TOWN OF SEABROOK ISLAND

Planning Commission Regular Meeting
November 6, 2019 – 1:30 PM

Town Hall, Council Chambers
2001 Seabrook Island Road

AGENDA

CALL TO ORDER

APPROVAL OF MINUTES

1. **Regular Meeting: September 11, 2019** *[Pages 2–4]*

OLD BUSINESS ITEMS

There are no Old Business Items

NEW BUSINESS ITEMS

1. **Architectural Review: 3036 Seabrook Village Drive (Cable Railings)** *[Pages 5–16]*

   Request from Vintage Homes by the Charleston Group, Inc., to approve modifications to a previously approved plan for 3036 Seabrook Village Drive in the Village at Seabrook

2. **Architectural Review: Island House & Pelican's Nest Restaurant** *[Pages 17–107]*

   Request from the Seabrook Island Club to review and approve various exterior modifications to the Island House at 3771 Seabrook Island Road and reconstruction of the outdoor bar area the Pelican's Nest restaurant at 3772 Seabrook Island Road

3. **Text Amendment: Comprehensive Beachfront Management Plan** *[Pages 108–277]*

   An ordinance amending the Town Code for the Town of Seabrook Island, South Carolina; Chapter 32, Waterways and Beaches; Article II, Beachfront Management; Division I, Generally; Section 32-20, Plan Adopted; so as to adopt an updated Comprehensive Beach Management Plan for the Town of Seabrook Island

ITEMS FOR INFORMATION / DISCUSSION

1. **Mediation Update: Senior Living Facility Encroachment Permit**

ADJOURN

TOWN OF SEABROOK ISLAND

Planning Commission Regular Meeting
September 11, 2019 – 1:30 PM

Town Hall, Council Chambers
2001 Seabrook Island Road

MINUTES

Present: Robert Driscoll (Chair), Ken Otstot (Vice Chair), Wayne Billian, Stan Ullner, Joe Cronin (Town Administrator)

Absent: Cathy Patterson

Guests: Skip Crane, Lynn Crane, Larry Buchman, Heather Paton (SIPOA)

Chairman Driscoll called the meeting to order at 1:30 PM and welcomed everyone in attendance. Chairman Driscoll asked for a moment of silence to remember the victims of September 11, 2001, terrorist attacks. Town Administrator Cronin confirmed that the requirements of the Freedom of Information Act were fulfilled, and the meeting agenda was properly posted.

APPROVAL OF MINUTES

1. **Regular Meeting: July 10, 2019:** Dr. Ullner made a motion to approve the minutes from the July 10, 2019, meeting as submitted. Mr. Otstot seconded the motion. The motion was **APPROVED** by a vote of 4-0.

OLD BUSINESS ITEMS

There were no Old Business Items.

NEW BUSINESS ITEMS

There were no New Business Items.

ITEMS FOR INFORMATION / DISCUSSION

1. **Mediation Update: Senior Living Facility Encroachment Permit:** Chairman Driscoll provided members of the Planning Commission with a brief update on negotiations related to the senior living facility encroachment permit. Chairman Driscoll stated that the town and the applicants had reached a settlement during the mediation process, and that a copy of the settlement agreement was included in the agenda packet. The agreement was scheduled to go before Town Council for review and approval during the month of September. The agreement is expected to be adopted by ordinance following a public hearing, which will take

place on September 17th. Chairman Driscoll then provided a summary of the terms of the settlement agreement.

2. **Pending Commercial Project: MUSC Medical Office Building:** Chairman Driscoll notified members of the Planning Commission that he had participated in a meeting with Mayor Ron Ciancio and Mayor Pro Tem John Gregg with representatives from Kiawah Partners and MUSC. He stated that MUSC is seeking to build a freestanding emergency medical facility on the corner of Seabrook Island Road and Andell Bluff Boulevard, near the entrance to Bohicket Marina. Chairman Driscoll stated that this project is in the very early stages and will require the issuance of a Certificate of Need from SCDHEC. He noted that the project would be located in the town limits and if MUSC elects to move forward, the Planning Commission will take the lead on the review and approval process.

3. **Text Amendment: LED Signs:** Town Administrator Cronin stated that the Seabrook Island Property Owners Association (SIPOA) had submitted a permit request for the installation of two new LED signs on the inbound and outbound lanes of the security gate. He stated that Sec. 12.50 of the town's DSO provides that "no flashing, rotating or animated signs or devices shall be erected, constructed or maintained nor shall any such signs or devices be installed on, within or behind any window, door, building, façade or store front so as to be visible to the general public." In addition, Sec. 12.110.10.20 requires that "all permanent signs shall be constructed of treated wood, cedar or redwood, either sandblasted or routed or aluminum painted to resemble the appearance of the approved woods." In his opinion, the town's DSO would need to be amended to allow LED signs. He expressed concern with amending the ordinance to allow these types of signs, adding that while there may not be an objection to the SIPOA having LED signs, it would open the door for similar signs elsewhere on the island. He stated that the Planning Commission and Council should first decide whether in fact they want LED signs on the island, and if so, any amendments to the DSO should be carefully worded so as to limit their proliferation. Members of the Planning Commission briefly discussed the issues related to LED signs. Chairman Driscoll stated that before a text amendment is drafted, he would like to hear from the SIPOA as to why these types of signs are necessary. The Planning Commission agreed to hold this item for further information and discussion at a later date.

4. **PUD Amendment: Village at Seabrook Side Yard Setbacks:** Town Administrator Cronin informed members of a recent appeal that went before the Town's Board of Zoning Appeals related to setback requirements within the Village at Seabrook subdivision. He provided a brief overview of the case, as well as the Board's decision. Following the decision, members of Council were asked by some residents within the Village to amend the Village at Seabrook PUD so as to implement a minimum side yard setback. He stated that the current PUD ordinance does not specify a minimum side yard setback; rather, only a minimum separation distance of 15 feet is required between structures. This could create situations where property owners could build a home directly on the lot line, which would adversely impact the neighboring property owner. While the PUD could be amended to specify a minimum side yard setback of 7.5 feet from the side property line, Town Administrator Cronin noted that nearly half of the homes which have been built to date in the Village are situated less than 7.5 feet from the side property line. If the PUD is amended to require a minimum side yard

setback of 7.5 feet, 23 homes of the 56 homes built to date (41.1%) would become non-conforming with the new setback requirement. While these homes would be considered "existing non-conforming" (ie. "grandfathered"), the owners of those lots may be adversely impacted in the future if they seek to rebuild or substantially modify their homes. Chairman Driscoll stated that this is a complicated issue and recommended that the Planning Commission take some time to further evaluate the facts and consider potential solutions.

5. **Notice of Administrative Plat Approvals:** Town Administrator Cronin notified members of the Planning Commission that three subdivision plats were recently reviewed and approved by staff: Lot line modifications to Salt Marsh Lots U-1, U-2, V-1 and V-2; Recombination of Block 26, Lot 1, with an adjacent conservation lot; and abandonment of Block 24, Lot 31, with portions of the former Lot 31 being recombined with Lots 30 and 32. He noted that each of these plats are exempt from Planning Commission review and approval, and that this notice was being provided for informational purposes only.

There being no further business, Chairman Driscoll asked for a motion to adjourn. Mr. Billian made a motion to adjourn the meeting. Mr. Otstot seconded the motion. The motion was **APPROVED** by a vote of 4-0, and the meeting was adjourned at 3:09 PM.

Minutes Approved:

Joseph M. Cronin
Town Administrator

MEMORANDUM

TO: Town of Seabrook Island Planning Commission Members

FROM: Joseph M. Cronin, Town Administrator

SUBJECT: Architectural Review: 3036 Seabrook Village Drive (Cable Railings)

MEETING DATE: November 6, 2019

The Planning Commission is asked to review and approve a request from Vintage Homes by the Charleston Group, Inc., for modifications to a previously approved residential plan in the Village at Seabrook subdivision.

Plans for the new home at 3036 Seabrook Village Drive (Lot B-37) – which is currently under construction – were reviewed and approved by the Planning Commission on July 18, 2018. At that time, the Planning Commission approved the "Swallowtail 1" model as an approved plan for use in the Village at Seabrook subdivision.

The applicants are now seeking to make a minor modification to the approved plans. Specifically, the applicants are requesting approval to substitute cable railings in lieu of the previously approved materials on the rear porches, decks and stairs. Because this will be the first home to use cable railings, this is considered to be a new, previously unapproved material in the Village at Seabrook. Therefore, Planning Commission approval will be required.

The proposed materials have been reviewed and approved by both the Village at Seabrook Regime, as well as the SIPOA Architectural Review Committee, as required by Sec. 14.20.20.10 of the DSO. (See attached letters for confirmation)

Staff Recommendation

As required by Sec. 14.20.20.10, the cable railing material has been reviewed and approved by both the regime and the ARC. Therefore, staff recommends in favor of **APPROVAL**.

In addition, staff recommends that cable railings be deemed an "approved building material" and authorize town staff to approve the use of this material on other homes within the Village, without the necessity of further review and approval by the Planning Commission.

Respectfully submitted,

Joseph M. Cronin, Town Administrator

ARTICLE 14. - SITE PLAN REQUIREMENTS

Sec. 14.20. - General Procedures.

§ 14.20.10. The Zoning Administrator shall refer submitted Site Plans for all proposed developments requiring a zoning permit, except for single-family detached residential units, to the Planning Commission, for its review and approval.

§ 14.20.20. The Planning Commission will review all plans submitted as to architectural compatibility with existing town structures and shall have approval over the architectural compatibility and harmonious development of all multi-family and commercial development, even that subject to critical review by an Architectural Review Board as a part of a duly constituted PD. This review shall apply to for property construction, reconstruction, remodeling, enlargement, rearrangement or maintenance of such property.

> § 14.20.20.10 In connection with its review and evaluation of all plans required under this section of the DSO, where the property in issue is subject to review and approval of the SIPOA ARC, any site plan application submitted, either for a preliminary review or a final approval shall first be submitted to the SIPOA ARC for its review in accordance with its own applicable rules and regulations. Once such review has been concluded and the SIPOA ARC has: (i) approved the site plan in issue, (ii) provided a written critical review of the same to the Town and (iii) confirmed to the Town in writing that the application as proposed meets all applicable requirements of the SIPOA ARC, the applicant shall file the required documentation for approval of the site plan and any and all other required documents as called for in Section 14 with the Town Zoning Administrator for consideration under the criteria of DSO Section 14 and other applicable laws and regulations for the Town of Seabrook Island.
>
> § 14.20.20.20. In any area of the Town where there appears to the Planning Commission to be no duly constituted review board as a part of an approved PD to give written approval and review as to architectural compatibility to the Planning Commission, the Planning Commission shall have the authority to ensure that all such development is harmonious and architecturally compatible with surrounding areas and developments.

§ 14.20.30. Multi-Family Developments. All multi-family construction projects shall be subject to a critical review for safety and fire requirements by the St. Johns Fire District acting with the Zoning Administrator as a part of the permitting process prior to approval of such projects.

(Ord. No. 1995-06, 6-8-1995; Ord. No. 2015-10, § I (14.20.20.10), 1-26-2016)

Town of Seabrook Island - Zoning Permit

Permit Date: *10/28/2019* **Permit #, Town:** *16243* **License #:** *20190350*

Paid Date: 10/28/2019 **App Fee:** *$100.00* **Cash:** *No* **Check #:** *1441*

Applicant Name: *Vintage Homes by The Charleston Group,* **Phone:** *843-568-8907*
Contact Name: *Robert Chapman*
App Address1: *1081 East Montague Ste 3A*
App Address2:
App City: *North Charleston* **St:** *SC* **Zip:** *29405*

Property Owner: *Tillman* **Phone:**
Owner Address1: *1728 Fiddlers Cove*
Owner Address2:
Owner City: *Seabrook Island* **St:** *SC* **Zip:** *29455*

TMS Number: *147-00-00-065* **Thru:** **Lot:** *07* **Block:** *58*
Property Address: *3036 Seabrook Village Drive*
Purpose: *Planning Commission Review*

Work Value: *$0.00* **Flood Elev:** *0* **Zone:**
Architectural Review Board:
Comments: *Planning Commission Review: Request to install cable railing only at rear elevation of porches, decks and stairs.*

Amendment:

This Zoning Permit is valid for six (6) months. The action for which this permit was obtained must be taken within that time period.

If this zoning permit is for issuance of a building permit, such building permit is valid for a period of one (1) year as described in the town code. Any extentions, alterations, or amendments must be approved in writing by the Town of Seabrook Island Zoning Administration.

I hereby certify that the above information and any plan or drawing submitted herewith are true and accurate indications of existing or proposed improvements to the above identified property.

Owner/Applicant's Signature
10/28/2019

Zoning Administrator
10/28/2019

TOWN OF SEABROOK ISLAND

2001 Seabrook Island Road
Seabrook Island, SC 29455
843-768-9121

ZONING PERMIT APPLICATION

Fee Schedule			
Permit for New Construction, Single Family	$100	Permit Extension	$100
Permit for Remodeling, Addition, etc.	100	Record Plats	- prices vary
Building, HVAC, Roofing, Plumbing, etc.	25		
Permit for New Construction, Multi-Family	250 + $5 per unit		
Multiple Bldg Permit, Comm./Multi Family	100		

Date: 10/28/19 **TMS #:** 1470000065

Applicant's Name: Vintage Homes by The Charleston Group, Inc.

Name of Business Contact: Nanette M. Nelson

Address: 1081 E. Montague Ave. #3A **Phone:** 843-203-6111

City: N. Charleston **State:** SC **Zip:** 29405

Property Owner's Name: Paul & Krista Tillman

Address: 1728 Fiddlers Cove **Phone:** 704-458-6693

City: Seabrook Island **State:** SC **Zip:** 29455

Property Location Address: 3036 Seabrook Village Drive

Lot: 58 **Block:** 07 **Base Flood Elev.** 13 **Zone:** AE-13

Purpose of Permit: To request cable rail at rear elevation only porchs, decks and stairs.

Value of Construction: N/A **POA Approval:** _____

Applicant's Signature: _____

****This is an application only. The permit will be issued upon approval by the Town of Seabrook Island.**

SEABROOK ISLAND
Property Owners Association

Minutes: Architectural Review Committee Meeting
Tuesday, October 1, 2019 – 9:00 a.m.
SIPOA Conference Room

Present:

Members	Ray Hoover, Chair Dan Kortvelesy, Vice Chair Lynn Crane David Cruse Jan Genosi George Reinhart Annie Smith-Jones
SIPOA Staff	Katrina Burrell, Director of Administration and Architectural Review Adrea Hughes, ARC/Engineering Asst.

1. OPENING REMARKS & OVERVIEW:

The minutes of the September 17, 2019, meeting were approved on September 24, 2019.

2. PRESENTATIONS:

A. Block 25 Lot 02 - 2463 High Hammock Road - #201901011
Conceptual Design Review Presentation

Architect, Ashton Halloway, presented Conceptual Design Plans for a new home on High Hammock Road. Discussed were the expectations and approach of the Conceptual Design phase, unique features of the site, including the existing topography, hydrology, live oaks, etc., create an opportunity to integrate a distinctive home that complements the individual site characteristics.

George Reinhart moved to disapprove the Conceptual Design Plans for Block 25 Lot 02 - 2463 High Hammock Road with the following requirements:

1. **Consider consulting with an ISA Certified Arborist to further discuss the two questionable oak trees discussed during the meeting as well as to assess their health and viability;**
2. **Dumpsters shall not be located in the right-of-way; and**
3. **Ensure the Checklist for Conceptual Design Review is complete by either initialing or checking the boxes.**

The motion was seconded by Lynn Crane and passed unanimously.[1]

B. **North Beach Village**
Request to Update Exterior Color Standards

Property Managers, Amber Neale and Nicole Collins, and Regime Board Member, Duncan Morgan, presented a new exterior paint color palette for North Beach Villages which was prepared with the assistance of a Sherwin Williams color specialist. Discussed were the proposed policies for the distribution of colors, proposed front door colors, and clarifications of verbiage in the standards.

Jan Genosi moved to approval the new Exterior Color Standards for North Beach Village with the following requirements:

1. **Colors are conditionally approved with the stipulation that final color approval is not granted until a 6' square sample (with trim colors(s) if applicable) is painted on the house and approved by the ARC;**
2. **No two adjacent homes may be painted the same body color.**

The motion was seconded by George Reinhart and passed unanimously.[1]

The approved colors per the stipulations above are:
Trim (All Trim and All Doors): Sherwin Williams "Pure White" SW7005

Siding Options: Sherwin Williams "Steely Gray" SW7664
Sherwin Williams "Sand Dollar" SW6099
Sherwin Williams "Raindrop" SW6485
Sherwin Williams "Respite" SW6514
Sherwin Williams "Poolhouse" SW7603
Sherwin Williams "Requisite Grey" SW7023
Sherwin Williams "Aqua-Sphere" SW7613
Sherwin Williams "Blue Cruise" SW7606

C. **Beach Club Villas**
Request to Discuss Current Exterior Lighting Concerns

Property Manager, Amber Neale, provided background information regarding lighting concerns of the Beach Club Villas Owners. Several proposals from professionals, their costs, and limitations were discussed.

No action was requested for the Beach Club Villas Exterior Lighting Concerns, however, several recommendations were provided:

1. **Consider consulting with an Electrical Engineer or a Lighting Designer to provide a holistic approach to the design solutions;**
2. **Consider low voltage lighting (landscape pathway lighting, stairway post mounted lights, etc.) that are close to the ground, have deep hoods or shields, and can be directed to the location thus eliminating light trespass;**

3. **Ensure all exterior lighting fixtures produce a light color that is in the same Kelvin color spectrum and Color Rendering Index (CRI).**
4. **Ensure all requirements of §II.C.4. of the Policies and Procedures relating to Exterior Lighting have been met.**

D. **The Village at Seabrook**
Cable Railing on Rear Porch Standard Option Review Request

Annie Smith-Jones moved to approve the Cable Railings on the Rear Porch as a Standard Option the Village at Seabrook with the following requirements:

1. **Cable railings are only approved for the rear elevation, including all upper and lower decks, stairs, and landings;**
2. **All railings on the rear elevation shall be the same material and same construction style; and**
3. **The cable railing option will be considered on a site by site basis.**

The motion was seconded by David Cruse and passed unanimously.[1]

E. **Block 58 Lot 26 - 3037 Seabrook Village Drive #201901003**
Preliminary Design Review Presentation

Katrina Burrell gave the ARC an update on the approval process for the design plans referred to as "Garden Gem" by Kenneth Miller, Architect. The Village at Seabrook Regime Management and Board did not approve of the following items:

1. The horizontal railing on the front elevation, including the upper and lower porches, stairs, and landings are not approved;
2. Ensure a windscreen cap is to be used on the chimney; and
3. Include the total heated and cooled square footage of the home on the plans.

George Reinhart moved to reaffirm that plans will need to be resubmitted to the Village at Seabrook Regime Management and Board and to the SIPOA ARC for approval prior to SIPOA ARC approval being given to the Town of Seabrook Island Planning Commission. The motion was seconded by Jan Genosi and passed unanimously.[1]

F. **Golf Shore Villa Owners Association**
Request to Update the Back Porches Standard

The approved Building Standards for Golf Shore Villas currently provides two standard options for enclosing the existing back screen porches, Enclosed with Windows (full length glass panels) and Enclosed Room (with finished walls and windows). The Regime is requesting to update the Enclosed with Windows option to include a vertical 4-track venting window panel system, such as the PGT® Eze-Breeze® sliding panels.

David Cruse moved to approve the Request to Update the Back Porches Standard. The motion was seconded by Jan Genosi and passed with 6 in favor and Lynn Crane obstaining.[1]

3. DISCUSSION:

A. ARC meeting schedule - Upcoming meetings during the holiday seasons were discussed.

B. Tree Removal Policy - The existing tree removal and pruning policies and procedures (specifically in §II.C.5. Landscape Design; Appendix L: Tree and Natural Vegetation Preservation/Removal Policy; and Appendix R: Tree Trimming/Pruning Guidelines of the SIPOA Policies and Procedures for Residential Development) were discussed. The policies and ordinances of comparable associations and municipalities were also discussed. It was discussed that, at this immediate time, the current regulations and requirements of the SIPOA Policies and Procedures relating to tree and vegetation removal and pruning meet the current needs of the community. However, as part of its end of year effort in considering updates to the *"Policies and Procedures for Residential Development"* the ARC will consult with the Environmental Committee on this issue. Should the needs change, the policies will be revisited for review.

C. Policies and Procedures Updates - Suggestions for a list of changes and/or additions to the Policies and Procedures was requested.

The meeting was adjourned at approximately 12:11 p.m.

[1] In addition to the requirements detailed in this motion, all improvements must also comply with the applicable version of the SIPOA ARC Policies and Procedures. The omission of any stipulation or requirement of the Policies and Procedures is not a waiver of said requirement.

Joe Cronin

From: Cathy Patterson <pncpatt@aol.com>
Sent: Monday, October 28, 2019 12:47 PM
To: Joe Cronin
Subject: Re: 3036 Seabrook Village

Joe,
On August 20th, 2019 the Village at Seabrook Board approved the use of stainless cables on decks of homes within the Village at Seabrook Community. It was felt it was a variation that reflected new building techniques, changing tastes, updated looks with less maintenance issues.

Cathy Patterson, President Village at Seabrook Board

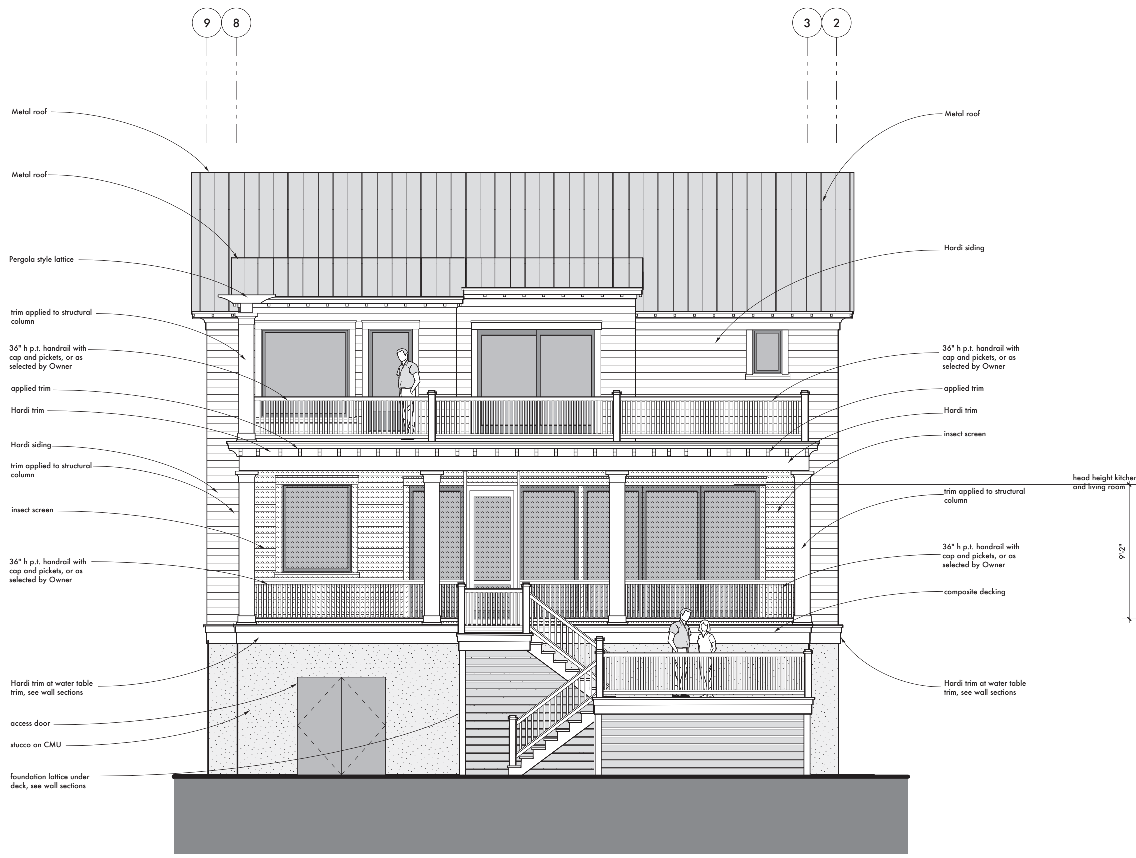
-----Original Message-----
From: Joe Cronin <jcronin@townofseabrookisland.org>
To: Cathy Patterson <PNCPATT@aol.com>
Sent: Mon, Oct 28, 2019 12:03 pm
Subject: 3036 Seabrook Village

Cathy,

Can you please send me an email confirming that the cable railings have been reviewed and approved by the Village regime board? I have the approval from the ARC, but I don't see anything indicating regime approval. Thanks.

Joseph M. Cronin
Town Administrator
Town of Seabrook Island
2001 Seabrook Island Road
Seabrook Island, SC 29455
Office: (843) 768-5321
Cell: (843) 637-9832
www.townofseabrookisland.org

Original Design (Approved by PC)



1 **Rear Elevation Approved by ARC**
Scale: 1/4" = 1'-0"

EXTERIOR COLOR SCHEDULE:

Shutters: Black

Trim: Extra White

House siding & shake: Antique Pewter

Roof: Dark Bronze

Porch Ceiling: Approved Blue for the porch ceiling, per The Village of Seabrook website (color # and name not listed on Village or ARC website):

Garage Doors: Trim color–Extra White

Porch ceilings may be painted the SIPOA approved blue color for wasp control, otherwise they must be painted the trim color

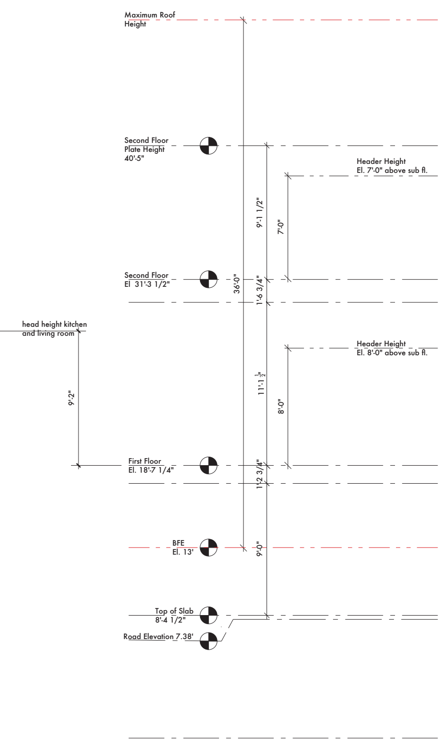
Foundation: Natural tabby

Window cladding: white

Front Door: Stained Dark Walnut

Decking: natural

Chimney shroud: same color as the roof– Dark Bronze



No.	Issued For	Date
6	Revision 3, windows added	April 29, 2019
1	Issued For Preliminary Submission	May 29, 2018
2	Issued For Conditional Submission	Sept 10, 2018
3	Issued For Pricing	Sept 25, 2018
4	Issued For Permit / Construction	Nov 16, 2018
5	Revision 2, Response to Plan Review	Jan 21, 2019

Stamps

STATE OF SOUTH CAROLINA
RACHEL BEVERLEY BURTON
Summerville, SC
No. 8440
REGISTERED ARCHITECT

STATE OF SOUTH CAROLINA
SWALLOWTAIL ARCHITECTURE LLC
Summerville, SC
No. 100760
REGISTERED ARCHITECTS

Nov 16, 2018

SWALLOWTAIL ARCHITECTURE, LLC
ARCHITECTURE AND INTERIOR DESIGN
843-885-9400 • SwallowtailArchitecture.com
814 N Cedar Street, Summerville, SC 29483

TILLMAN RESIDENCE
NEW CONSTRUCTION
BLOCK B7
VILLAGE AT SEABROOK, SEABROOK ISLAND
South Carolina

Plot Date 10/22/19

Checked RB

Drawn RB

Drawing Title
Rear Elevation

Drawing No.
A2.2

Revised Design

EXTERIOR COLOR SCHEDULE:

Shutters: Black

Trim: Extra White

House siding & shake: Antique Pewter

Roof: Dark Bronze

Porch Ceiling: Approved Blue for the porch ceiling, per The Village of Seabrook website (color # and name not listed on Village or ARC website):

Garage Doors: Trim color—Extra White

Porch ceilings may be painted the SIPOA approved blue color for wasp control, otherwise they must be painted the trim color

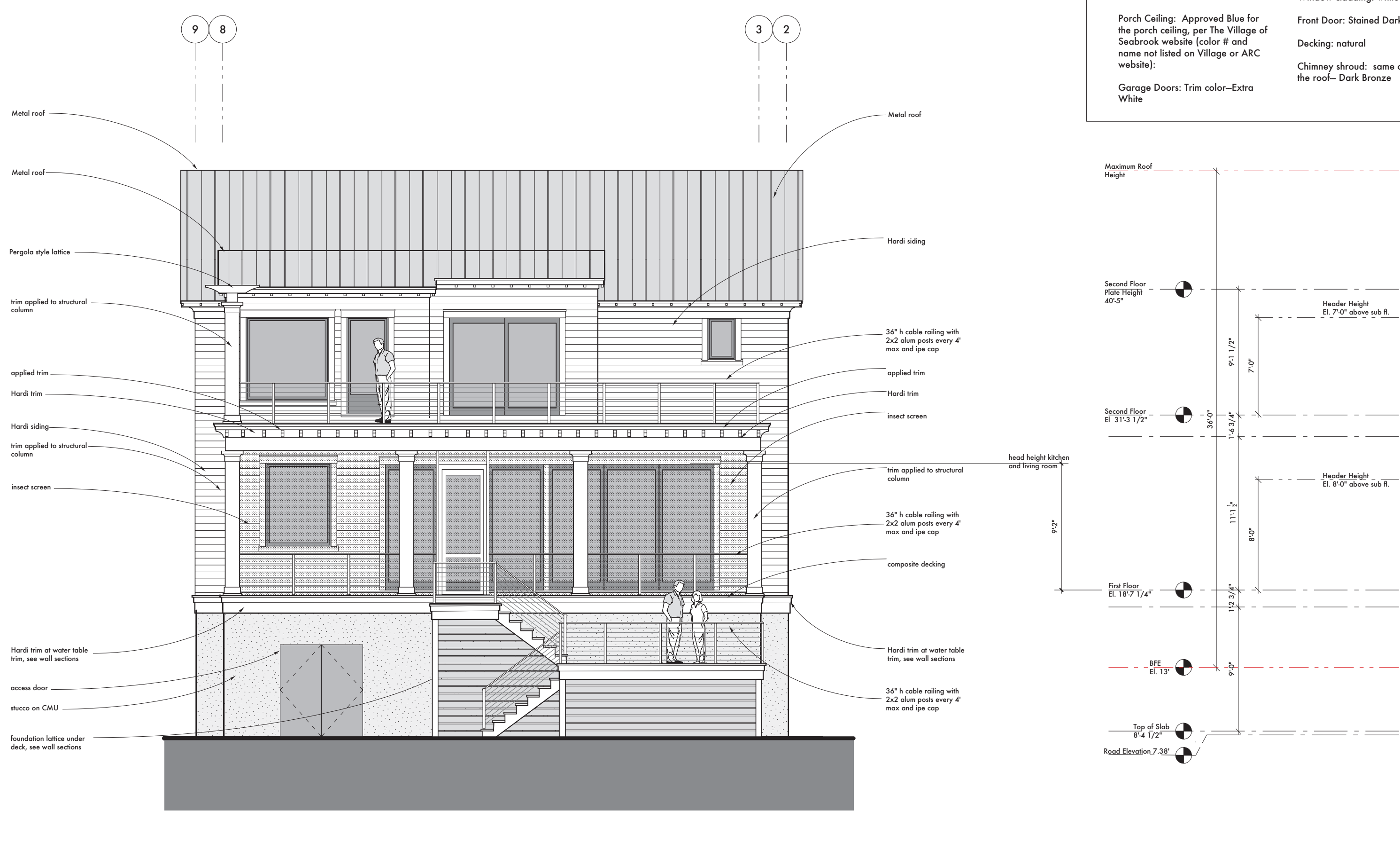
Foundation: Natural tabby

Window cladding: white

Front Door: Stained Dark Walnut

Decking: natural

Chimney shroud: same color as the roof— Dark Bronze



1 Rear Elevation REVISED RAILING AT REAR PORCH
Scale: 1/4" = 1'-0"

No.	Issued For	Date
6	Revision 3, windows added	April 29, 2019
1	Issued For Preliminary Submission	May 29, 2018
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Stamps

STATE OF SOUTH CAROLINA RACHEL BEVERLEY BURTON Summerville, SC No. 8440 REGISTERED ARCHITECT

STATE OF SOUTH CAROLINA SWALLOWTAIL ARCHITECTURE LLC Summerville, SC No. 100760 REGISTERED ARCHITECTS

Nov 16, 2018

SWALLOWTAIL ARCHITECTURE, LLC
ARCHITECTURE AND INTERIOR DESIGN

TILLMAN RESIDENCE
NEW CONSTRUCTION
BLOCK B7
VILLAGE AT SEABROOK, SEABROOK ISLAND
South Carolina

Plot Date 10/22/19

Checked RB

Drawn RB

Drawing Title
Rear Elevation

Drawing No.
A2.2


VINTAGE
HOMES

MEMORANDUM

TO: Planning Commission Members

FROM: Joseph M. Cronin, Town Administrator

SUBJECT: Commercial Plan Review: Seabrook Island Club Island House and Pelicans Nest Renovations

MEETING DATE: November 6, 2019

The Planning Commission is asked to review and approve a request from the Seabrook Island Club to undertake various exterior modifications to the Island House building, located at 3771 Seabrook Island Road (Tax Map # 147-05-00-018), as well as reconstruction of the outdoor bar area the Pelican's Nest restaurant, located at 3772 Seabrook Island Road (Tax Map # 147-05-00-085). The proposed modifications are outlined in the attached letter from SMHa, dated October 24, 2019.

The property is located within the CRO Commercial-Retail Office subdistrict within the Seabrook Island PDD. The existing uses are considered "conforming," as the Seabrook Island PDD, as amended, allows the following types of uses within the CRO Subdistrict:

- **Beach Club Area:**
  - Restaurants and bars;
- **Island House Area:**
  - Retail trade/general merchandise;
  - Cultural, recreational and entertainment facilities;
  - Public assembly facilities;
  - Meeting facilities;
  - Restaurants and bars;
  - Recreational center / indoor and outdoor facilities;
  - Office uses;
  - Golf cart storage, rental and repair; and
  - Parking, loading and support services;

Copies of the proposed site plans, building renderings and a detailed list of proposed materials for each project are attached for review. A discussion regarding setbacks and other design criteria is included below.

Staff Recommendation

Article 14 of the town's DSO outlines a two-part process for the review and approval of commercial site plans. Staff has completed an administrative review of the proposed modifications, and our comments and findings are outlined below. Additional items, particularly those related to proposed materials and colors, may warrant further review and discussion by the Planning Commission.

It is recommended that the review of these drawings during the November 6th meeting be considered as the **Preliminary Site Plan Review**. Substantive changes which may be recommended by the Planning Commission during the Preliminary Site Plan Review may be incorporated into the plan set prior to **Final Site Plan Review**. If the Planning Commission is satisfied with the plans as submitted, the Planning Commission may elect to grant Preliminary and Final Site Plan approval, and thereby waive the requirement for an additional review.

Lot Coverage

§ 7.50.30. Commercial. Nonresidential structures, including accessory structures and associated parking areas, driveways, garages, carports, walks and roadways shall cover no more than sixty (60%) percent of the net buildable land area of a lot. For purposes of this section, net buildable land area shall constitute gross acreage less any required recreation areas and marsh/wetland areas.

- **Lot coverage at the Island House will remain below 60%. The proposed modifications to the Pelican's Nest restaurant will take place within the existing building footprint. Therefore, there will be no change to the lot coverage. (OK)**

Setbacks

§ 5.50.40. Minimum Setback Requirements. Unless a greater setback is required to comply with buffer and landscaping requirements of this Ordinance, the following minimum setbacks shall be provided for all structures within the CRO district or subdistrict:

§ 5.50.40.10. Abutting streets or roads: 50 feet, except when any lot fronts on a regime-owned private drive or road, in which case such the lot shall have a front setback of thirty (30) feet from the front property line.

- **The proposed modifications will meet or exceed the minimum front yard setback requirement. (OK)**

§ 5.50.40.20. Side: 50 feet, except on interior lots of a common regime where the adjoining uses are similar in which case the side setback shall be 20 feet from the property line dividing adjoining lots, to be buffered and landscaped.

- **The proposed modifications will meet or exceed the minimum side yard setback requirement. (OK)**

§ 5.50.40.30. Rear: 35 feet, to be buffered and landscaped.

- **The proposed modifications will meet or exceed the minimum rear yard setback requirement. The property adjacent to the Island House contains the golf course and is under common ownership. Therefore, no rear buffer is required. (OK)**

§ 9.30.20. Minimum Setbacks. For all oceanfront and North Edisto River property, the minimum required setback from the ocean for any structure shall be the greater (most landward) of:

§ 9.30.21. The setback line mandated by the SC Coastal Tidelands and Wetlands Act of 1977 (State Code Sections 48-39-10 et seq.), as amended in 1988 and thereafter; and

§ 9.30.22. A line drawn parallel to the front (street side) property line and extending from the front property line the distance equal to seventy-five (75%) percent of the platted, average lot depth as measured from the front property line; and

§ 9.30.23. In no event shall construction be closer than (seaward of) thirty (30) feet landward from the landward edge of the primary dune or the dune formed by any existing revetment.

- **The beachfront setback requirement does not apply to proposed modifications at the Island House. (OK)**

- **The Pelican's Nest restaurant currently encroaches into the SCDHEC-OCRM Beachfront Jurisdictional Line and Setback Area; however, the proposed modifications to the bar area will not result in any modification to the existing footprint. The applicant has provided a confirmation email from SCDHEC-OCRM which states: A tenant upfit inside the existing building footprint does not require review or authorization from DHEC-OCRM…" (See attached correspondence)**

Buffers & Landscaping

§ 10.30. - Buffering of Incompatible Land Uses.

- **There is currently not a buffer in place which meets the requirements of Sec. 10-30 along the shared property lines between the Island House and the Spinnaker Beach Houses or Atrium Villas regimes. While the Planning Commission may require additional landscaping along this shared property line, this would not typically be required unless the value of the renovations or additions exceeded 50% of the existing building's fair market value. If a buffer is required, the DSO requires that the buffer be at least 50 feet in width, with shrubs or hedges at least 6 feet in height, as well as at least one shade tree for every 50 linear feet or part thereof. (Planning Commission discretion)**

- **The property containing the Pelican's Nest restaurant does not share a property line or otherwise abut property which is used for residential purposes. Therefore, no additional buffer will be required. (OK)**

§ 10.40.20. Site Developments. As a condition of any development order issued for any property requiring site plan approval, there must exist or be planted on said property within one (1) year, a number of shade trees, in accordance with this Article, determined by the ratio of one (1) shade tree for each four thousand (4,000) square feet of gross lot area.

(a) Newly planted trees shall be located so as to ensure that the appropriate proportion of trees is planted within the developed area of the property.

(b) This requirement shall not be applicable within one thousand (1,000) feet of the South Carolina Coastal Council Ocean Critical Line, where palmetto trees will be substituted for shade trees.

- **Both properties comply with the landscaping and tree requirements of the DSO. (OK)**

Fencing and Retaining Walls

§ 10.60.10(b). Walls must be made of stucco, cypress, pressure-treated wood, wood composite, brick, stone, architectural concrete masonry units (CMU), or similar materials.

- **Proposed retaining walls at the Island House will be constructed with Versa-Lock "Accent" (concrete masonry product) with cap unit top. The proposed materials are consistent with those used on existing segmental retaining walls. No new walls are proposed for the Pelican's Nest restaurant. (OK)**

§ 10.60.10(b). Fences must be made of stucco, cypress, pressure-treated wood, wood composite, iron, powder coated aluminum, or similar materials. Barbed wire, concertina wire, razor wire, chain link, poultry wire and vinyl are strictly prohibited;

- **No new fences are included in the plans for either location. The new guardrails and railings at the Island House will be constructed of wood and will be consistent with the existing guard rails and railings. (OK)**

§ 10.60.10(b). No wall or fence shall be taller than six (6) feet in height, measured from the finished elevation at its base to the highest point of the wall or fence; provided, however, the Planning Commission may allow a wall or fence to exceed six (6) feet in height when the wall or fence is used to screen a public building or storage yard, utility structures or equipment, or an approved outdoor storage area in a district zoned for agricultural, commercial, governmental, industrial, or parks and recreation uses.

- **No new fences are included in the plans for either location. The new guardrails and railings at the Island House will not exceed 6 feet in height. (OK)**

Architecture & Materials

§ 14.20.20. The Planning Commission will review all plans submitted as to architectural compatibility with existing town structures and shall have approval over the architectural compatibility and harmonious development of all multi-family and commercial development, even that subject to critical review by an Architectural Review Board as a part of a duly constituted PD. This review shall apply to for property construction, reconstruction, remodeling, enlargement, rearrangement or maintenance of such property.

- **The proposed elevations, materials and colors are illustrated in the attached plan set. The Planning Commission shall have discretion to determine whether the proposed designs, materials and colors are architecturally "compatible" and "harmonious" with neighboring development. Photos of neighboring buildings are included for reference. (Planning Commission Discretion)**

Notwithstanding any questions related to architectural design, materials and colors, the proposed modifications meet or exceed the requirements of the town's DSO. Therefore, staff recommends in favor of **APPROVAL**.

Approval of the architectural design, materials and colors shall be subject to the Planning Commission's discretion.

Respectfully submitted,

Joseph M. Cronin
Town Administrator

Town of Seabrook Island - Zoning Permit

Permit Date: *10/16/2019* **Permit #, Town:** *16211* **License #:** *20190457*

Paid Date: 10/16/2019 **App Fee:** *$100.00* **Cash:** *No* **Check #:** *1199*

Applicant Name: *Seabrook Island Club- Maintenance* **Phone:** *843-768-4946*
Contact Name: *Dwight Hartley*
App Address1: *1002 Landfall Way*
App Address2:
App City: *Johns Island* **St:** *SC* **Zip:** *29455*

Property Owner: *Seabrook Island Club* **Phone:** *843-364-3264*
Owner Address1: *3772 Seabrook Island Road*
Owner Address2:
Owner City: *Seabrook Island* **St:** *SC* **Zip:** *29455*

TMS Number: **Thru:** **Lot:** **Block:**

Property Address: *3771 & 3772 Seabrook Island Road*

Purpose: *Planning Commission review of the Seabrook Island Club's improvements at 3771 & 3772 Seabrook Island Road (Beach Club & Island House Restaurant.*

Work Value: *$0.00* **Flood Elev:** *0* **Zone:**

Architectural Review Board:

Comments:

Amendment:

This Zoning Permit is valid for six (6) months. The action for which this permit was obtained must be taken within that time period.

If this zoning permit is for issuance of a building permit, such building permit is valid for a period of one (1) year as described in the town code. Any extentions, alterations, or amendments must be approved in writing by the Town of Seabrook Island Zoning Administration.

I hereby certify that the above information and any plan or drawing submitted herewith are true and accurate indications of existing or proposed improvements to the above identified property.

Owner/Applicant's Signature
10/16/2019

Zoning Administrator
10/16/2019

* PC Review Only. Zoning permit to be issued Separately

TOWN OF SEABROOK ISLAND

2001 Seabrook Island Road
Seabrook Island, SC 29455
843-768-9121 (phone)
843-768-9830 (fax)

ZONING PERMIT APPLICATION

Fee Schedule

Permit for New Construction, Single Family	$100	Permit Extension	$100
Permit for Remodeling, Addition, etc.	100	Record Plats	- prices vary
Building, HVAC, Roofing, Plumbing, etc.	25		
Permit for New Construction, Multi-Family	250 + $5 per unit		
Multiple Bldg Permit, Comm./Multi Family	100		

Date: 10-16-19 TMS #: _____

Applicant's Name: John Wilcox

Name of Business Contact: SI Club

Address: _____ Phone: 843-364-3264

City: _____ State: _____ Zip: _____

Property Owner's Name: Seabrook Island Club

Address: 3772 SIR Phone: _____

City: Seabrook Island State: SC Zip: 29455

Property Location Address: 3771 & 3772 SIR Beachclub Island Road Horse

Lot: _____ Block: _____ Base Flood Elev. _____ Zone: _____

Purpose of Permit: Planning Comm. meeting Nov. To review SI Club improvement at ~~3772~~ 3772 & 3771 Seabrook Island Rd.

Value of Construction: _____ POA Approval: _____

Applicant's Signature: John Wilcox

**This is an application only. The permit will be issued upon approval by the Town of Seabrook Island.


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3768

October 24, 2019

Mr Laurence Bachman
Seabrook Club Building Committee
3772 Seabrook Island Road

Re: Seabrook Club & Pelican's Nest Renovation Scope
SMHa Comm. No. 1923.00

Dear Planning Commission Members:

This project entails several minor renovations to the Island House and one renovation to the Pelican's Nest. The renovation scope is as described below:

Island House Renovations:

Area A – Improved ADA Access.
The goal of Area A is to provide better patron/member access to an existing elevator. To do this, a new exterior access will be created. A new path will be created by removal of existing grade and site retaining walls. A new exterior pathway to a new elevator lobby will be created. The new access will redirect guest/member use from the lower-most level of the club, which currently serves as club staff facilities. The new access will greatly improve the experience of a handicapped individual.

Area B – Exterior Fire Pit
The veranda will be expanded to extend over an existing concrete landing/walkway. The veranda will be decked with ipe wood to match the existing construction. The purpose of the extended veranda/porch is to house two propane-fueled fire pits and lounge seating. The structure is to match the existing porch, that is wood framed with wood decking. A perimeter seat wall will be provided for additional seating capacity. All existing egress components will be maintained.

Area C1 – Storage Expansion
The club proposes to create a 550 square foot exterior expansion to better house event furnishings. This expansion is proposed to be located above the current loading/receiving area so as to limit the aesthetic intrusion to the facility. All exterior materials will match the existing construction, that is, cement board lap siding, asphalt shingles, tabby stucco concrete.

Area C2 – Service Improvements at First Level
The purpose of this renovation is to better utilize a space that is now a corridor from the kitchen to the event space. This space will be converted to a service only function by limiting the access to the main corridor and enlarging the opening from the kitchen to this space. This new dedicated service area will remain as an egress path to the building exterior.

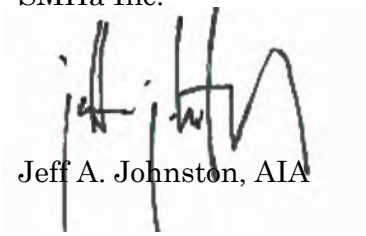
Pelican's Nest Renovations:

The renovation at the pelican's nest is a reconfiguration and remodel of the bar and the addition of a new server area. The specific purpose of the bar reconfiguration is in the creation of more seating at the bar. The overall seating capacity of the restaurant will remain as current, the seating type is simply re-distributed. The remodeled bar exists completely under the existing structure/roof and will have no horizontal expansion beyond the current building's footprint. The new service area is an unenclosed/non-conditioned space and will contain drink service and a small table for silverware preparation. A new host stand will be made adjacent to this service area with the purpose of better greeting guests.

Of note is that the design team has conferred with SCDHEC OCRM as well as the County of Charleston who both agree that this work is similar to a tenant upfit within an completely enclosed building and agree that additional site permits are not required on the Pelican Nest renovations.

If you have any questions or need additional assistance, please do not hesitate to call.

Sincerely,
SMHa Inc.



Jeff A. Johnston, AIA

Joe Cronin

From: Laurence Buchman <larrybuchman@gmail.com>
Sent: Monday, October 21, 2019 11:10 AM
To: Joe Cronin; Don Romano
Subject: Fwd: Meeting with the Town of Seabrook

Good morning Joe. We had our designer reach out to DHEC to verify their understanding concerning the upfit of the Pelican's Nest. Enclosed is DHEC's response that no review or authorization from DHEC is required.

If you have any questions please do not hesitate in contacting us. Thanks.

---------- Forwarded message ---------
From: **Jeff Johnston** <j.johnston@smha.com>
Date: Mon, Oct 21, 2019 at 9:31 AM
Subject: Re: Meeting with the Town of Seabrook
To: Larry Buchman <larrybuchman@gmail.com>
Cc: Don Romano <donaldromano44@gmail.com>, Barbara Vincentsen <barbaravincentsen@gmail.com>, Jeff Ward <wardenterprisesinc@gmail.com>, Caleb Elledge <celledge@discoverseabrook.com>, John Wilcox <jwilcox@discoverseabrook.com>, Emily Clark <e.clark@smha.com>

All,

SCDHEC agrees with the interior nature of the work scope at Pelican's nest not requiring DHEC-OCRM oversight. See below.

> William,
>
> A tenant upfit inside the existing building footprint does not require review or authorization from DHEC-OCRM. My office would get involved if there were proposed additions or land disturbance.
>
> Thanks,
> Matt
>
> --
> Matt Slagel
> Beachfront Permitting Project Manager
> Critical Area Permitting Section
> **Office of Ocean and Coastal Resource Management**
> **S.C. Dept. of Health & Environmental Control**
> Office: (843) 953-0250
> Email: slagelmj@dhec.sc.gov
> Connect: www.scdhec.gov Facebook Twitter

Jeff A. Johnston, AIA

SMHa
Architecture • Planning • Interiors

400 Hibben Street
Mount Pleasant, SC 29464
Office: 843.881.7642
Direct: 843.972.6064

smha.com

On Oct 18, 2019, at 2:18 PM, Larry Buchman <larrybuchman@gmail.com> wrote:

Jeff, thanks for your quick response.

Thursday works.

We agree with your assessment of the Pelican Nest but having Forsberg contact DHEC is excellent. Hope they agree with your position.

As for your presence at the meeting it would be great but probably not necessary based on previous experience. I think DHEC's response might be the tie breaker.

Have a good weekend.

Sent from my iPad

On Oct 18, 2019, at 12:37 PM, Jeff Johnston <j.johnston@smha.com> wrote:

> Thank you for the update Larry.
>
> I appreciate more insight into the documentation for the planning commission.
>
> We'll plan on getting drawings, a "map" and the requested scope description to you on Thursday the 24th. Is that acceptable?
>
> Does SMHa need to be present for the meeting on November 6th? Happy to be there if so.
>
> As for the Pelican's Nest, we have been working under the assumption that since this is under the roof and footprint of an existing building, there is no land disturbance happening. This renovation is no different than a tenant upfit (similar to the ice cream shop renos). We've confirmed this strategy with Charleston County Building Official and they feel the same.
>
> In light of Joe's specific question, I've tasked Forsberg to inquire to DHEC specifically for DHEC's stance and will be back in touch with that response.
>
> Jeff A. Johnston, AIA

SMHa
Architecture • Planning • Interiors

400 Hibben Street
Mount Pleasant, SC 29464
Office: 843.881.7642
Direct: 843.972.6064

smha.com

On Oct 18, 2019, at 9:57 AM, Laurence Buchman <larrybuchman@gmail.com> wrote:

Good morning Jeff.

Don & I just met with Joe Cronin, Town Administrator for Seabrook Island to update him on our project. He had the following comments/requests:

He acknowledged we are on the agenda to present to the planning commission on November 6th at 1 pm. He has requested completed drawings be submitted electronically by October 25th which will provide enough time to review and prepare for presentation. He asked if we could include in the drawing package a site plan which identifies (bubbles) the four project areas. In addition he asked if we could prepare a written description of the work for each project area which could be cut and pasted into his document being sent to the planning commission for approval.

He also pulled up the current OCRM map with set back lines for the Pelican Nest. The current bar and therefore the new bar is outside these lines. He was curious if we had any conversations with DHEC and have they voiced their acceptance of the work. Please confirm the status of this issue.

If you have any questions on the above please let us know as soon as possible.

Thanks
--
Larry Buchman
630-816-2618

--
Larry Buchman

AREA C2: SERVICE AT FIRST LEVEL

FIRST FLOOR:
- REMOVE DOOR AND PORTION OF WALL FROM KITCHEN TO SERVICE HALL.
- REMOVE DOOR AND INFILL WALL FROM SERVICE HALL INTO PREFUNCTION AREA.
- FIX ONE LEAF OF THE DOUBLE DOOR FROM SERVICE HALL TO VESTIBULE AND REPLACE HARDWARE TO REDUCE ACCESS TO HALL.

AREA B: EXTERIOR FIRE PIT

FIRST FLOOR:
- EXTEND EXISTING EXTERIOR PORCH.
- ADD PROPANE FUELED FIRE PITS (2 TOTAL).

AREA A: IMPROVED ADA ACCESS

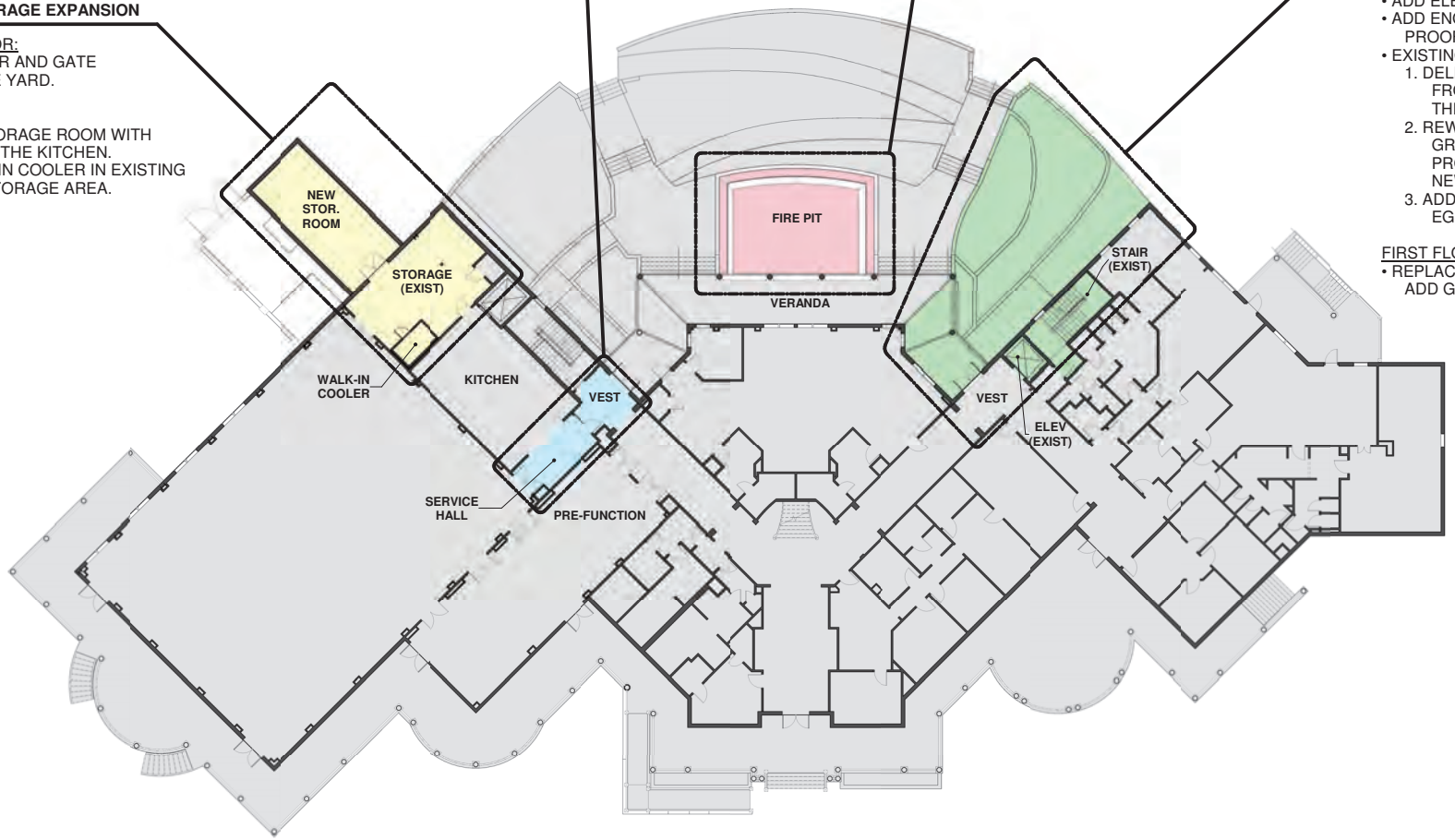
GROUND FLOOR:
- CUT EXISTING EXTERIOR GRADE FOR ADA ACCESSIBLE ENTRY TO THE EXISTING ELEVATOR.
- ADD ELEVATOR VESIBULE.
- ADD ENGINEERED VENTS FOR WET FLOOD PROOFING AT ELEVATOR VESTIBULE.
- EXISTING STAIR MODIFICATIONS (1,2,3)
  1. DELETE EXISTING DOOR LEADING FROM THE INTERMEDIATE LANDING TO THE EXTERIOR.
  2. REWORK EXISTING STAIR FROM GROUND LEVEL TO FIRST FLOOR TO PROVIDE PROPER CLEARANCES FOR NEW EXIT.
  3. ADD DOOR FOR GROUND LEVEL EGRESS FROM STAIR.

FIRST FLOOR:
- REPLACE PORTION OF EXISTING DECK AND ADD GUARD RAIL.

AREA C1: STORAGE EXPANSION

GROUND FLOOR:
- REPLACE PIER AND GATE AT SERVICE YARD.

FIRST FLOOR:
- ADD NEW STORAGE ROOM WITH DOOR INTO THE KITCHEN.
- ADD A WALK-IN COOLER IN EXISTING KITCHEN STORAGE AREA.



1 FIRST FLOOR PLAN
3/32" = 1'-0"

0 8' 16' 24'

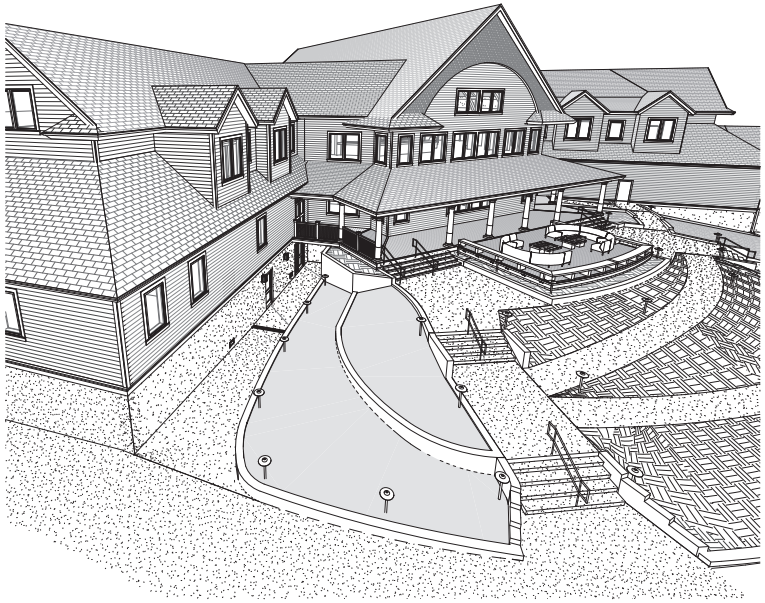
1923.00

SMHa
architecture • planning • interiors

SEABROOK ISLAND CLUB

AREAS OF WORK

10-24-19



PROJECT INFORMATION

owner

SEABROOK ISLAND CLUB
3771 Seabrook Island Rd.
Johns Island, SC 29455
Caleb Elledge
843.768.2500
celledge@discoverseabrook.com

architect

SMHa, INC.
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Jeff Johnston
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j.johnston@smha.com

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Troy Lowder
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tlowder@etiservices.net

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2240 Heritage Dr
Atlanta, GA 30345
Karen Kent
404.643.2650
karen.kent@kentinteriordesign.com

DRAWING INDEX

PLANNING COMMISSION SUBMITTAL

date of issue: **10-24-19**

SMHa project no: **1923.00**

SMHa architecture • planning • interiors

SEABROOK ISLAND Make It Uniquely Yours

SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

TMS #1470500018

3771 SEABROOK ISLAND RD, JOHNS ISLAND, SC 29455

EXTERIOR FINISH LEGEND - BASIS OF DESIGN

MARK	MATERIAL	BASIS OF DESIGN / DESCRIPTION
ACW-D	ALUMINUM CLAD WOOD DOOR	MANUF: STYLE: MAT'L: EXTERIOR FINISH: COLOR: INTERIOR FINISH:
ACW-W	ALUMINUM CLAD WOOD WINDOW	MANUF: STYLE: MAT'L: EXTERIOR FINISH: COLOR: INTERIOR FINISH:
ASR	ASPHALT SHINGLE ROOF	MANUF: SEE SPECIFICATIONS MATERIAL: GLASS FIBER REINFORCED ASPHALT SHINGLES COLOR: TBD
B-TS	BRACKET - TUBE STEEL	SIZE: 3" TUBE STEEL FINISH: HIGH PERFORMANCE PAINT SYSTEM PRIMER: EPOXY SHOP PRIMER INT COAT: EXTERIOR ALKYD MATCHING TOPCOAT TOPCOAT: EXTERIOR ALKYD SEMI-GLOSS
CPD	COMPOSITE DECKING	MANUF: SIZE: 2X6 FINISH:
DS-B	DOWNSPOUT AND BOOT	STYLE: SIZE: SEE ROOF PLAN FINISH: FACTORY COLOR: BOOT:
FAN	FAN	
FCF	FIBER CEMENT FASCIA	SEE ELECTRICAL
FCS	FIBER CEMENT SIDING	SIZE: 3/4" THICK, SEE DETAILS FOR WIDTH FINISH: SMOOTH COLOR: TBD TYPE: LAP SIZE: EXPOSURE: FINISH: COLOR:
FCT	FIBER CEMENT TRIM	TRIM: 1x4 FIBER CEMENT TRIM SIZE: SEE DRAWING DETAIL FINISH: COLOR:
FV-I	FLOOD VENT - INSULATED	MANUF: SMART VENT MODEL #: 1540-520 INSULATED FLOOD VENT STAINLESS STEEL TRIM & SLEEVE KIT
FV-IF	FLOOD VENT - INSULATED WITH FIRE DAMPER	FINISH: MARINE GRADE 316 STAINLESS STEEL MANUF: SMART VENT MODEL #: 1540-520 INSULATED FLOOD VENT STAINLESS STEEL TRIM & SLEEVE KIT FIRE DAMPER
GR-E	GUARDRAIL - EXTERIOR	FINISH: MARINE GRADE 316 STAINLESS STEEL MATERIAL: TRTD WOOD - SEE aA511 FINISH: PAINTED
GUT	GUTTER	COLOR: MATCH EXISTING STYLE: SIZE:
HR-E	HANDRAIL - EXTERIOR	FINISH:
LF-E1	LIGHT FIXTURE - EXTERIOR	ALUMINUM TUBE CONSTRUCTION, MILL FINISH
LF-E2	LIGHT FIXTURE - EXTERIOR	WALL SCONCE - SEE ELECTRICAL
LVR	FIXED ALUMINUM LOUVER	LANDSCAPE - SEE ELECTRICAL MANUF: FINISH: 2-COAT FLUOROPOLYMER FINISH
SC-E	SECURITY CAMERA - EXTERIOR	COLOR: SELECTED FROM MANUF'S FULL RANGE
STU	THREE COAT STUCCO FINISH	TBD FINISH: COLOR:

ABBREVIATIONS:

AFF	ABOVE FINISH FLOOR	HB	HOSE BIBB	R	RISERS
AHU	AIR HANDLING UNIT	HC	HANDICAP	RCP	REFLECTED CEILING PLAN
ALUM	ALUMINUM	HGT	HEIGHT	RD	ROOF DRAIN
APC	ACOUSTICAL PANEL CEILING	HM	HOLLOW METAL	RDL	ROOF DRAIN LEADER
ARCH	ARCHITECTURAL	HR	HOUR	REQ'D	REQUIRED
				RH	RIGHT HAND
BEJ	BRICK EXPANSION JOINT	IAW	IN ACCORDANCE WITH	RM	ROOM
BLDG	BUILDING	ID	INSIDE DIAMETER	RO	ROUGH OPENING
BLKG	BLOCKING	INFO	INFORMATION	RTU	ROOF TOP UNIT
BD	BOARD	INSUL	INSULATION		
BO	BOTTOM OF			SAB	SOUND ATTENUATING BLANKETS
BRG	BEARING	JAN	JANITOR	SF	SQUARE FEET
		JST	JOIST	SIM	SIMILAR
C	COURSES	JT	JOINT	SPECS	SPECIFICATIONS
CIP	CAST IN PLACE			SQ	SQUARE
CJ	CONTROL JOINT	KD	KILN DRIED	SSM	SOLID SURFACE MATERIAL
CL	CENTERLINE			STC	SOUND TRANSMISSION COEFFICIENT
CLG	CEILING	LH	LEFT HAND	STD	STANDARD
CLR	CLEAR	LTG	LIGHTING	STL	STEEL
CMU	CONCRETE MASONRY UNIT	LVR	LOUVER	STRUCT	STRUCTURAL
COL	COLUMN			STOR	STORAGE
CONC	CONCRETE	MAN'F	MANUFACTURER		
CONT	CONTINUOUS	MAT'L	MATERIAL	T	TEMPERED
		MAX	MAXIMUM	T	TREAD
DBL	DOUBLE	MECH	MECHANICAL	TO	TOP OF
DIA	DIAMETER	MIN	MINIMUM	TOC	TOP OF CONCRETE
DIM	DIMENSION	MISC	MISCELLANEOUS	TOF	TOP OF FOOTING
DN	DOWN	MO	MASONRY OPENING	TOM	TOP OF MASONRY
DS	DOWNSPOUT	MTG	MOUNTING	TOP	TOP OF PARAPET
DTL	DETAIL	MSL	MEAN SEA LEVEL	TOS	TOP OF STUD
DWG	DRAWING	MTL	METAL	TOSTL	TOP OF STEEL
				TRTD	TREATED
EA	EACH	N/A	NOT APPLICABLE	TYP	TYPICAL
EJ	EXPANSION JOINT	NIC	NOT IN CONTRACT		
ELEC	ELECTRICAL	NOM	NOMINAL	UNO	UNLESS NOTED OTHERWISE
EOS	EDGE OF SLAB	NRC	NOISE REDUCTION COEFFICIENT	US	UNDER SIDE
EQ	EQUAL	NTS	NOT TO SCALE		
EWC	ELECTRIC WATER COOLER			VCT	VINYL COMPOSITION TILE
EXIST	EXISTING	OC	ON CENTER	VIF	VERIFY IN FIELD
EXT	EXTERIOR	OD	OUTSIDE DIAMETER	VTR	VENT THROUGH ROOF
		OD	OVERFLOW DRAIN		
FD	FLOOR DRAIN	ODL	OVERFLOW DRAIN LEADER	W/	WITH
FE	FIRE EXTINGUISHER	ODN	OVERFLOW DRAIN NOZZLE	W/O	WITHOUT
FEC	FIRE EXTINGUISHER CABINET	OH	OPPOSITE HAND	WD	WOOD
FF	FINISH FLOOR	OPNG	OPENING	WDO	WINDOW
FOB	FACE OF BRICK	OS	OVERFLOW SCUPPER	WH	WATER HEATER
FOM	FACE OF MASONRY			WRB	WATER-RESISTIVE BARRIER
FOS	FACE OF STUD	PLAM	PLASTIC LAMINATE		
FT	FEET	PR	PAIR	Y	YARD
FTG	FOOTING	PT	POINT		
FV	FIELD VERIFY	PTD	PAINTED		
GA	GAUGE	QT	QUARRY TILE		
GALV	GALVANIZED				
GB	GYPSUM BOARD				
GYP BD	GYPSUM BOARD				
GC	GENERAL CONTRACTOR				

PROJECT NOTES:

PROJECT COORDINATION:

CO.1 ALL WALL MOUNTED DEVICES SHALL BE MOUNTED LEVEL AND PLUMB. WHERE DEVICES ARE ADJACENT TO ONE ANOTHER, SUCH AS LIGHT SWITCHES, RECEPTACLES, T-STATS, ETC. THE TOP OF THE DEVICE SHALL ALIGN WITH THE ADJACENT DEVICE.

CO.2 INFORMATION PERTINENT TO THE SCOPE OF WORK MAY OCCUR IN OTHER PORTIONS OF THE CONTRACT DOCUMENTS. REFER TO CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, ETC. FOR ADDITIONAL NOTES. ALL NOTES ARE TO BE REVIEWED AND APPLIED TO RELATED BUILDING COMPONENTS.

CO.3 THE CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL DRAWINGS, ETC. SUPPORT THE ARCHITECTURAL DRAWINGS IN DEFINING THE SCOPE OF WORK OF THE CONTRACT DOCUMENTS. DISCREPANCY BETWEEN THE ARCHITECTURAL AND THE ENGINEERING DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE COMMENCING WITH THE WORK. ANY WORK INSTALLED IN CONFLICT WITH THE ARCHITECTURAL DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE AND AT NO ADDITIONAL COST TO THE OWNER.

CO.4 DO NOT SCALE THE DRAWINGS. THE DRAWINGS ARE NOT NECESSARILY TO SCALE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE PRIOR TO THE START OF CONSTRUCTION. IF DISCREPANCIES ARE FOUND, THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION BEFORE COMMENCING WITH THE WORK.

CO.5 THE CONTRACTOR SHALL VISIT THE SITE AND BE KNOWLEDGEABLE OF CONDITIONS THEREON. HE SHALL INVESTIGATE, VERIFY, AND BE FAMILIAR WITH CONDITIONS OF THE PROJECT. HE SHALL NOTIFY THE OWNER OF ANY CONDITIONS REQUIRING MODIFICATION BEFORE PROCEEDING WITH THE WORK.

CO.6 PROVIDE SHOP DRAWINGS AND COORDINATION DRAWINGS TO GUIDE THE FIELD INSTALLATION OF ALL SYSTEMS. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL NOT USE THESE DIAGRAMMATIC CONTRACT DOCUMENTS AS THEIR SHOP AND COORDINATION DRAWINGS.

CO.7 DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE SHOWN. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

CO.8 THE CUTTING OF EXISTING CONSTRUCTION AND FINISHES SHALL BE REPAIRED WHERE CUT OR DAMAGED BY OTHER PORTIONS OF THE WORK. TRADES PEOPLE WHO ARE BY TRAINING AND EXPERIENCE QUALIFIED TO MAKE SUCH REPAIRS SHALL PERFORM THE REPAIRS.

DIMENSIONING

D.1 UNLESS OTHERWISE NOTED, DIMENSIONS ARE FROM COLUMN CENTERLINE, FACE OF INTERIOR AND EXTERIOR STUDS, FACE OF MASONRY AND FACE OF CONCRETE WALLS.

D.2 FINISH FLOOR ELEVATIONS ARE TO TOP OF CONCRETE SLAB, UNLESS NOTED OTHERWISE.

D.3 ALL NEW WORK ADJOINING EXISTING CONSTRUCTION SHALL ALIGN WITH, AND MATCH EXISTING CONSTRUCTION, UNLESS OTHERWISE DIMENSIONED OR DETAILED. NEW GYPSUM BOARD CONSTRUCTION MEETING EXISTING CONSTRUCTION IN THE SAME PLANE SHALL BE FLUSH WITH THE EXISTING MATERIALS AND SHOW NO VISIBLE JOINT.

GRAPHIC SYMBOLS LEGEND

CONSTRUCTION SUBSYSTEM — 00 — REFERS TO A TYPICAL ASSEMBLY

BUILDING WALL SECTION — A101 SIM — LOCATION ON DRAWING SHEET; SHEET DETAIL IS LOCATED

ELEVATION — 1 A101 — ARROW INDICATES DIRECTION OF ELEVATION; SHEET LOCATION WHERE ELEVATION IS LOCATED

INTERIOR ELEVATION — 1 A101 — ARROW INDICATES DIRECTION OF ELEVATION; SHEET LOCATION WHERE ELEVATION IS LOCATED

PARTITION TYPES — 00 — REFERS TO INTERIOR PARTITIONS, SEE SHEET **A002**

DOORS — 101 — REFERS TO NUMBER ON DOOR SCHEDULE, SEE SHEET **A401**

ROOM NUMBER — Room name 101 — REFERS TO NUMBER ON FLOOR PLAN

EXTERIOR AND INTERIOR WINDOWS — REFERS TO FRAME TYPE, SEE ENLARGED ELEVATIONS ON SHEET **A402**

DEMOLITION NOTE — X — REFERS TO DEMOLITION NOTES ON THAT SHEET

PLAN & SECTION DETAIL REFERENCE — LOCATION ON DRAWING SHEET; 1 A101 — LOCATION ON DRAWING SHEET

COLUMN LINE — 0

FACE OF STUD EDGE OF SLAB — A

GRADE ELEVATIONS — 0" — EXISTING ELEVATIONS IN PARENTHESIS, COORDINATE WITH CIVIL

REVISION — REVISIONS ARE SHOWN WITHIN "CLOUDED" AREA REVISION NUMBER & DATE WILL APPEAR IN TITLE BLOCK SPACE SO LABELED

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SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

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phase: **PLANNING COMMISSION SUBMITTAL** — date of issue: **10-24-19**

revisions

rev no.	description	date

key plan

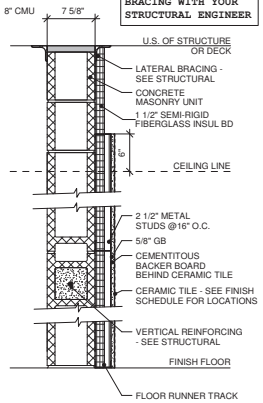
sheet title: **NOTES & ABBREVIATIONS**

sheet number: **A001**

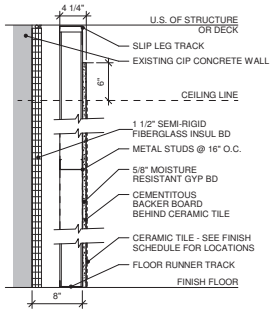
drawn by: EC print date:

B1 **CONCRETE MASONRY UNIT WITH GB ONE SIDE**
8" (U.N.O.) CMU EXTENDING FROM FLOOR TO UNDERSIDE OF DECK OR STRUCTURE ABOVE WITH 5/8" GB ONE SIDE OF 2 1/2" (U.N.O.) METAL STUDS @16" O.C. STUDS AND GB EXTEND TO 6" ABOVE FINISHED CEILING HEIGHT.

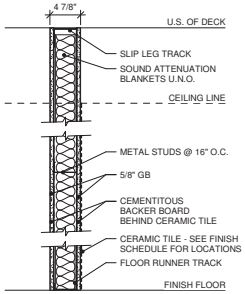
DESIGNER NOTE:
COORD. TOP OF WALL BRACING WITH YOUR STRUCTURAL ENGINEER



D1 **GYP. BD. ON METAL STUDS**
1 LAYER OF 5/8" GB ONE SIDE OF 3 5/8" (U.N.O.); METAL STUDS @16" O.C. STUDS EXTEND TO UNDERSIDE OF DECK OR STRUCTURE ABOVE. GB EXTENDS TO 6" ABOVE FINISHED CEILING HEIGHT.



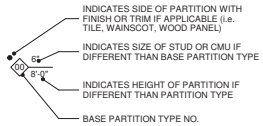
F1 **GYP. BD. ON METAL STUDS**
1 LAYER OF 5/8" GB EACH SIDE OF 3 5/8" (U.N.O.) METAL STUDS @16" O.C. PARTITION EXTENDS TO UNDERSIDE OF DECK ABOVE.

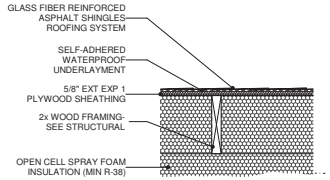


PARTITION NOTES:

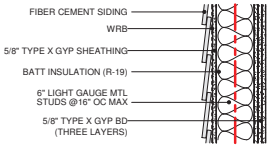
A. ALL STUD SPACING IS 16 INCHES ON CENTER UNLESS NOTED OTHERWISE.
B. ALL STUDS SHALL BE 20 GAUGE UNLESS NOTED OTHERWISE.
C. CONCRETE MASONRY UNIT WALLS AND PARTITIONS: PROVIDE HORIZONTAL JOINT REINFORCEMENT, VERTICAL REINFORCEMENT, BOND BEAMS, GROUTING, AND ADDITIONAL REQUIREMENTS AS INDICATED BY STRUCTURAL DRAWINGS AND SPECIFICATIONS.
D. SEE FINISH SCHEDULE FOR LOCATION OF APPLIED FINISHES (SUCH AS CERAMIC TILE, WALL COVERING, ETC.) THAT MAY AFFECT THE PARTITION SURFACE AND CONSTRUCTION REQUIREMENTS.
E. WHERE CERAMIC TILE AND CEMENTITIOUS BACKER UNIT ARE NOT SCHEDULED TO BE THE FULL HEIGHT OF PARTITION, PROVIDE GYPSUM BOARD (TYPE 'X' @ RATED PARTITIONS) AT THOSE PORTIONS OF THE PARTITION NOT SCHEDULED TO RECEIVE CERAMIC TILE. CEMENTITIOUS BACKER UNIT TO BE SAME THICKNESS AS 5/8" GYPSUM BOARD.
F. ALL SOUND RATED WALLS OR PARTITIONS (STC 45 OR AND ABOVE) SHALL HAVE AN ACOUSTICAL GASKET AND/OR ACOUSTICAL SEALANT AT THE TOP, BOTTOM AND SIDES WHERE A SOUND LEAK COULD OCCUR. ALL PENETRATIONS THROUGH SUCH PARTITIONS SHALL BE GASKETED AND SEALED ALONG THE PENETRATION PERIMETER. IF PARTITIONS ARE FIRE-RATED, PROVIDE UL-LABELED FIRE STOPPING IN PLACE OF ACOUSTICAL SEALANT. AT PARTITIONS THAT ARE SOUND AND FIRE RATED, PROVIDE ACOUSTICAL SEALANT AT PARTITION PENETRATIONS THAT DO NOT REQUIRE FIRE STOPPING (EXAMPLE: DUCT PENETRATIONS WITH FIRE DAMPERS).
G. ALL FIRE AND/OR SMOKE PARTITIONS, FIRE BARRIERS AND FIRE WALLS SHALL EXTEND FROM FINISH FLOOR TO WHERE IT MAY BE SEALED, SUCH AS THE UNDERSIDE OF THE STRUCTURE OR DECK, AND BE ENTIRELY SEALED WITH FIRE SAFING MATERIALS PER AN APPROVED FIRE RATED ASSEMBLY IN ACCORDANCE WITH A U.L. DESIGN, OR A DESIGN TESTED BY A TESTING LAB APPROVED BY THE AUTHORITY HAVING JURISDICTION. ALL PENETRATIONS THROUGH AND EDGES OF PARTITIONS SHALL ALLOW FOR APPROPRIATE DEFLECTIONS AND MOVEMENT OF ADJACENT MATERIALS AND RESULTING SPACES PROPERLY FILLED WITH FIRE SAFING INSULATION AND/OR SEALED TO MAINTAIN THE RATING INTEGRITY.
H. ALL RATED PARTITIONS SHALL BE PERMANENTLY IDENTIFIED WITH A SIGN OR STENCILING ABOVE THE CEILING. THE SIGN SHALL READ **"X-HOUR FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS"**, AND BE LOCATED A MAXIMUM 15 FEET O.C. ON CONTINUOUS WALLS. BEGIN NEW SERIES ON ALL CORNERS. LETTERING AND ARROWS MAY BE UTILIZED TO INDICATE THE DIRECTION AND EXTENT OF THE FIRE RATING.
I. ALL NON-RATED PARTITIONS OF COMBUSTIBLE CONSTRUCTION EXTENDING ABOVE THE CEILING SHALL BE FIREBLOCKED AT THE TOP OF PARTITION AND HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET IF NECESSARY, WITH 2 INCH NOMINAL LUMBER ALL PENETRATIONS OF THIS FIRE-STOPPING SHALL BE SEALED.
J. PROVIDE BRACING AT 48" O.C. MAXIMUM ABOVE CEILING TO STRUCTURAL FRAMING WHERE PARTITION EXCEEDS THE MAXIMUM UNBRACED HEIGHT OR WHERE REQUIRED TO PROVIDE RIGIDITY TO THE PARTITION BELOW THE CEILING WHERE CERAMIC TILE OCCURS. ENSURE INTEGRITY OF FIRE AND SOUND RATINGS OF PARTITION IF BRACING PENETRATES PARTITION SURFACE.
K. NON-RATED PARTITIONS THAT DO NOT EXTEND TO STRUCTURE OR DECK ABOVE, IN AREAS WITH ACOUSTICAL TILE CEILINGS, SHALL EXTEND A MINIMUM OF 8 INCHES ABOVE THE CEILING. SEE NOTE 'J' ABOVE FOR BRACING REQUIREMENTS. TOP OF PARTITION SHALL BE FIRE-STOPPED WITH NON-COMBUSTIBLE MATERIAL (I.E. METAL STUD RUNNER).
L. PARTITIONS WITH SOUND ATTENUATION BLANKETS WHICH DO NOT EXTEND TO THE UNDERSIDE OF STRUCTURE SHALL HAVE ENCAPSULATED SOUND ATTENUATION BLANKETS ON BOTH SIDES OF THE PARTITION (MINIMUM 24" WIDE) ABOVE THE FINISHED CEILING.
M. FIBERGLASS FACED GYPSUM BOARD SHALL BE USED FOR THE FACE LAYER IN ANY PARTITION TYPE WHERE EPOXY FINISHES OCCUR.
N. PROVIDE BLOCKING AT ALL ACCESSORIES AND CASEWORK.
O. AT SPACES WITHOUT CEILINGS, SURROUNDING PARTITIONS SHALL EXTEND TO STRUCTURE OR DECK ABOVE WITHOUT ANY VOIDS ABOVE TOP OF WALL.
P. SEE SPECIFICATION SECTION 092900 - GYPSUM BOARD ASSEMBLIES FOR FINISH LEVEL REQUIRED, UNLESS SPECIFICALLY NOTED.
Q. ONLY THOSE PARTITIONS SHOWN AS RATED WALLS ON THE FIRE PROTECTION PLANS AND THE REFLECTED CEILING PLANS MUST CONFORM TO THE UL LISTING INDICATED.
R. PROVIDE METAL CONTROL JOINTS IN GYPSUM BOARD SURFACES SPACED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED BEST PRACTICES. WHERE VISUAL CONSIDERATIONS PREVAIL, CONSULT WITH ARCHITECT TO DETERMINE LOCATIONS.
S. PROVIDE L-BEAD WITH SEALANT AND BACKER ROD WHERE GWB ABUTS A DISSIMILAR MATERIAL SUCH AS CMU.
T. WALL ACCESSORIES SUCH AS FIRE EXTINGUISHER CABINETS, PAPER TOWEL DISPENSERS, ETC. INSTALLED IN RATED WALLS SHALL BE INSTALLED IN A MANNER WHICH WILL NOT REDUCE THE FIRE RATING OF THE WALL.
U. ALL OUTSIDE CORNERS AND END OF GYPSUM BOARD PARTITIONS SHALL RECEIVE METAL CORNER BEADS OR METAL TRIM UNLESS NOTED OTHERWISE.
V. EXPOSED CONCRETE WALL SHALL BE POINTED UP, RUBBED AND PATCHED AS REQUIRED, PRIOR TO THE APPLICTION OF PRIME PAINTING IN ALL LOCATIONS. POINTING UP MATERIAL SHALL BE THE SAME TYPE OF MATERIAL AS THE WALL CONSTRUCTION.

PARTITION SYMBOL KEY:

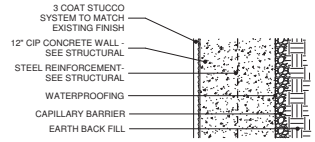




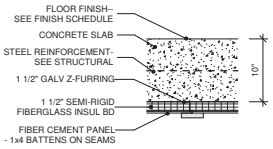
R1 **ASPHALT SHINGLES ROOF SYSTEM**



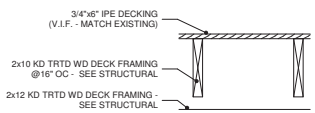
W2 **FIBER CEMENT SIDING ON METAL STUDS (2 HOUR RATED EXTERIOR WALL - UL U418)**



W1 **STUCCO ON CIP CONCRETE**



S2 **UPPER FLOOR CONCRETE SLAB**



S1 **WOOD JOIST WITH IPE DECK BOARDS**

CONSTRUCTION SUBSYSTEMS:

S1 **WOOD JOIST WITH IPE DECK BOARDS**
- 3/4"x6" IPE DECK BOARDS (064000)
  WITH EDGE BOARD AT PERIMETER (064000)
- 2"x KD TRTD WOOD JOIST FRAMING
  - SEE STRUCTURAL (061100)

S2 **UPPER FLOOR CONCRETE SLAB**
- FLOOR FINISH - SEE FINISH SCHEDULE
- CONCRETE SLAB (033000)
- STEEL REINFORCEMENT (032000)
- 1 1/2" SEMI-RIGID FIBERGLASS INSULATION BOARD (R-6.3 MIN) [+/- 1 1/2"] (**XXXXXX**)
- 1 1/2" GALVANIZED Z-FURRING (092200)
- FIBER CEMENT PANELING WITH BATTENS ON SEAMS (**XXXXXX**)

W1 **STUCCO ON CIP CONCRETE**
- THREE LAYER STUCCO SYSTEM (092200)
- CAST IN PLACE CONCRETE (033000)
- STEEL REINFORCEMENT (032000)
- WATERPROOFING (**XXXXXX**)
- CAPILLARY FILL (033000)
- COMPACTED FILL (033000)

W2 **FIBER CEMENT SIDING ON METAL STUDS (2 HOUR RATED EXTERIOR WALL - UL U418)**
- FIBER CEMENT SIDING - **XX"** THICK, **X"** EXPOSURE WITH FIBER CEMENT TRIM (074646)
  - SEE ELEVATIONS FOR SIZES
- WATER-RESISTIVE BARRIER (WRB) (072727)
- 5/8" TYPE X GYPSUM SHEATHING (061600)
- 6" LIGHT GAUGE MTL STUDS (054000)
- BATT INSULATION (R-19) (072100)
- 5/8" INTERIOR TYPE X GYPSUM BOARD (THREE LAYERS) (092900)

R1 **ASPHALT SHINGLES ROOF SYSTEM**
- GLASS FIBER REINFORCED ASPHALT SHINGLES ROOFING ASSEMBLY (**XXXXXX**)
- SELF-ADHERED WATERPROOF UNDERLAYMENT (**XXXXXX**)
- 5/8" EXT EXP 1 PLYWOOD SHEATHING (061600)
- 2"x WOOD JOIST FRAMING
  - SEE STRUCTURAL (061100)
- SPRAY APPLIED OPEN CELL INSULATION (R-38 MIN) [+/- 10 1/2"] (072100)

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SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

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phase: **PLANNING COMMISSION SUBMITTAL** — date of issue: **10-24-19**

revisions

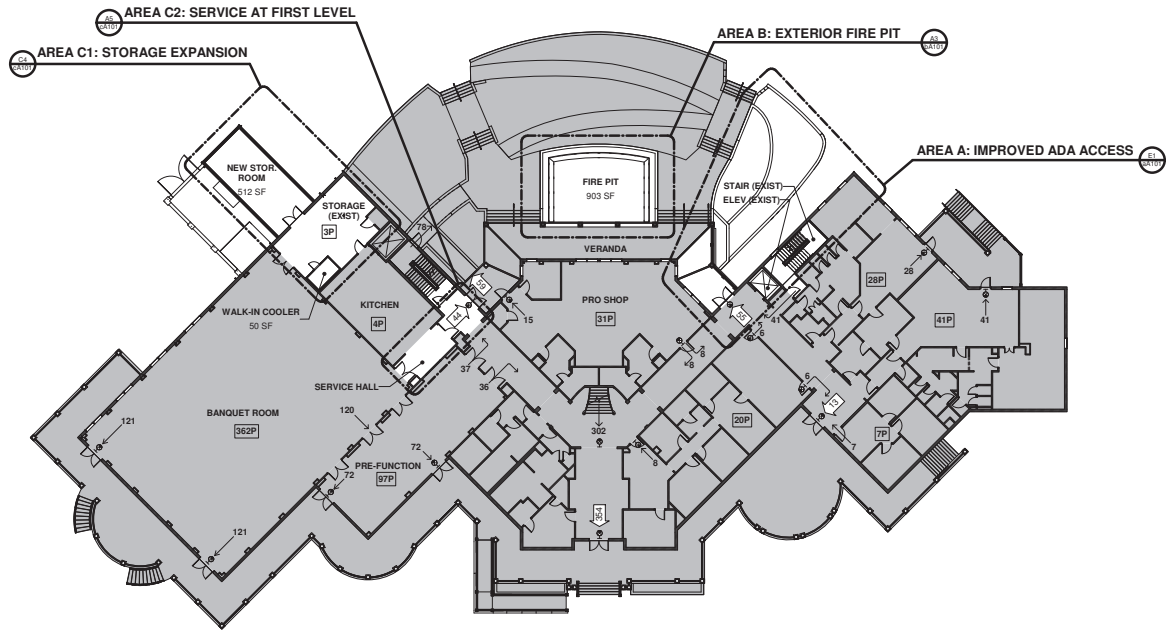
rev no.	description	date

key plan

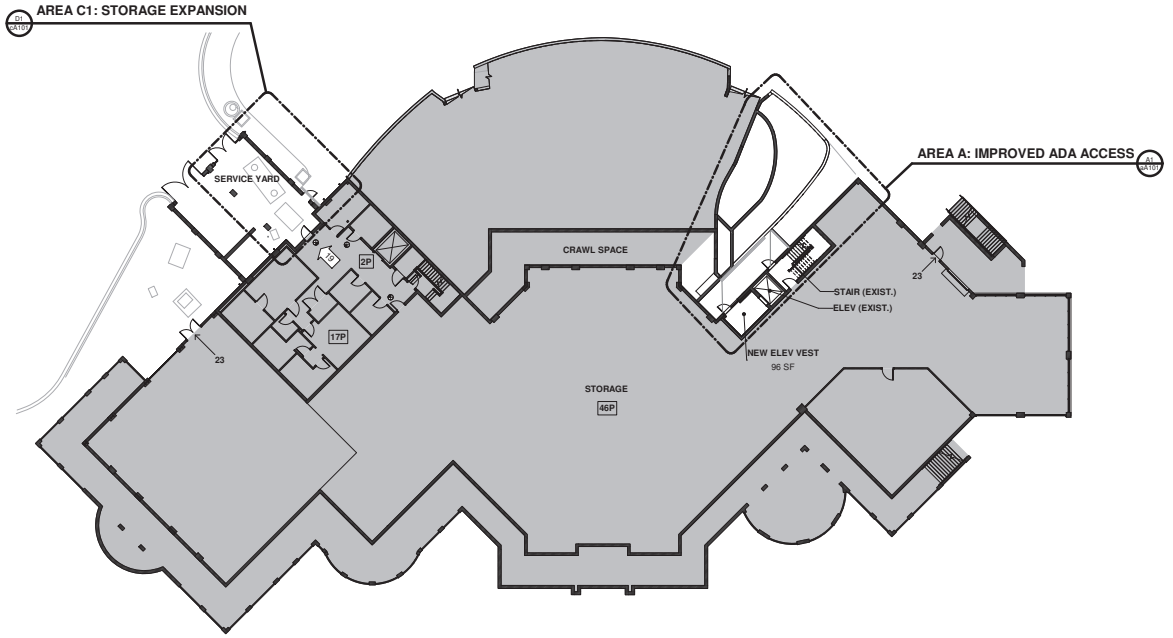
sheet title: **CONSTRUCTION SUBSYSTEMS & PARTITION TYPES**

sheet number: **A002**

drawn by: EC — print date:



D1 FIRST FLOOR LIFE SAFETY PLAN
1/16" = 1'-0"



A1 GROUND FLOOR LIFE SAFETY PLAN
1/16" = 1'-0"

LIFESAFETY LEGEND:

- EXIT SIGN
- 1 HOUR RATED FIRE PARTITION (1 HOUR RATED FIRE BARRIER - EDIT)
- 2 HOUR RATED FIRE PARTITION (2 HOUR RATED FIRE BARRIER - EDIT)
- NOT IN SCOPE
- EXIT INFORMATION
  - NO. PERSONS EXIT ALLOWS
  - EXIT WIDTH
  - OCCUPANT LOAD
- TYPICAL EXIT
  - CUMULATIVE OCCUPANT LOAD
- DIRECTION OF TRAVEL
  - OCCUPANT LOAD
- FEC — FIRE EXTINGUISHER IN CABINET
- FACP — FIRE ALARM CONTROL PANEL
- FIRE EXTINGUISHER ON WALL WITH MOUNTING BRACKET
- NUMBER OF OCCUPANTS
- CPET — COMMON PATH OF EGRESS TRAVEL
- DEC — DEAD END CORRIDOR

LIFE SAFETY NOTES:

A. CLEAR EGRESS WIDTH IS FROM FACE OF DOOR OPEN AT 90 DEGREES AT HINGE AND FACE OF STOP ON LATCH. ACTUAL WIDTH IS 3" LESS THAN DOOR WIDTH.

0 8' 16' 32'

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sheet title
LIFE SAFETY PLANS

sheet number
LS001

drawn by: EC print date:

SEABROOK ISLAND CLUB CLUBHOUSE - CODE REVIEW

October, 2019
Phase: Design Development
By: Steve Graudin AIA

ADMINISTRATION:

Jurisdiction: Charleston County, SC and Town of Seabrook Island
Inspections: Charleston County, SC
Planning: Charleston County, SC

CODE REFERENCES:

A. International Building Code w SC Amendments/ International Existing Building Code, 2015 Edition.
B. International Mechanical Code, 2015 Edition.
C. International Plumbing Code, 2015 Edition.
D. International Fire Code, 2015 Edition.
E. International Fuel Gas Code, 2015 Edition.
F. International Energy Conservation Code, 2009 Edition
G. ADA Standards for Accessible Design, 2010 Edition
H. ICC 117.1 2009 edition
I. State Fire Marshal Regulations (07.16.13)

NOTE: CONSTRUCTION DOCUMENTS FOR THE EXISTING BUILDING ARE DATED 1/31/08 (BY GLICK/GOEHM & ASSOCIATES) AND ARE BASED ON THE 2003 EDITION OF THE IBC. CODE SUMMARY AVAILABLE AT THE OFFICE OF SMHa.

PROJECT SCOPE

AREA A- Improved ADA Accesss

Ground Level
- Cut existing exterior grade for ADA accessible entry to the existing elevator.
- Add elevator vesibule.
- Add engineered vents for wet flood proofing at elevator vestibule.
- Existing Stair Modifications (1,2,3)
  1. Delete existing door leading from the intermediate landing to the exterior.
  2. Rework existing stair from ground level to first floor to provide proper clearances for new exit.
  3. Add door for ground level egress from stair.

First Floor
- Replace portion of existing deck and add guard rail.

AREA B - Exterior Fire Pit:
- Extend existing exterior porch.
- Add propane fueled fire pits (2 total).

AREA C1 - Storage Expansion:

Ground Floor
- Replace pier and gate at service yard.

First Floor
- Add Storage Room with door into the Kitchen.
- Add a walk-in cooler in existing Kitchen Storage Area.

AREA C2 - Service at First Level:

First Floor
- Remove door and portion of wall from Kitchen to Service Hall.
- Remove door and infill wall from Service Hall into Prefunction Area.
- Fix one leaf of the double door from Service Hall to Vestibule and replace hardware to reduce access to Hall.

EXISTING BUILDING CODE

General Scope of Proposed Renovations

Repairs, alternations, and addition and correction of life safety code deficiencies to an existing building without a change of use or occupancy.

IEBC Chapter 3: Compliance Method -

Prescriptive Compliance Method	301.1.1

FIRM/FEMA Strategy

This property is located within an AE (13) flood zone designation, as shown on Flood Insurance Rate Map (Map no. 45019C0795J, Panel 795, November 17, 2004). The BFE is 13.0'. The DFE is 14.0'.
The structure's ground finish floor is 6.87'. The First Level finish floor is 16.89' and the Second Floor Level finish floor is 30.9'±.

Strategy: Engineered Opening flood vents by Smart Vent will be used on the ground floor. The requirement is 1 square inch per 1 square foot of floor area. Each vent is engineered and ICC-ES Certified for 200 square feet. There is 104 square feet in the Elevator Vestibule. There will be one vent provided on each of two opposing sides of the occupied space.

1 Use and Occupancy - Chapter 3 IBC

		Reference	Notes
Ground Floor - Storage	Storage S-2	311.3	
First Floor - Banquet Room / Offices	Assembly A-2	303.3	
Second Floor - *Dining Room / Grille*	Assembly A-2	303.3	

2 Type of Construction - Chapter 6

	Condition	Reference	Notes
Classification - Type III-B	Sprinklered	602.3	

3 Building Height - Chapter 5

3.1 The project is an interior renovation and small addition. The addition has not changed the building height.

4 Building Area - Chapter 5

4.1 The building area remains the same with the exception of the Storage Room addition (600 SFI).

5 Fire Protection Systems - Chapter 9

5.1 The existing building and addition are equipped with an Automatic Sprinkler System (903) and Fire Alarm Detection System (907). See Electrical and Fire Protection documents.

6 Occupant Load - Chapter 10

Occupancy Type A (Assembly - unconcentrated)	Area	Occupant Load Factor	Net/Gross	Occupant Load
Ground Floor (break room)	251	15	Net	17
First Floor	6,872	15		459
Second Floor	6,855	15		457
Total Occupancy Type A				**933**

Occupancy Type B (Business)	Area	Occupant Load Factor	Net/Gross	Occupant Load
First Floor	2,538	100		26
Total Occupancy Type B				**26**

Occupancy Type S (Storage)	Area	Occupant Load Factor	Net/Gross	Occupant Load
Ground Floor	14,005	300		47
First Floor	848	300	Gross	3
Second Floor	821	300		3
Total Occupancy Type S				**53**

Occupancy Type M (Mercantile)	Area	Occupant Load Factor	Net/Gross	Occupant Load
First Floor	1,843	60		31
Total Occupancy Type M				**31**

Occupancy (Kitchen)	Area	Occupant Load Factor	Net/Gross	Occupant Load
First Floor	714	200	Gross	4
Second Floor	2,261	200		12
Total Occupancy Kitchen				**16**

Occupancy (Locker Rooms)	Area	Occupant Load Factor	Net/Gross	Occupant Load
First Floor	3,160	50	Gross	64
Total Occupancy Locker Rooms				**64**

Total Occupants per Floor		Occupant Load
Ground Floor		64
First Floor		587
Second Floor		472
Total Building Occupancy		**1,123**

Note: Areas indicated above are existing and there is no change in the number of occupants.

7 Zoning

7.1 There are no exterior improvements associated with this project that require Zoning review.
7.2 This property is not located in a Fire District.
7.3 This property is located in a Flood Zone. See FIRM/FEMA Strategy above.

8 Plumbing Fixtures - Chapter 29

	Toilets Men	Toilets Women	Lavs	DF
Total Provided Ground Floor	**1 wc / 1 ur**	**2**	**2**	**0**
Total Provided First Floor	**5 wc / 5 ur**	**11**	**14**	**0**
Total Provided Second Floor	**3 wc / 2 ur**	**4**	**7**	**0**

Notes:
8.1 Except for the 521 square foot storage room addition, the building size and function remains unchanged. The total occupant count is increased by 2, which does not change the plumbing fixture count.

SMHa
architecture • planning • interiors

project number **1923.00**

SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

TMS #1470500018
3771 SEABROOK ISLAND RD, JOHNS ISLAND, SC 29455

seal / signature

phase	date of issue
PLANNING COMMISSION SUBMITTAL	**10-24-19**

revisions

rev no.	description	date

key plan
sheet title
CODE REVIEW

sheet number
LS002

drawn by: Author print date:

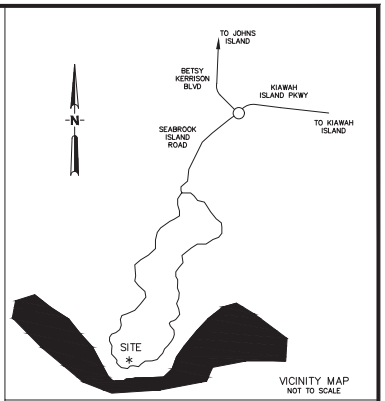
EXTERIOR IMPROVEMENTS
AT
THE ISLAND HOUSE

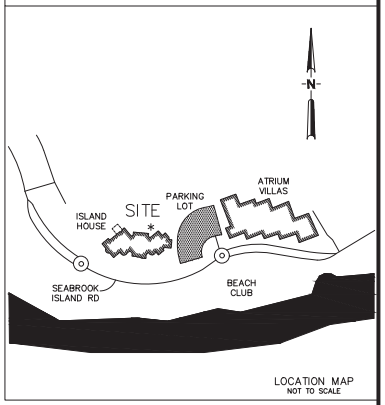
3771 SEABROOK ISLAND ROAD

THE CLUB AT SEABROOK ISLAND

TMS 147-05-00-018

TOWN OF SEABROOK ISLAND
CHARLESTON COUNTY, SOUTH CAROLINA





SHEET NO	SHEET TITLE
C100	TOPOGRAPHIC SURVEY
C200	DEMOLITION & SEDIMENT CONTROL PLAN
C300	SITE PLAN
C400	GRADING PLAN
C500	CONSTRUCTION DETAILS
C501	CONSTRUCTION DETAILS

NOTES

1. TMS # 147-05-00-018.
2. THE OWNER IS THE CLUB AT SEABROOK ISLAND.
3. THE ADDRESS IS 3771 SEABROOK ISLAND ROAD.
4. THE TOTAL PROPERTY AREA IS 5.84 AC. THE TOTAL DISTURBED AREA IS 0.1 AC.
5. ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 45019 C 0795 J, DATED NOVEMBER 17, 2004, THE PROPERTY LIES IN FLOOD ZONE AE (EL 13), WHICH IS A SPECIAL FLOOD HAZARD AREA (SFHA).
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7. A BOUNDARY SURVEY WAS NOT PERFORMED AT THIS TIME. PROPERTIES LINES SHOWN WERE TAKEN FROM PREVIOUS SURVEYS AND CIVIL PLANS.

SCDHEC STANDARD SWPPP NOTES

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.

   - WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
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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.

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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:

   - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
   - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
   - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
   - 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.

CONSTRUCTION SEQUENCE

ITEMS MUST OCCUR IN THE ORDER LISTED; ITEMS CANNOT OCCUR CONCURRENTLY UNLESS SPECIFICALLY NOTED.

1. RECEIVE NPDES COVERAGE FROM SCDHEC.
2. PRE-CONSTRUCTION MEETING (ON-SITE IF MORE THAN 10 DISTURBED AND NON-LINEAR).
3. NOTIFY SCDHEC EQC REGIONAL OFFICE OR OCRM OFFICE 48 HOURS PRIOR TO BEGINNING LAND-DISTURBING ACTIVITIES.
4. IDENTIFY ALL TREES TO BE PROTECTED AND INSTALL TREE BARRICADES AS REQUIRED.
5. INSTALLATION OF CONSTRUCTION ENTRANCE(S).
6. CLEARING & GRUBBING ONLY AS NECESSARY FOR INSTALLATION OF PERIMETER CONTROLS.
7. INSTALLATION OF PERIMETER CONTROLS (E.G., SILT FENCE).
8. HAVE TREE BARRICADES AND SILT FENCE INSPECTED AND APPROVED BY APPROPRIATE AUTHORITY IF REQUIRED.
9. CLEARING & GRUBBING ONLY IN AREAS OF BASINS/ TRAPS/ PONDS.
10. INSTALLATION OF BASINS/ TRAPS/ PONDS 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 AND DIVERSIONS TO THE STRUCTURES ARE COMPLETELY INSTALLED).
11. CLEARING & GRUBBING OF SITE OR DEMOLITION (SEDIMENT & EROSION CONTROL MEASURES FOR THESE AREAS MUST ALREADY BE INSTALLED).
12. ROUGH GRADING.
13. INSTALLATION OF UTILITIES, STORM DRAIN SYSTEM , AND PLACEMENT OF INLET PROTECTION AS EACH INLET IS INSTALLED.
14. BUILDING CONSTRUCTION.
15. FINE GRADING, PAVING, ETC.
16. PERMANENT/ FINAL STABILIZATION.
17. 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.
18. REMOVAL OF TEMPORARY SEDIMENT & EROSION CONTROL MEASURES AFTER ENTIRE AREA DRAINING TO THE STRUCTURE IS FINALLY STABILIZED (SCDHEC RECOMMENDS THAT THE PROJECT OWNER/ OPERATOR HAVE THE SWPPP PREPARER OR REGISTRATION EQUIVALENT APPROVE THE REMOVAL OF TEMPORARY STRUCTURES.)
19. PERFORM AS-BUILT SURVEYS OF ALL DETENTION STRUCTURES AND SUBMIT TO SCDHEC OR MS4 FOR ACCEPTANCE.
20. SUBMIT NOTICE OF TERMINATION (NOT) TO SCDHEC AS APPROPRIATE.

NOTES

A. IF FLOWS FROM OFFSITE AREAS WILL BE DIVERTED AROUND THE SITE AND THE ON-SITE STRUCTURES ARE NOT DESIGNED TO HANDLE FLOWS FROM THE OFFSITE AREAS, THEN THE DIVERSIONS/ PIPING FOR THE OFFSITE FLOWS MUST BE INSTALLED BEFORE LAND-DISTURBING ACTIVITIES BEGIN ON THE SITE. SEDIMENT AND EROSION CONTROL MEASURES FOR THE DISTURBED AREAS FOR THE DIVERSION/ PIPING MUST BE INSTALLED BEFORE THOSE AREAS ARE DISTURBED.
B. IF AN EXISTING DETENTION/ SEDIMENT BASIN IS BEING MODIFIED TO HANDLE THE FLOWS FROM THE PROPOSED DEVELOPMENT, THEN IT MUST BE MODIFIED BEFORE LAND-DISTURBING ACTIVITIES BEGIN ON THE SITE.
C. INCLUDE INDIVIDUAL LOT DEVELOPMENT/ CONSTRUCTION IN THE SEQUENCE IF THE SITE WILL NOT BE MASS-GRADED.
D. INSTALLATION OF SOME PERMANENT WATER QUALITY DEVICES SHOULD OCCUR AFTER THE SITE IS STABILIZED. CLEANOUT OF OTHER WATER QUALITY DEVICES THAT WERE USED DURING CONSTRUCTION SHOULD OCCUR AFTER SITE STABILIZATION.
E. MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES MUST CONTINUE UNTIL THE SITE IS PERMANENTLY STABILIZED AND THE CONTROLS ARE REMOVED.

SOUTH CAROLINA ENGINEERING CERTIFICATE OF AUTHORIZATION — FORSBERG ENGINEERING & SURVEYING, INC. No. C00343

SOUTH CAROLINA PROFESSIONAL ENGINEER — WILLIAM A. WEAVER — No. 28158

DATE: OCTOBER 24, 2019

South Carolina 811 — Call Bef... Before you Dig.

Know what's below. Call before you dig.

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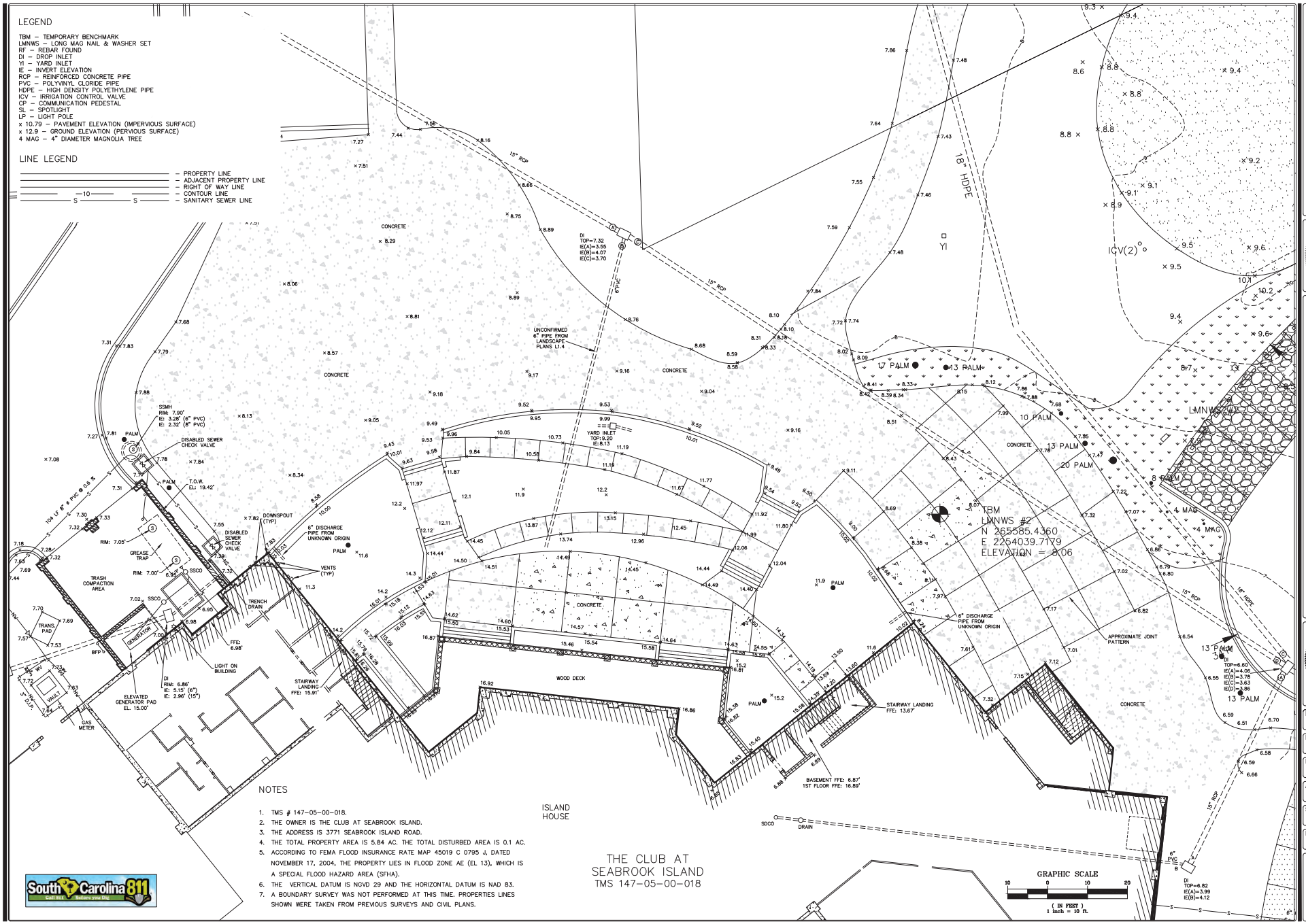
P.O. BOX 30575
CHARLESTON, SOUTH CAROLINA 29417
(843) 571-2622 FAX (843) 571-6780
CIVIL ENGINEERING, SURVEYING AND LAND PLANNING

JOB# 3962-2



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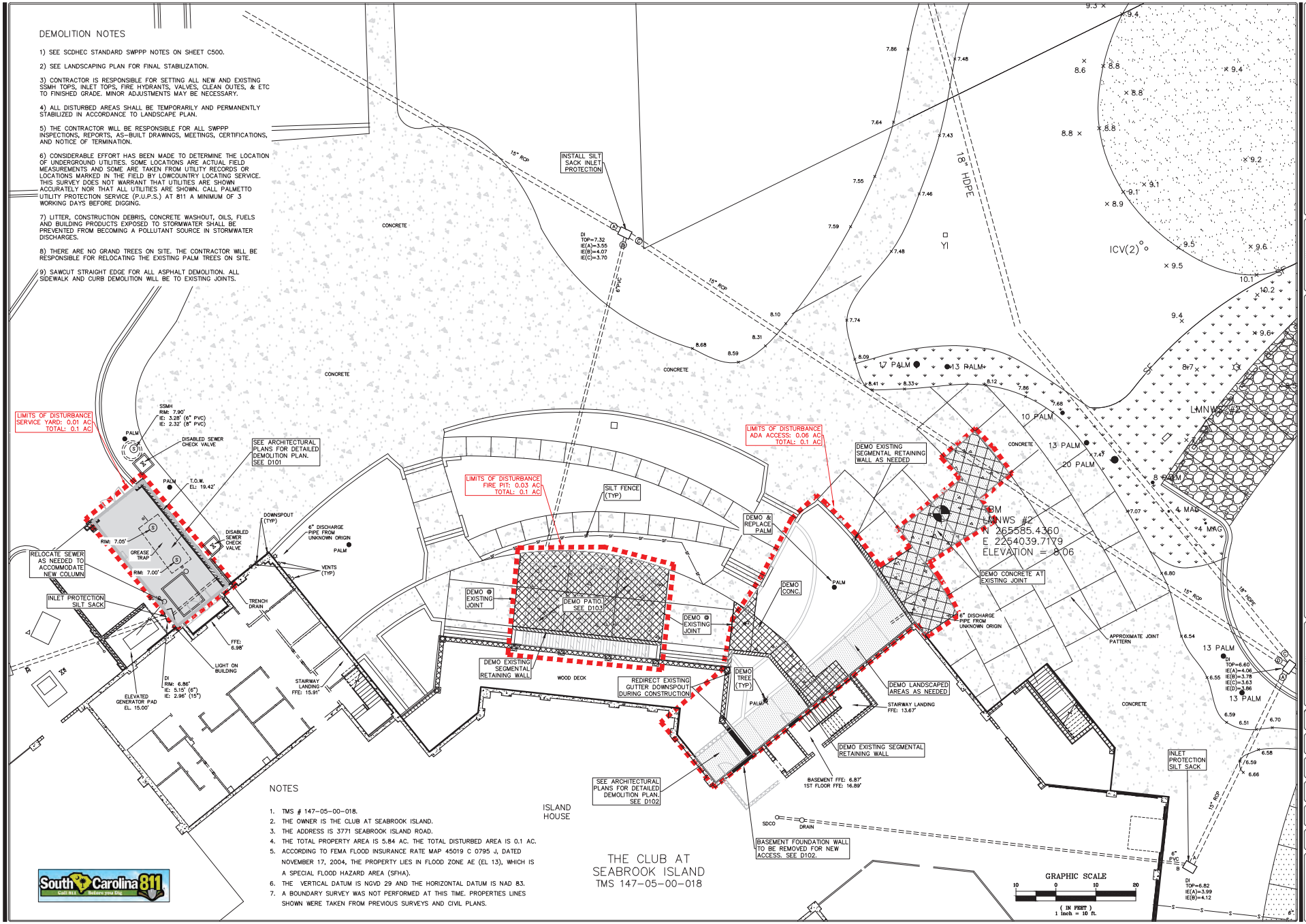
CIVIL ENGINEERING, SURVEYING
AND LAND PLANNING

FORSBERG ENGINEERING & SURVEYING, INC. No. C00343
STATE OF SOUTH CAROLINA

TOPOGRAPHIC SURVEY
ISLAND HOUSE IMPROVEMENTS
THE CLUB AT SEABROOK ISLAND
TOWN OF SEABROOK ISLAND, CHARLESTON COUNTY, SOUTH CAROLINA

REGISTERED PROFESSIONAL LAND SURVEYOR
No. 28158
STATE OF SOUTH CAROLINA
WILLIAM W. WEATHERS

DATE	OCTOBER 24, 2019
DRAWN/CHECKED	WWW/MSJ
LAST REVISED	-
APPROVED	WWW
SCALE	1" = 10'
PROJECT NO.	3962-2
SHEET NUMBER	C100
OF	



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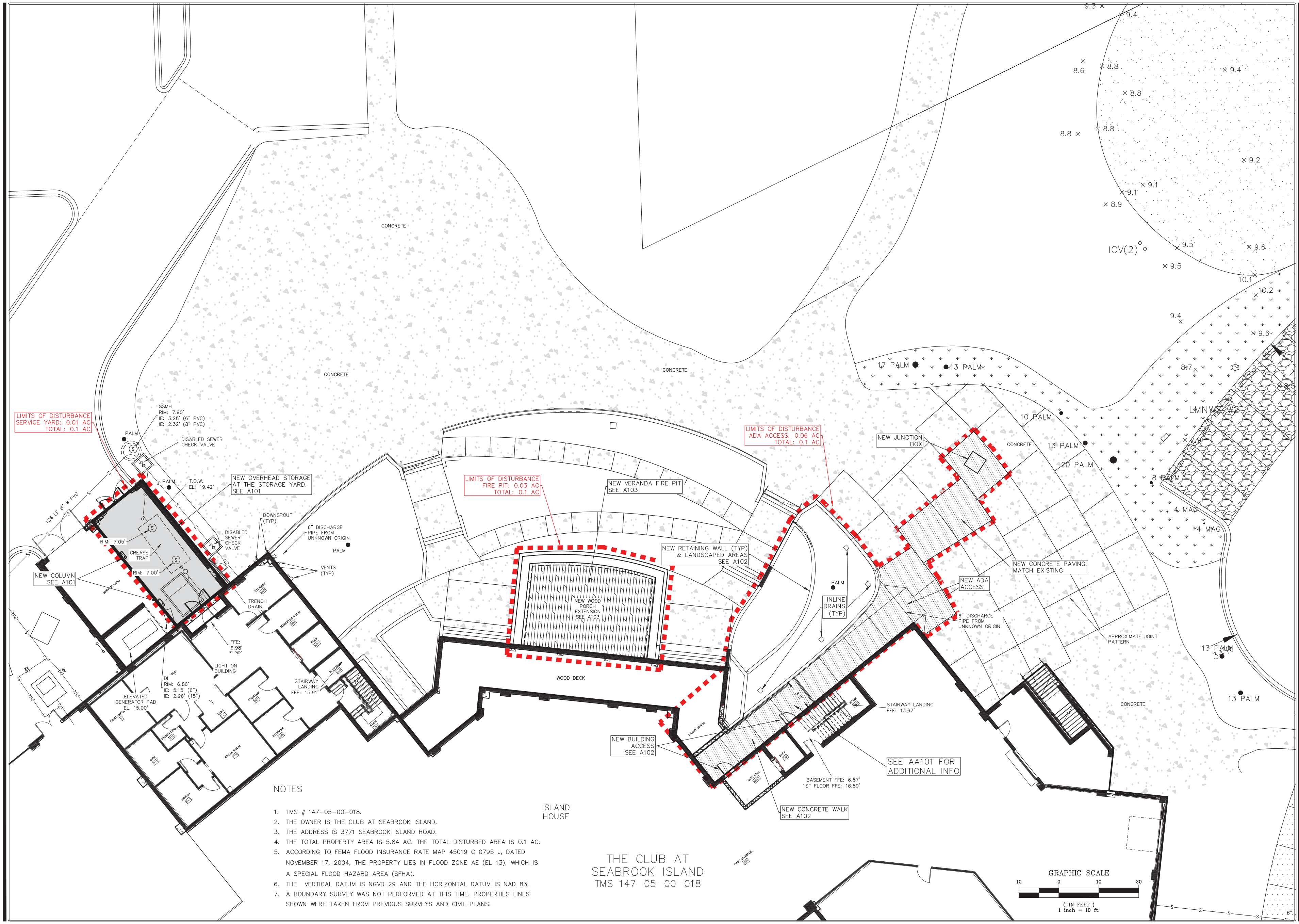
REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR

DEMOLITION & SEDIMENT CONTROL PLAN

ADDITIONAL PARKING AT THE ISLAND HOUSE
THE CLUB AT SEABROOK ISLAND

TOWN OF SEABROOK ISLAND, CHARLESTON COUNTY, SOUTH CAROLINA

DATE	OCTOBER 24, 2019
DRAWN/CHECKED	WWW/MSJ
LAST REVISED	-
APPROVED	WWW
SCALE	1" = 10'
PROJECT NO.	3962-2
SHEET NUMBER	C200
OF	7



NOTES

1. TMS # 147-05-00-018.
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3. THE ADDRESS IS 3771 SEABROOK ISLAND ROAD.
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5. ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 45019 C 0795 J, DATED NOVEMBER 17, 2004, THE PROPERTY LIES IN FLOOD ZONE AE (EL 13), WHICH IS A SPECIAL FLOOD HAZARD AREA (SFHA).
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CIVIL ENGINEERING, SURVEYING AND LAND PLANNING

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION — FORSBERG ENGINEERING & SURVEYING, INC. No. C00343

SITE PLAN

ADDITIONAL PARKING AT THE ISLAND HOUSE
THE CLUB AT SEABROOK ISLAND
TOWN OF SEABROOK ISLAND, CHARLESTON COUNTY, SOUTH CAROLINA

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR No. 28158 WILLIAM W. WEATHERS

WILLIAM W. WEATHERS

DATE	OCTOBER 24, 2019
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LAST REVISED	-
APPROVED	WWW
SCALE	1" = 10'
PROJECT NO.	3962-2
SHEET NUMBER	C300
OF	7

LEGEND

DI – DROP INLET
YI – YARD INLET
IE – INVERT ELEVATION
RCP – REINFORCED CONCRETE PIPE
PVC – POLYVINYL CLORIDE PIPE
HDPE – HIGH DENSITY POLYETHYLENE PIPE
ICV – IRRIGATION CONTROL VALVE
CP – COMMUNICATION PEDESTAL
SL – SPOTLIGHT

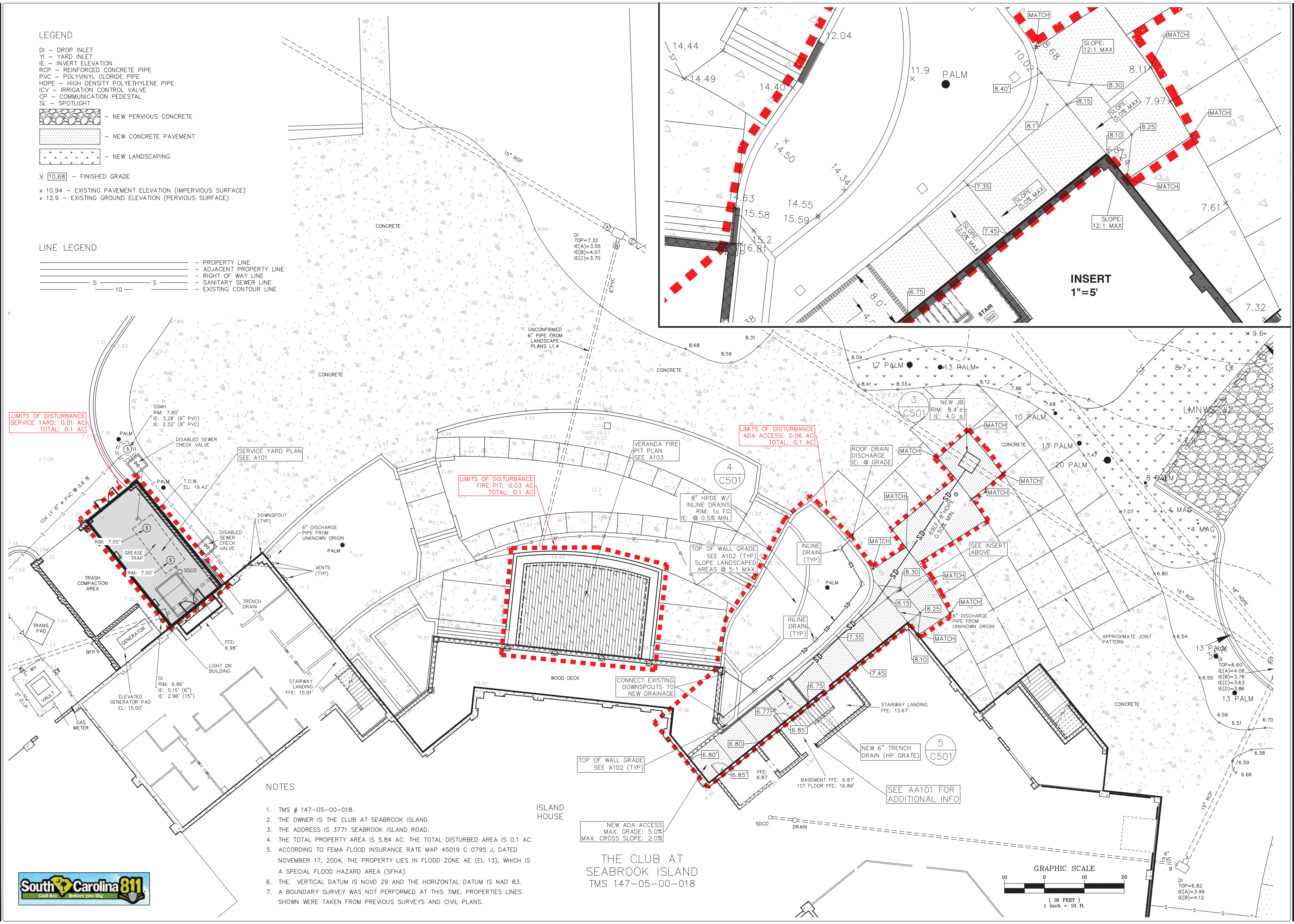
– NEW PERVIOUS CONCRETE
– NEW CONCRETE PAVEMENT
– NEW LANDSCAPING

X 10.68 – FINISHED GRADE

x 10.94 – EXISTING PAVEMENT ELEVATION (IMPERVIOUS SURFACE)
x 12.9 – EXISTING GROUND ELEVATION (PERVIOUS SURFACE)

LINE LEGEND

– PROPERTY LINE
– ADJACENT PROPERTY LINE
– RIGHT OF WAY LINE
– SANITARY SEWER LINE
– EXISTING CONTOUR LINE



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GRADING PLAN

ADDITIONAL PARKING AT THE ISLAND HOUSE
THE CLUB AT SEABROOK ISLAND
TOWN OF SEABROOK ISLAND, CHARLESTON COUNTY, SOUTH CAROLINA

WILLIAM W. WEATHERS

DATE	OCTOBER 24, 2019
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LAST REVISED	.
APPROVED	WWW
SCALE	1" = 10'
PROJECT NO.	3962-2
SHEET NUMBER	C400
OF	7

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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:

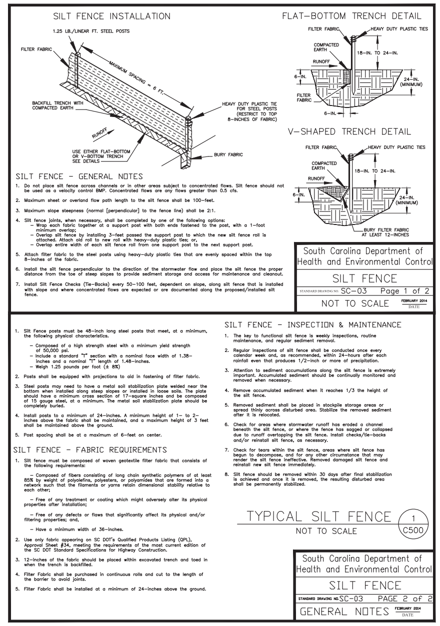
- WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
- WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
- FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
- 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.

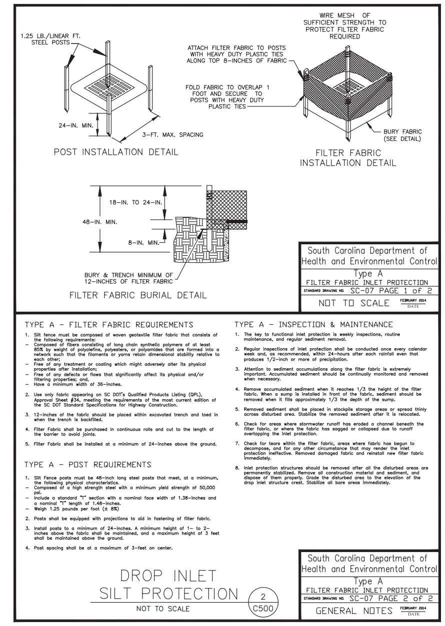
18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, 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.

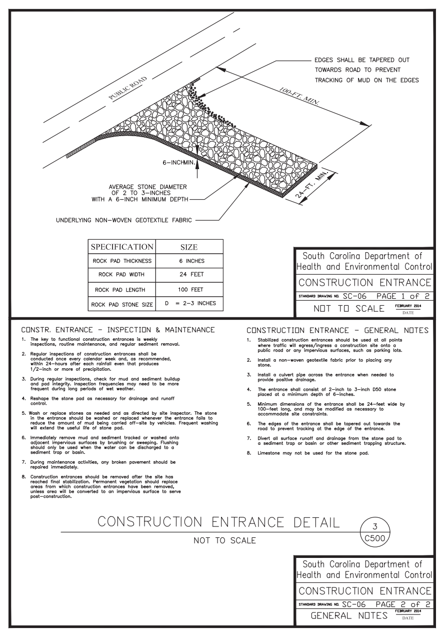
SCDHEC STANDARD DRAWING DETAILS HAVE BEEN REDUCED TO FIT ON PAGE. FULL SIZE DETAILS ARE AVAILABLE AT HTTP://WWW.SCDHEC.GOV/ENVIRONMENT/DOCS/APPENDIX_H.PDF



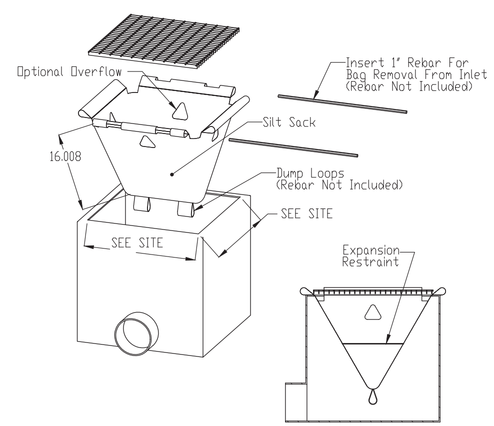
TYPICAL SILT FENCE (1/C500)
NOT TO SCALE



DROP INLET SILT PROTECTION (2/C500)
NOT TO SCALE



CONSTRUCTION ENTRANCE DETAIL (3/C500)
NOT TO SCALE



NOTE: ACF ENVIRONMENTAL SILT SACK (TYPE B). SEE WEBSITE WWW.ACFENVIRONMENTAL.COM FOR DETAILS AND SPECIFICATIONS. CONTRACTOR MAY SUBSTITUTE WITH ENGINEER APPROVED EQUAL.

INSPECT EVERY 14 CALENDAR DAYS AND WITHIN 24–HRS. AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2" OR MORE OF PRECIPITATION. CHECK FOR SEDIMENT BUILDUP. IF THE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE SECTION IMMEDIATELY. REMOVE SEDIMENT ACCUMULATED IN THE SACK WHEN IT REACHES 1/3 THE HEIGHT OF THE SACK, ESPECIALLY IF HEAVY RAINS ARE EXPECTED. REMOVE TRAPPED SEDIMENT FROM THE SITE OR STABILIZE IT ON SITE. REMOVE WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED OR AFTER BEST MANAGEMENT PRACTICES(BMP'S) ARE NO LONGER NEEDED.

INLET SILT PROTECTION (SILT SAK) (4/C500)
NOT TO SCALE

FORSBERG ENGINEERING AND SURVEYING, INC.
1587 SAVANNAH HIGHWAY SUITE B
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CHARLESTON, SOUTH CAROLINA 29417
(843) 571-2622 FAX (843) 571-6780
CIVIL ENGINEERING, SURVEYING AND LAND PLANNING

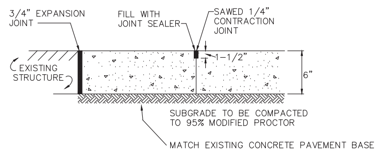
SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION — FORSBERG ENGINEERING & SURVEYING, INC. No. C00343

CONSTRUCTION DETAILS
ADDITIONAL PARKING AT THE ISLAND HOUSE
THE CLUB AT SEABROOK ISLAND
TOWN OF SEABROOK ISLAND, CHARLESTON COUNTY, SOUTH CAROLINA

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR No. 28158 WILLIAM W. WEATHERS

WILLIAM W. WEATHERS

DATE	OCTOBER 24, 2019
DRAWN/CHECKED	WWW/MSJ
LAST REVISED	.
APPROVED	WWW
SCALE	1" = 10'
PROJECT NO.	3962-2
SHEET NUMBER	C500 OF 7



NEW CONCRETE DETAIL 1/C501
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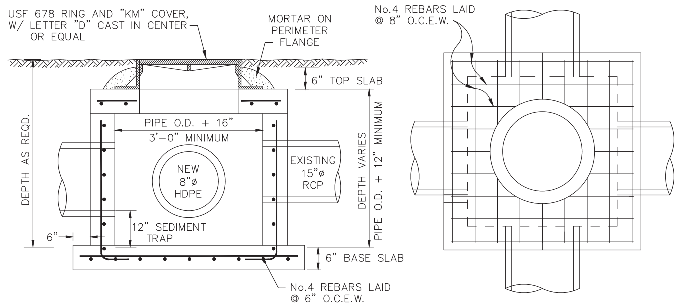

JUNCTION BOX 3/C501
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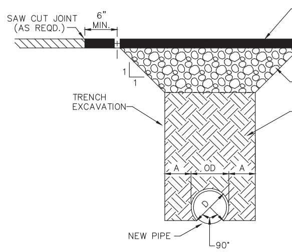
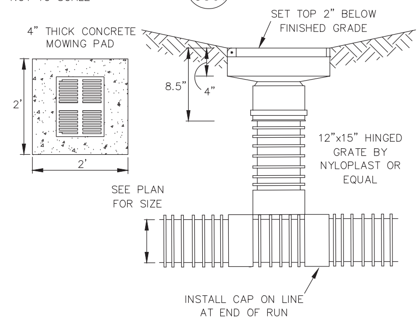


PIPE DIAMETER "D"	MAXIMUM "A"
6" TO 15"	8"
18" TO 21"	10"
24" TO 30"	12"
33" TO 42"	15"
48" & LARGER	18"

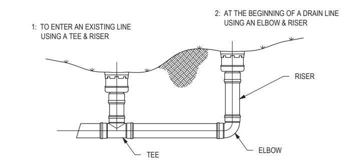
STORM TRENCHING DETAIL 2/C501
NOT TO SCALE



LANDSCAPE DRAIN/PIPE 4/C501
NOT TO SCALE

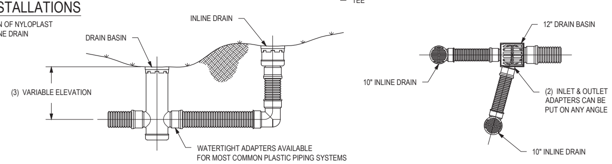
WHEN ARE INLINE DRAINS USED?

2708AG _ _ X
2710AG _ _ X
2712AG _ _ X
2715AG _ _ X
2718AG _ _ X
2724AG _ _ X
2730AG _ _ X



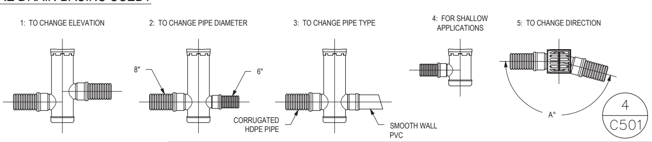
TYPICAL INSTALLATIONS

TYPICAL INSTALLATION OF NYLOPLAST DRAIN BASIN AND INLINE DRAIN



WHEN ARE DRAIN BASINS USED?

2808AG _ _ X
2810AG _ _ X
2812AG _ _ X
2815AG _ _ X
2818AG _ _ X
2824AG _ _ X
2830AG _ _ X
2836AG _ _ X



4/C501

1 - STRUCTURES & ADAPTERS AVAILABLE IN SIZES 8" - 36"
2 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°, TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS SEE DRAWING NO. 7001-110-065
4 - REDUCING CONES DOWN TO 30" DIAMETER WILL BE REQUIRED FOR 36" DRAIN BASINS.

DRAWN BY AWA	MATERIAL	Nyloplast 3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com
DATE 8-10-00		
REVISED BY NMH	PROJECT NO./NAME	TITLE 8 IN - 36 IN TYPICAL INSTALLATION OPTIONS
DATE 11-2-18		
DWG SIZE A	SCALE 1:40 SHEET 1 OF 1	DWG NO. 7001-110-042 REV E

ZURN

PERMA-TRENCH® HDPE TRENCH DRAINS

Z886 Perma-Trench®

HPDE 6" Drain System (4" Throat)

Z886 Applications

- Highways
- Driveways
- Kitchens
- Pools
- Parking Lots
- Gas Stations
- Airports
- Airplane Hangars
- Industrial Parks
- Chemical Plants
- Food Processing
- Shopping Malls
- Industrial Plants
- Pharmaceuticals
- Amusement Parks

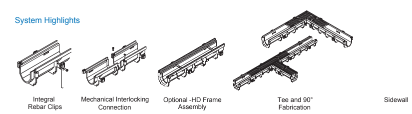
Features and Benefits

- 80" Pre-engineered Modular Channel Sections with 20" or 40" Grates
- .75% Built-In Slope – Handles greater flows, uniform slope
- Radiused Bottom – Better flow rate, less solids build-up
- Smooth High Density Polyethylene Structural Composite Interior – 0% water absorption
- Durable and Lightweight – Strong corrosion-resistant material
- Extra Long Runs – Sidewall extensions allow pre-slope runs up to 300 feet
- Variety of Gratings – Multiple finishes and designs available
- Grate Options – From heel-proof to FAA rated; ADA compliant. See pages 36-37.
- Built-In Rebar Clips – Accommodates #3 or #4 rebar (supplied by others)
- Frame available in coated steel, stainless steel, or galvanized steel

Engineering Specification

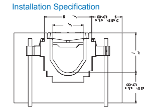
Channels shall be 80" long, 6-1/4" wide, and have a 4" wide throat. Modular channel sections shall be made of High Density Polyethylene (HDPE), have mechanical interlocking ends, and radiused bottom. Channel shall be provided either flat (neutral) or with a .75% built-in slope. Channels shall be available with inverts ranging from 3.5" to 12.50" (sidewall extensions optional; must be installed at factory). Channels shall have clips molded into the sides of the channel to accommodate vertical rebar for positioning and anchoring purposes. Choice of class A, B, C, D, E, and F grates shall be available with H-20 and/or FAA load ratings and/or ADA compliance with mechanical lockdown devices (refer to pages 24 and 25). End caps and catch basins shall be available to complement the channels and grates. End outlets, bottom outlets, and side outlets shall be available in 2", 3", 4", and 6" diameters. Trench drain shall be Flo-Thru model Z886. For downloadable CSI format specification, visit www.zurn.com.

System Highlights



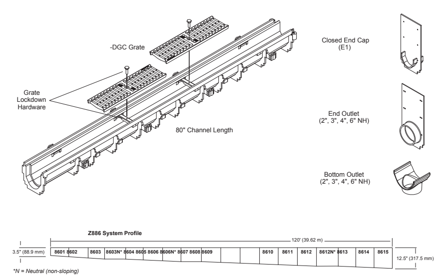
4

Installation Specification



4" Throat / 6-1/4" Overall Width
Consult Plans and Specifications

8601	3.50 [89]	4.10 [104]	93	6	0.207	14 [6.2]
8602	4.10 [104]	4.70 [119]	122	8	0.272	15 [6.8]
8603	4.70 [119]	5.30 [135]	152	10	0.339	16 [7.4]
8603N	5.30 [135]	5.30 [135]	–	–	–	17 [7.7]
8604	5.30 [135]	5.90 [150]	183	12	0.408	18 [8.3]
8605	5.90 [150]	6.50 [165]	214	14	0.477	20 [8.9]
8606	6.50 [165]	7.10 [180]	245	16	0.546	21 [9.5]
8606N	7.10 [180]	7.10 [180]	–	–	–	22 [10]
8607	7.10 [180]	7.70 [196]	276	17	0.615	23 [10.6]
8608	7.70 [196]	8.30 [211]	308	19	0.686	25 [11.2]
8609	8.30 [211]	8.90 [226]	339	21	0.755	26 [11.8]
8610	8.90 [226]	9.50 [241]	371	23	0.827	27 [12.4]
8611	9.50 [241]	10.1 [257]	403	26	0.898	29 [13]
8612	10.10 [257]	10.7 [272]	435	28	0.969	30 [13.6]
8612N	10.70 [272]	10.7 [272]	–	–	–	30 [13.6]
8613	10.70 [272]	11.3 [287]	467	30	1.041	31 [14.2]
8614	11.30 [287]	11.9 [302]	498	32	1.11	33 [14.8]
8615	11.90 [302]	12.5 [318]	530	34	1.181	34 [15.4]



*N = Neutral (non-sloping)

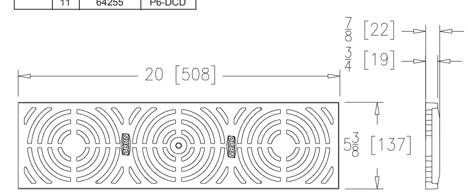
5

ZURN P6-DCD
6 [152] Wide Decorative Grate

Dimensional Data (Imperial and [Metric]) are subject to manufacturing tolerances and change without notice. Linear (in[mm]), Area (in²[mm²], & Weight (lbs[kg]).

Back to Index

Please Check	Item No.	Part Number	Item I.D.
✓	11	64255	P6-DCD



DCD GRATE ENGINEERING SPECIFICATION: ZURN P6-DCD
20" [508mm] X 5-3/8" [137mm] Ductile Iron circular decorative grate, weighing 6.3 lbs per linear foot [9.5kg/m]. The grate has an open area of 17.6 in² per linear foot [374cm²/m], DIN rating of C, ANSI rating of Heavy-Duty and ASTM A536 Grade 80-55-06.

DCD - Circular Decorative	
Material: Ductile Iron	
DIN Rating: Class C	
Weight: 6.3 lbs/ft. [9.5kg/m]	
Open Area: in2/ft. [374cm²/m]	
ANSI Rating: Heavy-Duty	
Application: Decorative Heel-Proof	
Slot Width/Hole Size: 1/4" [6.4mm]	
ADA:	Yes
H-20:	No
FAA:	No

Zurn Industries, LLC | Specification Drainage Operation
1801 Pittsburgh Avenue, Erie, PA U.S.A. 16502 · Ph. 855-663-9876, Fax 814-454-7929
In Canada | Zurn Industries Limited
3544 Nashua Drive, Mississauga, Ontario L4V 1L2 · Ph. 905-405-8272, Fax 905-405-1292
www.zurn.com

Rev. AL
Date: 04/16/15
C.N. No. 132548
Form Number: FT641

5/C501

FORSBERG ENGINEERING AND SURVEYING, INC.
1587 SAVANNAH HIGHWAY SUITE B
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(843) 571-2622 FAX (843) 571-6780
CIVIL ENGINEERING, SURVEYING AND LAND PLANNING

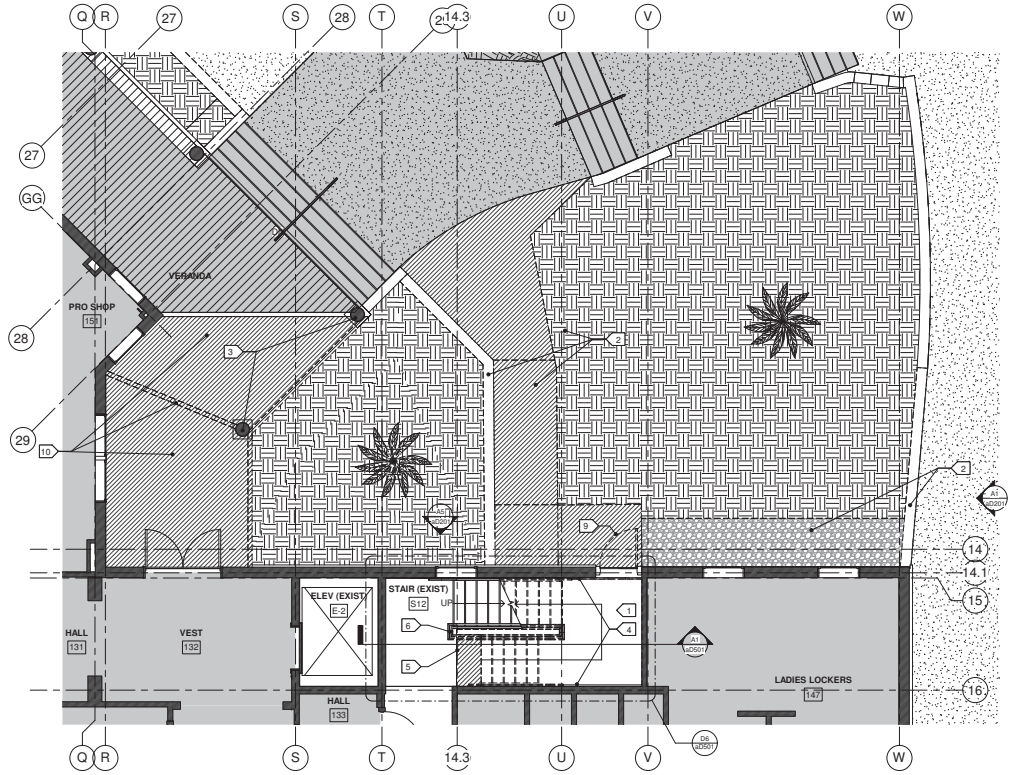
SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION FORSBERG ENGINEERING & SURVEYING, INC. No. C00343

CONSTRUCTION DETAILS
ADDITIONAL PARKING AT THE ISLAND HOUSE
THE CLUB AT SEABROOK ISLAND
TOWN OF SEABROOK ISLAND, CHARLESTON COUNTY, SOUTH CAROLINA

SOUTH CAROLINA REGISTERED PROFESSIONAL & LAND SURVEYOR No. 28158 WILLIAM W. WEATHERS

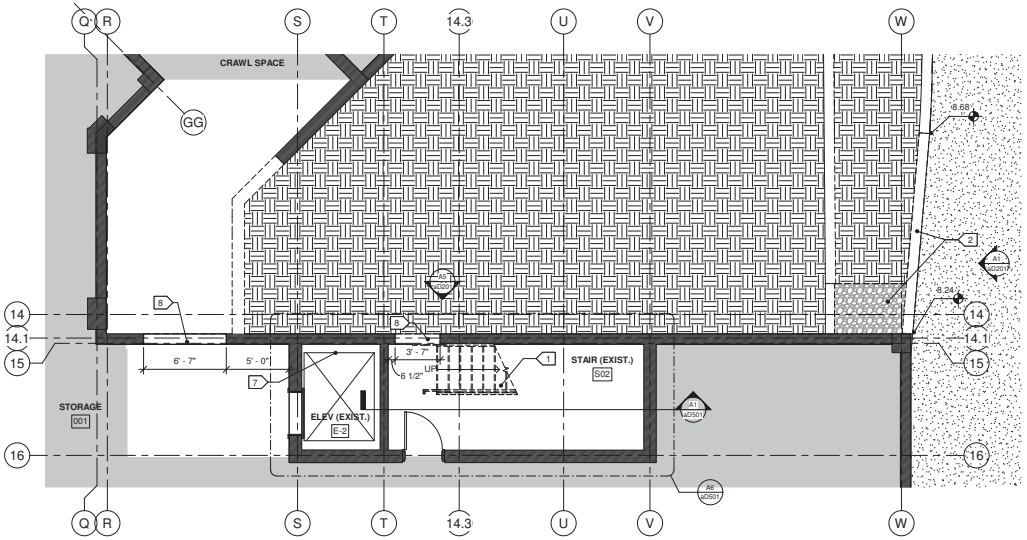
WILLIAM W. WEATHERS

DATE	OCTOBER 24, 2019
DRAWN/CHECKED	WWW/MSJ
LAST REVISED	.
APPROVED	WWW
SCALE	1" = 10'
PROJECT NO.	3962-2
SHEET NUMBER	C501
	OF 7



D2 FIRST FLOOR DEMO PLAN - ELEVATOR & STAIR S12

1/4" = 1'-0"



A2 GROUND FLOOR DEMO PLAN - ELEVATOR & STAIR S02

1/4" = 1'-0"

DEMOLITION NOTES

(APPLY TO THIS SHEET ONLY)

1 DEMOLISH EXISTING STAIR ASSEMBLY BETWEEN GROUND LEVEL AND FIRST FLOOR LEVEL

2 DEMOLISH EXISTING SIDEWALK, LANDSCAPING, SEGMENTAL RETAINING WALL AND GRADING TO GRADE LEVEL TO ALLOW FOR NEW ADA ENTRY

3 SHORE UP EXISTING COLUMNS WHILE CUTTING OUT WALL BELOW

4 REMOVE HANDRAILS ON WALLS.

5 DEMO STAIR LANDING BACK TO BUILDING STRUCTURAL MEMBER.

6 CUT HANDRAIL & GUARDRAIL HERE

7 DEMO FINISHES WITHIN ELEVATOR CAB

8 SAW CUT C.I.P. CONCRETE WALL TO FACILITATE NEW DOOR INSTALL. SEE ELEVATIONS FOR EXTENTS.

9 DEMOLISH EXISTING DOOR AND FRAME AT STAIR LANDING

10 REMOVE EXISTING PORCH DECKING. REMOVE PORCH FRAMING AS NEEDED TO FACILITATE DEMOLITION OF GRADING FOR NEW ADA ENTRY

DEMOLITION LEGEND:

EXISTING CONSTRUCTION TO REMAIN

WALL OR ELEMENTS TO BE REMOVED

EXTENT OF FLOOR SLAB TO BE REMOVED. COORDINATE DIMENSIONS AND LOCATIONS WITH STRUCTURAL AND UTILITIES

NOT IN SCOPE

10 DEMOLITION TAG

GENERAL DEMOLITION NOTES:

A. THIS DRAWING SHOWS THE GENERAL EXTENT OF SELECTIVE DEMOLITION. ALL ITEMS DASHED ARE TO BE REMOVED. CONTRACTOR SHALL INCLUDE ALL DEMOLITION, CUTTING AND PATCHING REQUIRED FOR NEW CONSTRUCTION. REFER TO OTHER DISCIPLINE (MECHANICAL, ELECTRICAL, PLUMBING, CIVIL, STRUCTURAL) DEMOLITION PLANS FOR ADDITIONAL ITEMS TO BE REMOVED OR RELOCATED.

B. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO UNDERTAKING ANY DEMOLITION WORK. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY.

C. WHERE EXISTING WALL OR FLOOR SYSTEMS ARE TO REMAIN AND ARE DISTURBED BY DEMOLITION, THEY SHALL BE REPAIRED AS REQUIRED TO MATCH ORIGINAL INTEGRITY AND ADJACENT CONSTRUCTION.

D. PROVIDE TEMPORARY DUST PARTITION PROTECTING ACCESS ENCLOSURES WHERE NOTED AND AS DIRECTED BY THE OWNER AROUND ALL AREAS OF WORK TO PREVENT THE SPREAD OF CONSTRUCTION DEBRIS AND DUST. TEMPORARY PARTITIONS TO BE CONSTRUCTED PRIOR TO START OF DEMOLITION WORK.

E. PATCH HOLES AND VOIDS (REGARDLESS OF SIZE) IN EXISTING FLOORS OCCURRING AS A RESULT OF DEMOLITION OR NEW CONSTRUCTION. SEE SPEC SECTION 017329 (CUTTING AND PATCHING) FOR REQUIREMENTS.

F. ALL EXISTING ITEMS SCHEDULED TO REMAIN WHICH ARE EXPOSED DUE TO DEMOLITION WORK SHALL BE RELOCATED TO REMAIN COVERED BY FINISHED WORK.

G. REMOVE PORTIONS OF EXISTING CONCRETE SLABS AS REQUIRED FOR NEW MECHANICAL, ELECTRICAL, AND/OR PLUMBING WORK. COORDINATE LOCATIONS AND SIZES WITH MECHANICAL, ELECTRICAL AND/OR PLUMBING INSTALLERS. PATCH CONCRETE SLABS TO MATCH EXISTING. INSTALL VAPOR BARRIER PRIOR TO POURING SLAB.

H. THE REQUIRED DEMOLITION SHALL NOT BE LIMITED TO THAT PORTION OF WORK SHOWN ON THE PLANS ALONE. WORK COINCIDENTAL THERETO WHICH IS NECESSARY TO ACCOMPLISH THE INTENT OF THE CONTRACT DOCUMENTS IS ALSO PART OF THE WORK.

I. THE CONTRACTOR SHALL SCHEDULE ALL WORK INCLUDING ANY INTERRUPTION OF UTILITIES PRIOR TO THE START OF WORK. THE BUILDING SHALL BE OCCUPIED AND IN USE DURING THE TIME THE WORK IS BEING PERFORMED. CONTRACTOR MUST NOTIFY AND SCHEDULE INTERRUPTIONS WITH THE OWNER OR MAINTAIN ACCESS TO AREAS OUTSIDE THE SCOPE OF WORK AS REQUIRED BY OWNER.

J. MAINTAIN AND PROTECT ANY AND ALL ITEMS NOTED TO BE REUSED AND/OR RELOCATED.

K. REFER TO ELECTRICAL AND MECHANICAL DEMOLITION DRAWINGS FOR ADDITIONAL SCOPE. INCIDENTAL DEMOLITION DUE TO MECHANICAL AND/OR ELECTRICAL DEMOLITION AND NEW WORK SHALL BE INCLUDED IN CONTRACT AS WELL AS REPAIR WORK REQUIRED TO RETURN FINISH SURFACE TO ORIGINAL CONDITION.

L. CONTRACTOR TO REMOVE ALL UNNECESSARY OR ABANDONED PIPING, CONDUIT AND WIRING THAT IS ACCESSIBLE WITHOUT ADDITIONAL DEMOLITION.

M. REMOVE ALL INTERIOR SIGNAGE AFFECTED BY WORK. PUT IN A CONTAINER AND TURN OVER TO OWNER. SOME EXISTING SIGNAGE MAY BE REINSTALLED UNDER SIGNAGE ALLOWANCE OR SIGNAGE SCHEDULE.

N. WHERE PLUMBING FIXTURES ARE REMOVED, EXISTING PIPING SHALL BE CAPPED BELOW THE FLOOR AND / OR WALL SURFACE. REFER TO MECHANICAL AND PLUMBING DEMOLITION DRAWINGS.

O. AREAS SHOWING THE REMOVAL OF WALLS TO BE PROPERLY SHORED UP, IF NECESSARY. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHICH AREAS ARE TO BE SHORED AND THE STRUCTURAL INTEGRITY OF SUCH SHORING.

P. REFER TO EXISTING DRAWINGS AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING DEMOLITION.

Q. REMOVE ALL WALL-MOUNTED APPURTENANCES AND DELIVER TO THE OWNER.

R. NOTES SHOWING DEMOLISHED CONDUIT, GAS LINES, WATER LINES AND AIR LINES ASSUME DEMOLITION OF ENTIRE LINE REFERENCED. FIELD WORK SHALL DETERMINE EXACT LENGTHS AND QUANTITIES.

S. WHEN WORK IS UNDERWAY AND DEMOLITION HAS EXPOSED THE INTERIOR OF THE BUILDING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF PROPERTY IN THE INTERIOR PORTION OF THE BUILDING UNDER CONSTRUCTION (TYP. ALL PHASES).

T. REMOVE AND/OR REINSTALL CEILINGS AS REQUIRED BY MECHANICAL, ELECTRICAL, OR PLUMBING CEILING WORK IN AREAS WHERE NO ARCHITECTURAL DEMOLITION WORK OR LIMITED DEMOLITION WORK IS BEING DONE. REINSTALL CEILINGS AND PATCH TO MATCH EXISTING. WHERE PLUMBING FIXTURES ARE REMOVED, EXISTING PIPING SHALL BE CAPPED BELOW THE FLOOR AND/OR WALL SURFACE. REFER TO MECHANICAL AND PLUMBING DEMOLITION DRAWINGS.

U. ANY DEMOLITION WORK NECESSARY ON FLOOR ABOVE OR BELOW (DEMOLITION REQUIRED TO INSTALL NEW WORK) SHALL BE SCHEDULED WITH THE OWNER. ANY FINISHES DISTURBED OR DAMAGED AS A RESULT OF DEMOLITION OR INSTALLATION SHALL BE PATCHED OR REPLACED TO MATCH EXISTING FINISHES.

V. REMOVE PORTIONS OF EXISTING CONCRETE SLABS AS REQUIRED FOR NEW MECHANICAL, ELECTRICAL AND/OR PLUMBING WORK. COORDINATE LOCATIONS AND SIZES WITH MECHANICAL, ELECTRICAL AND/OR PLUMBING INSTALLERS. PATCH CONCRETE/TERRAZZO SLABS TO MATCH EXISTING.

0 2' 4' 8'

N PROJECT NORTH TRUE NORTH

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SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

TMS #1470500018
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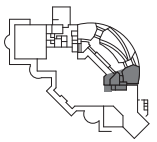
phase	date of issue
PLANNING COMMISSION SUBMITTAL	**10-24-19**

revisions

rev no.	description	date



GROUND FLOOR

key plan

sheet title

DEMO PLANS - ADA ENTRY

sheet number

aD101

drawn by: EC print date:

E1 PERSPECTIVE VIEW AT ADA ENTRY - EXISTING

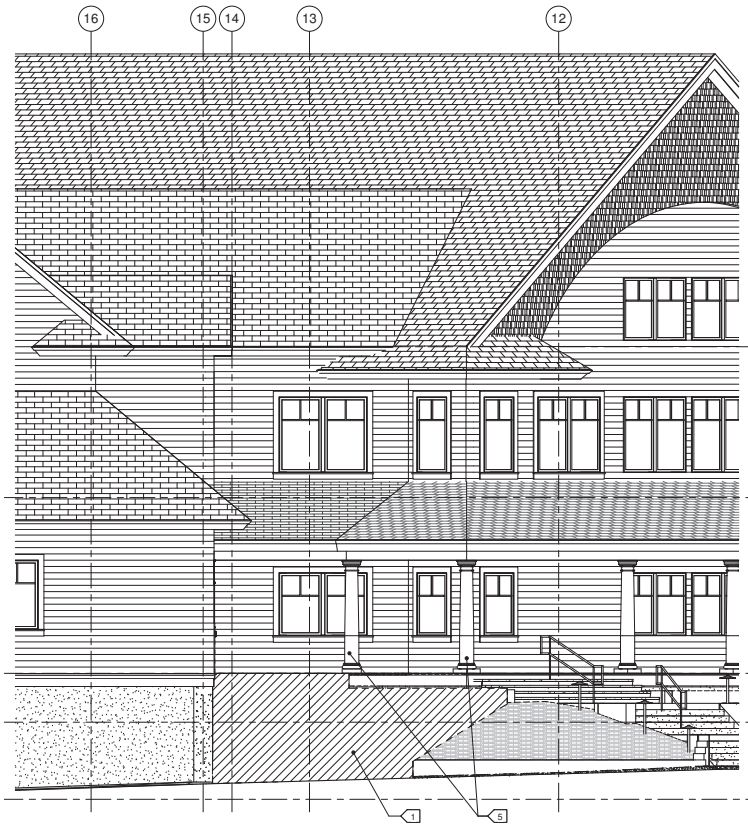
DEMOLITION NOTES

(APPLY TO THIS SHEET ONLY)

1. DEMOLISH EXISTING LANDSCAPING, PERIMETER WALL AND GRADING TO GRADE LEVEL TO ALLOW FOR NEW ENTRY AT EXISTING ELEVATOR E-2
2. SAW CUT C.I.P. CONCRETE WALL TO FACILITATE NEW DOOR INSTALL
3. SHORE DURING EXCAVATION
4. DEMO EXISTING DOOR AND FRAME - TAKE SIDING BACK TO NATURAL BREAK POINTS - STAGGER SIDING JOINTS.
5. SHORE COLUMNS BEYOND DURING EXCAVATION
6. SAW CUT C.I.P. CONCRETE WALL TO FACILITATE NEW DOOR INSTALL. CUT WALL UP TO UNDERSIDE OF EXISTING CONCRETE BEAM.

DEMOLITION LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- WALL OR ELEMENTS TO BE REMOVED
- EXTENT OF FLOOR SLAB TO BE REMOVED. COORDINATE DIMENSIONS AND LOCATIONS WITH STRUCTURAL AND UTILITIES
- 10 DEMOLITION TAG



A1 EAST ELEVATION - ADA ENTRY - DEMO
1/4" = 1'-0" (REFERENCE: aD101)

A5 NORTH ELEVATION - ADA ENTRY - DEMO
1/4" = 1'-0" (REFERENCE: aD101)

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ISLAND HOUSE RENOVATIONS - PHASE I

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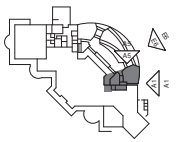


GROUND FLOOR

key plan

sheet title
DEMO ELEVATIONS - ADA ENTRY

sheet number
aD201

drawn by: EC print date:

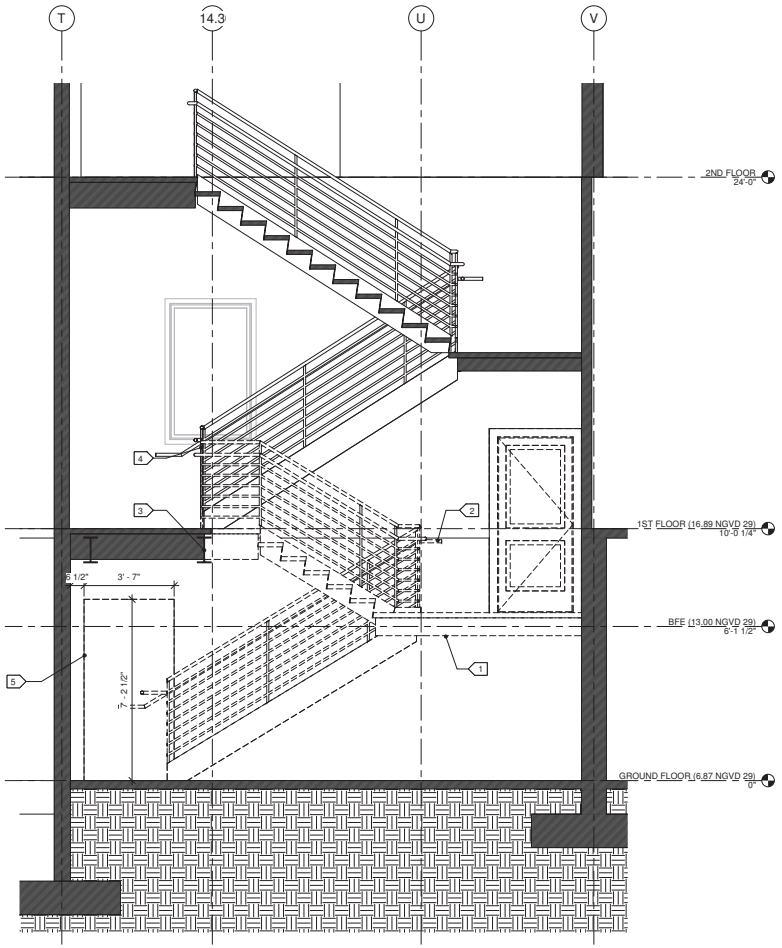
DEMOLITION NOTES

(APPLY TO THIS SHEET ONLY)

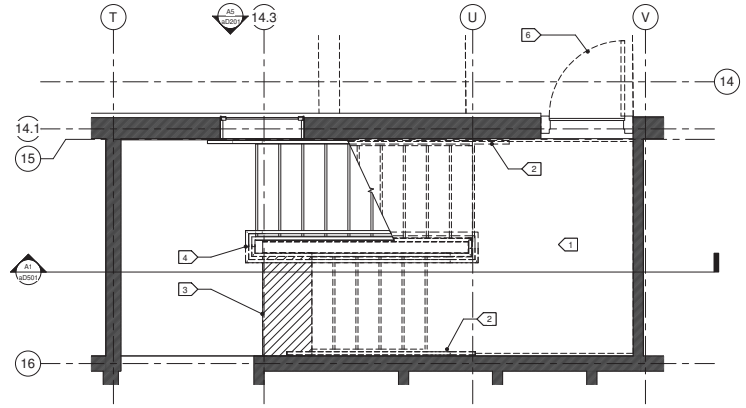
1. DEMOLISH EXISTING STAIR ASSEMBLY BETWEEN GROUND LEVEL AND FIRST FLOOR LEVEL
2. REMOVE HANDRAIL ON WALL
3. DEMO STAIR LANDING BACK TO BUILDING STRUCTURAL MEMBER.
4. CUT HANDRAIL & GUARDRAIL HERE
5. SAW CUT C.I.P. CONCRETE WALL TO FACILITATE NEW DOOR INSTALL
6. DEMOLISH EXISTING DOOR AND FRAME AT STAIR LANDING

DEMOLITION LEGEND:

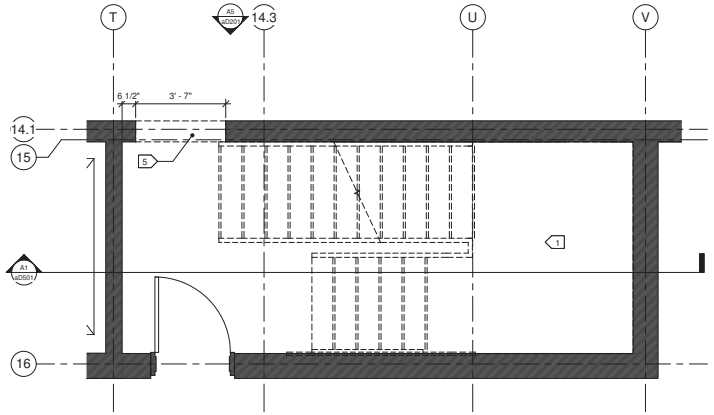
- EXISTING CONSTRUCTION TO REMAIN
- WALL OR ELEMENTS TO BE REMOVED
- EXTENT OF FLOOR SLAB TO BE REMOVED. COORDINATE DIMENSIONS AND LOCATIONS WITH STRUCTURAL AND UTILITIES
- NOT IN SCOPE
- 10 DEMOLITION TAG



A1 DEMO SECTION - STAIR S02
1/2" = 1'-0" (REFERENCE: aA111)



D6 ENLARGED FIRST FLOOR DEMO PLAN - STAIR S02
1/2" = 1'-0" (REFERENCE: aD101)



A6 ENLARGED GROUND FLOOR DEMO PLAN - STAIR S02
1/2" = 1'-0" (REFERENCE: aD101)

0 1' 2' 4'

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SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

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key plan

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DEMO ENLARGED STAIR PLANS & SECTION - ADA ENTRY

sheet number
aD501

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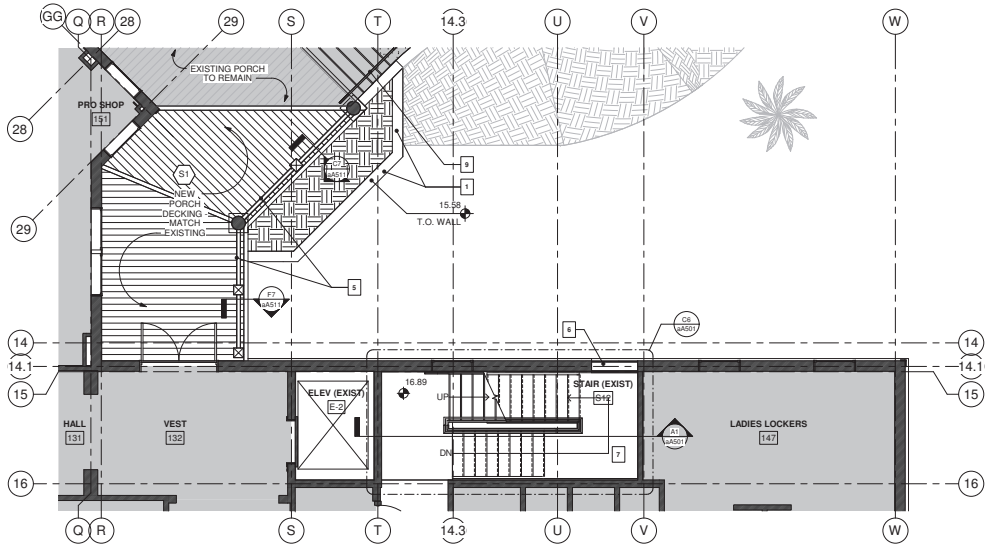
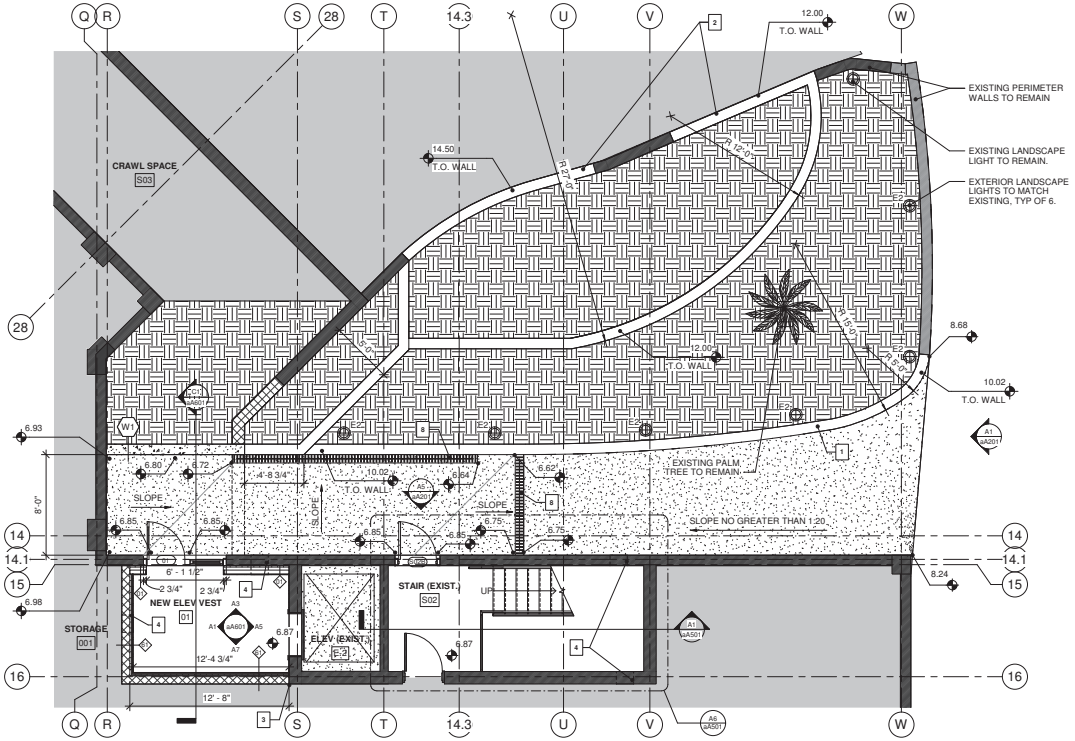


E1 FIRST FLOOR PLAN - ELEVATOR & STAIR S12

1/4" = 1'-0"



A1 GROUND FLOOR PLAN - ELEVATOR & STAIR S02

1/4" = 1'-0"

CONSTRUCTION NOTES

(APPLY TO THIS SHEET ONLY)

1. VERSA-LOK "ACCENT" WITH CAP UNIT TOP - MATCH T.O. WALL ELEVATION TO EXISTING T.O. WALL ELEVATION. MATCH NEW WALL CONSTRUCTION AND MATERIALS TO EXISTING SEGMENTAL RETAINING WALL.
2. VERSA-LOK "ACCENT" WITH CAP UNIT TOP - MATCH T.O. WALL ELEVATION TO EXISTING CONCRETE WALK ELEVATION
3. ALIGN NEW 8" CMU WALL WITH FACE OF EXISTING CONCRETE WALL
4. DASHED LINE REPRESENTS SMART VENT - INSULATED FLOOD VENT BELOW. SEE ELEVATIONS FOR TYPE.
5. NEW GUARDRAIL - MATCH EXISTING PORCH RAILING
6. INFILL WALL TO MATCH ADJACENT CIP WALL - SEE STRUCTURAL
7. NEW STAIR FROM GROUND LEVEL TO FIRST FLOOR LEVEL. MATCH EXISTING STAIR CONSTRUCTION AND RAILINGS
8. NEW TRENCH DRAIN
9. NEW HANDRAIL - MATCH EXISTING STAIR RAILING

LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION
- NOT IN SCOPE
- FD — FLOOR DRAIN - SEE PLUMBING
- RDL — ROOF DRAIN LEADER - SEE PLUMBING & CIVIL
- DS — DOWNSPOUT - SEE ROOF PLAN
- CJ — CONCRETE OR CMU CONTROL JOINT
- 2 HOUR RATED FIRE BARRIER
- E2 — EXTERIOR LIGHT FIXTURE - LANDSCAPE

CONSTRUCTION SUBSYSTEMS:

- S1 **WOOD JOIST WITH IPE DECK BOARDS**
- S2 **UPPER FLOOR CONCRETE SLAB**
- W1 **STUCCO ON CIP CONCRETE**
- W2 **FIBER CEMENT SIDING ON METAL STUDS**
- R1 **ASPHALT SHINGLES ROOF SYSTEM**

GENERAL FLOOR PLAN NOTES:

A. DIMENSIONS TO FACE OF STUD UNLESS NOTED OTHERWISE. (¢ INDICATES DIMENSION TO COLUMN OR WALL CENTERLINE)
B. ALL PARTITIONS ARE TYPE **XX** UNLESS NOTED OTHERWISE.
C. ALL EXTERIOR MASONRY DIMENSIONS ARE NOMINAL. FOR ACTUAL DIMENSIONS SEE ENLARGED DETAILS ON **AXXX**. CONTRACTOR SHALL MAKE PROPER ALLOWANCES FOR JOINT DIMENSIONS WHEN LAYING OUT THE WORK.
D. SEE ENLARGED PLANS OF STAIRS, ELEVATORS, AND TOILETS FOR PARTITION TYPES IN THE AREAS REFERENCED.
E. GENERAL CONTRACTOR TO LAYOUT LOCATION OF BUILDING ACCORDING TO THE DIMENSIONS SHOWN ON THIS SHEET RELATIVE TO **[THE EXISTING BUILDING] [OTHER]**.
F. PLAN DETAIL DIMENSIONS TAKE PRECEDENT IF A CONFLICT ARISES WITH TYPICAL DIMENSION STRINGS. SEE PLAN DETAIL SHEETS **A311 - A3XX**.
G. ALL INTERIOR DOORS ARE LOCATED WITH INTERIOR OF JAMB AT HINGE SIDE 6 INCHES FROM ADJACENT WALL, UNLESS NOTED OTHERWISE.
H. DOORS REFERENCED BY A DOOR NUMBER INDICATE A NEW DOOR OR SOME MODIFICATION TO AN EXISTING DOOR. SEE DOOR SCHEDULE. DOORS WITHOUT DOOR NUMBER REFERENCES ARE EXISTING DOORS TO REMAIN, WITH NO WORK OR MODIFICATION REQUIRED.
I. ALL CORRIDORS TO RECEIVE ABUSE-RESISTANT GYPSUM BOARD TO **[DESIGNATE HEIGHT]**.
J. FOR MARKERBOARDS AND TACKBOARDS INDICATED BY SYMBOL, SEE **AXXX**. EXACT LOCATION TO BE DETERMINED IN THE FIELD WITH ARCHITECT AND OWNER.
K. PROVIDE CODE COMPLIANT WOOD BLOCKING OR SHEET METAL PLATES IN HOLLOW WALL SYSTEMS FOR ATTACHMENT OF ANY WALL MOUNTED ACCESSORIES INCLUDING, BUT NOT LIMITED TO, SHELVING, CASEWORK, TOILET ACCESSORIES, TOILET PARTITIONS, LIGHT FIXTURES, BENCHES, COAT RODS, AUDIO VISUAL EQUIPMENT, SECURITY CAMERAS, MARKER BOARDS, MIRRORS, ETC.
L. WALL ACCESSORIES SUCH AS FIRE EXTINGUISHER CABINETS AND PAPER TOWEL DISPENSERS THAT REQUIRE A SEMI-RECESSED INSTALLATION SHALL NOT REDUCE THE FIRE RATING OF THE WALL. IF A DETAIL IS NOT PROVIDED WITHIN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL CONSULT THE ARCHITECT FOR PROPER DETAILS PRIOR TO INSTALLING THE ACCESSORY.
M. PARTITION TYPES AT INFILL WALLS SHALL MATCH ADJOINING EXISTING WALLS PROVIDING FOR A FLUSH, SMOOTH TRANSITION IN THE FINISHED SURFACE. MATCH BASE IN AREAS WHERE BASE IS OTHERWISE INDICATED TO REMAIN, RUNNING FROM AN INTERIOR CORNER OR OTHER DEFINED EDGE.
N. PATCH AND REPAIR ALL GYPSUM BOARD SURFACES WHERE DEMOLITION OF ADJOINING OR INTERSECTING PARTITIONS HAS RESULTED IN LESS THAN A FINISHED CONDITION. PATCHES SHALL BE FLUSH AND SMOOTH.
O. EXISTING ROOMS THAT ARE NOT INDICATED TO BE AFFECTED BY THE WORK ARE TO BE PROTECTED FROM DAMAGE AND/OR PAINT DEGRADATION. SHOULD THE GENERAL CONTRACTOR AFFECT THE CONDITION OR FINISH OF THESE ROOMS, THE SURFACE OR SPACE SHALL BE RESTORED TO ORIGINAL CONDITION.
P. REFERENCE DRAWING **A00X** FOR GENERAL DEMOLITION PLANS. WHERE NEW CONSTRUCTION ABUTS EXISTING CONSTRUCTION IN THE SAME PLANE, FINISHES SHALL BE FLUSH. VERIFY ALL DIMENSIONS TO EXISTING ELEMENTS.
Q. THE FINISH FLOOR ELEVATION OF THE NEW ADDITION SHALL MATCH THAT OF THE EXISTING BUILDING.
R. NOTIFY THE ARCHITECT OF ANY AND ALL DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK. FAILURE TO NOTIFY THE ARCHITECT WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PERFORM THE WORK AS INTENDED BY THE CONTRACT DOCUMENTS.
S. VERIFY EXISTING DIMENSIONS, CONDITIONS AND CLEARANCES PRIOR TO THE SUBMISSION OF SHOP DRAWINGS.

0 2' 4' 8'

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ISLAND HOUSE RENOVATIONS - PHASE I

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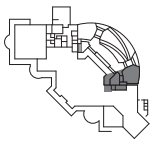


GROUND FLOOR

key plan

sheet title

FLOOR PLANS - ADA ENTRY

sheet number

aA101

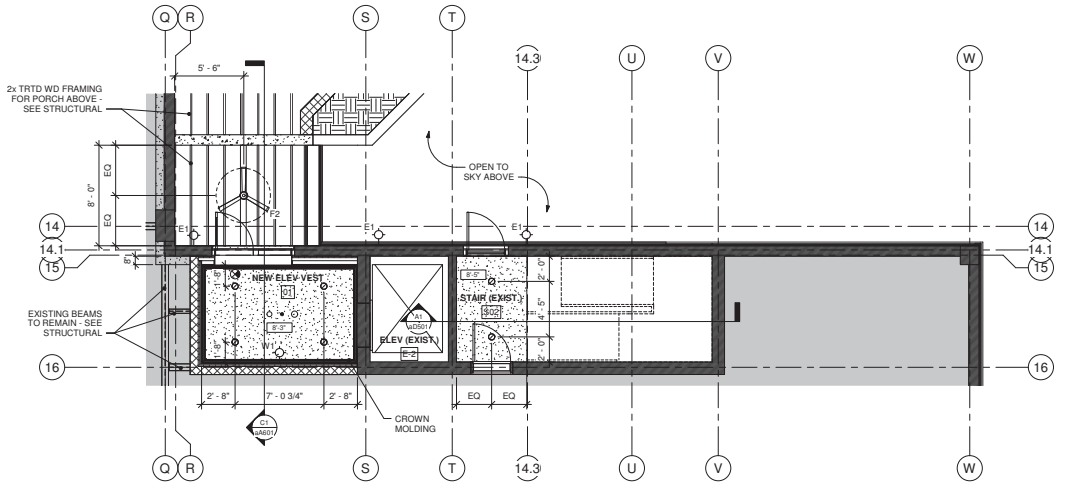
drawn by: EC print date:

GENERAL RCP NOTES:

A. IN ANY UNBRACED AREA OF CEILING WHICH IS LESS THAN 1000 SF, IT IS REQUIRED THAT SPRINKLER HEADS AND OTHER PENETRATIONS BE INSTALLED WITH A 2" OVERSIZED RING, SLEEVE, OR ADAPTER THROUGH THE CEILING TILE TO ALLOW FOR ONE INCH OF FREE MOVEMENT IN ALL HORIZONTAL DIRECTIONS.
B. HEIGHT OF CEILING ABOVE FINISH FLOOR IS TAKEN FROM FLOOR SURFACE DIRECTLY BELOW. CEILING HEIGHT TO BE **X-0"** AFF UNLESS NOTED OTHERWISE.
C. THE BUILDING IS IN A SEISMIC CATEGORY "D" AND ALL CODE RELATED CEILING REQUIREMENTS WILL APPLY. SEE CEILING DETAIL SHEET **A1XX**.
D. SUSPENSION GRIDS SHALL BE CENTERED IN ALL SPACES UNLESS INDICATED OTHERWISE ON ARCHITECTURAL RCP.
E. NO TILE LESS THAN 6" IN WIDTH SHALL BE INSTALLED. IF FIELD CONDITIONS REQUIRE THAT A CEILING TILE LARGER THAN 24" IN ANY DIMENSION BE USED IN THE PERIMETER BOARDS OF A TYPICAL GRID, THE BOARDS SHALL BE CUT FROM A 24"X48" CEILING TILE OF THE SAME MATERIAL. A DOUBLE WALL ANGLE SHALL NOT BE USED IN THE CEILING GRID SYSTEM.
F. ALL DEVICES MOUNTED IN ACOUSTICAL CEILING TILES SUCH AS LIGHTS, SPEAKERS, EXHAUST GRILLES, SPRINKLER HEADS, SMOKE DETECTORS, REMOTE TEST SWITCHES FOR DUCT DETECTORS, ETC. SHALL BE CENTERED IN THE ACOUSTICAL CEILING TILE U.N.O. ALL DEVICES SHALL BE INDEPENDENTLY SUPPORTED.
G. SPRINKLER HEADS IN GYPSUM BOARD CEILINGS SHALL BE CENTERED AND ALIGN WITH RECESSED LIGHT FIXTURES IF APPLICABLE.
H. GYPSUM BOARD CEILINGS IN SHOWERS TO BE FIBERGLASS FACED.
I. PROVIDE CEILING ACCESS PANELS IN GWB CEILINGS TO PROVIDE ACCESS TO ELECTRICAL, MECHANICAL AND PLUMBING DEVICES THAT REQUIRE SERVICE FOR MAINTENANCE. CONFER WITH A/E PRIOR TO PLACEMENT.

RCP LEGEND:

- 2' X 4' ACOUSTICAL PANEL CEILING SYSTEM - SEE FINISH PLANS AND SPECIFICATIONS FOR TYPE
- FIBER CEMENT PANEL CEILING
- GYP BD CEILING
- EXIT SIGN
- 2' X 2' LIGHT FIXTURE
- 2' X 4' LIGHT FIXTURE
- S3 — SURFACE MOUNTED LED LIGHT FIXTURE
- CAN LIGHT
- PENDENT LIGHT
- E1 — EXTERIOR WALL MOUNTED FIXTURE
- W1 — WALL MOUNTED FIXTURE
- HVAC SUPPLY, SEE MECH. DGWS
- RETURN AIR, SEE MECH. DWGS
- EXHAUST GRILLE
- F2 — CEILING FAN
- X'-X" — HEIGHT ABOVE FINISHED FLOOR SEE GENERAL NOTE B
- 2 HOUR RATED FIRE BARRIER
- NOT IN SCOPE



1 GROUND FLOOR RCP - ADA ENTRY
1/4" = 1'-0"

0 2' 4' 8'

N PROJECT NORTH TRUE NORTH

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ISLAND HOUSE RENOVATIONS - PHASE I

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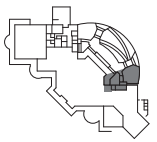


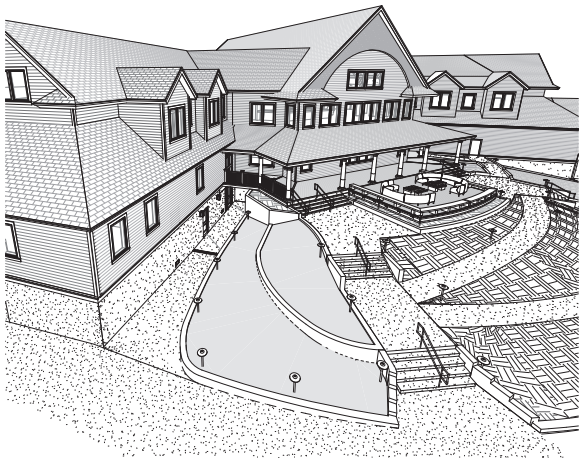
GROUND FLOOR

key plan

sheet title
GROUND FLOOR RCP - ADA ENTRY

sheet number
aA111

drawn by: EC print date:



E1 PERSPECTIVE VIEW AT ADA ENTRY - NEW

CONSTRUCTION NOTES

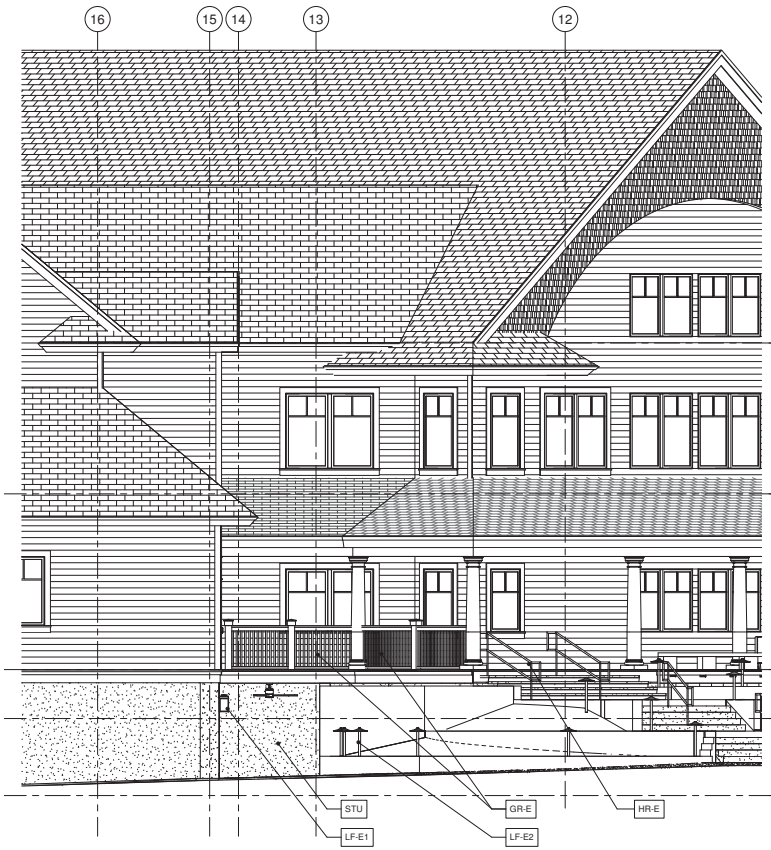
(APPLY TO THIS SHEET ONLY)

1 NEW STUCCO FINISH APPLIED TO EXISTING CONCRETE WALL TO MATCH EXISTING ADJACENT WALL FINISH

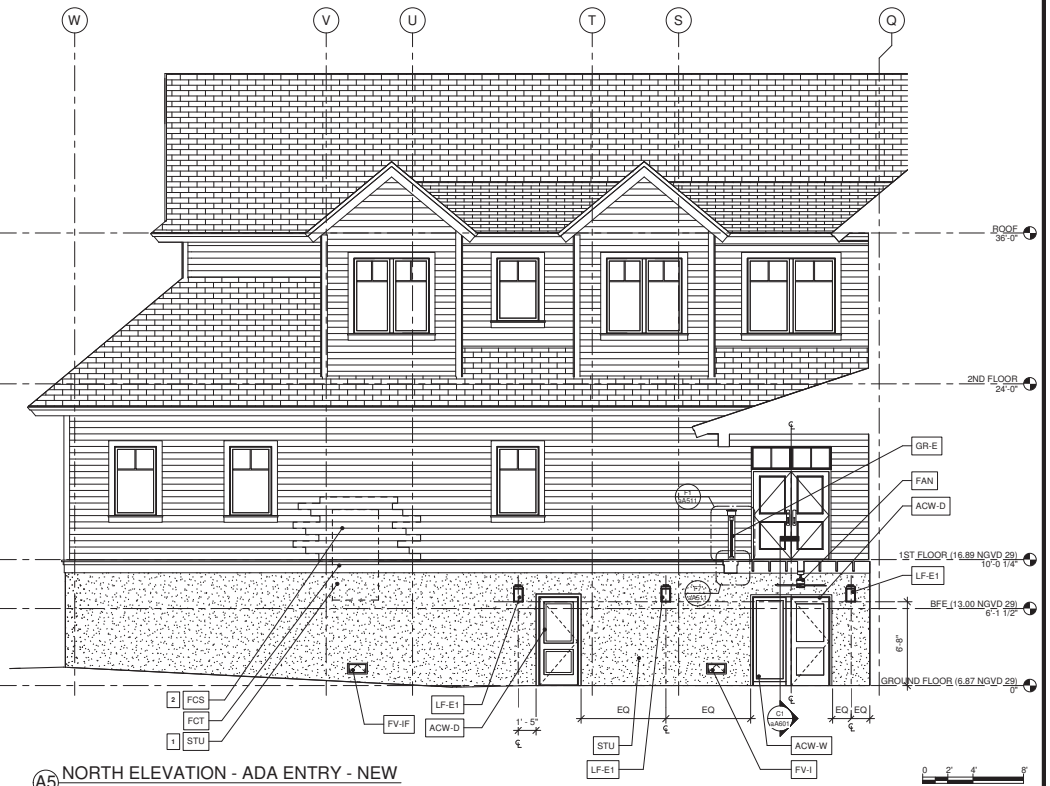
2 INFILLED WALL. MATCH NEW FINISHES TO EXISTING ADJACENT FINISHES - STAGGER SIDING JOINTS.

EXTERIOR FINISH LEGEND - BASIS OF DESIGN

MARK	MATERIAL
ACW-D	ALUMINUM CLAD WOOD DOOR
ACW-W	ALUMINUM CLAD WOOD WINDOW
ASR	ASPHALT SHINGLE ROOF
B-TS	BRACKET - TUBE STEEL
CPD	COMPOSITE DECKING
DS-B	DOWNSPOUT AND BOOT
FAN	FAN - SEE ELECTRICAL
FCF	FIBER CEMENT FASCIA
FCS	FIBER CEMENT SIDING
FCT	FIBER CEMENT TRIM
FV-I	FLOOD VENT - INSULATED
FV-IF	FLOOD VENT - INSULATED WITH FIRE DAMPER
GR-E	GUARDRAIL - EXTERIOR
GUT	GUTTER
HR-E	HANDRAIL - EXTERIOR
LF-E1	LIGHT FIXTURE - EXTERIOR SCONCE
LF-E2	LIGHT FIXTURE - EXTERIOR LANDSCAPE
LVR	FIXED ALUMINUM LOUVER
SC-E	SECURITY CAMERA - EXTERIOR
STU	THREE COAT STUCCO FINISH



A1 EAST ELEVATION - ADA ENTRY - NEW
1/4" = 1'-0" (REFERENCE: aA101)



A5 NORTH ELEVATION - ADA ENTRY - NEW
1/4" = 1'-0" (REFERENCE: aA101)

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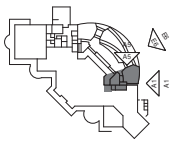


GROUND FLOOR

key plan

sheet title

ELEVATIONS - ADA ENTRY

sheet number

aA201

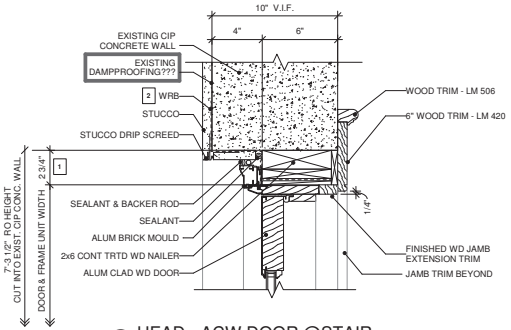
drawn by: EC print date:

CONSTRUCTION NOTES

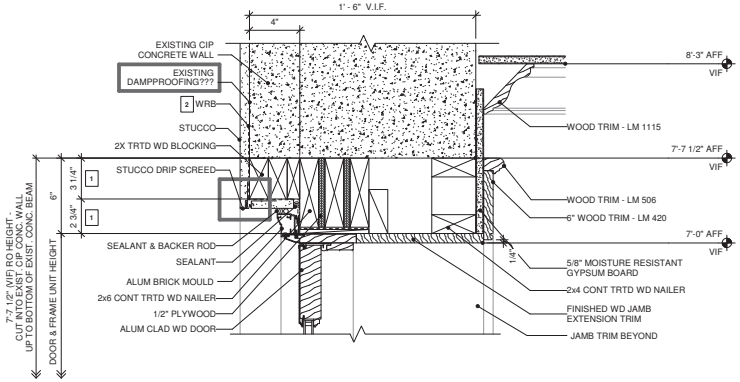
(APPLY TO THIS SHEET ONLY)

1 DIMENSION IS APPROXIMATE - ADJUST AS NECCESSARY TO ACCOMODATE FOR DOOR, FRAME & BRICK MOLD

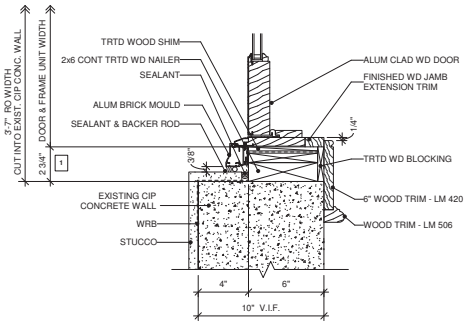
2 WRAP WRB ONTO CONCRETE, OVER WOOD BLOCKING & INTO OPENING. STRIP WRB OVER DOOR UNIT NAIL FIN.



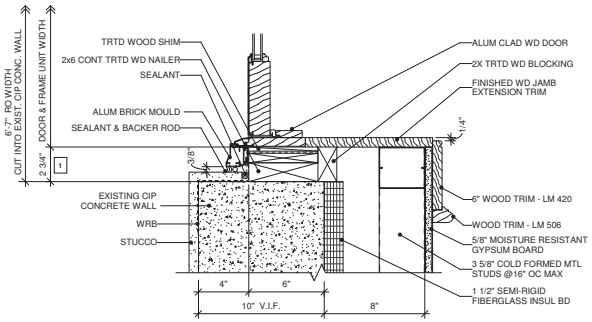
F1 HEAD - ACW DOOR @STAIR
3" = 1'-0"



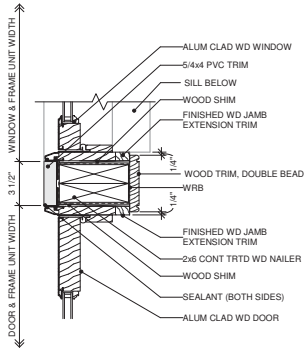
F5 HEAD - ACW DOOR @ELEVATOR VEST
3" = 1'-0" (REFERENCE: aA601)



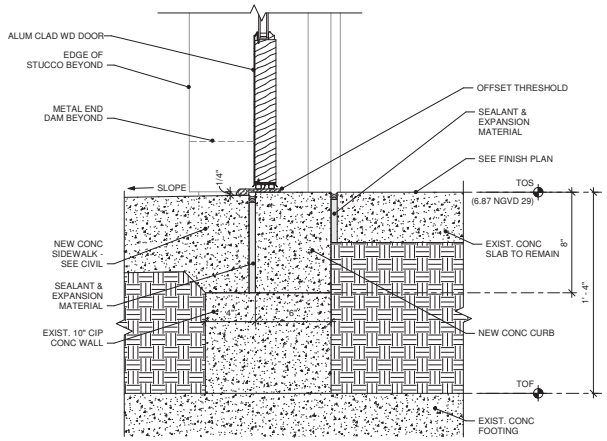
D1 JAMB - ACW DOOR @STAIR
3" = 1'-0"



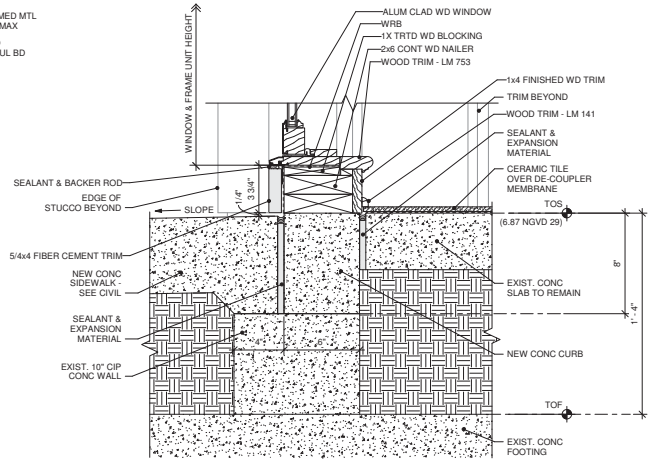
C5 JAMB - ACW DOOR @ELEVATOR VEST
3" = 1'-0"



D7 JOINING VERTICAL MULLION
3" = 1'-0"



A1 SILL - ACW DOOR @STAIR
3" = 1'-0"



A7 SILL - ACW SIDELITE @ELEV VEST
3" = 1'-0" (REFERENCE: aA601)

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SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

TMS #1470500018
3771 SEABROOK ISLAND RD, JOHNS ISLAND, SC 29455

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phase	date of issue
PLANNING COMMISSION SUBMITTAL	10-24-19

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key plan

sheet title
DOOR DETAILS - ADA ENTRY

sheet number
aA401

drawn by: Author print date:

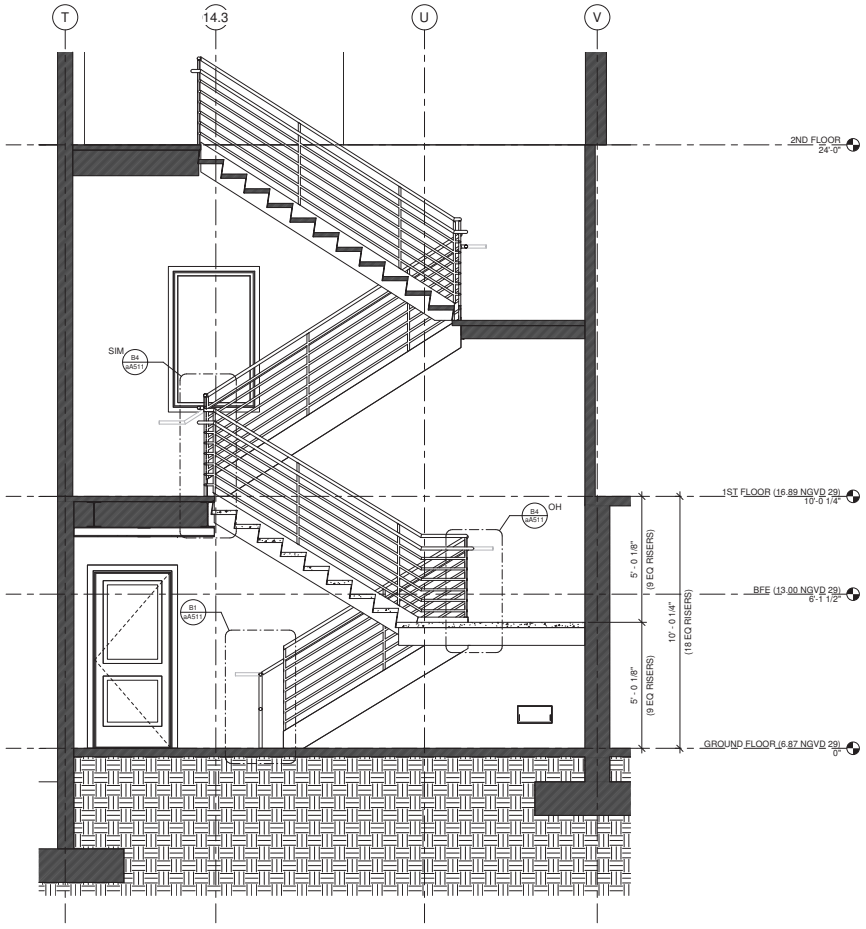
CONSTRUCTION NOTES

(APPLY TO THIS SHEET ONLY)

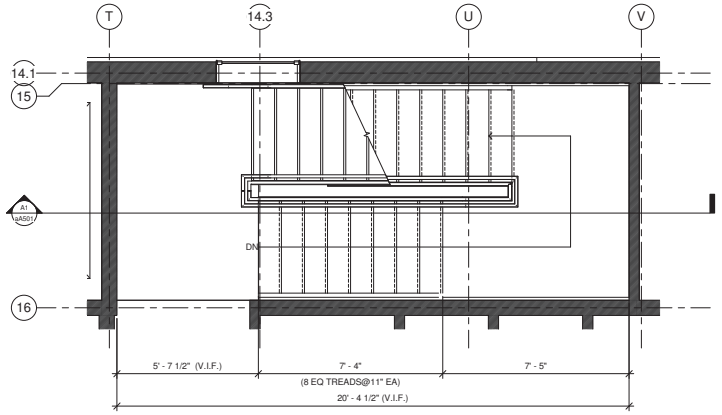
1 DASHED LINE REPRESENTS SMART VENT - INSULATED FLOOD VENT BELOW. SEE ELEVATIONS

GENERAL STAIR & ELEVATOR NOTES:

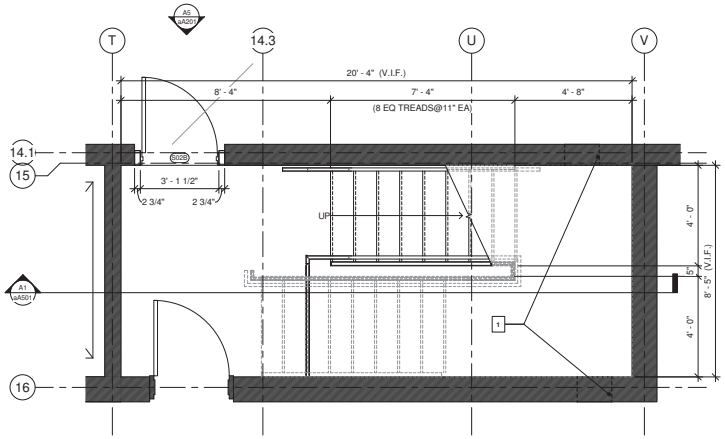
A. STEEL STAIRS AND RAILS ARE DELEGATED DESIGN ELEMENTS STRUCTURALLY. THE AESTHETIC DESIGN INTENT SHALL BE MAINTAINED UNLESS STRUCTURAL CONSIDERATIONS REVEAL AN INCOMPATIBILITY, WHICH SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT DURING SHOP DRAWING SUBMITTALS.
B. ALL EXPOSED WELDS SHALL BE GROUND SMOOTH TO PROVIDE AN ATTRACTIVE FINISHED PRODUCT.
C. ALL EXPOSED STEEL COMPONENTS OF STAIRS, INCLUDING GUARDRAILS AND HANDRAILS, SHALL BE PRIMED AND PAINTED IN ACCORDANCE WITH SPECIFICATION SECTIONS **055100 AND 099100**.
D. ALL WALL-MOUNTED HAND RAILS SHALL HAVE 2 X 8 (MIN.) WOOD BLOCKING INSTALLED IN STUD WALLS, WITH THE LOCATION COORDINATED WITH WALL MOUNTS AS INDICATED ON THE APPROVED SHOP DRAWINGS.
E. VERTICAL GUARDRAIL PIPE DIAMETER SHALL BE EQUAL TO OR LESS THAN THE STRINGER FLANGE WIDTH.
F. HANDRAILS ARE REQUIRED TO EXTEND HORIZONTALLY A MINIMUM OF 12" BEYOND THE TOP RISER AND CONTINUE TO SLOPE THE DISTANCE OF THE DEPTH OF ONE TREAD BEYOND THE BOTTOM RISER.
G. ELEVATOR SHAFT SIZE SHALL BE VERIFIED AND COORDINATED WITH THE ELEVATOR MANUFACTURER. ANY DEVIATION FROM THE DIMENSIONS SHOWN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
H. ALL MISCELLANEOUS STEEL REQUIRED FOR ELEVATOR INSTALLATION SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. COORDINATE BETWEEN ELEVATOR MANUF AND STEEL FABRICATOR.
I. ALL CONDITIONS AT RATED WALL INTERSECTIONS OR TERMINATIONS NOT SHOWN IN ENLARGED DETAILS SHALL CONFORM TO THE PRIORITY WALL DIAGRAM SHOWN ON **A00X**.



A1 SECTION - STAIR S02
1/2" = 1'-0" (REFERENCE: aA101)



C6 ENLARGED FIRST FLOOR PLAN - STAIR S02
1/2" = 1'-0" (REFERENCE: aA101)



A6 ENLARGED GROUND FLOOR PLAN - STAIR S02
1/2" = 1'-0" (REFERENCE: aA101)

0 1' 2' 4'

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ISLAND HOUSE RENOVATIONS - PHASE I

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PLANNING COMMISSION SUBMITTAL	10-24-19

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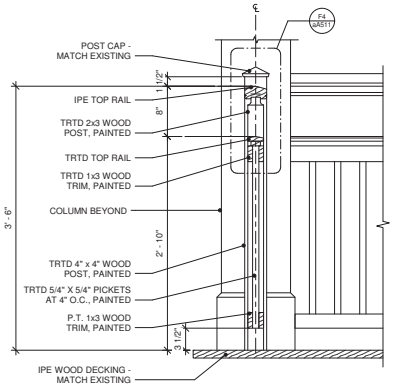
rev no.	description	date

key plan

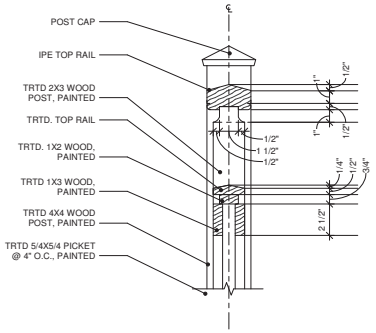
sheet title
ENLARGED STAIR PLANS & SECTION - ADA ENTRY

sheet number
aA501

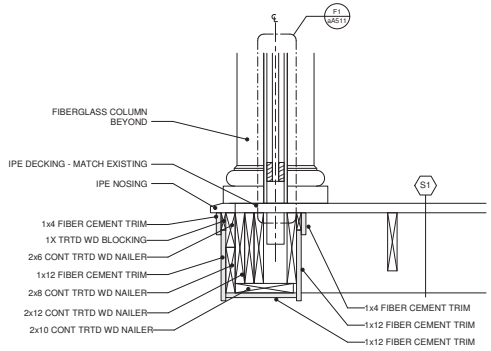
drawn by: EC print date:



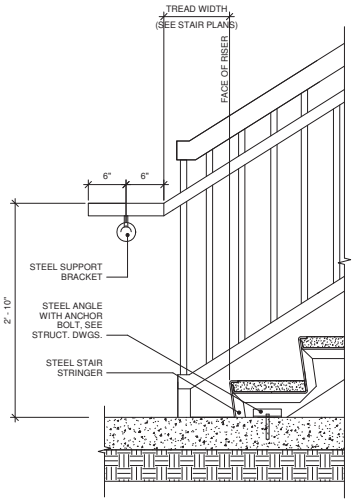
F1 TYPICAL RAILING SECTION
1 1/2" = 1'-0" (REFERENCE: aA201)



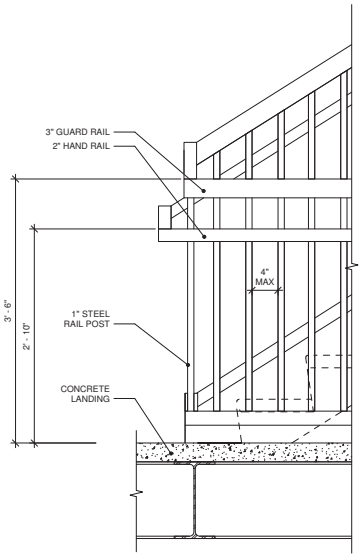
F4 RAIL DETAIL
3" = 1'-0"



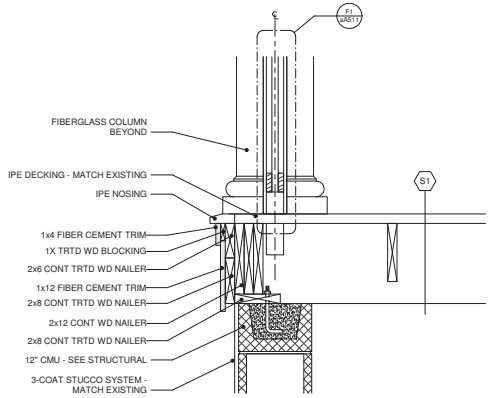
F7 PORCH EDGE SECTION DETAIL @BEAM
1 1/2" = 1'-0" (REFERENCE: aA101)



B1 STAIR DETAIL @FLOOR LANDING
1 1/2" = 1'-0" (REFERENCE: aA501)



B4 STAIR DETAIL @INTERMEDIATE LANDING
1 1/2" = 1'-0" (REFERENCE: aA501)



C7 PORCH EDGE SECTION DETAIL @WALL
1 1/2" = 1'-0" (REFERENCE: aA101)

0 1' 2'

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ISLAND HOUSE RENOVATIONS - PHASE I

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PLANNING COMMISSION SUBMITTAL	10-24-19

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key plan

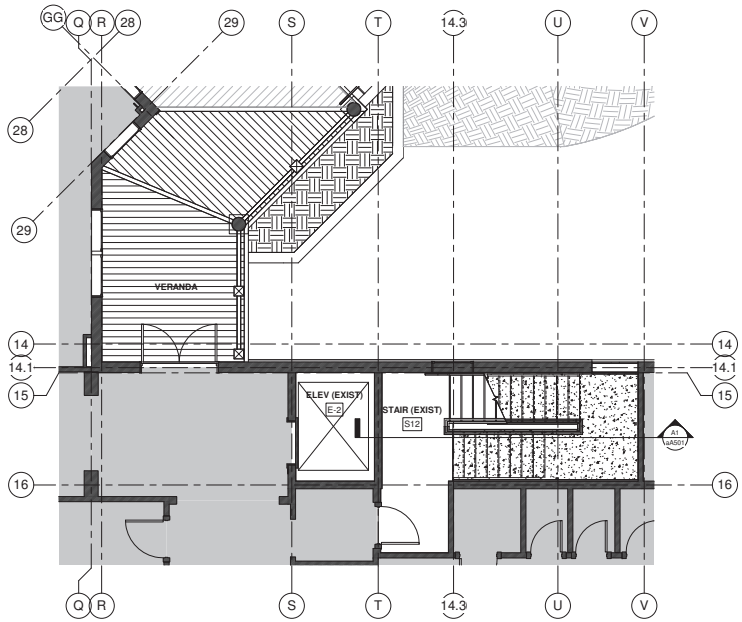
sheet title
STAIR & RAILING DETAILS - ADA ENTRY

sheet number
aA511

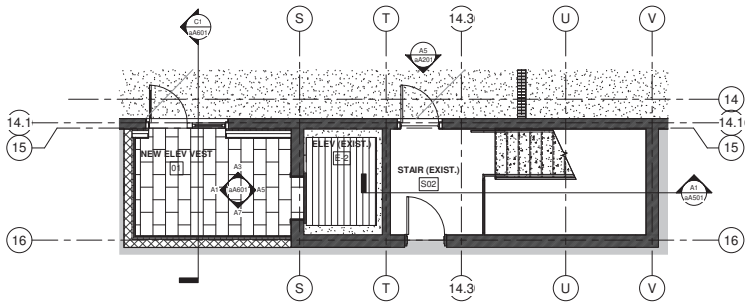
drawn by: EC print date:

FLOOR FINISH LEGEND

XXX-#	MATERIAL TYPE AND PATTERN ORIENTATION
	CFT 1 - CERAMIC FLOOR TILE 1a (GRAY)
	CONC P - CONCRETE, EPOXY PAINTED (GRAY)
	LVT 1 - LUXURY VINYL TILE 1a (BROWN)



B5 FIRST FLOOR PLAN - ELEVATOR & STAIR FINISH PLAN
1/4" = 1'-0" (REFERENCE: aA201)



A5 GROUND FLOOR PLAN - ELEVATOR & STAIR FINISH PLAN
1/4" = 1'-0" (REFERENCE: aA201)

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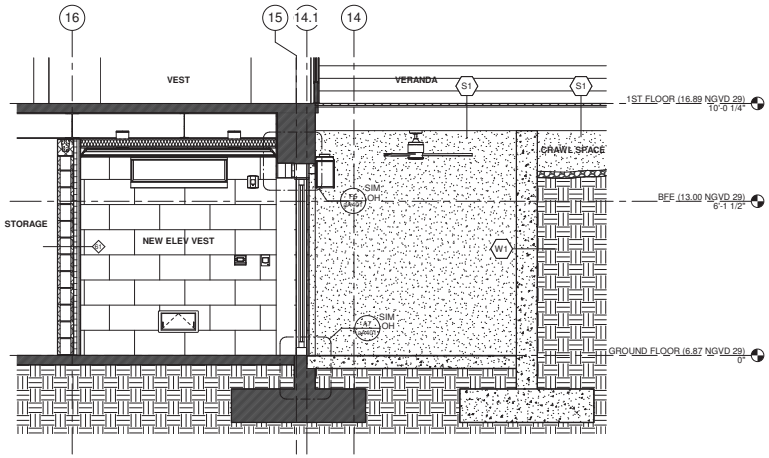
rev no.	description	date

key plan

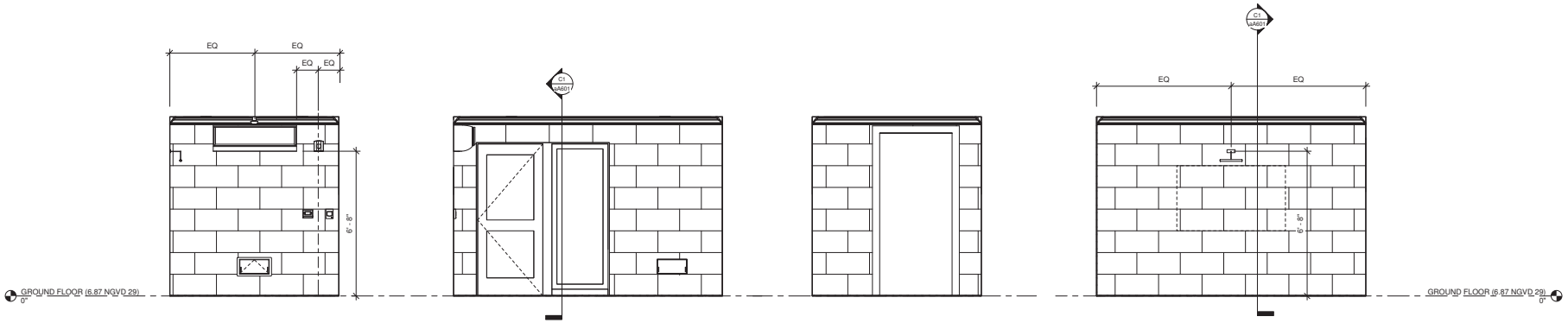
sheet title
FINISH PLAN - ADA ENTRY

sheet number
aA600

drawn by: Author print date:



C1 N/S SECTION @NEW ELEVATOR VESTIBULE
1/2" = 1'-0" (REFERENCE: aA101)



A1 ELEVATOR VESTIBULE - WEST
1/2" = 1'-0" (REFERENCE: aA101)

A3 ELEVATOR VESTIBULE - NORTH
1/2" = 1'-0" (REFERENCE: aA101)

A5 ELEVATOR VESTIBULE - EAST
1/2" = 1'-0" (REFERENCE: aA101)

A7 ELEVATOR VESTIBULE - SOUTH
1/2" = 1'-0" (REFERENCE: aA101)

0 2' 4' 6'

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ISLAND HOUSE RENOVATIONS - PHASE I

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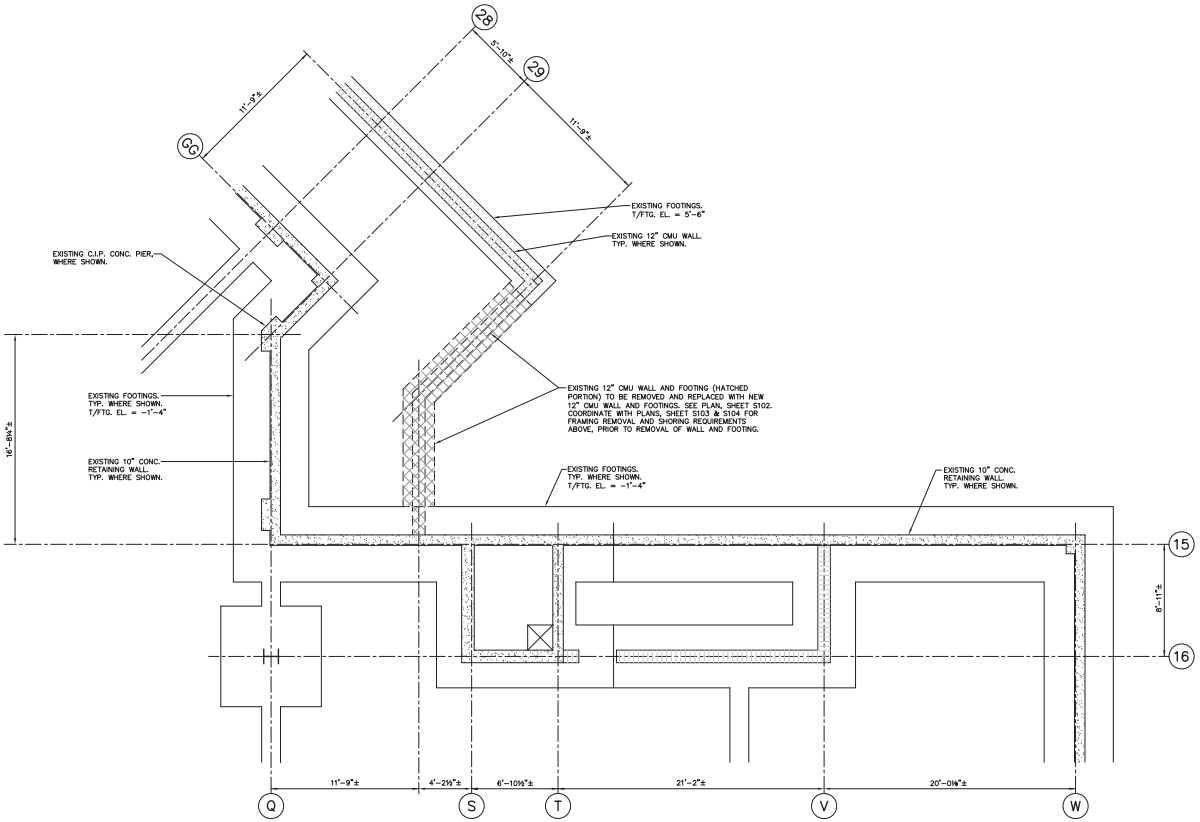
rev no.	description	date

key plan

sheet title
INTERIOR ELEVATIONS - ADA ENTRY

sheet number
aA601

drawn by: EC print date:



DEMO PLAN – FOUNDATION MODIFICATIONS AT NEW ADA ENTRY

¼"=1'-0"

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RENOVATIONS - PHASE I

SEABROOK ISLAND, SC

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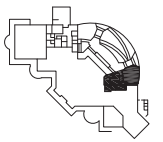
phase: 50% CONSTRUCTION DOCUMENTS
date of issue: 10-07-19

revisions

rev no.	description	date



GROUND FLOOR

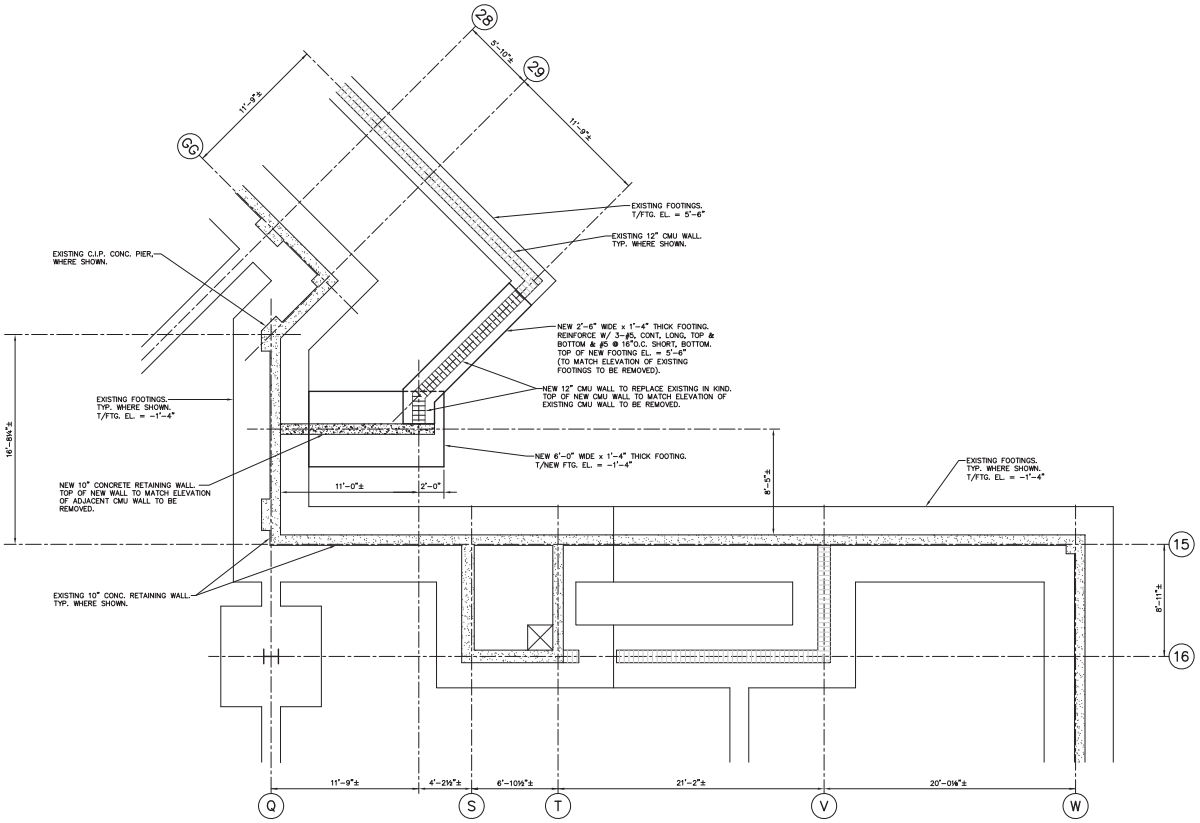
key plan

sheet title: **DEMO PLAN - ADA ENTRY**

sheet number: **S101**

drawn by:

print date:



FOUNDATION PLAN – FOUNDATION MODIFICATIONS AT NEW ADA ENTRY

¼"=1'-0"

NOTES:

1. NEW FOOTINGS ARE TO BE DOWELED INTO EXISTING FOOTINGS.
2. NEW CMU AND CONCRETE RETAING WALL ARE TO BE DOWELED INTO EXISTING CMU & CONCRETE WALLS.

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RENOVATIONS - PHASE I

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phase	date of issue
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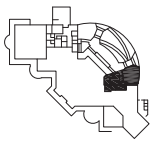
revisions

rev no.	description	date



GROUND FLOOR

key plan

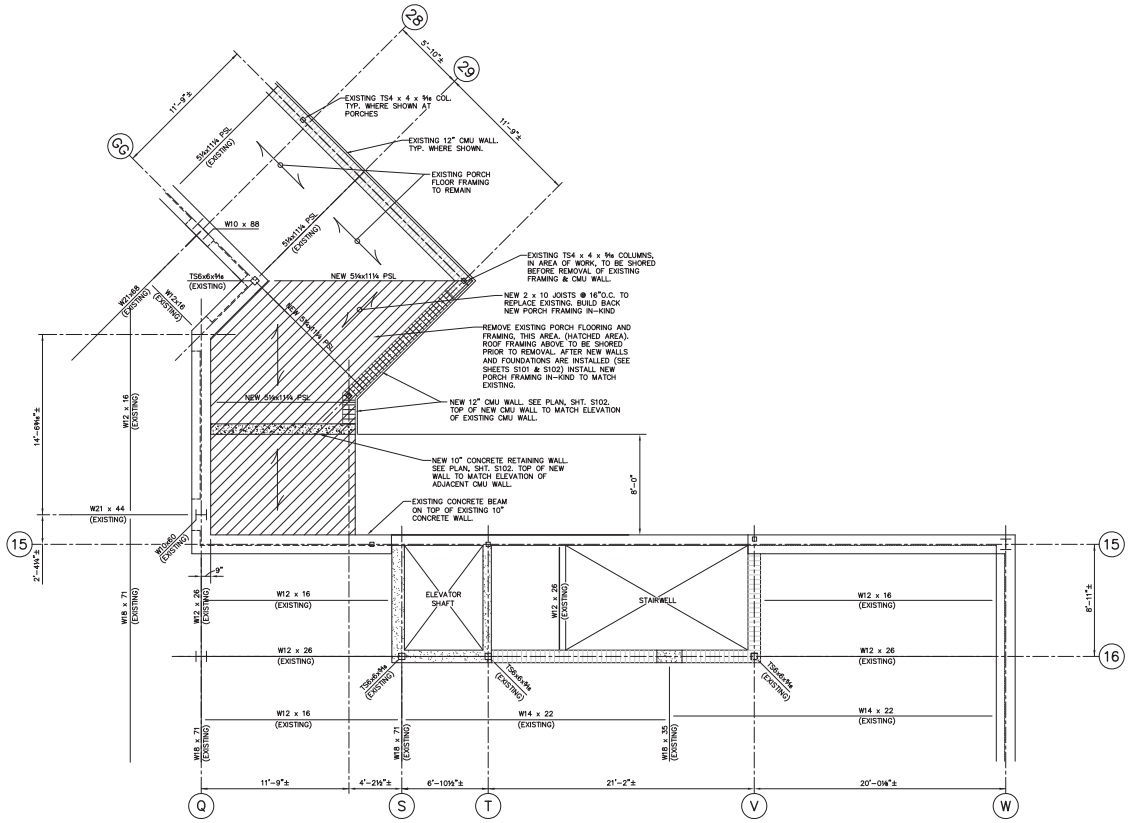
sheet title

FOUNDATION PLAN - ADA ENTRY

sheet number

S102

drawn by: print date:



PORCH FRAMING PLAN – PORCH MODIFICATIONS AT NEW ADA ENTRY

¼"=1'-0"

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phase: **50% CONSTRUCTION DOCUMENTS**

date of issue: 10-07-19

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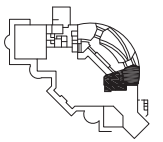
rev no.	description	date



GROUND FLOOR

key plan

sheet title

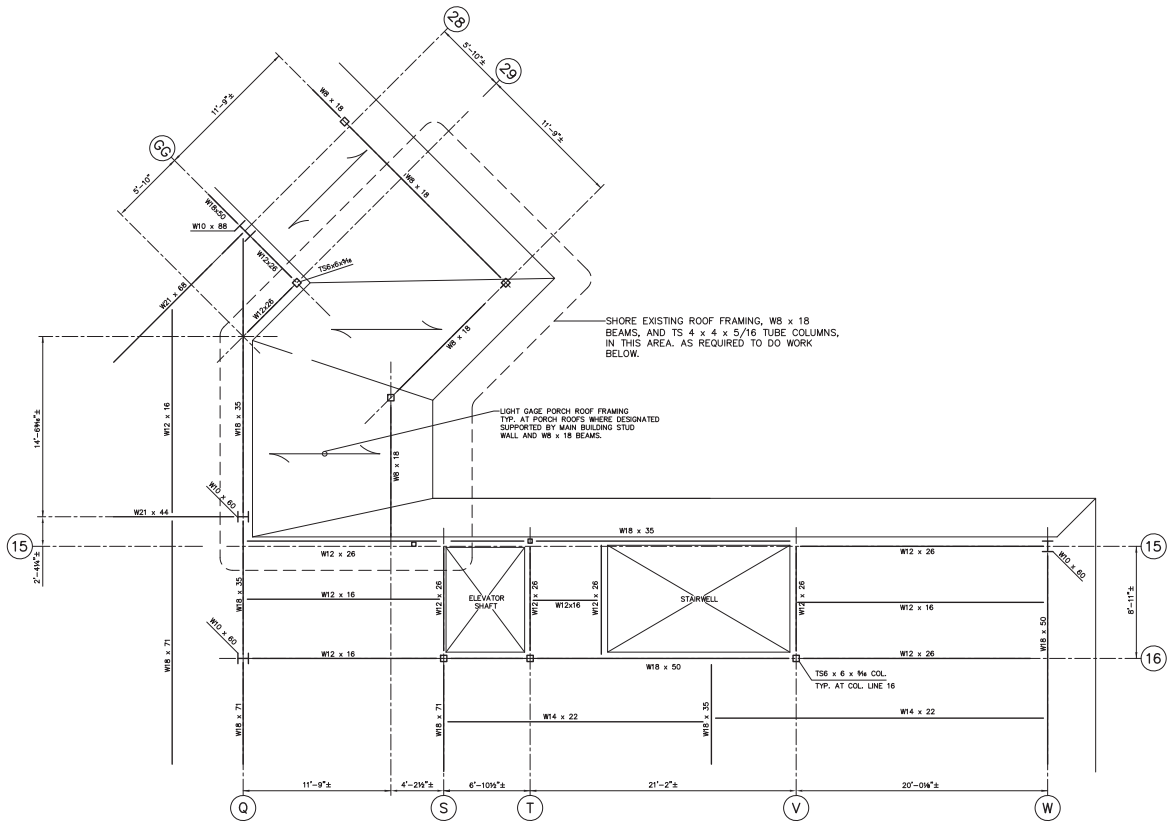
PORCH FRAMING PLAN - ADA ENTRY

sheet number

S103

drawn by:

print date:



EXISTING ROOF FRAMING PLAN
¼"=1'-0"

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phase: 50% CONSTRUCTION DOCUMENTS
date of issue: 10-07-19

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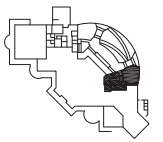

GROUND FLOOR

key plan

sheet title
ROOF FRAMING PLAN - ADA ENTRY

sheet number
S104

drawn by:
print date:

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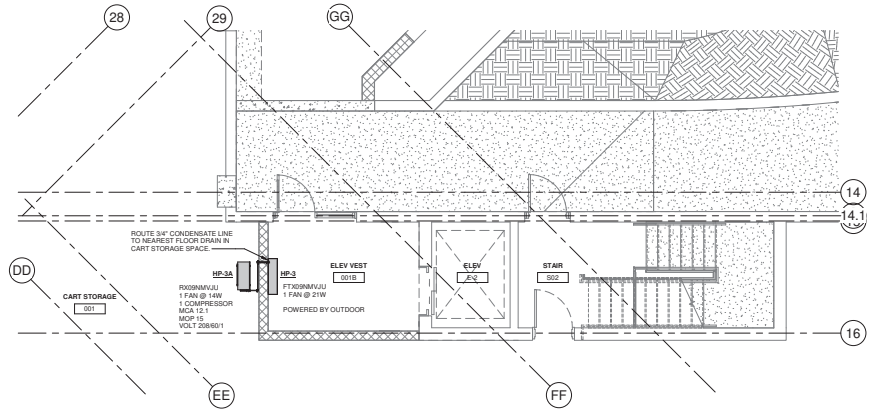
Designed:	WAM
Approved:	KLS
Job Number:	119161
Plot Date:	10/07/19



1 GROUND FLOOR - ADA ENTRY
1/4" = 1'-0"

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date of issue: **10-07-19**

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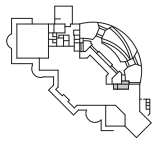


key plan

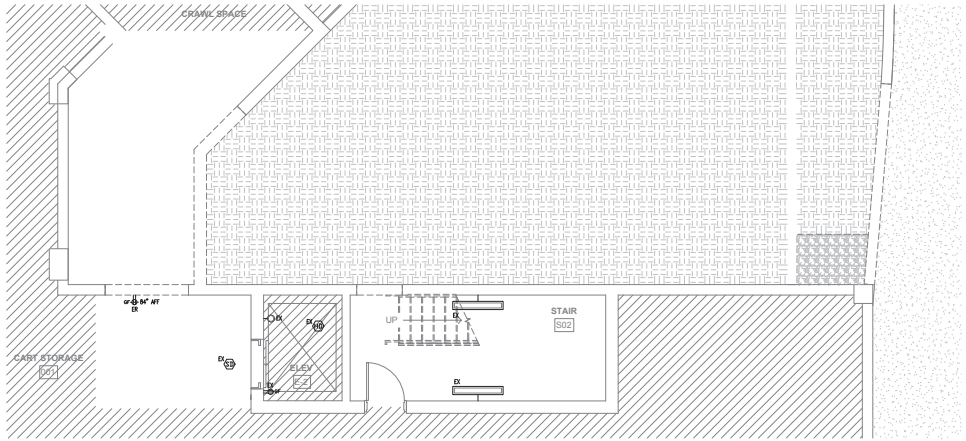
sheet title
ISLAND HOUSE - GROUND FLOOR - MECHANICAL RENOVATION

sheet number
M101

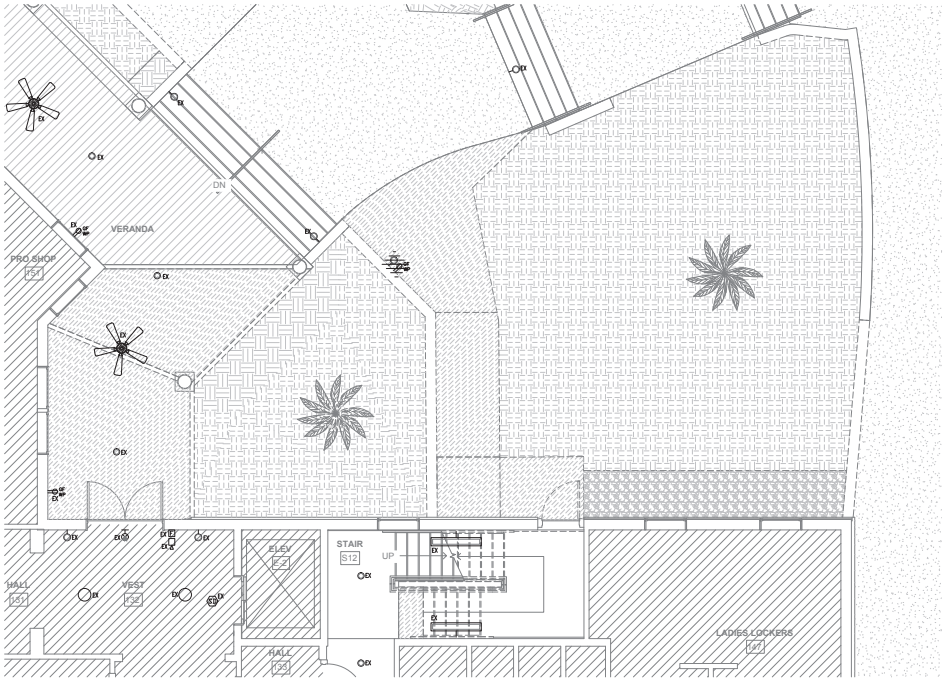
drawn by:

print date:

N
PROJECT NORTH
TRUE NORTH



2 ED101 DEMOLITION PLAN - GROUND FLOOR - ELEVATOR & STAIR
APPROXIMATE SCALE: 1/4" = 1'-0"



1 ED101 DEMOLITION PLAN - FIRST FLOOR - ELEVATOR & STAIR
APPROXIMATE SCALE: 1/4" = 1'-0"

GENERAL DEMOLITION NOTES:

1. ELECTRICAL DEMOLITION GENERALLY INCLUDES REMOVAL OF EXISTING ELECTRICAL DEVICES FROM WALLS AND CEILINGS BEING DEMOLISHED INCLUDING BACKBOXES, CONDUITS, AND CONDUCTORS BACK TO SOURCE PANEL. WHERE ONLY PART OF A CIRCUIT IS BEING REMOVED, REWORK CIRCUITS BY EXTENSION AND RECONNECTION TO CONTINUE REMAINING CIRCUIT IN SERVICE BEYOND THE DEMOLITION AREA.
2. PROVIDE ALL NEW WORK AND WORK REQUIRED TO MODIFY EXISTING CONDITIONS WHERE TO CONTINUE IN OPERATION.
3. PROVIDE REVISED CIRCUIT DIRECTORIES IN EXISTING PANELBOARDS TO INDICATE ALL LOADS, NEW AND MODIFIED.
4. CAREFULLY REVIEW ARCHITECTURAL DEMOLITION PLANS. EXAMINE WORK TO BE DONE AND PROVIDE ALL ELECTRICAL WORK REQUIRED FOR DEMOLITION, THIS INCLUDES RELOCATION, REROUTING, ETC OF ELECTRICAL CIRCUITS WHETHER SPECIFICALLY INDICATED ON ELECTRICAL PLANS OR NOT. CONTRACTOR IS CAUTIONED TO VISIT SITE PRIOR TO BID AND INCLUDE IN BID RELOCATION OF ALL EXISTING ELECTRICAL WORK AS REQUIRED FOR THE NEW ADDITION.
5. REMOVE ALL ELECTRICAL DEVICES FROM WALLS BEING DEMOLISHED.
6. REMOVE ALL LIGHT FIXTURES IN AREAS WHERE NEW LIGHTING IS PROVIDED INCLUDING CONDUIT, BOXES AND CONDUCTORS.
7. INDICATE ON RECORD DRAWINGS CIRCUITS FOR ALL ELECTRICAL DEVICES, NEW AND EXISTING (INCLUDING LIGHTS) IN RENOVATION AREA.
8. CONTRACTOR SHALL COORDINATE WITH RENOVATION DRAWINGS FOR IDENTIFICATION OF EXISTING DEVICES AND FIXTURES TO BE RELOCATED. ALL RELOCATED DEVICES AND FIXTURES SHALL BE DENOTED WITH "EN" ON RENOVATION DRAWINGS.

DEMOLITION LEGEND:

EXISTING ELECTRICAL SYSTEM ELEMENT BEING DEMOLISHED DENOTED BY HATCHING. REMOVE DEVICE, BOX, CONDUCTOR AND CONDUIT TO SOURCE U.N.O.. FOR SWITCH LOCATIONS RE-USE EXISTING LOCATION FOR NEW SWITCHING INDICATED ON RENOVATION PLANS, WHERE NO NEW SWITCH IS INDICATED PROVIDE BLANK PLATE.

EX EXISTING TO REMAIN

ER EXISTING TO BE RELOCATED. SEE RENOVATION PLANS FOR NEW LOCATION

NOT FOR CONSTRUCTION

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RENOVATIONS - PHASE I

SEABROOK ISLAND, SC

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phase: CONSTRUCTION DOCUMENTS
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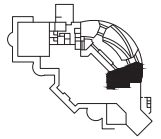


GROUND FLOOR

key plan
sheet title

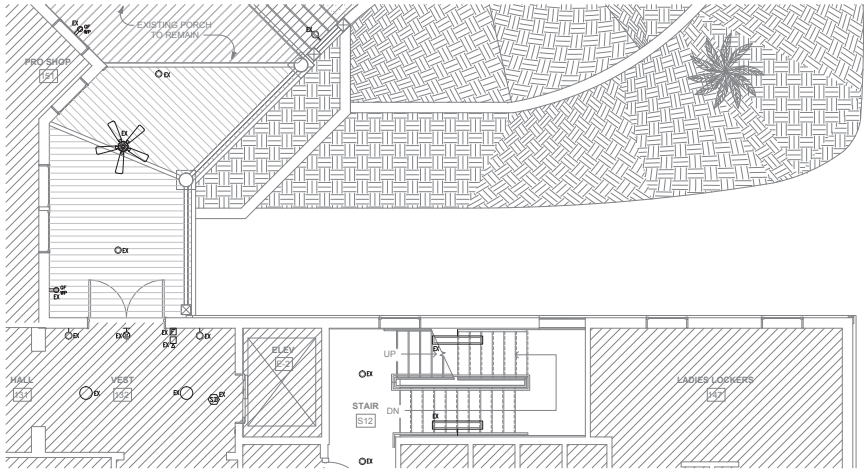
DEMOLITION PLAN - ADA ENTRY

sheet number

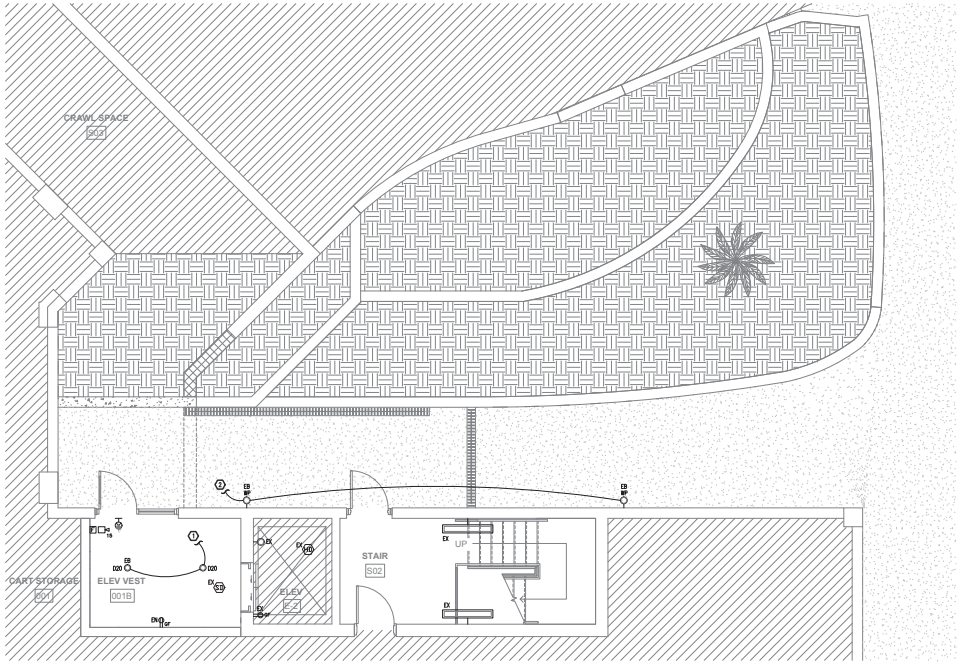
ED101

drawn by: TMD
print date:

N
PROJECT NORTH
TRUE NORTH



2 E101 ELECTRICAL RENOVATION PLAN - FIRST FLOOR - ELEVATOR & STAIR
APPROXIMATE SCALE: 1/4" = 1'-0"



1 E101 ELECTRICAL RENOVATION PLAN - GROUND FLOOR - ELEVATOR & STAIR
APPROXIMATE SCALE: 1/4" = 1'-0"

RENOVATION LEGEND:

EX EXISTING TO REMAIN

EN EXISTING NEW LOCATION

RENOVATION KEYNOTES:

1. EXTEND AND CONNECT TO SPARE 20A/1P CIRCUIT IN EXISTING PANEL H1B (LOCATED IN FIRST FLOOR ELECTRICAL ROOM) AND WIRED THROUGH SPARE RELAY IN LIGHTING CONTROL PANEL LMP1B (1ST FLOOR ELEC. P&L). RELAY SHALL BE CONTROLLED ON TIME OF DAY SCHEDULE FOR ON/OFF OPERATION, AND LOCAL DIGITAL SWITCH FOR OVERRIDE MOUNTED AT DOOR OF VESTIBULE.
2. EXTEND AND CONNECT TO SAME SPARE 20A/1P CIRCUIT IN EXISTING PANEL H1B AS KEYNOTE #1, AND WIRED THROUGH SPARE RELAY IN LIGHTING CONTROL PANEL LMP1B. RELAY SHALL BE CONTROLLED VIA PHOTOCELL AND TIME OFF SCHEDULING.

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ETI #1905-1923

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project number 1923

SEABROOK ISLAND CLUB

RENOVATIONS - PHASE I

SEABROOK ISLAND, SC

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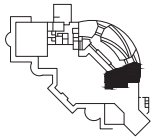
phase: CONSTRUCTION DOCUMENTS
date of issue: 10-07-19

revisions

rev no.	description	date



GROUND FLOOR

key plan

sheet title: **ELECTRICAL RENOVATION PLAN - ADA ENTRY**

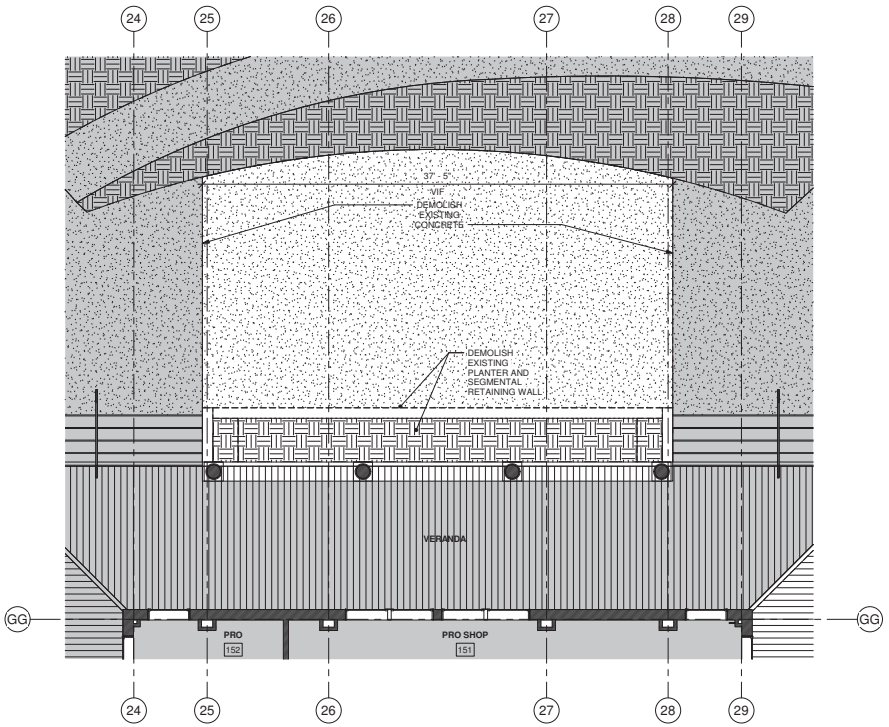
sheet number: **E101**

drawn by: TMD print date:

N PROJECT NORTH TRUE NORTH

DEMOLITION LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- WALL OR ELEMENTS TO BE REMOVED
- EXTENT OF FLOOR SLAB TO BE REMOVED. COORDINATE DIMENSIONS AND LOCATIONS WITH STRUCTURAL AND UTILITIES
- NOT IN SCOPE
- 10 DEMOLITION TAG



A3 FIRST FLOOR DEMO PLAN - VERANDA
1/4" = 1'-0"
VIEW HAS BEEN ROTATED ON SHEET

0 2' 4' 8'

N PROJECT NORTH

TRUE NORTH

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SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

TMS #1470500018
3771 SEABROOK ISLAND RD,
JOHNS ISLAND, SC 29455

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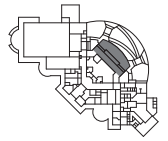
phase	date of issue
PLANNING COMMISSION SUBMITTAL	10-24-19

revisions

rev no.	description	date



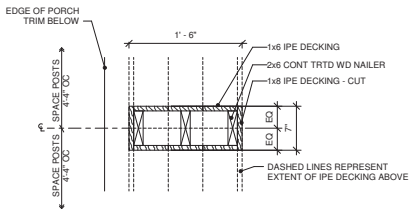
FIRST FLOOR

key plan

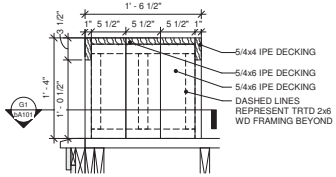
sheet title
DEMO PLANS - VERANDA FIRE PIT

sheet number
bD101

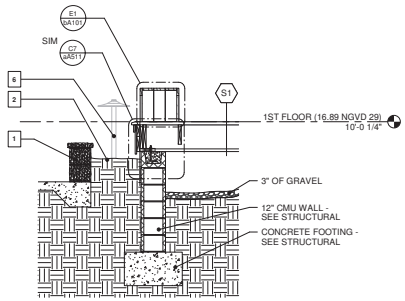
drawn by: EC print date:



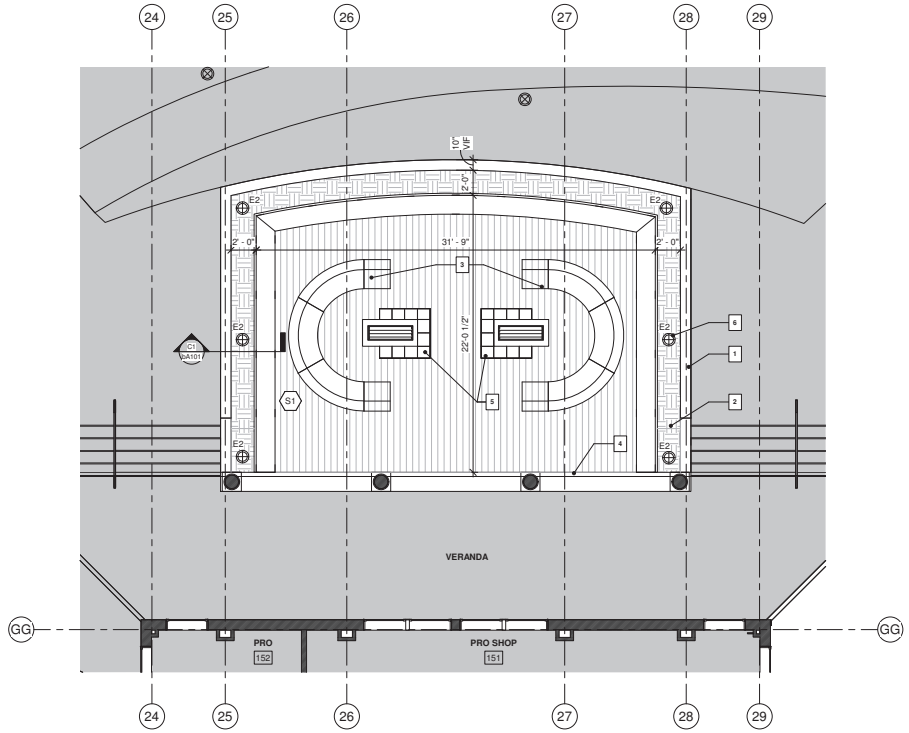
G1 PLAN DETAIL @BENCH SUPPORT POST
1 1/2" = 1'-0" (REFERENCE: bA101)



E1 SECTION DETAIL @BENCH
1 1/2" = 1'-0" (REFERENCE: bA101)



C1 SECTION @PERIMETER BENCH
1/2" = 1'-0" (REFERENCE: bA101)



A3 FIRST FLOOR PLAN - VERANDA FIRE PIT
1/4" = 1'-0"
VIEW HAS BEEN ROTATED ON SHEET

CONSTRUCTION NOTES
(APPLY TO THIS SHEET ONLY)

1 VERSA-LOK "ACCENT" WITH CAP UNIT TOP - MATCH T.O. WALL ELEVATION TO EXISTING T.O. SEGMENTAL RETAINING WALL ELEVATION - APPROX 15.55. MATCH NEW WALL CONSTRUCTION AND MATERIALS TO EXISTING SEGMENTEAL RETAINING WALL. SEE CIVIL

2 MATCH ELEVATION OF PLANTER TO EXISTING PLANTER ELEVATION - APPROX 15.45

3 FURNITURE, OPOI

4 NEW PORCH EXTENSION FOR FIRE PIT - MATCH FINISHES TO EXISTING PORCH. ALIGN FFE WITH EXISTING ADJACENT VERANDA FFE.

5 FIRE PIT: PROVIDE ELECTRICAL IGNITE AND PIPING TO PROPANE HATCH

6 EXTERIOR LANDSCAPE LIGHTS TO MATCH EXISTING, TYPICAL OF SIX

LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION
- NOT IN SCOPE
- FD FLOOR DRAIN - SEE PLUMBING
- RDL ROOF DRAIN LEADER - SEE PLUMBING & CIVIL
- DS DOWNSPOUT - SEE ROOF PLAN
- CJ CONCRETE OR CMU CONTROL JOINT
- 2 HOUR RATED FIRE BARRIER
- E2 EXTERIOR LIGHT FIXTURE - LANDSCAPE

CONSTRUCTION SUBSYSTEMS:

- S1 **WOOD JOIST WITH IPE DECK BOARDS**
- S2 **UPPER FLOOR CONCRETE SLAB**
- W1 **STUCCO ON CIP CONCRETE**
- W2 **FIBER CEMENT SIDING ON METAL STUDS**
- R1 **ASPHALT SHINGLES ROOF SYSTEM**

0 2' 4' 8'

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SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

TMS #1470500018
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phase	date of issue
PLANNING COMMISSION SUBMITTAL	10-24-19

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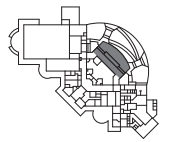
rev no.	description	date



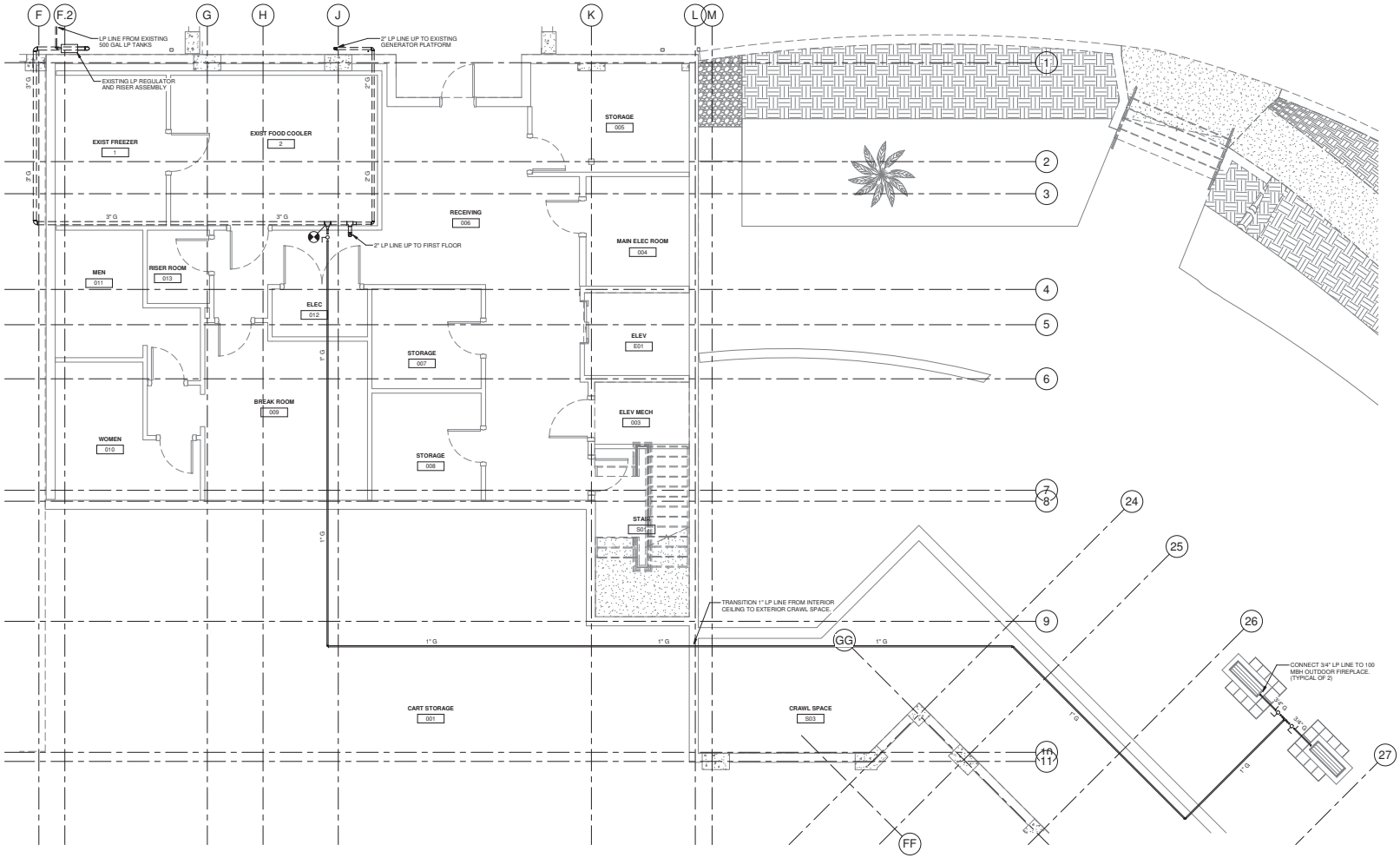
FIRST FLOOR

key plan

sheet title
FLOOR PLANS - VERANDA FIRE PIT

sheet number
bA101

drawn by: EC print date:



1 GROUND FLOOR - OUTDOOR FIREPIT GAS LINE
1/4" = 1'-0"

NOT FOR CONSTRUCTION

MECA
Mechanical Engineering Consulting Associates, Inc.
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Designed:	WAM
Approved:	KLS
Job Number:	119161
Plot Date:	10/07/19

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project number **1923**

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SEABROOK ISLAND, SC

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phase: **REVIEW DOCUMENTS**
date of issue: **10-07-19**

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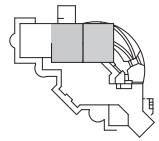


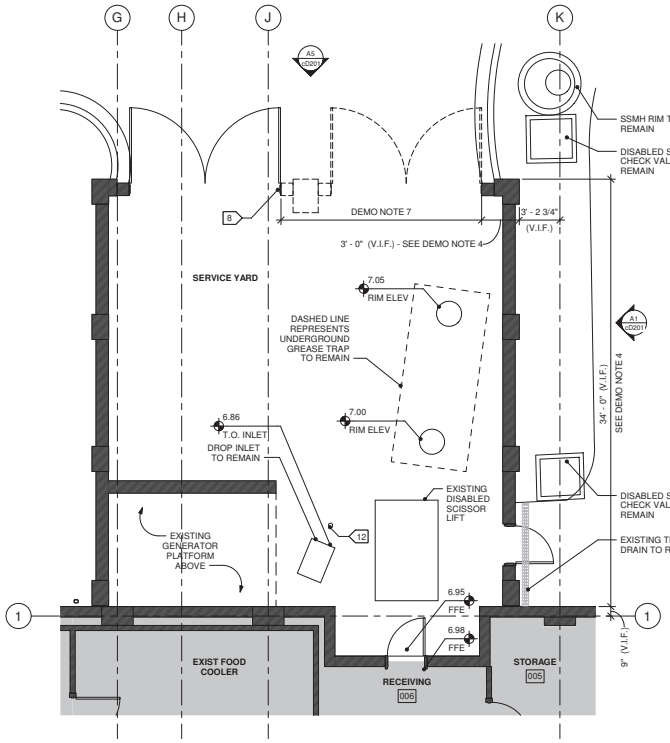
GROUND FLOOR

key plan

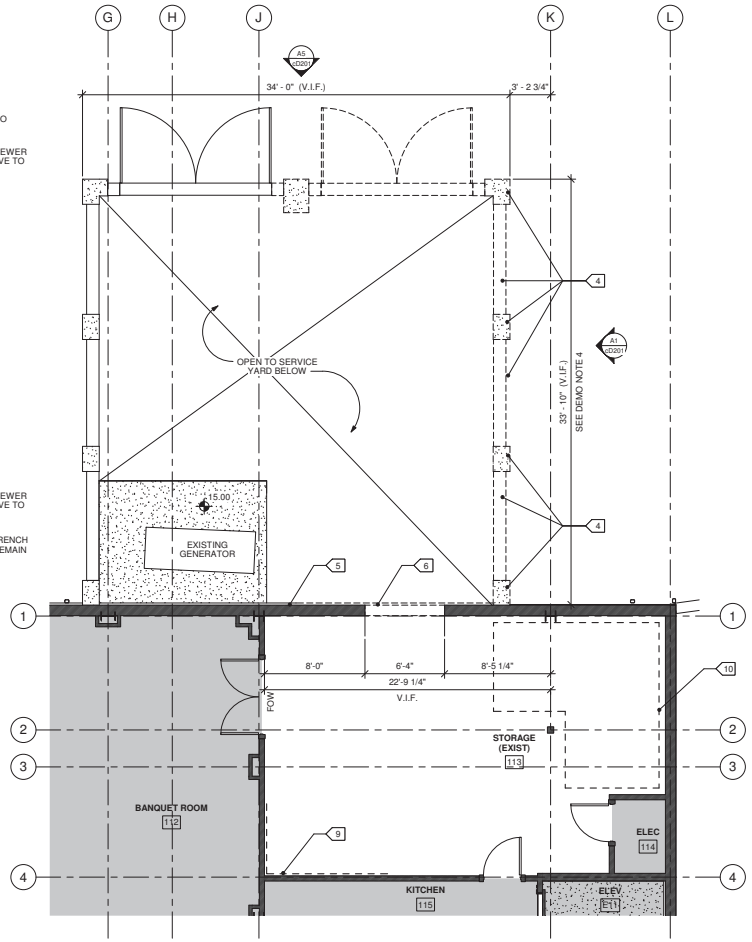
sheet title
ISLAND HOUSE - GROUND FLOOR - PLUMBING RENOVATION

sheet number
P101

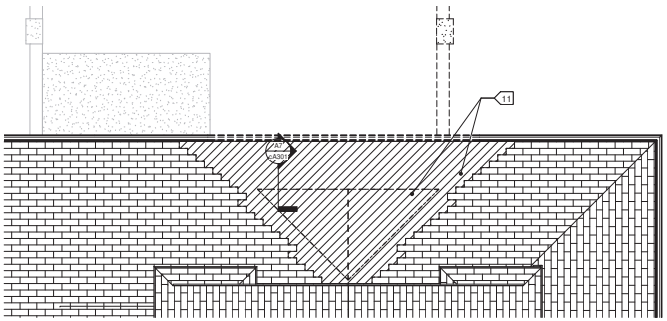
drawn by: print date:



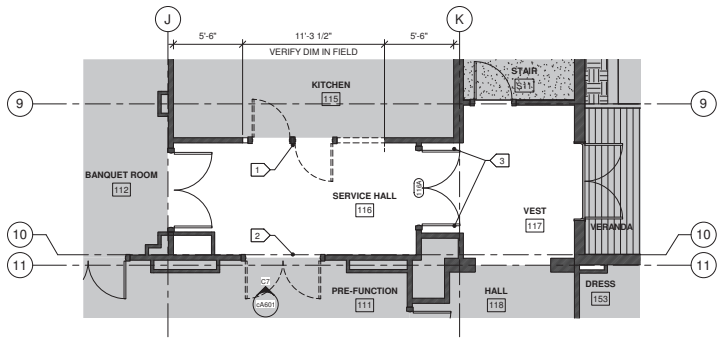
D1 GROUND FLOOR DEMO PLAN - SERVICE YARD
1/4" = 1'-0"



C4 FIRST FLOOR DEMO PLAN - STORAGE 113
1/4" = 1'-0"



A1 DEMO ROOF PLAN - STORAGE 113
1/4" = 1'-0"



A5 FIRST FLOOR DEMO PLAN - HALL 116
1/4" = 1'-0"

DEMOLITION LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- WALL OR ELEMENTS TO BE REMOVED
- EXTENT OF FLOOR SLAB TO BE REMOVED. COORDINATE DIMENSIONS AND LOCATIONS WITH STRUCTURAL AND UTILITIES
- NOT IN SCOPE
- 10 DEMOLITION TAG

DEMOLITION NOTES

(APPLY TO THIS SHEET ONLY)

1 REMOVE EXISTING DOORS AND WALL

2 REMOVE EXISTING DOORS

3 REMOVE HARDWARE FROM VESTIBULE SIDE OF DOOR

4 DEMOLISH TOP OF EXISTING CMU WALLS AND PIERS TO ACCOMMODATE FOR NEW CONCRETE SLAB AT FIRST FLOOR LEVEL - SEE DEMOLITION ELEVATIONS

5 REMOVE EXISTING EXTERIOR WALL FINISH TO SHEATHING LAYER

6 DEMOLISH PORTION OF EXISTING WALL FOR NEW DOUBLE DOOR

7 DEMOLISH EXISTING CMU WALLS, GATE AND PIER.

8 EXISTING GATE TO REMAIN - PROTECT DURING DEMOLITION TO ATTACH TO NEW CMU WALL AND PIER.

9 REMOVE EXISTING GYP BD - TO BE REPLACED WITH MOISTURE RESISTANT GYP BD BEFORE INSTALLATION OF WALK IN COOLER

10 PROTECT EXISTING EQUIPMENT DURING DEMOLITION AND CONSTRUCTION.

11 REMOVE DORMER WALLS, LOUVER AND ROOF MATERIALS AS NEEDED TO OVERFRAME NEW ROOF CONSTRUCTION - TAKE SHINGLES BACK TO NATURAL BREAK POINTS.

12 RELOCATE EXISTING SSCO TO AVOID NEW STRUCTURE

0 2' 4' 8'

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SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

TMS #1470500018
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JOHNS ISLAND, SC 29455

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phase: PLANNING COMMISSION SUBMITTAL
date of issue: 10-24-19

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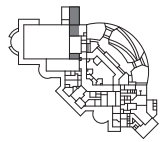
rev no.	description	date



FIRST FLOOR

key plan

sheet title
DEMO PLANS - KITCHEN STORAGE

sheet number
cD101

drawn by: EC print date:

DEMOLITION NOTES

(APPLY TO THIS SHEET ONLY)

1 REMOVE DORMER WALLS, LOUVER AND ROOF MATERIALS AS NEEDED TO OVERFRAME NEW ROOF CONSTRUCTION - TAKE SHINGLES BACK TO NATURAL BREAK POINTS.

2 DEMOLISH TOP OF EXISTING CMU WALLS AND PIERS TO ACCOMMODATE FOR NEW CONCRETE SLAB AT FIRST FLOOR LEVEL

3 DEMOLISH PORTION OF EXISTING WALL FOR NEW DOUBLE DOOR

4 REMOVE EXISTING EXTERIOR WALL FINISH TO SHEATHING LAYER

5 EXISTING GATE TO REMAIN - PROTECT DURING DEMOLITION TO ATTACH TO NEW CMU WALL AND PIER.

7 REMOVE EXISTING GATE. DEMOLISH EXISTING CMU WALLS AND PIER.

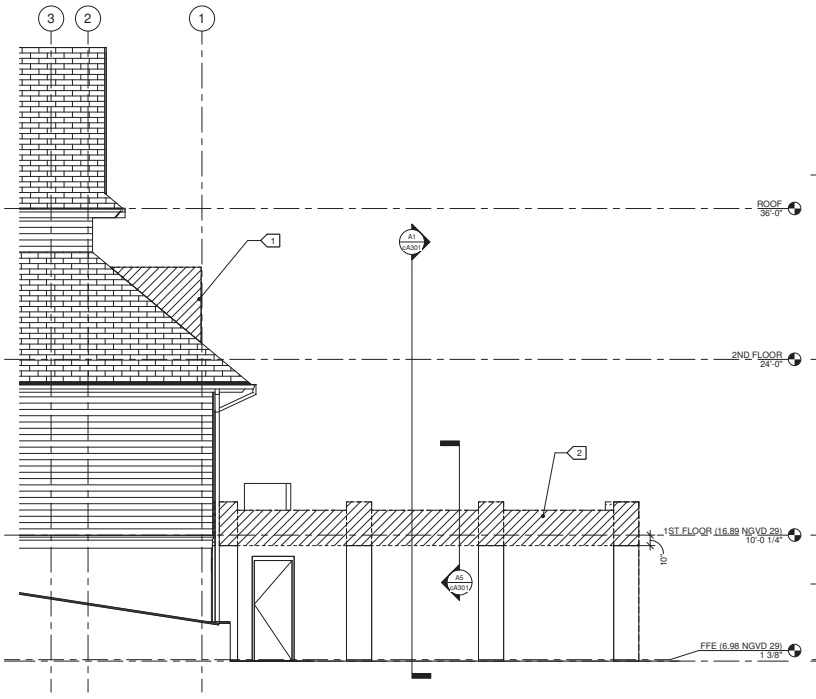
DEMOLITION LEGEND:

EXISTING CONSTRUCTION TO REMAIN

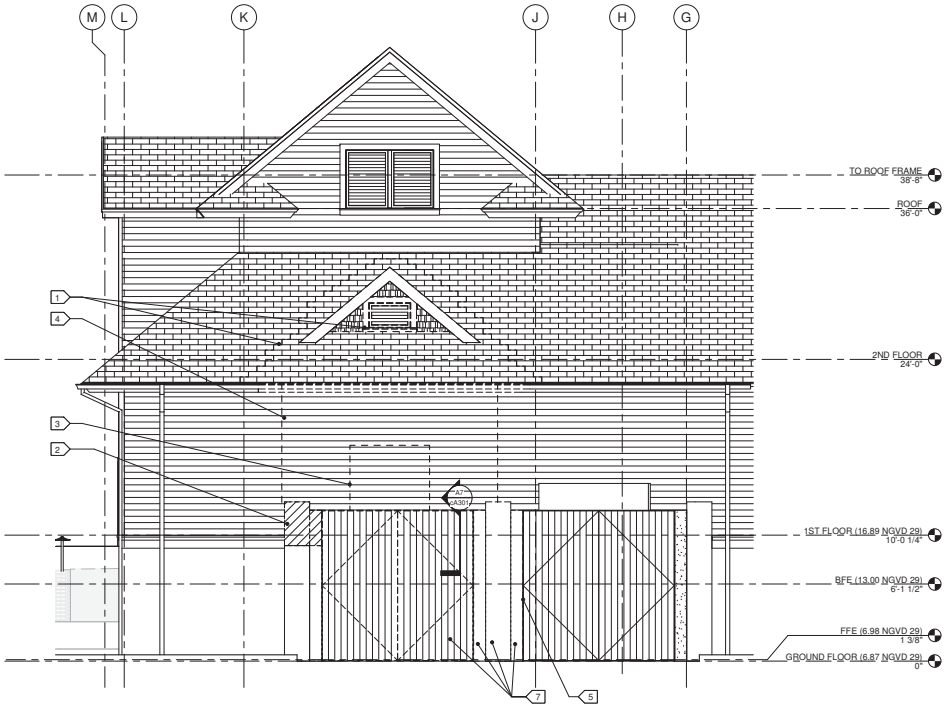
WALL OR ELEMENTS TO BE REMOVED

EXTENT OF FLOOR SLAB TO BE REMOVED. COORDINATE DIMENSIONS AND LOCATIONS WITH STRUCTURAL AND UTILITIES

10 DEMOLITION TAG



A1 EAST ELEVATION - SERVICE YARD - DEMO
1/4" = 1'-0" (REFERENCE: cD101)



A5 NORTH ELEVATION - SERVICE YARD - DEMO
1/4" = 1'-0" (REFERENCE: cD101)

0 2' 4' 8'

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SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

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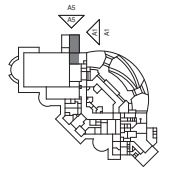


FIRST FLOOR

key plan

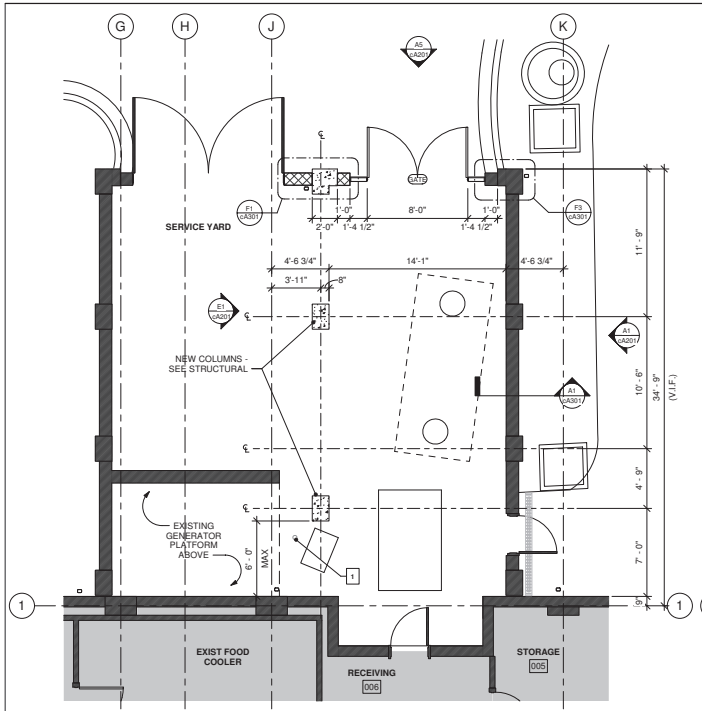
sheet title

DEMO ELEVATIONS - KITCHEN STORAGE

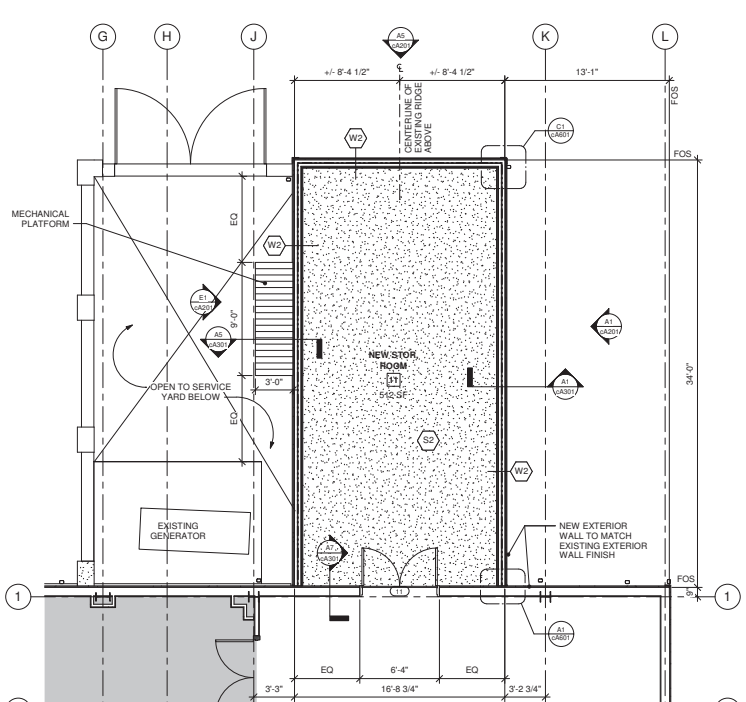
sheet number

cD201

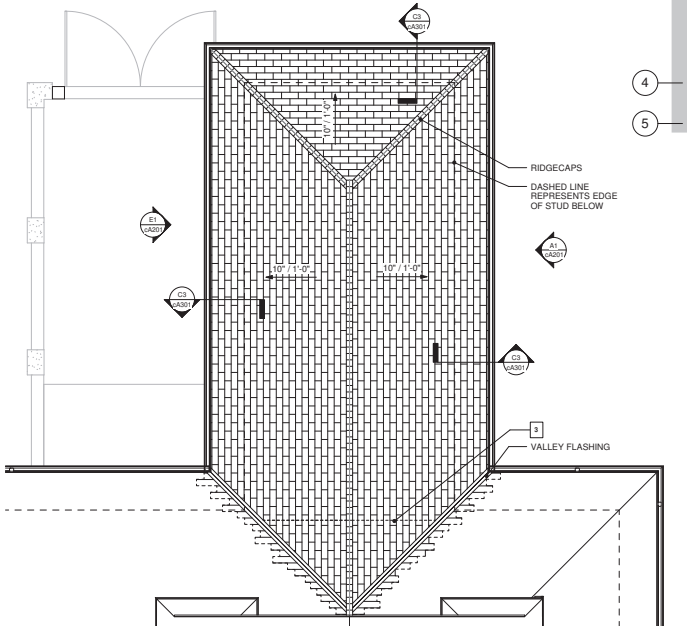
drawn by: EC print date:



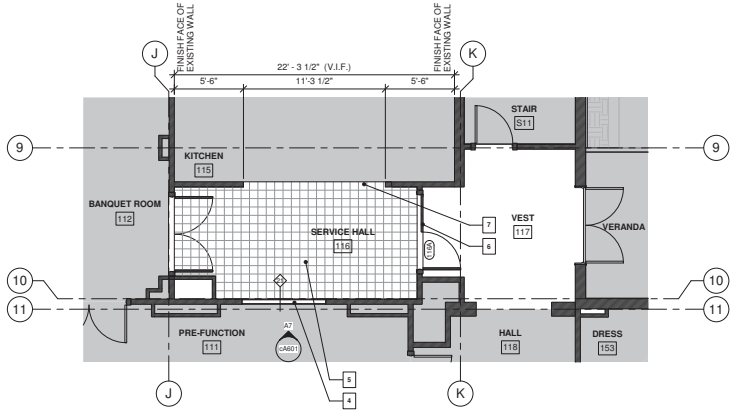
D1 GROUND FLOOR PLAN - SERVICE YARD
1/4" = 1'-0"



C4 FIRST FLOOR PLAN - STORAGE 113
1/4" = 1'-0"



A1 ROOF PLAN - STORAGE 113
1/4" = 1'-0"



A5 FIRST FLOOR PLAN - HALL 116
1/4" = 1'-0"

LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION
- NOT IN SCOPE
- FD — FLOOR DRAIN - SEE PLUMBING
- RDL — ROOF DRAIN LEADER - SEE PLUMBING & CIVIL
- DS — DOWNSPOUT - SEE ROOF PLAN
- CJ — CONCRETE OR CMU CONTROL JOINT
- 2 HOUR RATED FIRE BARRIER
- E2 — EXTERIOR LIGHT FIXTURE - LANDSCAPE

CONSTRUCTION SUBSYSTEMS:

- S1 **WOOD JOIST WITH IPE DECK BOARDS**
- S2 **UPPER FLOOR CONCRETE SLAB**
- W1 **STUCCO ON CIP CONCRETE**
- W2 **FIBER CEMENT SIDING ON METAL STUDS**
- R1 **ASPHALT SHINGLES ROOF SYSTEM**

CONSTRUCTION NOTES
(APPLY TO THIS SHEET ONLY)

1 RELOCATED SSCO TO AVOID NEW STRUCTURAL COLUMN AND FOOTING - SEE PLUMBING

2 REPLACE EXISTING GYP BD WITH MOISTURE RESISTANT GYP BD BEFORE INSTALLING COOLER TO AVOID MOLD. POSITION COOLER WALLS MINIMUM CLEARANCE FROM EXISTING WALLS AS PER MANUFACTURER'S REQUIREMENTS.

3 NEW ROOF OVERFRAMED ON EXISTING ROOF STRUCTURE. MATCH NEW ROOF FINISHES TO EXISTING ADJACENT FINISHES.

4 INFILL WALL TO MATCH EXISTING WALL

5 HALL 116 FLOOR FINISH TO MATCH EXISTING TILE IN KITCHEN 115

6 AFIX THIS DOOR OF EXISTING PAIR OF DOORS. ALL HARDWARE REMOVED FROM VESTIBULE SIDE OF DOORS. PANIC HARDWARE ADDED TO HALL SIDE OF OPERATIONAL DOOR.

7 NEW WALL OPENING INTO KITCHEN. VERIFY OPENING IS NOT IN CONFLICT WITH LOCATION OF EXISTING DISHWASHER & EQUIPMENT IN KITCHEN.

GENERAL ROOF NOTES:

A. IN THE ABSENCE OF A DETAIL OF ANY CONDITION ON THE ROOF, PREFERRED DETAILS OF THE NRCA SHALL APPLY. UNDER ALL CIRCUMSTANCES, THE CONCEPTS SET FORTH IN THE NRCA MANUAL, CURRENT EDITION, SHALL BE FOLLOWED TO PRODUCE A PROFESSIONALLY EXECUTED, WATERTIGHT INSTALLATION.
B. IN THE ABSENCE OF A DETAIL REGARDING SHEET METAL, DOWNSPOUTS, GUTTERS, CONDUCTOR HEADS, OR SCUPPERS, THE PREFERRED DETAILS OF SMACNA SHALL APPLY. UNDER ALL CIRCUMSTANCES, THE CONCEPTS SET FORTH IN THE SMACNA MANUAL, CURRENT EDITION SHALL BE FOLLOWED TO PRODUCE A PROFESSIONALLY EXECUTED, WELL CRAFTED, WATERTIGHT INSTALLATION.
C. PROVIDE CRICKETS AT ALL CURBS AND EQUIPMENT RAILS SET PERPENDICULAR TO ROOF SLOPE, WHICH ARE GREATER THAN 24 INCHES WIDE.
D. COORDINATE M/E/P SUPPORTS AND PENETRATION REQUIREMENTS WITH ARCHITECTURAL ROOFING AND STRUCTURAL DRAWINGS. ROOFING FLASHING DETAILS SHOWN ON ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER M/E/P DRAWING WHEN A CONFLICT EXISTS SPECIFIC TO HOW TO INSTALL ROOFING OR SHEET METAL.
E. A MINIMUM HEIGHT OF 12" SHALL BE PROVIDED BETWEEN ANY PENETRATIONS AND/OR TERMINATIONS. A MINIMUM DISTANCE OF 30 INCHES SHALL BE PROVIDED BETWEEN A ROOF DRAIN AND OVERFLOW DRAIN TO PERMIT TAPERED INSULATION AND PROPER FLASHING.
F. USE ONLY ROUND SHAPES TO CONSTRUCT EQUIPMENT AND SCREEN SUPPORTS.
G. EQUIPMENT SUPPORTS SHOULD BE A MINIMUM OF 14" ABOVE THE FINISHED ROOF SURFACE.
H. LOCATE SECONDARY DRAINS TO AVOID INSULATION VALLEYS.
I. WALKPADS ARE REQUIRED AROUND ALL EQUIPMENT AND ROOF ACCESS POINT. INSTALL EACH 12" FROM THE NEXT AND 12" AWAY FROM WALLS AND CURBS TO ENSURE PROPER DRAINAGE.
J. ROOF INSULATION IS REQUIRED ON ALL ROOFS AS SPECIFIED AND INDICATED ON DRAWINGS.
K. ALL ROOF AREAS TO HAVE A MINIMUM 1/4":12" FINISHED SLOPE. THE ROOF SLOPE SHALL BE PROVIDED BY A FULL TAPERED INSULATION SYSTEM WHERE THE ROOF DECK DOES NOT PROVIDE SPECIFIED FINISH SLOPE. TAPERED INSULATION SYSTEM SHALL PROVIDE THE REQUIRED SLOPE FOR PRIMARY AND SECONDARY MEANS OF DRAINAGE.
L. A MINIMUM R-VALUE OF 25 IS REQUIRED.
M. THE SECONDARY SLOPE (CRICKETS, SADDLES, ETC) SHALL PROVIDE A MINIMUM FINISHED SLOPE EQUAL TO THE PRIMARY SLOPE OF THE ROOF. SECONDARY SLOPE SHALL BE PROVIDED WITH TAPERED INSULATION AT A RATE OF 2X THE PRIMARY SLOPE.
N. ALL PENETRATIONS / TERMINATIONS SHALL PROVIDE A MIN. 8" BASE FLASHING HEIGHT ABOVE THE FINISHED ROOF, INCLUDING THE TAPERED INSULATION.
O. AT DRAINAGE LOCATIONS, ENSURE INSULATION TAPERS UP FROM DRAIN A MINIMUM 1/4" : 12" AND A MAXIMUM 1" : 12". PROVIDE TAPERED FILLER TO MATCH FIELD INSULATION THICKNESS.
P. PROVIDE A TAPERED CRICKET ON THE HIGH SIDE OF ALL PENETRATIONS WIDER THAN 24".
Q. ADJUST CRICKETS AND VALLEYS BASED ON ACTUAL CURB LOCATIONS TO ENSURE POSITIVE DRAINAGE.

0 2' 4' 8'

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SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

TMS #1470500018
3771 SEABROOK ISLAND RD, JOHNS ISLAND, SC 29455

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phase	date of issue
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revisions

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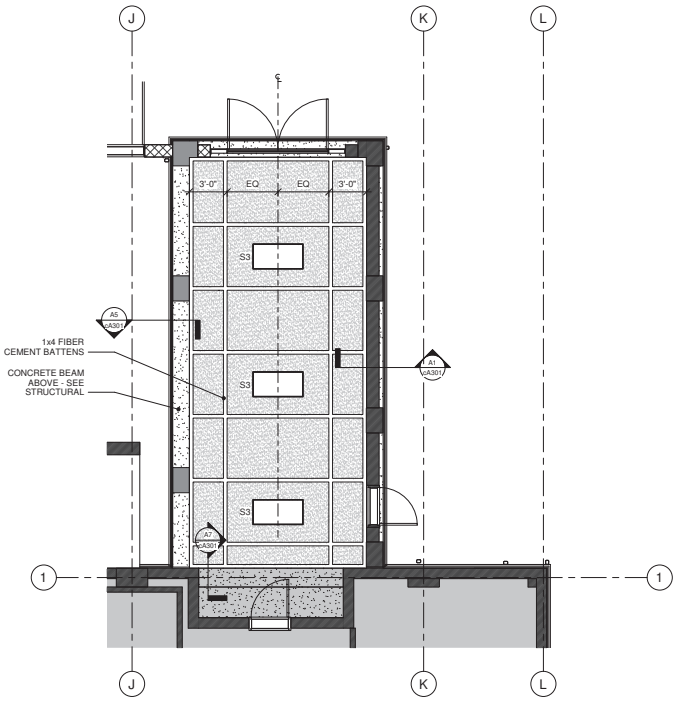
key plan

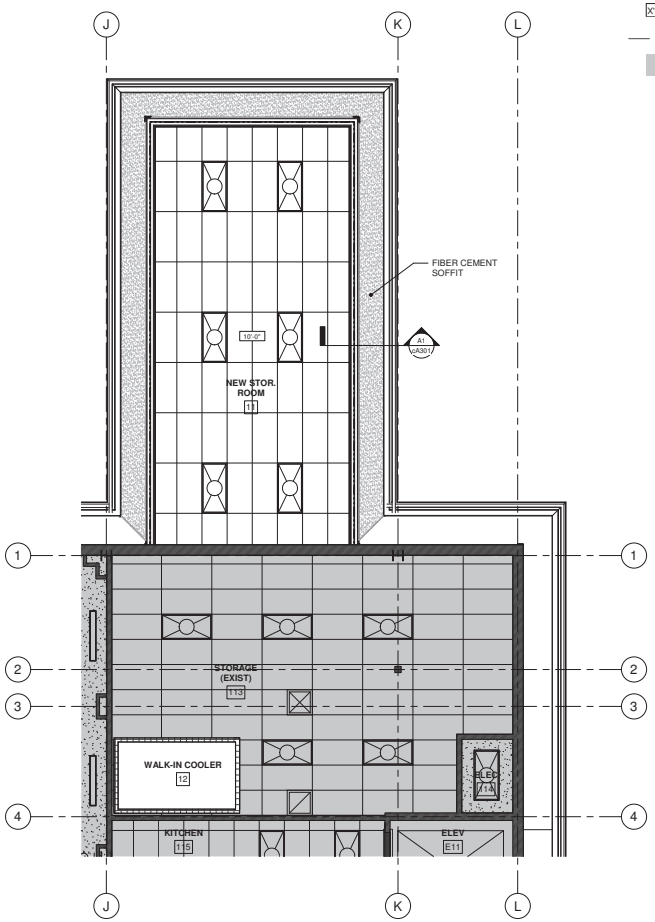
sheet title
FLOOR PLANS - KITCHEN STORAGE

sheet number
cA101

drawn by: EC print date:



B1 GROUND FLOOR RCP - KITCHEN STORAGE
1/4" = 1'-0"



A5 FIRST FLOOR RCP - KITCHEN STORAGE
1/4" = 1'-0"

RCP LEGEND:

- 2' X 4' ACOUSTICAL PANEL CEILING SYSTEM - SEE FINISH PLANS AND SPECIFICATIONS FOR TYPE
- FIBER CEMENT PANEL CEILING
- GYP BD CEILING
- EXIT SIGN
- 2' X 2' LIGHT FIXTURE
- 2' X 4' LIGHT FIXTURE
- S3 — SURFACE MOUNTED LED LIGHT FIXTURE
- CAN LIGHT
- PENDENT LIGHT
- E1 — EXTERIOR WALL MOUNTED FIXTURE
- W1 — WALL MOUNTED FIXTURE
- HVAC SUPPLY, SEE MECH. DGWS
- RETURN AIR, SEE MECH. DWGS
- EXHAUST GRILLE
- F2 — CEILING FAN
- X'-X" — HEIGHT ABOVE FINISHED FLOOR SEE GENERAL NOTE B
- 2 HOUR RATED FIRE BARRIER
- NOT IN SCOPE

0 2' 4' 8'

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SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

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phase	date of issue
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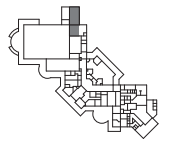
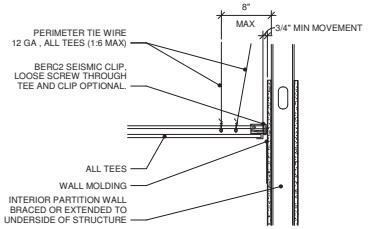


key plan

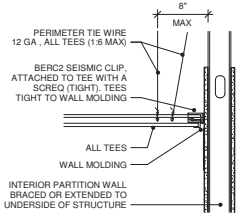
sheet title
GROUND & FIRST FLOOR RCP - KITCHEN STORAGE

sheet number
cA111

drawn by: EC print date:



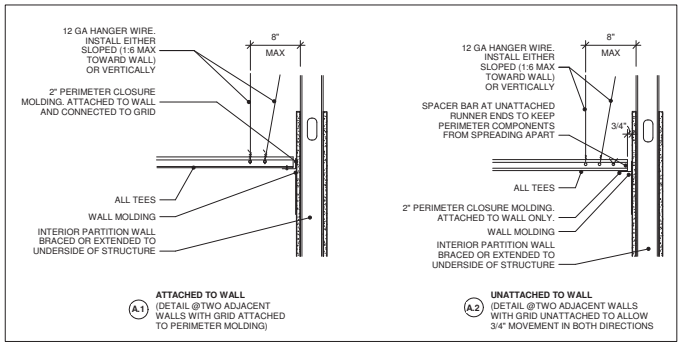
A.1 **FLOATING SIDES**
(TWO ADJACENT WALLS WITH GRID TEES ATTACHED TO BERC2 CLIP. LOOSE SCREW THROUGH BERC2 CLIP AND TEE OPTIONAL



A.2 **FIXED SIDES**
(TWO ADJACENT WALLS WITH GRID TEES ATTACHED TO BERC2 CLIP. CLIP IS ATTACHED TO TEES WITH A TIGHTENED SCREW)

ARMSTRONG GRID DETAILS

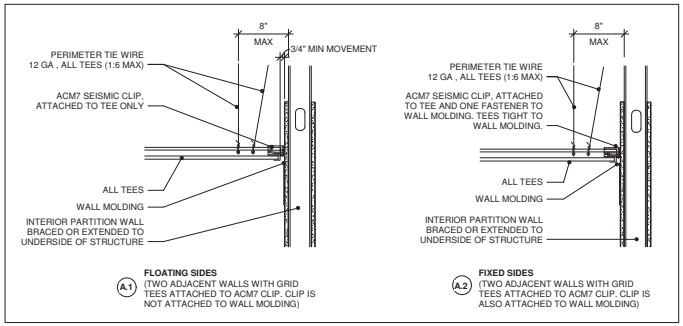
ARMSTRONG TESTED SYSTEMS:
Prelude XL, Silhouette XL, Suprafine XL, Interlude XL, Clean Room.



A.1 **ATTACHED TO WALL**
(DETAIL @TWO ADJACENT WALLS WITH GRID ATTACHED TO PERIMETER MOLDING)

A.2 **UNATTACHED TO WALL**
(DETAIL @TWO ADJACENT WALLS WITH GRID UNATTACHED TO ALLOW 3/4" MOVEMENT IN BOTH DIRECTIONS

STANDARD 2" EDGE MOLD

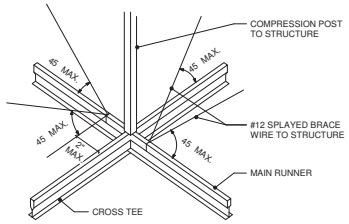


A.1 **FLOATING SIDES**
(TWO ADJACENT WALLS WITH GRID TEES ATTACHED TO ACM7 CLIP. CLIP IS NOT ATTACHED TO WALL MOLDING)

A.2 **FIXED SIDES**
(TWO ADJACENT WALLS WITH GRID TEES ATTACHED TO ACM7 CLIP. CLIP IS ALSO ATTACHED TO WALL MOLDING)

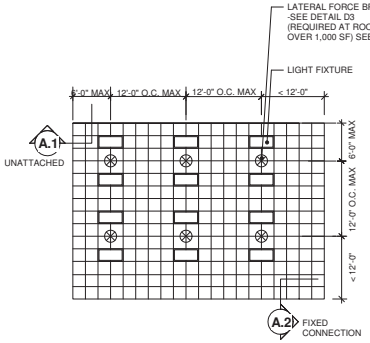
USG GRID DETAILS

All main Donn suspension systems-DX/DXL, Fineline DXF, Fineline 1/8DXFF, Centricitee DXT/DXLT, CE, DWX, DXLA and ZXLA include the code compliant and heavy-duty main tees for seismic design categories D, E and F.



D.3 **LATERAL FORCE BRACING DETAIL**
(REQUIRED @ ROOMS OVER 1000 SF)

NOTE:
DELETE IF NO SPACES ARE OVER 1,000 SF



TYPICAL GRID PERIMETER DETAIL LOCATIONS

SEISMIC DESIGN CATEGORY D

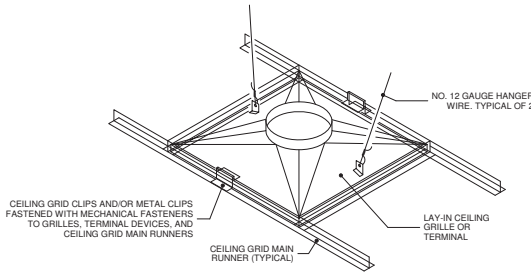
CONNECTIONS/HANGERS	
HANGERS	#12 @ 4' O.C.
PLUMB	VERTICAL OR NOT MORE THAN 1 IN 6
CONNECTION DEVICES	MIN. 100 LBS
PERIMETER WIRES	MAXIMUM 8" FROM ALL WALLS

LATERAL FORCE BRACING	SEE DETAIL D3
4 WIRE CLUSTERS	REQUIRED OVER 1000 SF CEILING AREA
FIRST POINT	MAX. 6 FEET FROM PERIMETER WALLS
DEFLECTION	LIMITED TO LESS THAN 1/4"
SPACING	12'-0" O.C.
CONNECTION STRENGTH	MIN. 250 LBS
COMPRESSION POSTS	REQUIRED (CONDUIT/STEEL STUD)

NOTE: DELETE IF NO SPACES OVER 1000 SF

MOLDING/PARTITIONS	SEE DETAILS A.1 & A.2
PERIMETER CLOSURE MOLDING	2 INCHES
ATTACHMENT TO GRID	REQUIRED @ 2 ADJACENT WALLS
CLEARANCE	3/4" @ 2 ADJACENT WALLS
SPACER BARS	REQUIRED AT UNATTACHED WALLS
PARTITION ATTACHMENT TO GRID	ALLOWED W/ BRACING, UNDER 2,500 SF

SEISMIC MATRIX



CEILING INSTALLATION NOTES:

A. THIS PROJECT IS LOCATED IN SEISMIC DESIGN CATEGORY D. IN ROOMS RECEIVING A COMPLETE CEILING REPLACEMENT, THE CEILING INSTALLATION SHALL BE PER THE REQUIREMENTS OF THE 2015 INTERNATIONAL BUILDING CODE, ASCE 7.10, ASTM E580, AND CISCA SEISMIC CONSTRUCTION HANDBOOK (2013 EDITION).

B. ALL CEILING GRID SHALL BE HEAVY DUTY.

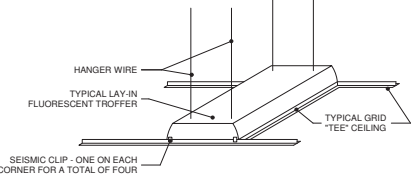
C. CEILINGS AREAS UNDER 144 SF ARE EXEMPT FROM ALL SEISMIC FORCE REQUIREMENTS.

D. CEILING AREAS OVER 1,000 SF REQUIRE LATERAL FORCE BRACING. SEE DETAILS A3 & D3 ON THIS SHEET.

E. FOR FIELD-TIED CONNECTIONS, VERTICAL HANGER WIRES MUST BE SHARPLY BENT AND WRAPPED WITH THREE TURNS IN 3 INCHES OR LESS.

F. WIRES MAY NOT ATTACH TO OR BEND AROUND INTERFERING EQUIPMENT. USE TRAPEZES TO AVOID SUCH OBSTACLES.

G. THE CISCA SEISMIC CONSTRUCTION HANDBOOK (2013 EDITION) STATES THAT LATERAL FORCE BRACING MUST START WITHIN 6 FEET OF TWO ADJACENT WALLS. IT IS NOTNECESSARY TO END THE LATERAL FORCE BRACING WITHIN 6 FEET OF THE OPPOSITE TWO WALLS. THE LAST LATERAL FORCE BRACE MUST ONLY BE WITHIN 12 FEET OF THE OPPOSITE WALLS. LATERAL FORCE BRACING MUST BE SPACED A MINIMUM OF 6 INCHES FROM UNBRACED HORIZONTAL PIPING OR DUCTWORK.



AIR TERMINAL ATTACHMENT NOTES:

CEILING MOUNTED AIR TERMINALS SERVICES WEIGHING 20 LBS OR LESS SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION MAIN RUNNERS OR CROSS RUNNERS.

AIR TERMINALS OR SERVICES WEIGHING MORE THAN 20 LBS AND LESS THAN 56 LBS SHALL HAVE, IN ADDITION TO THE ATTACHMENTS NOTED ABOVE, TWO NO. 12 GAUGE HANGERS CONNECTED TO THE CEILING SYSTEM HANGERS OR TO THE STRUCTURE ABOVE. WIRES MAY BE SLACK.

AIR TERMINALS OR SERVICES WEIGHING MORE THAN 56 LBS SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY APPROVED HANGERS.

LIGHT FIXTURE ATTACHMENT NOTES:

FIXTURES AND ATTACHMENTS WEIGHING 10 LBS OR LESS REQUIRE ONE NO. 12 GAGE HANGER WIRE CONNECTED TO THE HOUSING AND THE STRUCTURE ABOVE. THE WIRE MAY BE SLACK.

FOR FIXTURES WEIGHING GREATER THAN 10 LBS AND LESS THAN OR EQUAL TO 56 LBS, TWO NO. 12 GAGE MINIMUM HANGER WIRES ARE REQUIRED TO BE CONNECTED TO THE FIXTURE HOUSING ON OPPOSITE DIAGONAL CORNERS AND CONNECTED TO THE STRUCTURE ABOVE. HANGER WIRES MUST BE INSTALLED VERTICAL, BUT NOT MORE THAN 1 IN 6 OUT OF PLUMB.

FIXTURES WEIGHING MORE THAN 56 LBS REQUIRE INDEPENDENT SUPPORT FROM THE STRUCTURE BY HANGERS APPROVED BY THE AUTHORITY HAVING JURISDICTION.

CLAMPING DEVICES FOR SURFACE MOUNTED LIGHT FIXTURES SHALL HAVE SAFETY WIRES TO THE GRID OR STRUCTURE ABOVE.

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ISLAND HOUSE RENOVATIONS - PHASE I

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phase	date of issue
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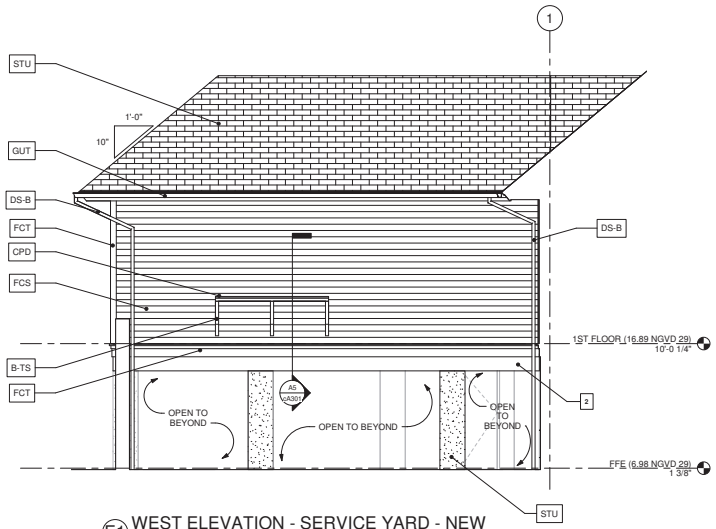
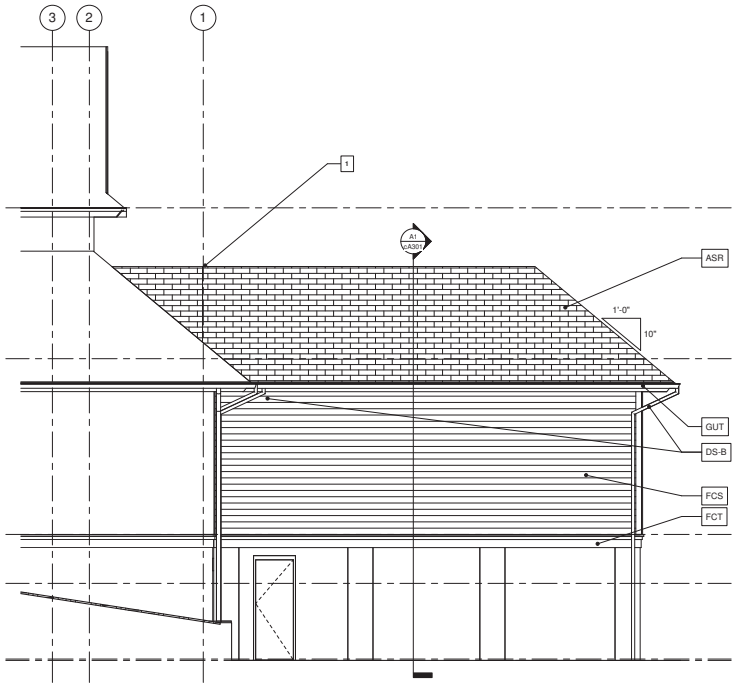
SIESMIC RCP DETAILS - KITCHEN STORAGE

sheet number
cA120

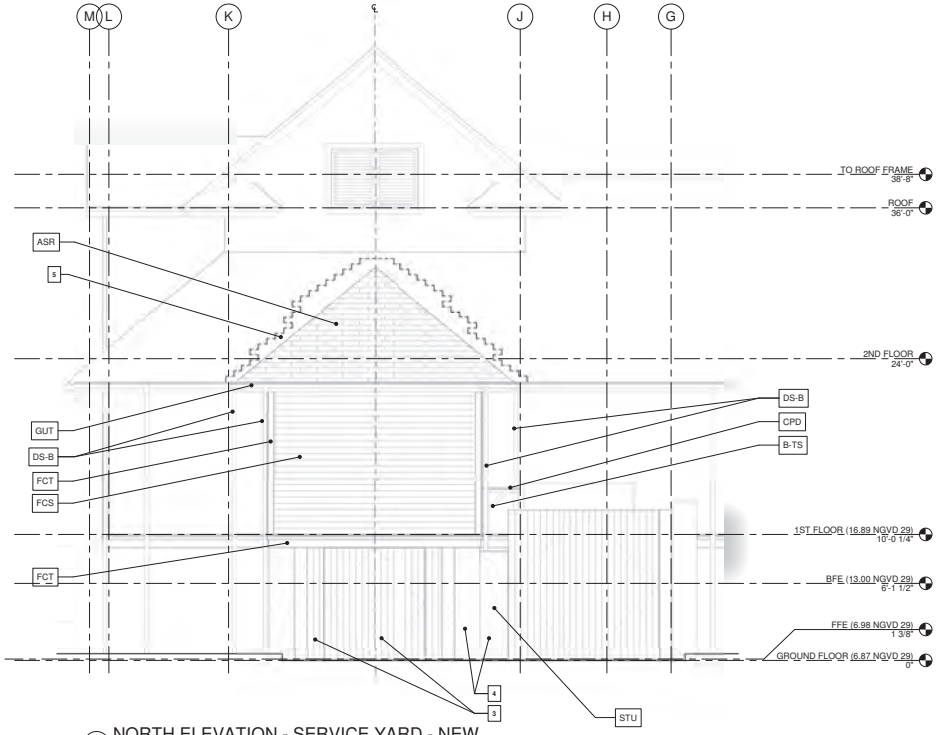
drawn by: EC print date:



E1 WEST ELEVATION - SERVICE YARD - NEW
1/4" = 1'-0" (REFERENCE: cA101)



A1 EAST ELEVATION - SERVICE YARD - NEW
1/4" = 1'-0" (REFERENCE: cA101)



A5 NORTH ELEVATION - SERVICE YARD - NEW
1/4" = 1'-0" (REFERENCE: cA101)

0 2' 4' 8'

GENERAL ELEVATION NOTES:

A. BUILDING ELEVATIONS SHOW RELATIVE GRADE ABUTTING THE BUILDING. REFERENCE CIVIL DRAWINGS FOR MORE SPECIFIC EXTERIOR GRADING INFORMATION.

CONSTRUCTION NOTES

(APPLY TO THIS SHEET ONLY)

1 NEW ROOF OVERFRAMED ON EXISTING ROOF STRUCTURE - ALIGN WITH EXISTING DORMER. MATCH NEW ROOF FINISHES TO EXISTING ADJACENT FINISHES.

2 16" CONCRETE BEAM - SEE STRUCTURAL

3 NEW GATE AND FIXED WALL CONSTRUCTION TO MATCH EXISTING GATE

4 NEW CMU WALL AND PIER. SECURE EXISTING GATE TO NEW CMU WALL.

5 NEW ROOF OVERFRAMED ON EXISTING ROOF STRUCTURE. MATCH NEW ROOF FINISHES TO EXISTING ADJACENT FINISHES.

EXTERIOR FINISH LEGEND - BASIS OF DESIGN

MARK	MATERIAL
ACW-D	ALUMINUM CLAD WOOD DOOR
ACW-W	ALUMINUM CLAD WOOD WINDOW
ASR	ASPHALT SHINGLE ROOF
B-TS	BRACKET - TUBE STEEL
CPD	COMPOSITE DECKING
DS-B	DOWNSPOUT AND BOOT
FAN	FAN - SEE ELECTRICAL
FCF	FIBER CEMENT FASCIA
FCS	FIBER CEMENT SIDING
FCT	FIBER CEMENT TRIM
FV-I	FLOOD VENT - INSULATED
FV-IF	FLOOD VENT - INSULATED WITH FIRE DAMPER
GR-E	GUARDRAIL - EXTERIOR
GUT	GUTTER
HR-E	HANDRAIL - EXTERIOR
LF-E1	LIGHT FIXTURE - EXTERIOR SCONCE
LF-E2	LIGHT FIXTURE - EXTERIOR LANDSCAPE
LVR	FIXED ALUMINUM LOUVER
SC-E	SECURITY CAMERA - EXTERIOR
STU	THREE COAT STUCCO FINISH

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ISLAND HOUSE RENOVATIONS - PHASE I

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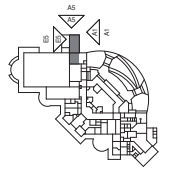


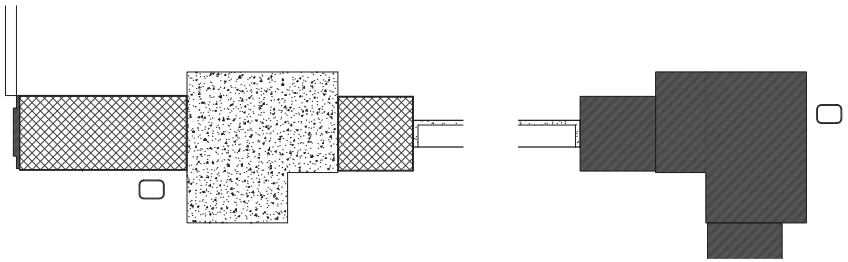
FIRST FLOOR

key plan

sheet title
ELEVATIONS - KITCHEN STORAGE

sheet number
cA201

drawn by: EC print date:



F1 PLAN DETAIL@NEW PIER AT GATE
1 1/2" = 1'-0" (REFERENCE: cA101)

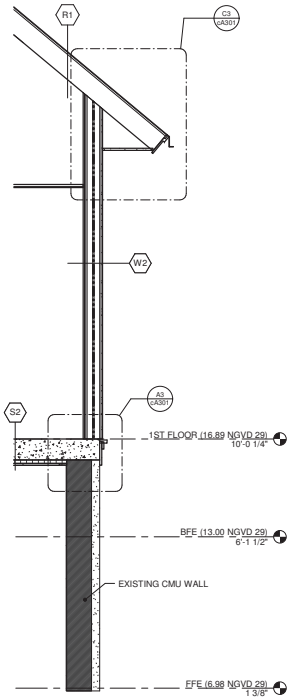
F3 PLAN DETAIL @EXISTING PIER AT GATE
1 1/2" = 1'-0" (REFERENCE: cA101)

CONSTRUCTION SUBSYSTEMS:

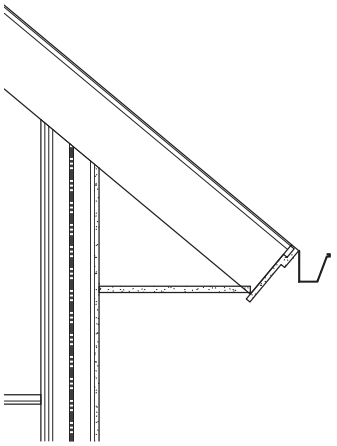
- S1 WOOD JOIST WITH IPE DECK BOARDS
- S2 UPPER FLOOR CONCRETE SLAB
- W1 STUCCO ON CIP CONCRETE
- W2 FIBER CEMENT SIDING ON METAL STUDS
- R1 ASPHALT SHINGLES ROOF SYSTEM

GENERAL DETAIL NOTES:

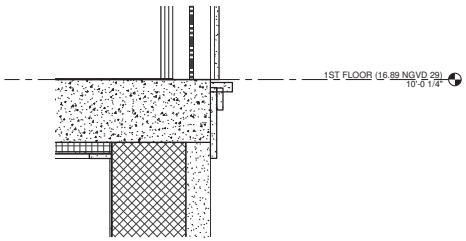
A. IT IS THE INTENT OF THIS BUILDING DETAILING THAT THE CONTINUITY OF THE AIR BARRIER (SYSTEM) AND THE WATER BARRIER (SYSTEM), BE CONSTRUCTED WITHOUT BREAKS, IN BOTH THE HORIZONTAL AND THE VERTICAL PLANE. WHEREAS DETAILS OF ALL TRANSITIONS CANNOT BE REASONABLY DRAWN, THE GENERAL CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ARCHITECT ANY AND ALL SITUATIONS WHICH ARE REASONABLY BELIEVED TO DISRUPT THE INTENDED CONTINUITY, SO THAT SUPPLEMENTARY DIRECTION MAY BE PROVIDED.
B. SEQUENCING OF CONSTRUCTION. WHILE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, SHALL OCCUR IN A PROGRESSIVE MANNER THAT PROPERLY LAPS ANY AND ALL WATERPROOFING COMPONENTS TO SHED WATER AWAY FROM THE INTERIOR OF THE BUILDING.
C. STUD CONFIGURATIONS ARE DIAGRAMMATIC TO THE POINT THAT THEY INDICATE THE REQUIRED FACE OF STUD TO WHICH OTHER MATERIALS ARE ATTACHED. ADDITIONAL STUD FRAMING MAY BE REQUIRED, BEYOND THE INDIVIDUAL STUDS INDICATED, TO EITHER PROVIDE ATTACHMENTS FOR MATERIAL EDGE CONDITIONS, OR TO SATISFY THE REQUIREMENTS OF THE STEEL STUD DESIGNER OR MANUFACTURER AS OUTLINED IN THE SPECIFICATIONS.
D. UNDER-SLAB VAPOR RETARDER SHALL BE INSTALLED CONTINUOUS, WITH ALL SEAMS LAPPED AND JOINTS TAPED. ALL ROUGH-IN PENETRATIONS OF THE VAPOR RETARDER SHALL BE DETAILED WITH A COMPATIBLE TAPE OR MASTIC THAT AFFORDS THE SAME LEVEL OF MOISTURE PROTECTION AND VAPOR RETARDER CONTINUITY. THE ARCHITECT SHALL REVIEW THE VAPOR RETARDER INSTALLATION PRIOR TO CONCRETE SLAB PLACEMENT. PROVIDE SUFFICIENT NOTICE TO THE ARCHITECT TO SCHEDULE SUCH REVIEW.
E. PLAN AND SECTION DETAILS UTILIZING BRICK VENEERS REQUIRE SEISMIC BRICK TIES OF TYPE AND WITH SPACING AS INDICATED IN THE SPECIFICATIONS, TYPICAL. LACK OF BRICK TIES INDICATED GRAPHICALLY, WHETHER FOR CLARITY OR SIMPLY OMISSION, DOES NOT RELIEVE THE GENERAL CONTRACTOR OF THE RESPONSIBILITY FOR THEIR INCLUSION IN ACCORDANCE WITH THE SPECIFICATIONS.
F. THROUGH WALL FLASHINGS, THOUGH INDICATED BELOW FINISH FLOOR TYPICALLY, SHALL BE STEPPED UP TO OCCUR AT FINISH FLOOR AT ANY SITUATION WHERE A HARD SURFACE (I.E. A SIDEWALK) ABUTS THE FACE OF THE BUILDING. SUCH STEPPED TRANSITIONS SHALL PROVIDE FOR CONTINUITY IN THE FLASHING ITSELF. WEEP HOLE SHALL NOT BE LOCATED LOWER THAN ADJOINING EXTERIOR GRADE.
G. FORM END DAMS IN FLASHING AT WINDOW & DOOR HEADS AND OTHER LOCATIONS AS REQUIRED TO DIRECT THE FLOW OF WATER TO THE EXTERIOR.
H. DO NOT SEAL WEEPS OR FLASHING TERMINATIONS TO THE EXTERIOR.
I. **SYMBOL** INDICATES CAST STONE SHAPE. SEE SHEET **A3XX** FOR ADDITIONAL DETAIL AND DIMENSIONS.
J. CAST STONE SHAPES SHALL BE FACTORY FABRICATED TO RETURN AROUND CORNERS, i.e. NO MITERED CORNERS ALLOWED.
K. ALL ARCHITECTURALLY EXPOSED STRUCTURAL STEEL TO RECEIVE HIGH PERFORMANCE COATING SYSTEM. SEE SPEC SECTIONS **051200 AND 099100**.
L. SEAL ALL PENETRATIONS OF SHEATHING AND AIR BARRIER WITH COMPATIBLE CLOSED CELL FOAM INSULATION.
M. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM OTHER METALS TO AVOID GALVANIC ACTION.



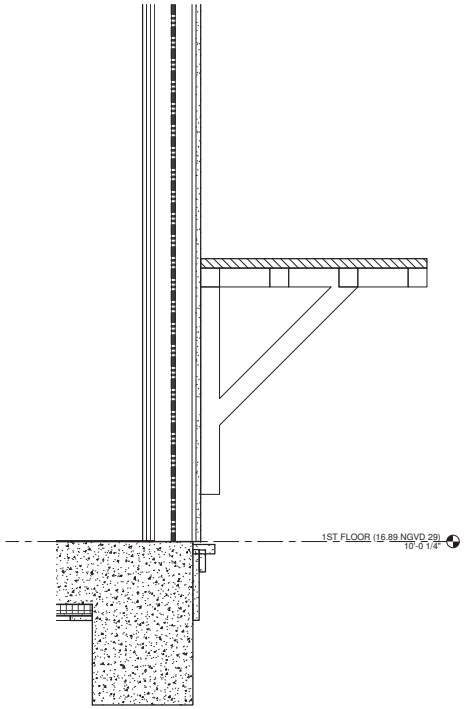
A1 WALL SECTION @KITCHEN STOR.
1/2" = 1'-0" (REFERENCE: cA101)



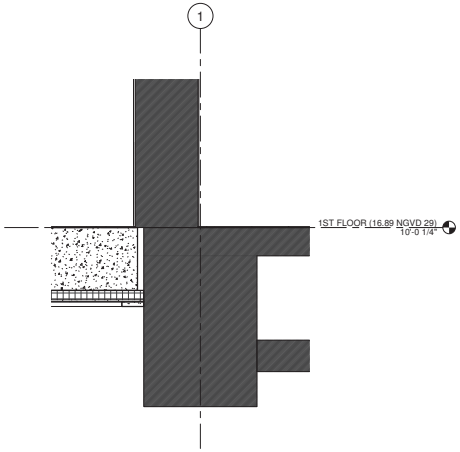
C3 DETAIL @EAVE
1 1/2" = 1'-0" (REFERENCE: cA101)



A3 DETAIL @1ST FLOOR
1 1/2" = 1'-0" (REFERENCE: cA301)



A5 DETAIL @MECHANICAL PLATFORM
1 1/2" = 1'-0" (REFERENCE: cA101)



A7 DETAIL @1ST FLOOR EXISTING
1 1/2" = 1'-0" (REFERENCE: cA101)

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WALL SECTIONS & DETAILS - KITCHEN STORAGE

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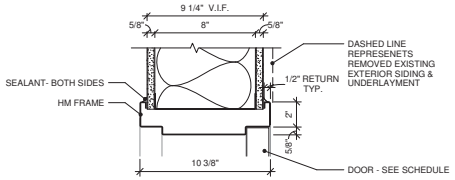
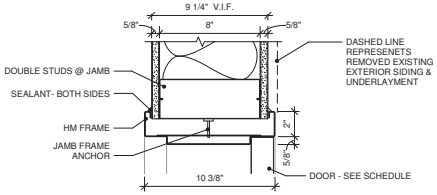
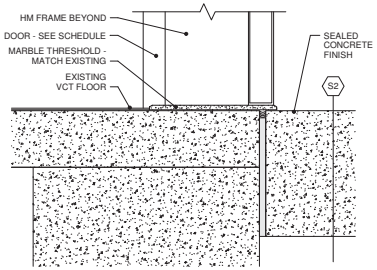


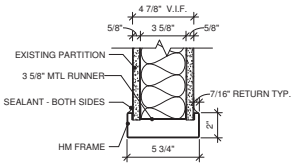
D6 HEAD - INT HM FRAME
3" = 1'-0"



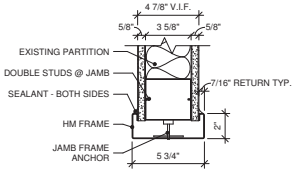
C6 JAMB - INT HM FRAME
3" = 1'-0"



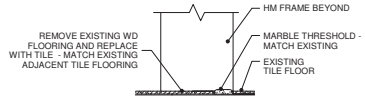
A6 SILL - INT HM FRAME
3" = 1'-0"



D8 HEAD - HM CASED OPENING
3" = 1'-0"



B8 JAMB - HM CASED OPENING
3" = 1'-0"



A8 SILL - HM CASED OPENING
3" = 1'-0"

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SEABROOK ISLAND CLUB

ISLAND HOUSE RENOVATIONS - PHASE I

TMS #1470500018
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phase	date of issue
PLANNING COMMISSION SUBMITTAL	**10-24-19**

revisions

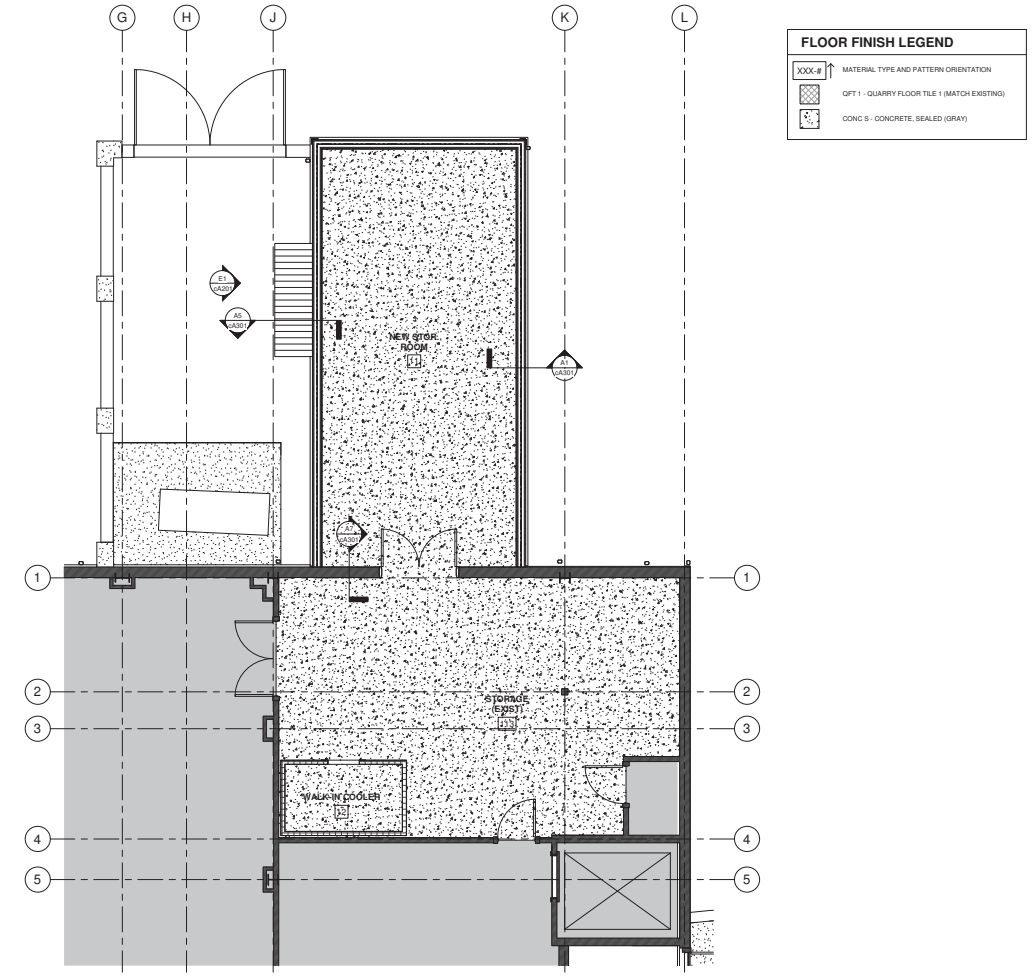
rev no.	description	date

key plan

sheet title
DOOR DETAILS - KITCHEN STORAGE

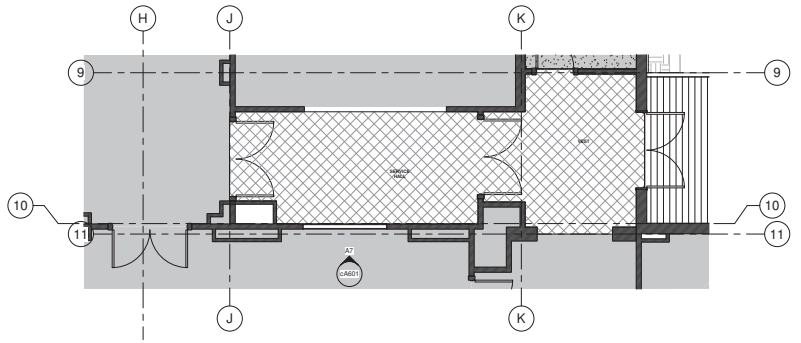
sheet number
cA401

drawn by: Author print date:



1 FIRST FLOOR PLAN - STORAGE 113

1/4" = 1'-0" (REFERENCE: aA201)



2 FIRST FLOOR PLAN - HALL 116

1/4" = 1'-0" (REFERENCE: aA201)

FLOOR FINISH LEGEND

XXX-#	MATERIAL TYPE AND PATTERN ORIENTATION
	QFT 1 - QUARRY FLOOR TILE 1 (MATCH EXISTING)
	CONC S - CONCRETE, SEALED (GRAY)

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ISLAND HOUSE RENOVATIONS - PHASE I

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phase	date of issue
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rev no.	description	date

key plan

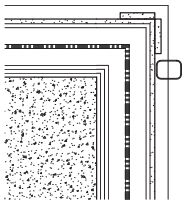
sheet title

FINISH PLAN - KITCHEN STORAGE

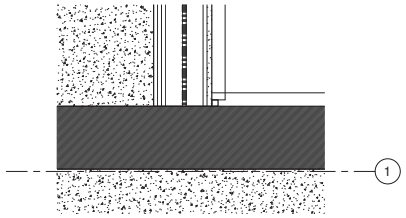
sheet number

cA600

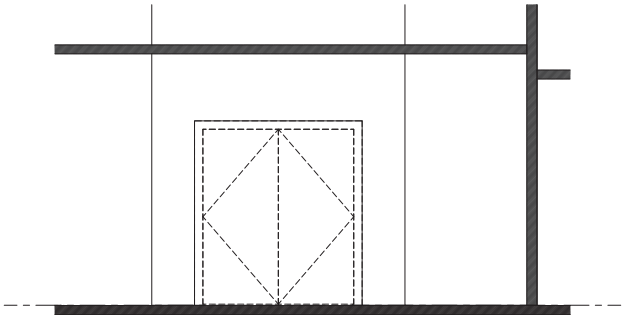
drawn by: Author print date:



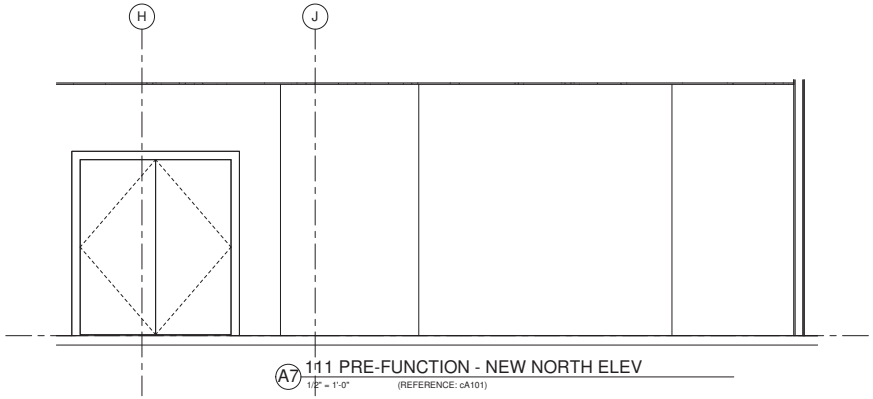
C1 TRIM DETAIL @OUTSIDE CORNER
1 1/2" = 1'-0" (REFERENCE: cA101)



A1 TRIM DETAIL @INSIDE CORNER
1 1/2" = 1'-0" (REFERENCE: cA101)



C7 111 PRE-FUNCTION - EXISTING NORTH ELEV
1/2" = 1'-0" (REFERENCE: cD101)



A7 111 PRE-FUNCTION - NEW NORTH ELEV
1/2" = 1'-0" (REFERENCE: cA101)

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ISLAND HOUSE RENOVATIONS - PHASE I

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phase	date of issue
PLANNING COMMISSION SUBMITTAL	10-24-19

revisions

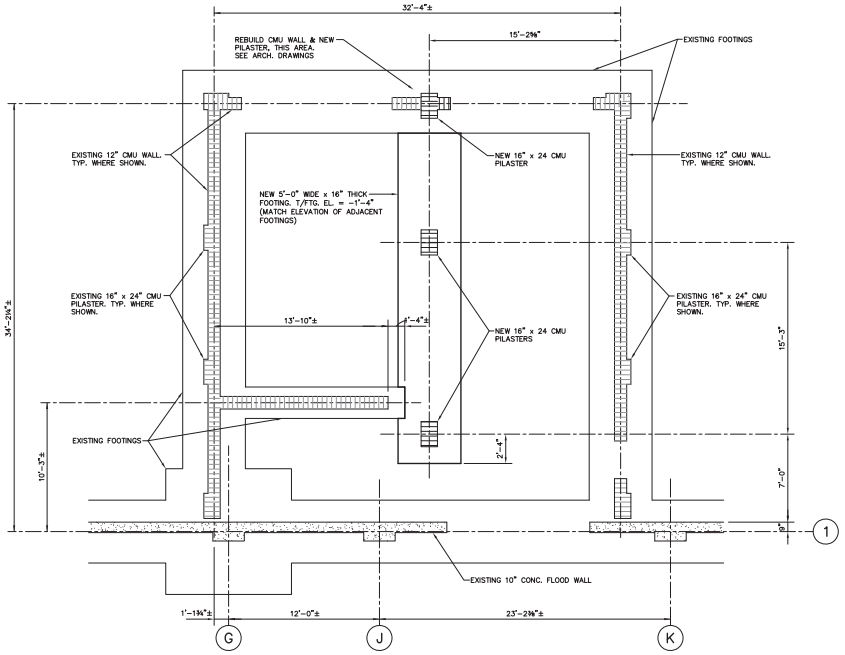
rev no.	description	date

key plan

sheet title
INTERIOR ELEVATIONS & TRIM DETAILS - KITCHEN STORAGE

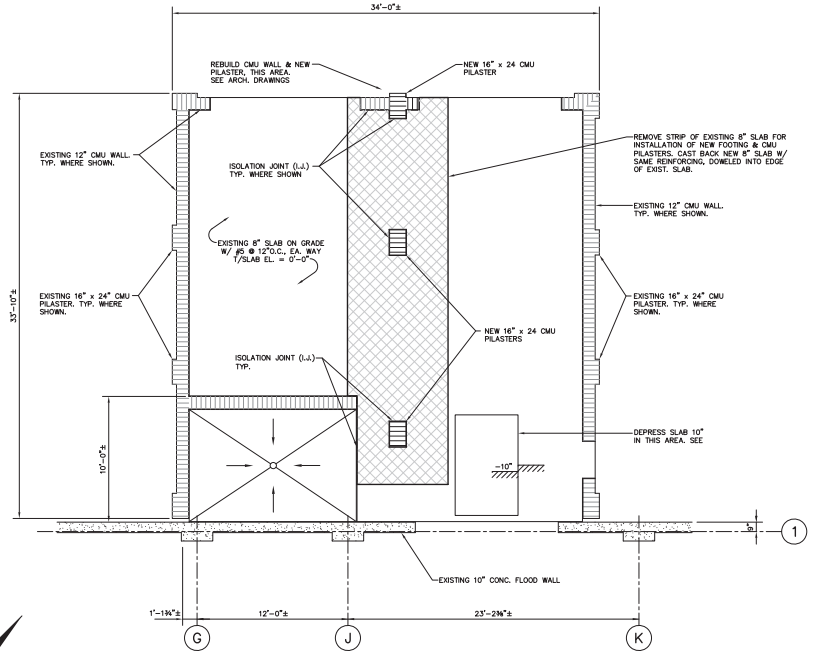
sheet number
cA601

drawn by: Author print date:



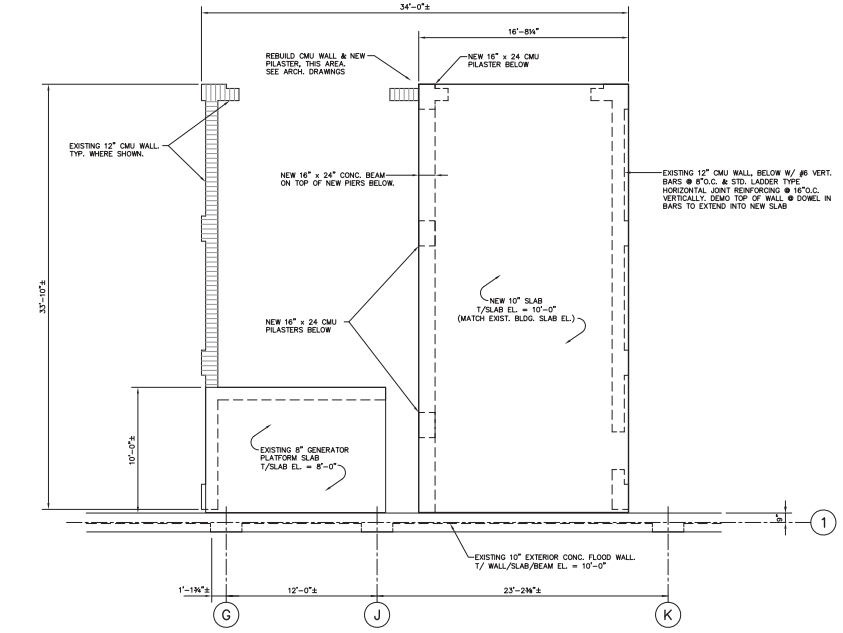
FOUNDATION PLAN – FOUNDATION MODIFICATIONS AT KITCHEN STORAGE

¼"=1'-0"



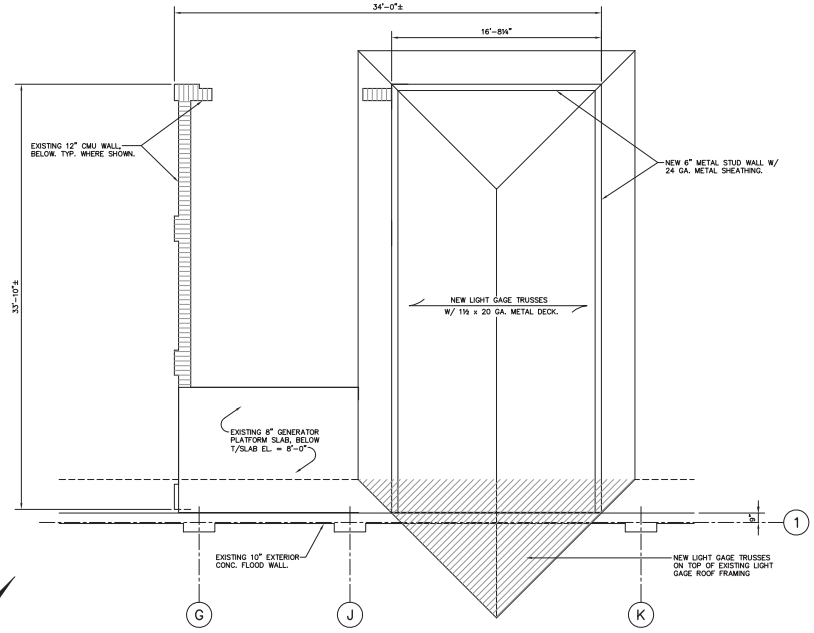
SLAB PLAN – SLAB MODIFICATIONS AT KITCHEN STORAGE

¼"=1'-0"



ELEVATED SLAB PLAN – NEW ELEVATED SLAB AT KITCHEN STORAGE

¼"=1'-0"



ROOF FRAMING PLAN – NEW ROOF AT KITCHEN STORAGE

¼"=1'-0"

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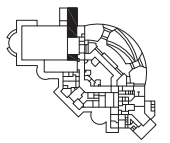


FIRST FLOOR

key plan

sheet title

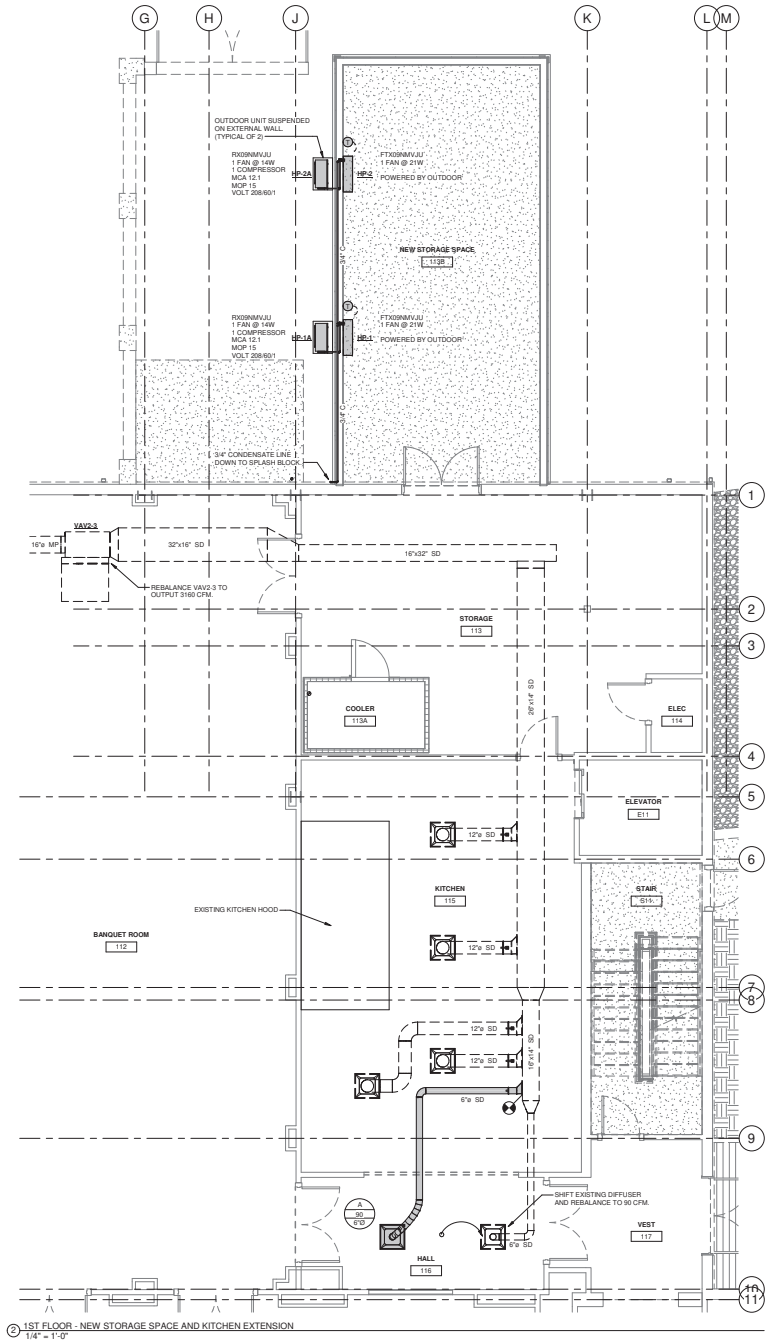
FND., SLAB, & FRAMING PLANS - KITCHEN STORAGE

sheet number

S201

drawn by:

print date:



② 1ST FLOOR - NEW STORAGE SPACE AND KITCHEN EXTENSION
1/4" = 1'-0"

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PROJECT NORTH
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Designed:	WAM
Approved:	KLS
Job Number:	119161
Plot Date:	10/07/19

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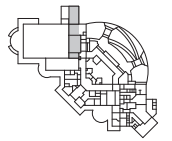


FIRST FLOOR

key plan

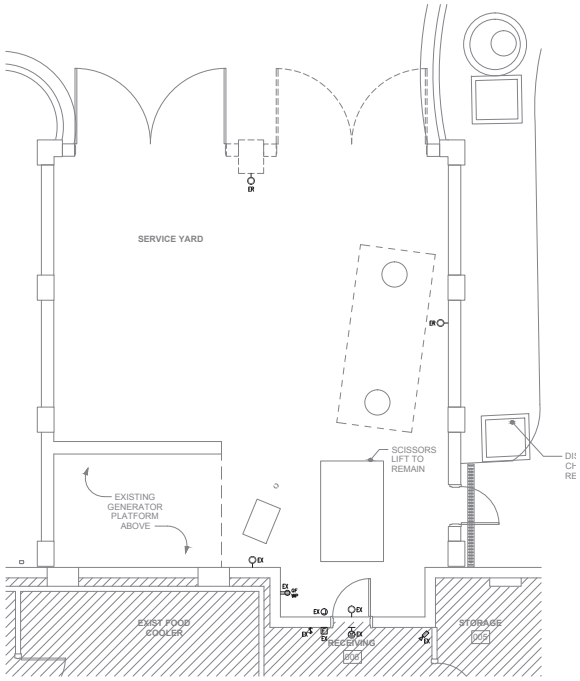
sheet title

ISLAND HOUSE - FIRST FLOOR - MECHANICAL RENOVATION

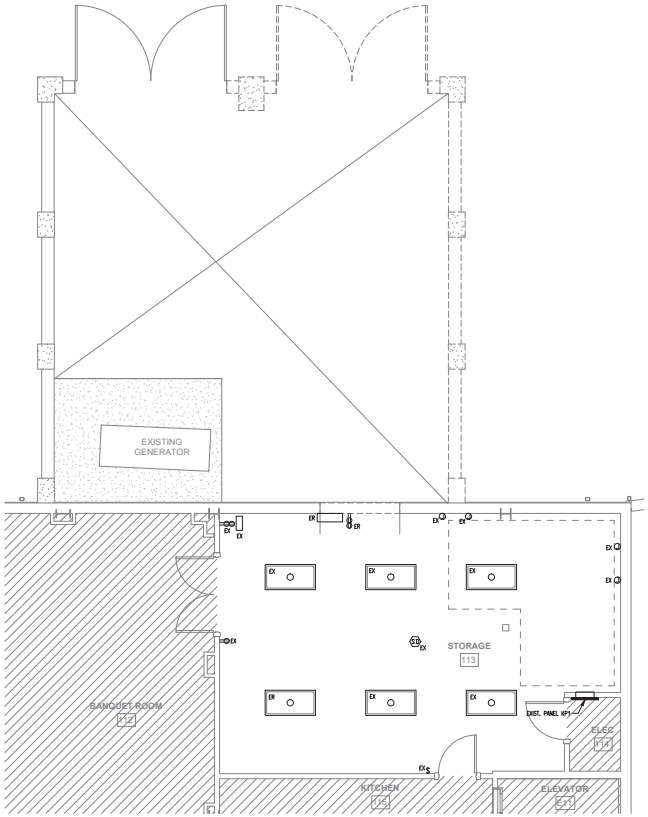
sheet number

M102

drawn by: | print date:



3 ED102 DEMOLITION PLAN - SERVICE YARD
APPROXIMATE SCALE: 1/4" = 1'-0"



2 ED102 DEMOLITION PLAN - STORAGE 113
APPROXIMATE SCALE: 1/4" = 1'-0"

GENERAL DEMOLITION NOTES:

1. ELECTRICAL DEMOLITION GENERALLY INCLUDES REMOVAL OF EXISTING ELECTRICAL DEVICES FROM WALLS AND CEILINGS BEING DEMOLISHED INCLUDING BACKBOXES, CONDUITS, AND CONDUCTORS BACK TO SOURCE PANEL. WHERE ONLY PART OF A CIRCUIT IS BEING REMOVED, REWORK CIRCUITS BY EXTENSION AND RECONNECTION TO CONTINUE REMAINING CIRCUIT IN SERVICE BEYOND THE DEMOLITION AREA.
2. PROVIDE ALL NEW WORK AND WORK REQUIRED TO MODIFY EXISTING CONDITIONS WHERE TO CONTINUE IN OPERATION.
3. PROVIDE REVISED CIRCUIT DIRECTORIES IN EXISTING PANELBOARDS TO INDICATE ALL LOADS, NEW AND MODIFIED.
4. CAREFULLY REVIEW ARCHITECTURAL DEMOLITION PLANS. EXAMINE WORK TO BE DONE AND PROVIDE ALL ELECTRICAL WORK REQUIRED FOR DEMOLITION, THIS INCLUDES RELOCATION, REROUTING, ETC OF ELECTRICAL CIRCUITS WHETHER SPECIFICALLY INDICATED ON ELECTRICAL PLANS OR NOT. CONTRACTOR IS CAUTIONED TO VISIT SITE PRIOR TO BID AND INCLUDE IN BID RELOCATION OF ALL EXISTING ELECTRICAL WORK AS REQUIRED FOR THE NEW ADDITION.
5. REMOVE ALL ELECTRICAL DEVICES FROM WALLS BEING DEMOLISHED.
6. REMOVE ALL LIGHT FIXTURES IN AREAS WHERE NEW LIGHTING IS PROVIDED INCLUDING CONDUIT, BOXES AND CONDUCTORS.
7. INDICATE ON RECORD DRAWINGS CIRCUITS FOR ALL ELECTRICAL DEVICES, NEW AND EXISTING (INCLUDING LIGHTS) IN RENOVATION AREA.
8. CONTRACTOR SHALL COORDINATE WITH RENOVATION DRAWINGS FOR IDENTIFICATION OF EXISTING DEVICES AND FIXTURES TO BE RELOCATED. ALL RELOCATED DEVICES AND FIXTURES SHALL BE DENOTED WITH "EN" ON RENOVATION DRAWINGS.

DEMOLITION LEGEND:

EXISTING ELECTRICAL SYSTEM ELEMENT BEING DEMOLISHED DENOTED BY HATCHING. REMOVE DEVICE, BOX, CONDUCTOR AND CONDUIT TO SOURCE U.N.O.. FOR SWITCH LOCATIONS RE-USE EXISTING LOCATION FOR NEW SWITCHING INDICATED ON RENOVATION PLANS, WHERE NO NEW SWITCH IS INDICATED PROVIDE BLANK PLATE.

EX EXISTING TO REMAIN

ER EXISTING TO BE RELOCATED. SEE RENOVATION PLANS FOR NEW LOCATION

DEMOLITION KEYNOTES:

1. REMOVE ALL LIGHTING AND ELECTRICAL DEVICES IN THIS AREA BACK TO SOURCE UNLESS OTHERWISE NOTED TO REMAIN.
2. AREA TO REMAIN AS-IS. NO WORK PERFORMED IN THIS AREA.
3. REMOVE EXISTING ELECTRICAL SERVICE TO SUPPLY & EXHAUST FANS SERVING EXHAUST HOOD TO BE DEMOLISHED.

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ETI #1905-1923

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RENOVATIONS - PHASE I

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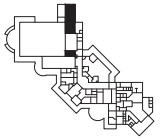

FIRST FLOOR

key plan
sheet title

DEMOLITION PLAN - KITCHEN STORAGE

sheet number

ED102

drawn by: TMD
print date:

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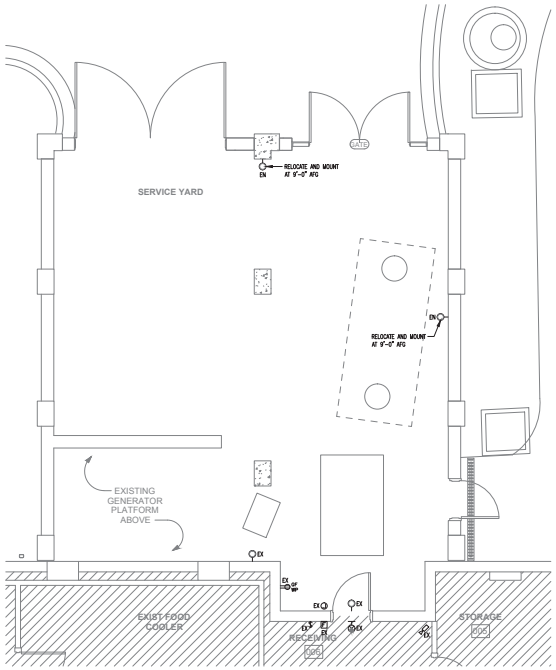
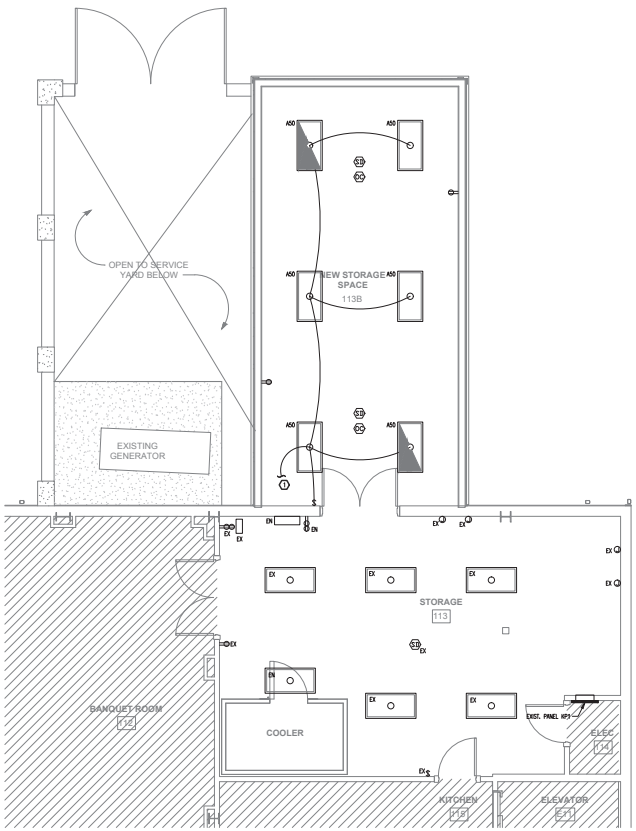
TRUE NORTH



3 E102 ELECTRICAL RENOVATION PLAN - SERVICE YARD

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



2 E102 ELECTRICAL RENOVATION PLAN - STORAGE 113

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

RENOVATION LEGEND:

EX EXISTING TO REMAIN

EN EXISTING NEW LOCATION

RENOVATION KEYNOTES:

1 EXTEND AND CONNECT TO SPARE 20A/1P CIRCUIT IN EXISTING PANEL HP3 IN GROUND FLOOR ELECTRICAL ROOM USING 3@12, @12 GND - 1/2"C.

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CONSTRUCTION DOCUMENTS 10-07-19

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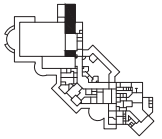


FIRST FLOOR

key plan

sheet title

ELECTRICAL RENOVATION PLAN - KITCHEN STORAGE

sheet number

E102

drawn by: TMD

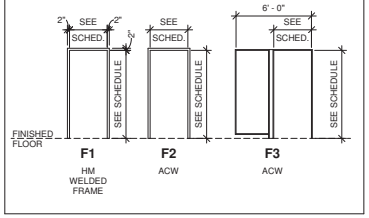
print date:

N

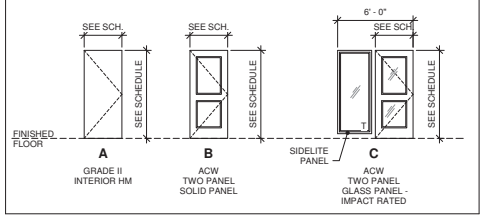
PROJECT NORTH

TRUE NORTH

FRAME LEGEND



DOOR LEGEND



DOOR SCHEDULE - PHASE I

DOOR					FRAME				
NUMBER	TYPE	RATING	WIDTH	HEIGHT	TYPE	HEAD	JAMB	SILL	NOTES
GROUND FLOOR (6.87 NGVD 29)									
S02B	B		3'-0"	7'-0"	F2	F1/aA401	D1/aA401	A1/aA401	
01	C		3'-0"	7'-0"	F3	F5/aA401	C5/aA401, D7/aA401	A1/aA401 SIM, A7/aA401	
1ST FLOOR (16.89 NGVD 29)									
11	A (PAIR)		3'-0"	7'-0"	F1	D6/cA401	C6/cA401	A6/cA401	

GENERAL DOOR SCHEDULE NOTES:

A. THE FOLLOWING SCHEDULE OF DOORS AND FRAMES IS PREPARED AS A SELECTION OF MATERIALS, CONFIGURATIONS, RATINGS AND DETAILS FOR DOORS, DOOR FRAMES AND OTHER INTERIOR FRAMES. TECHNICAL REQUIREMENTS OF MATERIALS CAN BE FOUND IN THE SPECIFICATIONS.
B. FOR DOOR NUMBERS SEE FLOOR PLANS.
C. FOR DOOR TYPES SEE ELEVATIONS ON SHEET A401.
D. ALL INTERIOR DOORS ARE 1 3/4" THICK UNLESS NOTED OTHERWISE.
E. PAIRS OF DOORS SHALL BE EQUAL LEAVES UNLESS NOTED OTHERWISE.
F. FOR DOOR FRAME TYPES AND ELEVATIONS SEE SHEET A401.
G. SEE SPECIFICATIONS FOR HARDWARE SET SCHEDULES.
H. WIDTH AND HEIGHT DIMENSIONS FOR DOORS ARE ROUGH OPENING DIMENSIONS. REFER TO MANUFACTURER'S REQUIREMENTS FOR EXACT FRAME AND DOOR DIMENSIONS.

DOOR ABBREVIATION. LEGEND

ALUM	ALUMINUM
ACW	ALUMINUM CLAD WOOD
FIB	FIBERGLASS
HM	HOLLOW METAL
T	TEMPERED GLASS

DOOR HARDWARE NOTES:

A. X

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ISLAND HOUSE RENOVATIONS - PHASE I

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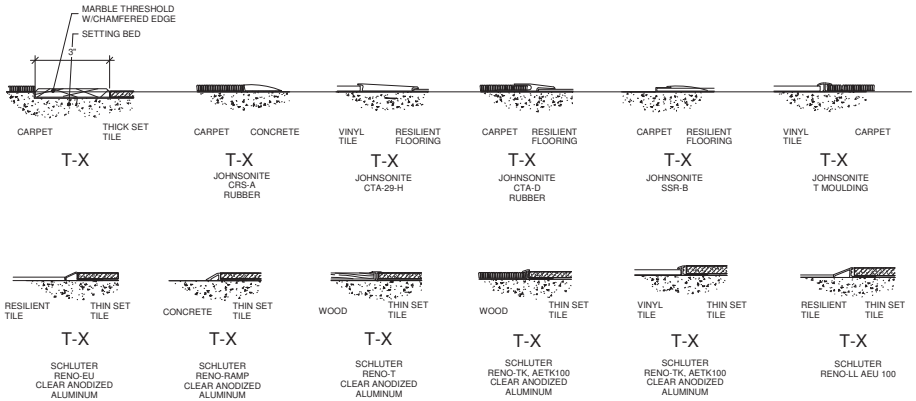
rev no.	description	date

key plan

sheet title: **DOOR LEGEND, SCHEDULE & DETAILS**

sheet number: **A400**

drawn by: EC print date:



(F1) FLOOR TRANSITION DETAILS

6" = 1'-0"

FLOOR FINISHES

KEY	FINISH MATERIAL	MANUF.	ITEM NUMBER/COLOR/FINISH	SIZE	NOTES
CFT 1	CERAMIC FLOOR TILE 1				
CFT 2	CERAMIC FLOOR TILE 2				
CFT 3	CERAMIC FLOOR TILE 3				
CONC P	CONCRETE		EPOXY PAINTED		
CONC S	CONCRETE		SEALED		
CPT 1	CARPET TILE 1				
CPT W	CARPET WALK OFF TILE				
EPOX R	EPOXY RESIN COATED CONCRETE				PROVIDE INTEGRAL COVE BASE
LVT 1	LUXURY VINYL TILE 1				DIRECT GLUE HIGH PERFORMANCE LUXURY VINYL TILE WITH SILENCING LAYER - INLET (0926V), COARSE (26595)
SWV 1	SEAMLESS WELDED VINYL 1				HOMOGENOUS SHEET WITH QUANTUM GUARD HP FINISH - BIOSPEC MD. WELD RODS TO MATCH COLOR.
SWV 2	SEAMLESS WELDED VINYL 2				HETEROGENOUS SHEET. WELD RODS TO MATCH COLOR.

BASE & TRIM FINISHES

KEY	FINISH MATERIAL	MANUF.	ITEM NUMBER/COLOR/FINISH	SIZE	NOTES
CBT 1	CERAMIC BASE TILE				
CG 1	CORNER GUARD 1				
CG 2	CORNER GUARD 2				
RB 1	RUBBER BASE 1				
SWV	SEAMLESS WELDED VINYL				
WB 1	WOOD BASE 1				

PAINT/WALL FINISHES

KEY	FINISH MATERIAL	MANUF.	ITEM NUMBER/COLOR/FINISH	SIZE	NOTES
AWP 1	ADVANCED WALL PROTECTION 1				
CWT 1	CERAMIC WALL TILE 1				
CWT 1	CERAMIC WALL TILE 2				
DWP 1	DECORATIVE WALL PANEL 1				
PT 1	PAINT 1 (CEILING)				
PT 2	PAINT 2 (TRIM)				
PT 3	PAINT 3 (WALL)				
PT 4	PAINT 4 (EPOXY)				
PT 5	PAINT 5 (ACCENT)				

CEILING FINISHES

KEY	FINISH MATERIAL	MANUF.	ITEM NUMBER/COLOR/FINISH	SIZE	NOTES
ACT 1	ACOUSTICAL CEILING TILE 1				9/16" SUPRAFINE GRID
ACT 2	ACOUSTICAL CEILING TILE 2				9/16" SUPRAFINE GRID
ACT 3	ACOUSTICAL CEILING TILE 3				9/16" SUPRAFINE GRID
EXP	EXPOSED: NO CEILING				PAINT EXPOSED STRUCTURE:
GWB 1	GYPSUM WALL BOARD 1				

CABINETRY & MILLWORK

KEY	FINISH MATERIAL	MANUF.	ITEM NUMBER/COLOR/FINISH	SIZE	NOTES
PL 1	PLASTIC LAMINATE 1 (BASE)				
PL 2	PLASTIC LAMINATE 2 (COUNTER)				
PL 3	PLASTIC LAMINATE 3 (ELEVATOR)				
QZ 1	QUARTZ				
SS 1	SOLID SURFACE				

CASEWORK HARDWARE/SPECIALITIES

KEY	FINISH MATERIAL	MANUF	ITEM NUMBER/COLOR/FINISH	SIZE	NOTES
CH 1	CASEWORK HARDWARE 1				
CH 2	CASEWORK HARDWARE 2				

FINISH SCHEDULE

RM NO.	ROOM NAME	FLOOR	BASE	WALL	CEILING	CASEWORK	NOTES
1	EXIST FREEZER						
2	EXIST FOOD COOLER						
011	MEN						
013	RISER ROOM						
006	RECEIVING						
009	BREAKER ROOM						
012	ELEC						
010	WOMEN						
008	STORAGE						
007	STORAGE						
004	MAIN ELEC ROOM						
005	STORAGE						
003	ELEV MECH						
E01	ELEV						
S01	STAIR						
S02	SERVICE YARD						
S02	STAIR						
E02	ELEV						
018	BAG STORAGE						
112	BANQUET ROOM						
113	STORAGE						
115	KITCHEN						
E11	ELEVATOR						
114	ELEC						
024	STAIR						
116	HALL						
117	VEST						
111	PRE-FUNCTION						
110	BAR						
109	ELEC						
108	MEN						
107	WOMEN						
102	BRIDE						
103	TOILET						
104	STO						
105	STO						
118	HALL						
106	VEST						
119	GRAND STAIR						
151	PRO SHOP						
152	PRO						
153	DRESS						
154	MERCH						
155	STOR						
157	STOR						
156	ASSIST. PRO						
101	FOYER						
120	RECEPTION						
121	EXEC DIR.						
126	HR. DIR						
127	ACCNT DIR						
124	FILE ROOM						
122	PAYROLL						
129	SERVER						
128	ACCOUNTING						
125	HALL						
131	HALL						
132	VEST						
123	WRKRM						
130	CONFERENCE ROOM						
133	HALL						
134	VEST.						
E12	ELEV						
S12	STAIR						
148	LADIES RESTROOM						
147	LADIES LOCKERS						
146	LADIES LOUNGE						
150	HOUSEKEEPING						
149	VEST						
144	SERVICE BAR						
145	SHOES						
139	VEST						
143	MENS LOUNGE						
135	EVENTS OFFICE						
136	SHOWROOM						
137	F&B DIRECTOR						
138	CATERING DIRECTOR						
140	MENS RESTROOM						
142	MENS LOCKERS						
141	MENS SHOWER						
202	MAIN KITCHEN						
E21	ELEV						
S21	STAIR						
224	VEST						
220	GRILLE						
206	PRIVATE DINING						
203	TOILET						
204	CHEFS OFFICE						
207	VEST						
223	SERVICE						
221	SERVICE						
208	DINING ROOM						
201	CENTER HALL						
222	SERVICE						
209	HALL						
210	HALL						
211	LOUNGE						
212	VEST						
215	VEST						
213	VEST						
227	VEST						
218	STORAGE						
217	ELEC						
S1	SHAFT						
216	MEN						
219	ELEV MECH						
S2	SHAFT						
214	WOMEN						
E22	ELEV						
S22	STAIR						
001	CART STORAGE						
-	VERANDA						
220	BAR						
X5	PORCH						
X6	RAMP						

GENERAL FINISHES NOTES:

A. PRIOR TO INSTALLATION AND FABRICATION, CONTRACTOR SHALL COORDINATE WITH ARCHITECT AND INTERIOR DESIGNER TO REVIEW ALL FLOOR PATTERNS AND FINISHES.
B. PRIOR TO PAINTING, PAINTING CONTRACTOR SHALL SUBMIT TO ARCHITECT/INTERIOR DESIGNER EACH PAINT COLOR FINISH ON AN 8 1/2" X 11" SHEET OF CHIPBOARD FOR PRELIMINARY APPROVAL. FOR FINAL APPROVAL BY ARCHITECT, DESIGNER, AND OWNER PRIOR TO PAINTING, THE PAINTING CONTRACTOR SHALL PAINT EACH COLOR WITH THE DESIGNATED FINISH ON A 4' X 4' PIECE OF GYPSUM BOARD. SAMPLE BOARDS SHALL BE REVIEWED AND APPROVED AT THE JOB SITE WITH APPROPRIATE LIGHTING.
C. PAINT METAL WALL-MOUNTED ACCESS DOORS, GRILLS, RETURN AIR GRILLES, COVER PLATES, FAN COIL UNITS, FIRE EQUIPMENT CABINETS, AND ELECTRICAL CABINETS TO MATCH THE ADJACENT SURFACE UNLESS NOTED OTHERWISE.
D. ALL INTERIOR DOORS SHALL BE STAINED TO MATCH DESIGNER'S SAMPLE.
E. ALL INTERIOR DOOR FRAMES SHALL BE PAINTED **PT-X**, SEMI-GLOSS FINISH.
F. ALL FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTER LINE OF CLOSED DOORS.
G. FLOOR PATTERN TO CONTINUE UNDER ALL OPEN WOODWORK WORK SURFACES UNLESS NOTED OTHERWISE.
H. CARPET SHALL BE DIRECT GLUE APPLICATION. FLOORING CONTRACTOR SHALL MAKE ADJUSTMENTS TO ACCOMMODATE FOR ANY DIFFERENCES IN THE PILE HEIGHT OF THE CARPET OR TRANSITION FROM OTHER MATERIAL.
I. PRIOR TO ORDERING, SUB-CONTRACTORS FOR FLOORING, PAINTING, AND MILLWORK SHALL SUBMIT TO ARCHITECT/DESIGNER AN 8" x 8" SAMPLE OF EACH MATERIAL SPECIFIED FOR FINAL APPROVAL.
J. PRIOR TO ORDERING CARPET OR ROLLED FLOORING, CONTRACTOR SHALL PROVIDE SEAMING DIAGRAM TO ARCHITECT/DESIGNER.
K. ALL CARPETS SHALL BE INSTALLED IN A PATTERN AS DIRECTED BY OWNER'S INTERIOR DESIGNER OR ARCHITECT.
L. PRIOR TO ORDERING WALL COVERING, CONTRACTOR SHALL SUBMIT A MOCKUP OF SEAMING.
M. IF ANY DISCREPANCIES OR OMISSIONS ARE NOTED IN THESE DRAWINGS, CONTACT INTERIOR DESIGNER/ARCHITECT PRIOR TO ORDERING OR COMMENCING WORK.
N. ALL PAINTED GWB WALLS SHALL BE **EGGSHELL** FINISH, UNLESS NOTED OTHERWISE.
O. ALL PAINTED CMU WALLS SHALL BE **SEMI-GLOSS** FINISH, UNLESS NOTED OTHERWISE.
P. ALL PAINTED GWB CEILINGS SHALL BE **PT-X FLAT** FINISH, UNLESS NOTED OTHERWISE.
Q. IN AREAS INDICATED BY THE FINISH SCHEDULE TO BE PAINTED AND WHERE NO CEILING IS INDICATED, PAINT SHALL EXTEND TO THE BOTTOM OF THE FLOOR OR ROOF STRUCTURE (TYPICAL). REFER TO THE FINISH SCHEDULE FOR PAINTING OF EXPOSED STRUCTURE.
R. ALL METAL GUARDRAILS, STRINGERS, AND SUPPORT STRUCTURE SCHEDULED TO RECEIVE PAINT SHALL BE PAINTED **PT-X**, FINISH: ALKYD ENAMEL SEMI-GLOSS.
S. ELEVATOR FLOORING SHALL BE **TBD**. ELEVATOR CAB WALLS SHALL BE **TBD**.
T. ALL LAMINATE COUNTERTOPS SHALL BE **TBD**.
U. ALL UPPER AND LOWER CABINET FACES, SUPPORTS, AND SKIRTS SHALL BE **TBD**, UNLESS OTHERWISE NOTED.
V. FURNISHINGS SHOWN ARE FOR THE PURPOSE OF ESTABLISHING SPACE REQUIREMENTS AND FOR LOCATING UTILITIES. ALL FURNISHINGS ARE PROVIDED BY OWNER AND ARE NOT IN CONTRACT.
W. ALL ELECTRICAL RECEPTACLE AND SWITCH PLATE COLORS SHALL BE **BRUSHED STAINLESS STEEL**.
X. SEE TRANSITION DETAILS **XX/AXXX** FOR TRANSITION BETWEEN FLOORING MATERIALS.

GENERAL CASEWORK NOTES:

NOTES APPLY TO ALL CASEWORK, NOT JUST THOSE APPEARING ON THIS SHEET.

A. CONTRACTOR SHALL FIELD VERIFY ALL WALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO FABRICATION OF CASEWORK.
B. BASE AND STORAGE CABINETS ARE 24" DEEP UNLESS NOTED OTHERWISE.
C. WALL CABINETS AND OPEN SHELVES ARE 14" DEEP UNLESS NOTED OTHERWISE.
D. ALL COUNTERTOPS ARE AT 36" AFF UNLESS NOTED OTHERWISE. COUNTERTOPS TO RECEIVE A 4" HIGH BACKSPLASH WITH THE SAME MATERIAL AS THE COUNTER U.N.O.
E. THERE SHALL BE ONE (1) ADJUSTABLE SHELF IN 24" HIGH WALL CABINETS; TWO (2) ADJUSTABLE SHELVES IN 30" HIGH WALL CABINETS; THREE (3) ADJUSTABLE SHELVES IN 54" HIGH WALL CABINETS, U.N.O.
F. ALL SHELVES IN WALL AND BASE CABINETS SHALL BE ADJUSTABLE. SHELVES OVER 36" LONG SHALL BE 1" THICK.
G. WALL AND BASE CABINET DOORS SHALL BE NO MORE THAN 24" WIDE UNLESS NOTED OTHERWISE.
H. BASE CABINET DRAWERS SHALL BE NO MORE THAN 30" WIDE UNLESS NOTED OTHERWISE.
I. CABINETS TO RECEIVE PLASTIC LAMINATE BASE U.N.O. BASE SHALL MATCH BASE CABINET FINISH AND PATTERN.
J. FILLER STRIPS NO GREATER THAN 1" WIDE AT WALL MAY BE USED AS REQUIRED. ALL FILLER STRIPS TO MATCH ADJACENT CABINETS.
K. PROVIDE FINISHED END PANELS WHERE REQUIRED AT BASE AND WALL CABINETS.
L. ALL CASEWORK COMPONENTS TO BE PLASTIC LAMINATE CLAD (COLOR AS SELECTED BY ARCHITECT) U.N.O. ALL SHELF TOPS, BOTTOMS, AND EDGES TO BE CLAD WITH PLASTIC LAMINATE UNLESS NOTED OTHERWISE.
M. PROVIDE GROMMETS AT ALL ELECTRICAL, DATA, AND PRINTER LOCATIONS TO BELOW WORK COUNTER. COORDINATE LOCATION WITH THE OWNER.
N. SEE SPECIFICATIONS SECTION 064023 - INTERIOR ARCHITECTURAL WOODWORK - FOR FURTHER DESCRIPTION OF CASEWORK.
O. COORDINATE EQUIPMENT OPENINGS WITH THE OWNER PROVIDED EQUIPMENT.
P. SEE KEY TO FINISHES FOR CASEWORK HARDWARE AND FINISHES.

FINISH SCHEDULE NOTES:

1. NOTE 1

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ISLAND HOUSE RENOVATIONS - PHASE I

TMS #1470500018
3771 SEABROOK ISLAND RD, JOHNS ISLAND, SC 29455

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phase: **PLANNING COMMISSION SUBMITTAL**
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LEGEND

SUPPLY

A — DIFFUSER/GRILLE SYMBOL
100 — AIRFLOW CAPACITY (CFM)
6" — ROUND NECK SIZE (IN.)

RETURN

B — GRILLE/LOUVER/DAMPER SYMBOL
6 | 6 — SQUARE NECK SIZE (IN.)

REFER TO GRILLE & DIFFUSER LEGEND FOR SCHEDULING DETAILS
DIMENSIONS NOTED ON PLANS ARE IN INCHES UNLESS OTHERWISE NOTED.

MECHANICAL SYMBOLS

	SUPPLY AIR DUCT SECTION		4-WAY CEILING DIFFUSER
	RETURN AIR DUCT SECTION		CEILING RETURN/EXHAUST GRILLE
T	THERMOSTAT	FC	FLEXIBLE CONNECTION
	TURNING VANES	AFF	ABOVE FINISHED FLOOR
	MANUAL DAMPER	BFC	BELOW FINISHED CEILING
	CONNECT TO EXISTING	PCO	PIPE CLEAN-OUT
C	CONDENSATE PIPING		

MECHANICAL NOTES

-DO NOT SCALE DRAWING. ROUGH FROM EQUIPMENT MANUFACTURER AND ARCHITECTURAL DRAWINGS.

-DIMENSIONS NOTED ON PLANS ARE IN INCHES UNLESS OTHERWISE NOTED.

-DUCT SIZES NOTED ON PLANS ARE INTERIOR DIMENSIONS.

-ROUTE PVC (COPPER IN PLENUMS AND ON ROOF) CONDENSATE DRAIN LINES TO ROOF DRAINS, GUTTERS, FLOOR DRAINS, FRENCH DRAIN OR AS SHOWN ON DRAWINGS.

-MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EQUIPMENT VOLTAGES, ELECTRICAL REQUIREMENTS AND DISCONNECTS WITH THE ELECTRICAL CONTRACTOR PRIOR TO RELEASING EQUIPMENT FROM MANUFACTURER.

-SOME REFRIGERANT LINE LENGTHS AND/OR VERTICAL LIFTS MAY EXCEED MANUFACTURER'S RECOMMENDATIONS. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR INSURING THE EQUIPMENT MANUFACTURER SIZES ALL REFRIGERANT LINES FOR THESE PIECES OF EQUIPMENT.

-ALL DUCTWORK SHOWN ON DRAWING IS DIAGRAMMATIC. ACTUAL RUN SHALL BE SHORTEST POSSIBLE WITHOUT SHARP BENDS. ALL DUCTWORK SHALL BE GALVANIZED STEEL INSTALLED PER SMACNA, INTERNATIONAL AND LOCAL CODES WITH 2-1/4" THICK FIBERGLASS DUCT WRAP INSULATION AND/OR AS OUTLINED IN SPECIFICATIONS.

-ALL DUCTWORK SHALL BE SEALED AIRTIGHT WITH MASTIC. NO HEAT SENSITIVE, PRESSURE SENSITIVE OR DUCT TAPE ALLOWED ON PROJECT.

-LOW PRESSURE DUCTWORK SHALL BE TESTED AND NOT EXCEED 10% AIRFLOW LOSS AT 2" PRESSURE CLASS.

-ALL DUCTWRAP INSULATION SHALL BE SEALED PER MANUFACTURER'S RECOMMENDATIONS FOR GLASS FABRIC AND MASTIC INSTALLATIONS. NO PRESSURE SENSITIVE TAPE SHALL BE ALLOWED.

-FLEXIBLE DUCTWORK WILL BE ALLOWED AT THE END OF GALVANIZED STEEL RUN OUTS; MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL NOT EXCEED 8'-0". REFER TO TYPICAL RUN OUT DETAIL.

-ENTIRE MECHANICAL SYSTEMS SHALL BE INSTALLED PER 2015 INTERNATIONAL CODES EXCEPT 2009 INTERNATIONAL ENERGY CODE. AS WELL AS PER LOCAL CODES & AUTHORITY HAVING JURISDICTION.

-COORDINATION OF ALL MECHANICAL SYSTEMS WITH OTHER DISCIPLINES IS THE RESPONSIBILITY OF THE CONTRACTOR. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO INSTALLING. CONTRACTOR SHALL NOT PROCEED WITH UNCERTAINTY.

-PROVIDE PLASTIC NAMEPLATES FOR ALL EQUIPMENT SPECIFIED ON PROJECT. LABELING TAG SHALL BE SAME AS EQUIPMENT NUMBER.

-ALL PIPING SHALL BE MANUFACTURED IN THE UNITED STATES OF AMERICA. NO FOREIGN PIPING ALLOWED ON THIS PROJECT.

-ALL PIPING SUPPORT SPACING SHALL BE PER MSS-SP69 AND WITHIN 18" OF CHANGE IN DIRECTION.

-ALL EQUIPMENT, PIPE AND DUCT SHALL BE SEISMICALLY RESTRAINED PER 2015 IBC. SEISMIC RESTRAINT SYSTEMS AS MANUFACTURED BY MASON INDUSTRIES, AMBER/BOOTH OR APPROVED EQUAL WHO MUST BE A MEMBER OF VISCMA. CONTRACTOR TO PROVIDE SEISMIC CALCULATIONS AND DRAWINGS CERTIFIED AND STAMPED BY AN ENGINEER EMPLOYED BY THE MANUFACTURER. CALCULATIONS TO MEET ICC, IBC, NFPA, ASCE/SEI 7-10, SMACNA AND AUTHORITY HAVING JURISDICTION (AHJ).

-PROVIDE TESTING AND BALANCING OF ALL SYSTEMS BY A THIRD PARTY NEBB CERTIFIED T&B CONTRACTOR. SUBMIT T&B FORMS PRIOR TO PERFORMING WORK FOR APPROVAL.

-GENERAL AND MECHANICAL CONTRACTOR SHALL REVIEW AND APPROVE ALL SHOP DRAWINGS PRIOR TO SUBMITTING TO ENGINEER/ARCHITECT WITH "APPROVED" OR "APPROVED AS NOTED" STAMPS FOR ENGINEER'S 10 CALENDAR DAY REVIEW.

AIR DISTRIBUTION SCHEDULE

SYMBOL	TYPE	MANUFACTURER	MODEL NUMBER	FINISH	DAMPER	REMARKS
A	LAY-IN DIFFUSER	PRICE	ASPD-31	OFF-WHITE	W/OBD	
	MANUAL DAMPER	RUSKIN	MD-35/MDRS-25	MILL		

REMARKS:

ALTERNATE AIR DISTRIBUTION SUPPLIERS SHALL INSURE THAT "NC" AND PERFORMANCE DATA MATCHES SPECIFIED DEVICES.

COORDINATE ALL AIR DISTRIBUTION STYLES AND LOCATIONS WITH ARCHITECTURAL CEILING GRID AND ELECTRICAL LIGHT LAYOUT PRIOR TO SUBMITTING SHOP DRAWINGS OR ORDERING.

DUCTLESS SYSTEM SCHEDULE

MANUFACTURER		DAIKIN			
INDOOR UNIT	SYMBOL	HP-1, 2, 3			
	MODEL NUMBER	FTX09NMVJU			
	TYPE	WALL			
	SUPPLY AIRFLOW	417			
	EXTERNAL S.P. (IN.)	0			
	FAN MOTOR WATTS	21			
	DRY BULB (°F)	75			
	WET BULB (°F)	63			
	UNIT VOLTAGE	SEE OUTDOOR			
	WEIGHT (LBS.)	18			
OUTDOOR UNIT	SYMBOL	HP-1A, 2A, 3A			
	MODEL NUMBER	RX09NMVJU			
	TYPE	SLAB			
	FAN QNTY/ WATTS	1 @ 14			
	COMP. QUANTITY	1			
	M.C.A. (FLA)	12.1			
	M.F.S. (OPD)	15			
	UNIT VOLTAGE	208-230/60/1			
	WEIGHT (LBS.)	55			
COOLING CAPACITY	AMBIENT (°F)	95			
	T.C. RANGE (BTUH)	8,800			
	S.C. RANGE (BTUH)	7,590			
INTEGRATED HTG. CAP. @ 17°F		10,000 / 6,000			
EER/SEER RATING @ AHRI		19 / 12.5			
HSPF/COP RATING @ 47°F		4.06			

REMARKS:

-PRIOR TO ORDERING, CONTRACTOR SHALL VERIFY VOLTAGE AND ALL ELECTRICAL REQUIREMENTS. INDOOR UNIT RECEIVES POWER AND COMMUNICATION FROM OUTDOOR UNIT THROUGH FIELD SUPPLIED INTERCONNECTED WIRING BY ELECTRICAL CONTRACTOR.

-PROVIDE UNITS WITH LOW AMBIENT COOLING OPERATION DOWN TO 0°F WITH WIND BAFFLE ACCESSORY, R-410A VARIABLE REFRIGERANT FLOW, DC INVERTER-DRIVEN COMPRESSOR, WIRED REMOTE CONTROLLER, GOBI II CONDENSATE DISCHARGE MODULE AND DPLS1 SOLID STATE DRAIN PAN LEVEL SENSOR.

-PROVIDE "LINE-HIDE" LINESET COVER SYSTEM FOR EXPOSED WIRING, CONDENSATE, AND REFRIGERANT LINES ON INTERIOR/EXTERIOR WALL.

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Job Number:	119161
Plot Date:	10/07/19

NOT FOR CONSTRUCTION

SMHa
architecture • planning • interiors

project number **1923**

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SEABROOK ISLAND, SC

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N — PROJECT NORTH — TRUE NORTH

ELECTRICAL SYMBOL SCHEDULE - GENERAL

GENERAL	
LP1-2,4	BRANCH CIRCUIT RACEWAY. RUN CONCEALED IN CEILING OR WALLS. ARROWHEAD DENOTES HOMERUN TO PANEL. CROSSLINES DENOTE NUMBER OF PHASE AND NEUTRAL CONDUCTORS WHEN MORE THAN TWO ARE TO BE INSTALLED. TEXT DENOTES PANEL NAME AND CIRCUIT NUMBERS FOR HOMERUN. INSTALL GROUND WIRE IN ALL RACEWAYS. #12 AWG MINIMUM AND AS PER CODE.
LP1-2,4	BRANCH CIRCUIT RACEWAY. RUN IN OR UNDER SLAB OR FLOOR. ARROWHEAD DENOTES HOMERUN TO PANEL. CROSSLINES DENOTE NUMBER OF PHASE AND NEUTRAL CONDUCTORS WHEN MORE THAN TWO ARE TO BE INSTALLED. TEXT DENOTES PANEL NAME AND CIRCUIT NUMBERS FOR HOMERUN. INSTALL GROUND WIRE IN ALL RACEWAYS. #12 AWG MINIMUM AND AS PER CODE.
TCB*	PLYWOOD TELECOM BACKBOARD. SEE DETAIL.
PP1	ELECTRICAL DISTRIBUTION OR BRANCH CIRCUIT PANELBOARD. TEXT DENOTES NAME. REFER TO DRAWINGS FOR LOCATION. SEE POWER RISER DIAGRAM AND PANEL SCHEDULES. SURFACE OR FLUSH MOUNTED AS INDICATED ON PANEL SCHEDULE.
CP	SIGNAL SYSTEM OR OTHER ELECTRICAL CONTROL OR COMMUNICATIONS CABINET. REFER TO DRAWINGS AND SPECIFICATIONS FOR DETAILS.
	JUNCTION BOX, FLUSH WALL MOUNTED IN FINISHED WALLS, SURFACE MOUNTED WHERE INDICATED ON DRAWINGS. MINIMUM 4" SQUARE WITH APPROPRIATE REDUCING RING FOR DEVICE BEING INSTALLED. REFER TO TYPICAL MOUNTING HEIGHTS DETAIL WHERE MOUNTING HEIGHT IS NOT INDICATED ON DRAWINGS. SIZE PER NEC.
	JUNCTION BOX, CEILING MOUNTED. SIZE PER NEC.

ELECTRICAL SYMBOL SCHEDULE - LIGHTING SYSTEMS AND ACCESSORIES

LIGHTING	
A	CEILING MOUNTED LIGHT FIXTURE. REFER TO LIGHT FIXTURE SCHEDULE FOR TYPE AND MOUNTING. SEE RECESSED LAY-IN FIXTURE DETAIL FOR LAY-IN FIXTURES MOUNTED IN CEILING GRID. LETTER DENOTES FIXTURE TYPE.
A/A/A	WALL MOUNTED FIXTURE. REFER TO LIGHT FIXTURE SCHEDULE FOR TYPE, MOUNTING HEIGHTS AS INDICATED ON DRAWINGS OR IN LIGHT FIXTURE SCHEDULE OR AS DIRECTED BY OWNER. LETTER DENOTES FIXTURE TYPE. PROVIDE COLD WEATHER BALLASTS FOR ALL FIXTURES LOCATED OUTDOORS.
A	CEILING MOUNTED FIXTURE. REFER TO LIGHT FIXTURE SCHEDULE FOR TYPE AND MOUNTING. PROVIDE MOUNTING HARDWARE APPROPRIATE FOR TYPE OF CEILING WHERE FIXTURE IS INSTALLED. SEE ARCHITECTURAL REFLECTED CEILING PLAN. LETTER DENOTES FIXTURE TYPE.
⊗/⊗	LED EXIT SIGN, WALL OR CEILING MOUNTED, STEM DENOTES WALL MOUNTED. FACES AS INDICATED BY DARKENED AREAS. ARROWS DENOTE CHEVRONS INDICATING DIRECTION OF EXIT AS INDICATED ON DRAWINGS. REFER TO LIGHT FIXTURE SCHEDULE FOR TYPE.
$	120-277V, 20A SINGLE POLE LIGHT SWITCH. HEAVY DUTY TYPE. PROVIDE NEUTRAL CONDUCTOR TO ALL SWITCH LOCATIONS.
$M	120-277V, 20A, 1HP @ 120V MOTOR RATED TOGGLE SWITCH. HEAVY DUTY TYPE. PROVIDE NEUTRAL CONDUCTOR TO ALL SWITCH LOCATIONS. 30A/2HP RATED WHERE INDICATED ON DRAWINGS.
	CEILING MOUNTED LOW VOLTAGE 360° COVERAGE OCCUPANCY SENSOR, DUAL TECHNOLOGY UNLESS OTHERWISE NOTED ON DRAWINGS. WATTSTOPPER DT-300/305 OR EQUIVALENT. "P" DENOTES PASSIVE INFRARED TYPE (WATTSTOPPER CI-300/305). "U" DENOTES ULTRASONIC TYPE (WATTSTOPPER WT SERIES). PROVIDE QUANTITY OF POWER PACKS AS REQUIRED TO SUIT LOAD. PROVIDE SIGNAL CABLING AS REQUIRED TO LINK MULTIPLE SENSORS/POWER PACKS SERVING COMMON AREA OR LIGHTING ZONE.

ELECTRICAL SYMBOL SCHEDULE - POWER

POWER	
	120V, 20A DUPLEX RECEPTACLE, NEMA 5-20R. WALL MOUNTED, REFER TO TYPICAL MOUNTING HEIGHTS DETAIL. REFER TO ADDITIONAL NOTATIONS BELOW WHERE INDICATED ON DRAWINGS.
	120V, 20A DUPLEX RECEPTACLE, NEMA 5-20R. WALL MOUNTED AT 42" AFF OR 6" ABOVE COUNTERTOP BACKSPLASH UNLESS OTHERWISE NOTED. REFER TO ADDITIONAL NOTATIONS BELOW WHERE INDICATED ON DRAWINGS.
	120V, 20A QUADRAPLEX RECEPTACLE CONSISTING OF TWO DUPLEX RECEPTACLES IN COMMON BACKBOX, NEMA 5-20R. WALL MOUNTED, REFER TO TYPICAL MOUNTING HEIGHTS DETAIL. REFER TO ADDITIONAL NOTATIONS BELOW WHERE INDICATED ON DRAWINGS.
	120V, 20A QUADRAPLEX RECEPTACLE CONSISTING OF TWO DUPLEX RECEPTACLES IN COMMON BACKBOX, NEMA 5-20R. WALL MOUNTED AT 42" AFF OR 6" ABOVE COUNTERTOP BACKSPLASH UNLESS OTHERWISE NOTED. REFER TO ADDITIONAL NOTATIONS BELOW WHERE INDICATED ON DRAWINGS.
	ELECTRIC MOTOR OR EXHAUST FAN. PROVIDE LOCAL MEANS OF DISCONNECT PER NEC RATED TO SUIT LOAD WHERE NOT FACTORY EQUIPPED. CONNECT AS REQUIRED.
	HEAVY DUTY DISCONNECT SWITCH, SEE SCHEDULE.
WIRING DEVICE TYPICAL NOTATIONS	
GF	GROUND FAULT CIRCUIT INTERRUPTER TYPE RECEPTACLE.
GF WP	GROUND FAULT CIRCUIT INTERRUPTER TYPE WITH CAST WEATHERPROOF IN-USE TYPE COVER. ALL RECEPTACLES LOCATED OUTDOORS OR EXPOSED TO THE ELEMENTS SHALL BE WEATHER RESISTANT LISTED WITH "WR" LISTING ON FACE OF DEVICE BY FACTORY.

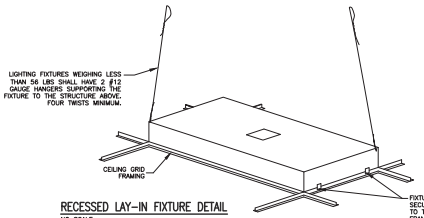
ELECTRICAL SYMBOL SCHEDULE - FIRE ALARM

FIRE ALARM	
	FIRE ALARM PULL STATION. SEE SPECIFICATIONS.
15	FIRE ALARM HORN/STROBE. NUMBER INDICATES CANDELA RATING. SEE SPECIFICATIONS.
15	FIRE ALARM STROBE ONLY. NUMBER INDICATES CANDELA RATING. SEE SPECIFICATIONS.
	CEILING MOUNTED SMOKE DETECTOR. SEE SPECIFICATIONS. "RB" DENOTES TO PROVIDE WITH RELAY BASE FOR AUXILLARY OUTPUT TO INDICATOR LIGHT OR OTHER DEVICE AS INDICATED.

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	CATALOG NUMBER	LAMPS	WATTAGE	NOTES
A50	2'x4' LED FLAT PANEL, 5000 LUMEN PACKAGE	HE WILLIAMS #LP-24-L50-*-DIM-UNV EMERGENCY: EM/10WRM	LED BY MFR.	48.1W	
D20	6" LED DOWNLIGHT, 2000 LUMEN PACKAGE	HE WILLIAMS #6DR-TL-C20-*-DIM-UNV-L-W-OF-*-AD-R EMERGENCY: EM/10W	LED BY MFR.	19.1W	
WP	EXTERIOR LED WALL PACK, 3000 LUMEN PACKAGE	HE WILLIAMS #WPH-L30-*-T3-*-CCL-DIM-UNV EMERGENCY: EM/10WC	LED BY MFR.	36.0W	MOUNT BELOW FIRST FLOOR MOULDING
	LED EDGE-LIT EXIT LIGHT, 90 MINUTE MINIMUM BATTERY BACKUP. *HOUSING AND LETTERING COLOR AS DIRECTED BY ARCHITECT.	MATCH EXISTING	BY MFR.	0.7W	CONNECT TO LINE SIDE OF ANY SWITCHING VIA LIGHTING CIRCUIT SERVING SAME AREA.

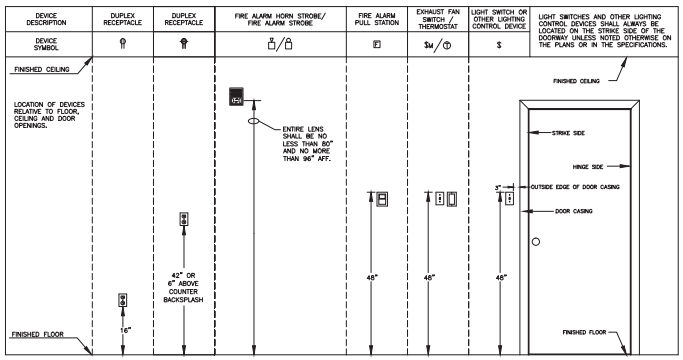
1. OTHER MANUFACTURERS ACCEPTABLE WITH PRIOR APPROVAL OF ENGINEER.
2. HALF SHADED FIXTURES AND/OR LABELED "EB" SHALL BE EQUIPPED WITH 90 MINUTE MINIMUM EMERGENCY BATTERY PACK CONNECTED LINE SIDE OF ANY SWITCHING, RELAY, OR OTHER CONTROL DEVICE.
3. LAMPING COLOR TEMPERATURE PER ARCHITECT AND OWNER REQUIREMENTS.



RECESSED LAY-IN FIXTURE DETAIL
NO SCALE

GENERAL NOTES ALL DRAWINGS:

1. DO NOT SCALE DRAWINGS. LOCATE OUTLETS, EQUIPMENT AND OTHER ELECTRICAL DEVICES AS INDICATED AND COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS. COORDINATE EXACT LIGHTING FIXTURE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN.
2. MINIMUM SIZE CONDUCTOR FOR POWER SHALL BE #12 AWG. PROVIDE DEDICATED NEUTRAL FOR EACH MULTI-WIRE BRANCH CIRCUIT IN COMPLIANCE WITH NEC.
3. ALL FUSES SHALL BE DUAL-ELEMENT TYPE, "FUSETRON" BY BUSSMANN, "ECON" BY ECONOMY, OR FERRAZ SHAWMUT.
4. BRANCH CIRCUIT SIZES ARE #12 AWG, 1/2"C. UNLESS OTHERWISE NOTED IN PANELBOARD SCHEDULES OR ON DRAWINGS.
5. ALL BRANCH CIRCUIT LOADS SHALL BE BALANCED ACROSS PANELBOARD BUSSES TO OBTAIN MINIMUM NEUTRAL CURRENT.
6. ALL FLEXIBLE CONDUIT SHALL CONTAIN A GREEN WIRE BONDED TO RIGID RACEWAY, BOX OR FIXTURE AT EACH END OF FLEX. SIZE GROUND PER NEC TABLE 250-122.
7. PROVIDE PULL STRING IN ALL EMPTY RACEWAYS.
8. COORDINATE WITH OTHER TRADES TO CONCEAL ELECTRICAL WORK AND PROVIDE OUTLETS IN CORRECT LOCATIONS.
9. DO NOT FLUSH MOUNT JUNCTION BOXES BACK TO BACK, STAGGER TO REDUCE SOUND TRANSMISSION BETWEEN ROOMS.
10. CONCEAL OUTLETS FOR ALL EQUIPMENT IN FINISHED AREAS. OBTAIN ROUGHING DIAGRAMS FOR ALL EQUIPMENT AND INSTALL ELECTRICAL WORK ACCORDING TO DIAGRAMS.
11. MOUNT BRACKET TYPE LIGHTING FIXTURES AT HEIGHTS SHOWN OR SCHEDULED ON DRAWINGS OR AS DIRECTED ON JOB BY ARCHITECT UNLESS NOTED OTHERWISE.
12. SEAL ALL PENETRATIONS TO RATED WALLS AND CEILINGS WITH UL LISTED FIREPROOFING SYSTEM. THIS IS TO INCLUDE BUT IS IN NO WAY LIMITED TO CONDUCTOR, RACEWAY AND DEVICE PENETRATIONS. SUBMIT SYSTEM AND INSTALLATION DETAILS AS PART OF SHOP DRAWING SUBMITTAL.
13. WHERE NOT INDICATED OTHERWISE, EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED PER NEC TABLE 250-122.
14. ALL METAL CONDUITS 1" AND LARGER SHALL HAVE A GROUNDING BUSHING BONDING CONDUIT TO ENCLOSURE.
15. REMOVE DRYWALL DUST AND MUD FROM THE INTERIOR OF BOXES BEFORE INSTALLING DEVICES.
16. AT SUBSTANTIAL COMPLETION CLEAN ALL LIGHT FIXTURES AND CLEAN ALL DEVICES IN THE CONSTRUCTION AREAS. REPLACE DAMAGED DEVICES AND DEVICE PLATES AS NEEDED.
17. VERIFY ALL MECHANICAL EQUIPMENT LOCATIONS AND ELECTRICAL REQUIREMENTS WITH MECHANICAL PLANS. IF MECHANICAL EQUIPMENT BEING PROVIDED DOES NOT MATCH DESIGN NOTIFY ENGINEER IMMEDIATELY.
18. CONCEAL ALL CONDUIT AND RACEWAY. IF CONDITIONS REQUIRE CONDUIT OR RACEWAY TO BE RUN EXPOSED COORDINATE ROUTING WITH ARCHITECT AND PAINT AS REQUIRED BY ARCHITECT.
19. ALL RACEWAYS TRANSITIONING BETWEEN CONDITIONED AND UNCONDITIONED SPACED AND RACEWAYS EXITING BUILDING SHALL BE SEALED IN ACCORDANCE WITH NEC. USE POLYWATER FST DUCT SEALANT SYSTEM OR EQUIVALENT.
20. ELECTRICAL WORK SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, REQUIREMENTS AND ORDINANCES.
21. ALL BACKBOXES SHALL BE MINIMUM 4" SQUARE.
22. ALL EMT FITTINGS SHALL BE STEEL COMPRESSION TYPE WITH INSULATED THROAT.
23. PROVIDE PLASTIC ENGRAVED NAMETAGS FOR ALL ELECTRICAL GEAR. INDICATE EQUIPMENT NAME, EQUIPMENT SERVED (WHERE APPLICABLE), FEEDER SOURCE AND CIRCUIT, VOLTAGE. LETTERING SHALL BE 3/8" IN HEIGHT, WHITE ON BLACK BACKGROUND.
24. PROVIDE LABELS INDICATING CIRCUIT NUMBER AND SOURCE FOR ALL 120V AND GREATER DEVICES. LABELS SHALL BE THERMAL TRANSFER TYPE, 3/8" WITH 1/4" LETTERING. WHITE BACKGROUND FOR BLACK DEVICES, CLEAR BACKGROUND OTHERWISE.
25. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE IN THE PROPOSAL OR BID AN INITIAL SITE SURVEY AND COST FOR THE COMPLETE DESIGN AND INSTALLATION OF A UL 2524 LISTED NFPA 72, NFPA 1221 AND IFC COMPLIANT BI-DIRECTIONAL AMPLIFIER SYSTEM (BDA) FOR THE FACILITY COMPATIBLE WITH THE REQUIREMENTS OF THE TWO-WAY COMMUNICATIONS SYSTEM(S) UTILIZED BY THE LOCAL JURISDICTION. THE SYSTEM SHALL BE STAND ALONE IN THE ABSENCE OF A BUILDING FIRE ALARM SYSTEM OR SHALL INTEGRATE WITH THE BUILDING FIRE ALARM SYSTEM. THE COST OF THE SYSTEM SHALL BE PROVIDED AS A SEPARATE LINE ITEM SO THAT IF THE SYSTEM IS DETERMINED NOT TO BE REQUIRED AFTER THE PRICE PROPOSAL OR BID HAS BEEN ACCEPTED THE SYSTEM COST CAN BE REMOVED FROM THE PROJECT.



****ALL MOUNTING HEIGHTS ARE TYPICAL UNLESS OTHERWISE NOTED ON PLANS.****

DEVICE MOUNTING HEIGHTS
NO SCALE

ABBREVIATIONS

A	AMPERE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AF	ARC FAULT CIRCUIT INTERRUPTER
BKR	BREAKER
C	CONDUIT
CATV	CABLE TELEVISION
CKT	CIRCUIT
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EMT	ELECTRICAL METALLIC TUBING
FCU	FAN COIL UNIT
GC	GENERAL CONTRACTOR
GF	GROUND FAULT CIRCUIT INTERRUPTER
GRS	GALVANIZED RIGID STEEL CONDUIT
HID	HIGH INTENSITY DISCHARGE
IG	DEVICE SHALL HAVE ISOLATED GROUND
IMC	INTERMEDIATE METALLIC CONDUIT
JB or J-BOX	JUNCTION BOX
KVA	KILOVOLT AMPERES
KW	KILOWATT
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MDP	MAIN DISTRIBUTION PANEL
MIN	MINIMUM
MFR	MANUFACTURER
NMC	NONMETALLIC-SHEATHED CABLE
V	VOLT
NEC	2014 NATIONAL ELECTRICAL CODE. (NFPA 70)
SWBD	SWITCHBOARD
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
WC	WATER COOLER
XFMR	TRANSFORMER

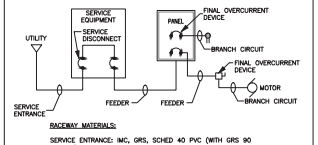
DISCONNECT SWITCH SCHEDULE

SWITCH	DESCRIPTION
S-1	30A/2P
S-2	60A/2P
S-3	100A/2P
S-4	200A/2P
S-5	400A/2P
S-6	30A/3P
S-7	60A/3P
S-8	100A/3P
S-9	200A/3P
S-10	400A/3P
S-11	30A/4#SN
S-12	60A/4#SN
S-13	100A/4#SN
S-14	200A/4#SN
S-15	400A/4#SN

SWITCH NOTES:

1. ALL DISCONNECTS SHALL BE HEAVY DUTY TYPE.
2. 240V OR 600V TO SUIT CIRCUIT VOLTAGE.
3. ALL DISCONNECTS FUSIBLE UNLESS OTHERWISE NOTED. ENCLOSURE FUSED TO SUIT LOAD.
4. ENCLOSURES: NEMA 3R OUTDOORS AND IN WET LOCATIONS. NEMA 1 ELSEWHERE UNLESS OTHERWISE NOTED.
5. ALL OUTDOOR DISCONNECTS SERVING GROUND MOUNTED HVAC UNITS SHALL NOT BE MOUNTED HIGHER THAN 36" ABOVE FINISHED GRADE.
6. COORDINATE WITH EQUIPMENT MANUFACTURER AND INSTALL TO PROVIDE REQUIRED CLEARANCES PER NEC.

RACEWAY MATERIAL SCHEDULE



RACEWAY MATERIALS:

SERVICE ENTRANCE: IMC, GRS, SCHED 40 PVC (WITH GRS 90 ELBOWS). IMC AND GRS TO HAVE BITUMINOUS COATING IF INSTALLED BELOW GRADE.

SERVICE ENTRANCE WHERE EXPOSED TO PHYSICAL DAMAGE OR ABOVE GRADE: IMC, GRS, SCHEDULE 80 PVC, EMT (INTERIOR).

FEEDERS: AC/MC CABLE*, IMC, GRS, EMT (INTERIOR)

BRANCH CIRCUITS CONCEALED ABOVE CEILING/IN WALLS: AC/MC CABLE*, EMT, IMC, GRS, HCF MC CABLE IN PATIENT CARE AREAS

BRANCH CIRCUITS EXPOSED (INTERIOR): EMT

IN OR UNDER CONCRETE FLOORS: SAME AS SERVICE ENTRANCE.

OUTDOORS BELOW GRADE: SAME AS SERVICE ENTRANCE.

OUTDOORS EXPOSED: IMC, GRS (WITH THE EXCEPTION OF CONNECTIONS TO MECHANICAL EQUIPMENT WHICH MAY BE FLEXIBLE WATERTIGHT CONDUIT).

* WHERE PERMITTED BY CODE.

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NOT FOR CONSTRUCTION

project number 1923

SEABROOK ISLAND CLUB

RENOVATIONS - PHASE I

SEABROOK ISLAND, SC

seal / signature

phase: CONSTRUCTION DOCUMENTS
date of issue: 10-07-19

revisions
rev no. | description | date

key plan
sheet title: ELECTRICAL SYMBOLS & SCHEDULES

sheet number: E000

drawn by: TMD
print date:

N
PROJECT NORTH
TRUE NORTH

PROJECT INFORMATION

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DRAWING INDEX

PLANNING COMMISSION SUBMITTAL

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SEABROOK ISLAND
Make It Uniquely Yours

SEABROOK ISLAND CLUB

PELICAN'S NEST BAR RENOVATIONS

TMS #1470500085

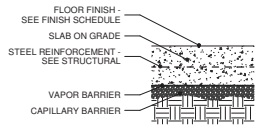
3772 SEABROOK ISLAND RD, JOHNS ISLAND, SC 29455

CONSTRUCTION SUBSYSTEMS:

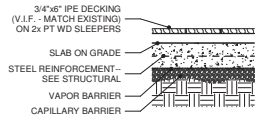
S1 CONCRETE SLAB ON GRADE
- FLOOR FINISH - SEE FINISH SCHEDULE
- SLAB ON GRADE (033000)
- STEEL REINFORCEMENT (032000)
- VAPOR BARRIER (033000)
- CAPILLARY FILL (033000)
- COMPACTED FILL (033000)

S2 CONCRETE SLAB ON GRADE WITH IPE DECK BOARDS
- 3/4"x6" IPE DECK BOARDS (064000) WITH EDGE BOARD AT PERIMETER (064000)
- 2"x4" WOOD SLEEPERS (061100)
- SLAB ON GRADE (033000)
- STEEL REINFORCEMENT (032000)
- VAPOR BARRIER (033000)
- CAPILLARY FILL (033000)
- COMPACTED FILL (033000)

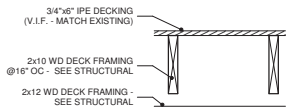
S3 WOOD JOIST WITH IPE DECK BOARDS
- 3/4"x6" IPE DECK BOARDS (064000) WITH EDGE BOARD AT PERIMETER (064000)
- 2"x WOOD JOIST FRAMING - SEE STRUCTURAL (061100)



S1 **CONCRETE SLAB ON GRADE**



S2 **CONCRETE SLAB ON GRADE WITH IPE DECK BOARDS**



S3 **WOOD JOIST WITH IPE DECK BOARDS**

EXTERIOR FINISH LEGEND - BASIS OF DESIGN

MARK	MATERIAL	BASIS OF DESIGN / DESCRIPTION
ABS-D	ABS DOOR	MANUF: ELIASON CORPORATION MATERIAL: ABS PMP-2 TRAFFIC DOOR DOUBLE ACTING
ESS	EXPOSED STRUCTURAL STEEL	FINISH: HIGH PERFORMANCE PAINT SYSTEM PRIMER: EPOXY SHOP PRIMER INT COAT: EXTERIOR ALKYD MATCHING TOPCOAT TOPCOAT: EXTERIOR ALKYD SEMI-GLOSS
FAN	EXTERIOR SURFACE MOUNTED FAN	SEE ELECTRICAL
FCF	FIBER CEMENT FASCIA	SIZE: 3/4" THICK, SEE DETAILS FOR WIDTH FINISH: SMOOTH COLOR: TBD
FCP	FIBER CEMENT PANEL	THICKNESS: 5/16" FINISH: SMOOTH BATTENS: 3 1/2" FIBER CEMENT TRIM COLOR: TBD:
FCT	FIBER CEMENT TRIM	SIZE: SEE DRAWING DETAIL FINISH: COLOR:
HM-F	HOLLOW METAL FRAME	EXTERIOR GRADE, EXTRA-HEAVY-DUTY PROVIDE WELDED FRAMES FACTORY PRIMED FINISH: PAINTED WITH 2 COATS ALKYD, EXTERIOR, SEMI-GLOSS
LF-E1	LIGHT FIXTURE - EXTERIOR - PENDANT	SEE ELECTRICAL
LF-E2	LIGHT FIXTURE - EXTERIOR - SURFACE	SEE ELECTRICAL
SC-E	SECURITY CAMERA - EXTERIOR	TBD
SI-E	SIGNAGE - EXTERIOR	MAT'L: STYLE: FINISH:
WSW	WOOD SCREEN WALL	INFILL WALL BETWEEN EXISTING COLUMNS: PRESSURE TREATED 4"x4" WD POSTS - 4'-0" OC POLYETHELENE WIND SCREEN TRTD KDAT 1"x6" PAINTED WOOD AT 6" OC PRIME AND PAINT ALL SURFACES #8 STAINLESS STL FINISH WASHER & BUTTON HEAD STAINLESS STL SCREWS

ABBREVIATIONS:

AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
APC	ACOUSTICAL PANEL CEILING
ARCH	ARCHITECTURAL
BEJ	BRICK EXPANSION JOINT
BLDG	BUILDING
BLKG	BLOCKING
BO	BOTTOM OF
BRG	BEARING
C	COURSES
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
DBL	DOUBLE
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DS	DOWNSPOUT
DTL	DETAIL
DWG	DRAWING
EA	EACH
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
EOS	EDGE OF SLAB
EQ	EQUAL
EWC	ELECTRIC WATER COOLER
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FOB	FACE OF BRICK
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FT	FEET
FTG	FOOTING
FV	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED
GB	GYPSUM BOARD
GYP BD	GYPSUM BOARD
GC	GENERAL CONTRACTOR
HB	HOSE BIBB
HC	HANDICAP
HGT	HEIGHT
HM	HOLLOW METAL
HR	HOUR
IAW	IN ACCORDANCE WITH
ID	INSIDE DIAMETER
INFO	INFORMATION
JAN	JANITOR
JST	JOIST
JT	JOINT
KD	KILN DRIED
LH	LEFT HAND
LT	LIGHT
LTG	LIGHTING
LVR	LOUVER
MAN'F	MANUFACTURER
MAT'L	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTG	MOUNTING
MSL	MEAN SEA LEVEL
MTL	METAL
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OD	OVERFLOW DRAIN
ODL	OVERFLOW DRAIN LEADER
ODN	OVERFLOW DRAIN NOZZLE
OH	OPPOSITE HAND
OPNG	OPENING
OS	OVERFLOW SCUPPER
PLAM	PLASTIC LAMINATE
PR	PAIR
PT	POINT
PTD	PAINTED
QT	QUARRY TILE
R	RISERS
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RDL	ROOF DRAIN LEADER
REQ'D	REQUIRED
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
RTU	ROOF TOP UNIT
SAB	SOUND ATTENUATING BLANKETS
SF	SQUARE FEET
SIM	SIMILAR
SPECS	SPECIFICATIONS
SQ	SQUARE
SSM	SOLID SURFACE MATERIAL
STC	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
STOR	STORAGE
T	TEMPERED
T	TREAD
TO	TOP OF
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOP	TOP OF PARAPET
TOS	TOP OF STUD
TOSTL	TOP OF STEEL
TRTD	TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
US	UNDER SIDE
VCT	VINYL COMPOSITION TILE
VIF	VERIFY IN FIELD
VTR	VENT THROUGH ROOF
W/	WITH
W/O	WITHOUT
WDO	WINDOW
WH	WATER HEATER
Y	YARD

PROJECT NOTES:

PROJECT COORDINATION:

CO.1 ALL WALL MOUNTED DEVICES SHALL BE MOUNTED LEVEL AND PLUMB. WHERE DEVICES ARE ADJACENT TO ONE ANOTHER, SUCH AS LIGHT SWITCHES, RECEPTACLES, T-STATS, ETC. THE TOP OF THE DEVICE SHALL ALIGN WITH THE ADJACENT DEVICE.

CO.2 INFORMATION PERTINENT TO THE SCOPE OF WORK MAY OCCUR IN OTHER PORTIONS OF THE CONTRACT DOCUMENTS. REFER TO CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, ETC. FOR ADDITIONAL NOTES. ALL NOTES ARE TO BE REVIEWED AND APPLIED TO RELATED BUILDING COMPONENTS.

CO.3 THE CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL DRAWINGS, ETC. SUPPORT THE ARCHITECTURAL DRAWINGS IN DEFINING THE SCOPE OF WORK OF THE CONTRACT DOCUMENTS. DISCREPANCY BETWEEN THE ARCHITECTURAL AND THE ENGINEERING DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE COMMENCING WITH THE WORK. ANY WORK INSTALLED IN CONFLICT WITH THE ARCHITECTURAL DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE AND AT NO ADDITIONAL COST TO THE OWNER.

CO.4 DO NOT SCALE THE DRAWINGS. THE DRAWINGS ARE NOT NECESSARILY TO SCALE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE PRIOR TO THE START OF CONSTRUCTION. IF DISCREPANCIES ARE FOUND, THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION BEFORE COMMENCING WITH THE WORK.

CO.5 THE CONTRACTOR SHALL VISIT THE SITE AND BE KNOWLEDGEABLE OF CONDITIONS THEREON. HE SHALL INVESTIGATE, VERIFY, AND BE FAMILIAR WITH CONDITIONS OF THE PROJECT. HE SHALL NOTIFY THE OWNER OF ANY CONDITIONS REQUIRING MODIFICATION BEFORE PROCEEDING WITH THE WORK.

CO.6 PROVIDE SHOP DRAWINGS AND COORDINATION DRAWINGS TO GUIDE THE FIELD INSTALLATION OF ALL SYSTEMS. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL NOT USE THESE DIAGRAMMATIC CONTRACT DOCUMENTS AS THEIR SHOP AND COORDINATION DRAWINGS.

CO.7 DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE SHOWN. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

CO.8 THE CUTTING OF EXISTING CONSTRUCTION AND FINISHES SHALL BE REPAIRED WHERE CUT OR DAMAGED BY OTHER PORTIONS OF THE WORK. TRADES PEOPLE WHO ARE BY TRAINING AND EXPERIENCE QUALIFIED TO MAKE SUCH REPAIRS SHALL PERFORM THE REPAIRS.

DIMENSIONING

D.1 UNLESS OTHERWISE NOTED, DIMENSIONS ARE FROM COLUMN CENTERLINE, FACE OF INTERIOR AND EXTERIOR STUDS, FACE OF MASONRY AND FACE OF CONCRETE WALLS.

D.2 FINISH FLOOR ELEVATIONS ARE TO TOP OF CONCRETE SLAB, UNLESS NOTED OTHERWISE.

D.3 ALL NEW WORK ADJOINING EXISTING CONSTRUCTION SHALL ALIGN WITH, AND MATCH EXISTING CONSTRUCTION, UNLESS OTHERWISE DIMENSIONED OR DETAILED. NEW GYPSUM BOARD CONSTRUCTION MEETING EXISTING CONSTRUCTION IN THE SAME PLANE SHALL BE FLUSH WITH THE EXISTING MATERIALS AND SHOW NO VISIBLE JOINT.

GRAPHIC SYMBOLS LEGEND

CONSTRUCTION SUBSYSTEM — 00 — REFERS TO A TYPICAL ASSEMBLY

BUILDING WALL SECTION — 3 / A101 SIM — LOCATION ON DRAWING SHEET; SHEET DETAIL IS LOCATED

ELEVATION — 1 / A101 — ARROW INDICATES DIRECTION OF ELEVATION; SHEET LOCATION WHERE ELEVATION IS LOCATED

INTERIOR ELEVATION — 1 / A101 — ARROW INDICATES DIRECTION OF ELEVATION; SHEET LOCATION WHERE ELEVATION IS LOCATED

PARTITION TYPES — 00 — REFERS TO INTERIOR PARTITIONS, SEE SHEET **A002**

DOORS — 101 — REFERS TO NUMBER ON DOOR SCHEDULE, SEE SHEET **A401**

ROOM NUMBER — **Room name** 101 — REFERS TO NUMBER ON FLOOR PLAN

EXTERIOR AND INTERIOR WINDOWS — REFERS TO FRAME TYPE, SEE ENLARGED ELEVATIONS ON SHEET **A402**

DEMOLITION NOTE — X — REFERS TO DEMOLITION NOTES ON THAT SHEET

PLAN & SECTION DETAIL REFERENCE — LOCATION ON DRAWING SHEET; 1 / A101 — LOCATION ON DRAWING SHEET

COLUMN LINE — 0

FACE OF STUD EDGE OF SLAB — A

GRADE ELEVATIONS — 0" — EXISTING ELEVATIONS IN PARENTHESIS, COORDINATE WITH CIVIL

REVISION — 1 — REVISIONS ARE SHOWN WITHIN "CLOUDED" AREA REVISION NUMBER & DATE WILL APPEAR IN TITLE BLOCK SPACE SO LABELED

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SEABROOK ISLAND CLUB
PELICAN'S NEST BAR RENOVATIONS

TMS #1470500085
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seal / signature

phase: **PLANNING COMMISSION SUBMITTAL** — date of issue: **10-24-19**

revisions

rev no.	description	date

key plan

sheet title: **NOTES, ABBREVIATIONS, & CONSTRUCTION SUBSYSTEMS**

sheet number: **A001**

drawn by: Author — print date:

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phase: PLANNING COMMISSION SUBMITTAL
date of issue: 10-24-19

revisions
rev no. | description | date

key plan

sheet title: LIFE SAFETY & CODE REVIEW

sheet number: LS001

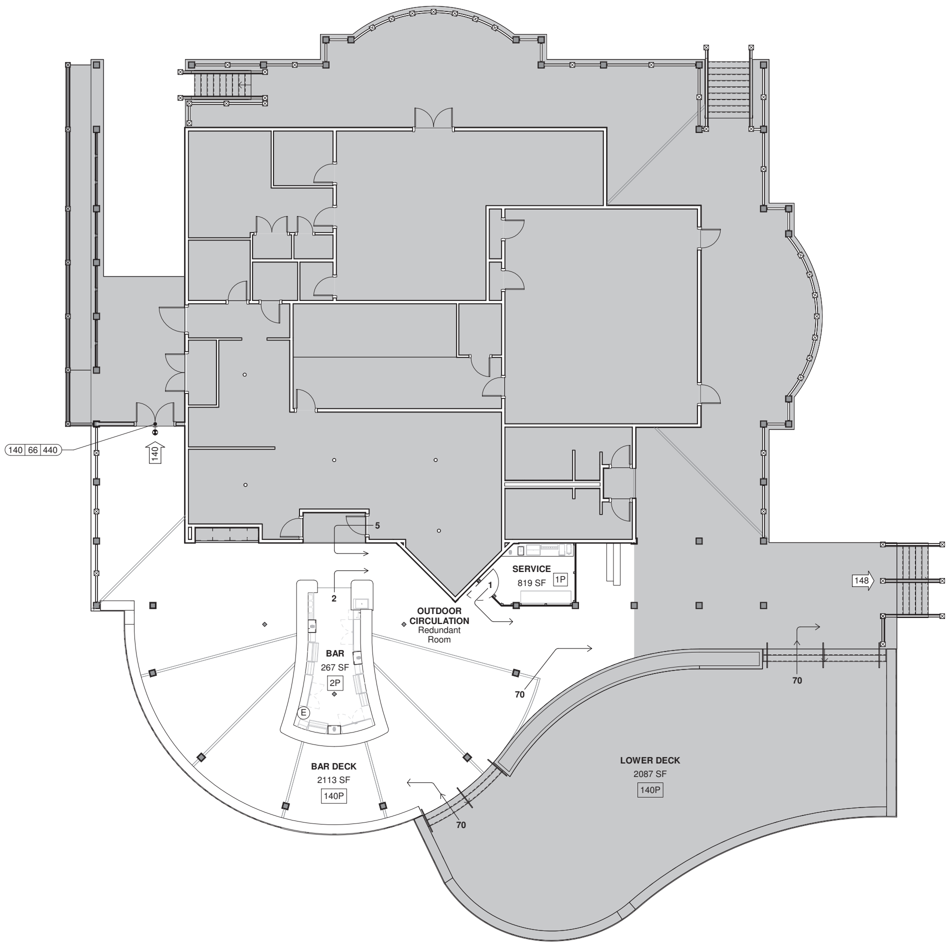
drawn by: Author
print date:

LIFESAFETY LEGEND:

- EXIT SIGN
- NOT IN SCOPE
- **EXIT INFORMATION** (XXX | 00" | XXX)
  - NO. PERSONS EXIT ALLOWS
  - EXIT WIDTH
  - OCCUPANT LOAD
- **TYPICAL EXIT** (XX)
  - CUMULATIVE OCCUPANT LOAD
- **DIRECTION OF TRAVEL** (XX)
  - OCCUPANT LOAD
- (E) FIRE EXTINGUISHER ON WALL WITH MOUNTING BRACKET
- 25P NUMBER OF OCCUPANTS

LIFE SAFETY NOTES:

A. CLEAR EGRESS WIDTH IS FROM FACE OF DOOR OPEN AT 90 DEGREES AT HINGE AND FACE OF STOP ON LATCH. ACTUAL WIDTH IS 3" LESS THAN DOOR WIDTH.



A1 FIRST FLOOR LIFE SAFETY PLAN
1/8" = 1'-0"

0 4' 8' 16'

N PROJECT NORTH | TRUE NORTH

SEABROOK ISLAND PELICAN'S NEST BAR RENOVATIONS - CODE REVIEW

October, 2019
Phase: Design Development
By: Steve Dragon AIA

ADMINISTRATION:
[illegible]: Charleston County, SC and Town of Seabrook Island
[illegible]: Charleston County, SC
[illegible]: Charleston County, SC

CODE REFERENCES:
A. International Building Code w SC [illegible] International Existing Building Code 2015 Edition
B. International Mechanical Code, 2015 Edition
C. International Plumbing Code, 2015 Edition
D. International Fire Code, 2018 Edition
E. International Fuel Gas Code, 2015 Edition
F. International Energy Conservation Code, 2009 Edition
G. ADA Standards for Accessible Design, 2010 Edition
H. ICC 117.1 2009 Edition
I. State Fire Marshal Regulations (07.18.13)

NOTE: CONSTRUCTION DOCUMENTS FOR THE EXISTING BUILDING ARE DATED [illegible] (BY [illegible] & ASSOCIATES) AND ARE BASED ON THE 2006 EDITION OF THE IBC. THE CODE SUMMARY IS AVAILABLE AT THE OFFICE OF SMHa.

PROJECT SCOPE
EXTERIOR PORCH
- Remove existing bar and replace with a new bar.
- Remove service window from Kitchen to porch and infill wall.
- Add new beverage service area [illegible]

EXISTING BUILDING CODE

General Scope of Proposed Renovations
Renovations to exterior porch area.

IEBC Chapter 3: Compliance Method -

Prescriptive Compliance Method	301.3.1

FIRM/FEMA Strategy
This property is located within an AE (13) flood zone designation, as shown on Flood Insurance Rate Map (Map no. [illegible], Panel 705, November 17, 2004). The BFE is 13.0', the DFE is 14.0'.
The finish floor elevation at 14.0'.
[illegible]

1 Use and Occupancy - Chapter 3 IBC

		Reference	Notes
Porch - Dining	Assembly A-2	303.1	

2 Type of Construction - Chapter 6

	[illegible]	Reference	Notes
Classification - Type V-B	Sprinklered	602.5	

3 Occupant Load - Chapter 10

Occupancy Type A (Assembly - unconcentrated)	Area	Occupant Load Factor	Net/Gross	Occupant Load
Porch - Lower Level	2,087	15	Net	140
Porch - Upper Level	2,098	15		140
Total Occupancy Type A				**280**

Occupancy (Bar/Service)	Area	Occupant Load Factor	Net/Gross	Occupant Load
Bar	267	200	Gross	2
Beverage Service	126	200		1
Total Occupancy Bar/Service				**3**

Total Occupancy	283

Note: [illegible] occupancy count.

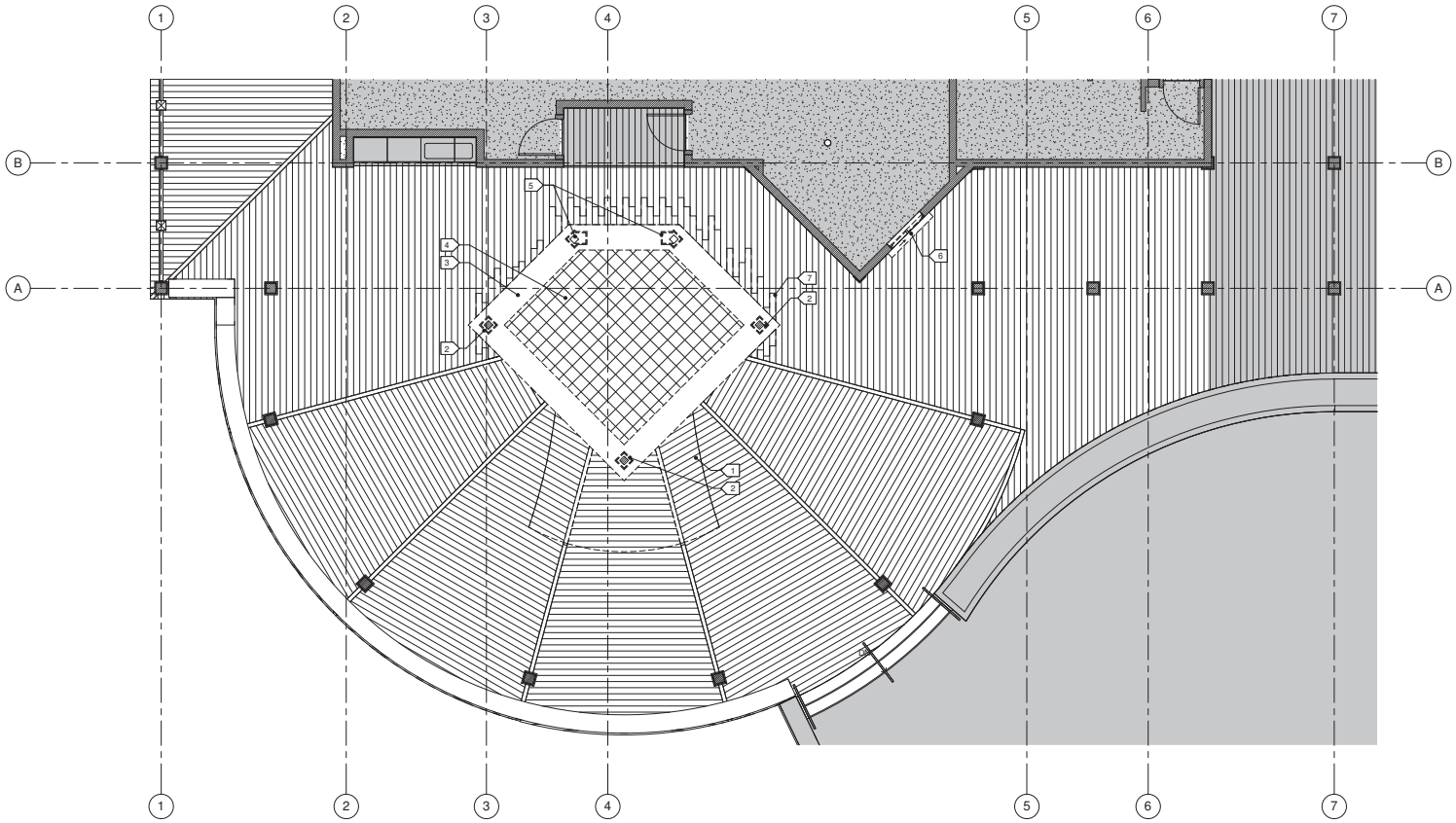
DEMOLITION NOTES

(APPLY TO THIS SHEET ONLY)

1. REMOVE IPE DECK AND WOOD FRAMING TO FACILITATE NEW FOUNDATION, CMU STEM WALL AND SLAB. MATCH NEW BAR CONFIGURATION
2. REMOVE TRIM AROUND COLUMNS. STEEL COLUMNS TO REMAIN
3. DEMOLISH BAR. REMOVE ALL BAR EQUIPMENT AND TURN OVER TO OWNER.
4. DEMOLISH QUARRY TILE AND CONCRETE 3" DEEP MINIMUM.
5. DEMOLISH COLUMNS AND ALL TRIM AROUND COLUMNS
6. DEMOLISH WINDOW AND COUNTERTOP
7. REMOVE IPE DECK STAGGERED TO FACILITATE BLENDING IN NEW IPE DECKING.

DEMOLITION LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- WALL OR ELEMENTS TO BE REMOVED
- EXTENT OF FLOOR SLAB TO BE REMOVED. COORDINATE DIMENSIONS AND LOCATIONS WITH STRUCTURAL AND UTILITIES
- NOT IN SCOPE
- 10 DEMOLITION TAG



A1 FIRST FLOOR DEMO PLAN - PELICAN'S NEST BAR
1/4" = 1'-0"

0 2' 4' 8'

N PROJECT NORTH TRUE NORTH

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SEABROOK ISLAND CLUB

PELICAN'S NEST BAR RENOVATIONS

TMS #1470500085
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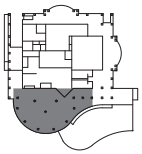
phase	date of issue
PLANNING COMMISSION SUBMITTAL	10-24-19

revisions

rev no.	description	date



key plan

sheet title
DEMO FLOOR PLAN

sheet number
D101

drawn by: Author print date:

CONSTRUCTION SUBSYSTEMS:

- S1 **CONCRETE SLAB ON GRADE**
- S2 **CONCRETE SLAB ON GRADE WITH IPE DECK BOARDS**
- S3 **WOOD JOIST WITH IPE DECK BOARDS**
- W1 **WOOD STUDS WITH FIBER CEMENT LAP SIDING**
- R1 **LOW-SLOPE SINGLE PLY MEMBRANE ROOF SYSTEM**

CONSTRUCTION NOTES

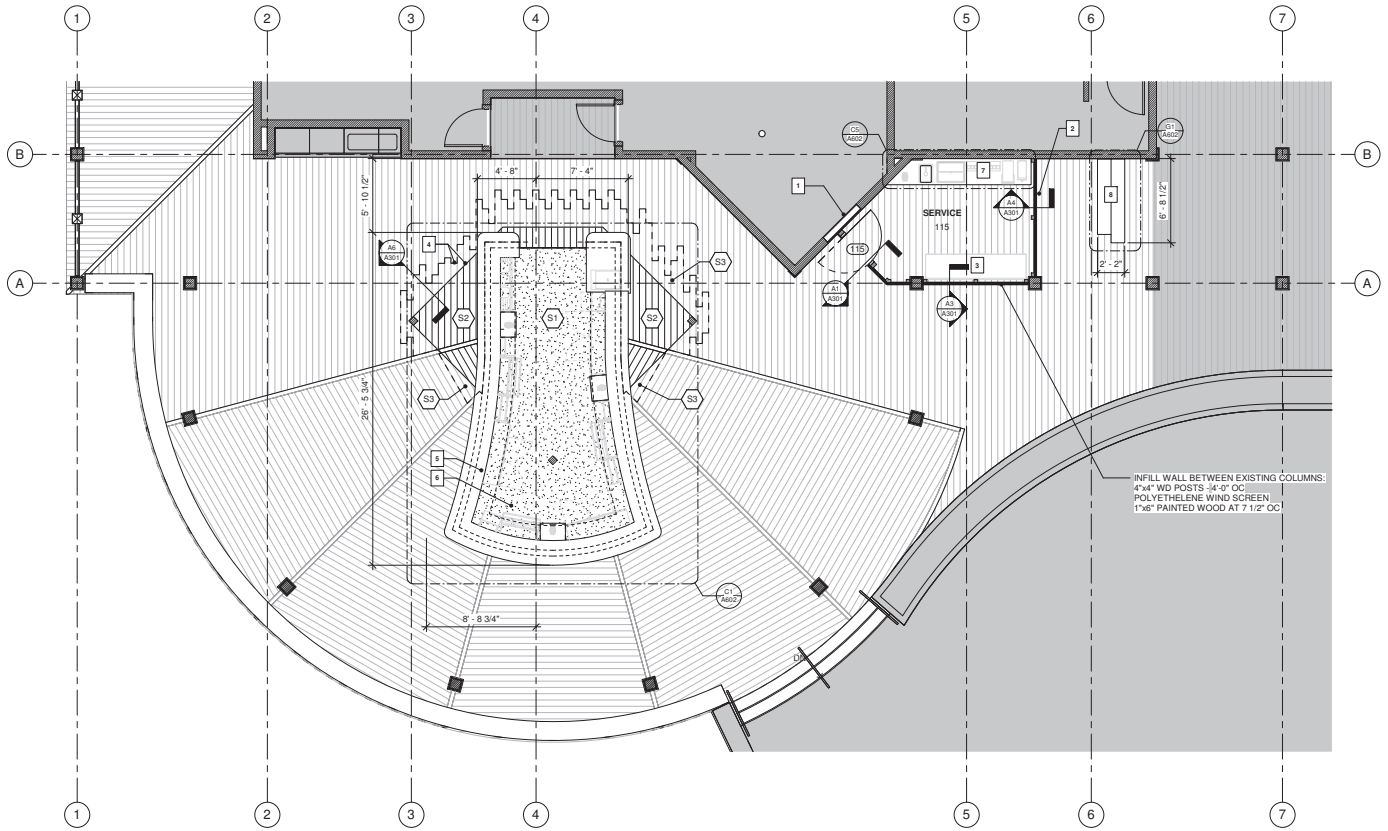
(APPLY TO THIS SHEET ONLY)

1. MATCH NEW INFILLED WALL TO EXISTING ADJACENT FINISHES
2. SIGNAGE ON TEXTURED WALL WITH DRAMATIC LIGHTING
3. SILVERWARE WORK TABLE
4. INSTALL LEVELER. PROVIDE 2x TREATED SLEEPERS ON NEW LEVELED CONCRETE. NEW IPE WOOD DECKING ON TOP OF SLEEPERS. BLEND IN NEW WOOD DECKING FOR ORIGINAL APPEARANCE.
5. NEW BAR
6. NEW TILE FLOOR IN BAR AREA ON CONCRETE ON FILL
7. NEW BEVERAGE STATION
8. NEW HOST STAND

LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION
- NOT IN SCOPE
- (E) FIRE EXTINGUISHER
- FEC FIRE EXTINGUISHER CABINET AND EXTINGUISHER
- EWC ELECTRIC WATER COOLER
- FD FLOOR DRAIN - SEE PLUMBING
- RDL ROOF DRAIN LEADER - SEE PLUMBING & CIVIL
- DS DOWNSPOUT - SEE ROOF PLAN
- CJ CONCRETE OR CMU CONTROL JOINT

FOR PARTITION RATINGS SEE ARCHITECTURAL FIRE PROTECTION DRAWINGS OR REFLECTED CEILING PLANS.



A1 FIRST FLOOR PLAN - PELICAN'S NEST BAR
1/4" = 1'-0"

0 2' 4' 8'

N PROJECT NORTH TRUE NORTH

GENERAL FLOOR PLAN NOTES:

A. DIMENSIONS TO FACE OF STUD UNLESS NOTED OTHERWISE. (℄ INDICATES DIMENSION TO COLUMN OR WALL CENTERLINE)
B. ALL PARTITIONS ARE TYPE **XX** UNLESS NOTED OTHERWISE.
C. ALL EXTERIOR MASONRY DIMENSIONS ARE NOMINAL. FOR ACTUAL DIMENSIONS SEE ENLARGED DETAILS ON **AXXX**. CONTRACTOR SHALL MAKE PROPER ALLOWANCES FOR JOINT DIMENSIONS WHEN LAYING OUT THE WORK.
D. SEE ENLARGED PLANS OF STAIRS, ELEVATORS, AND TOILETS FOR PARTITION TYPES IN THE AREAS REFERENCED.
E. GENERAL CONTRACTOR TO LAYOUT LOCATION OF BUILDING ACCORDING TO THE DIMENSIONS SHOWN ON THIS SHEET RELATIVE TO **[THE EXISTING BUILDING] [OTHER]**.
F. PLAN DETAIL DIMENSIONS TAKE PRECEDENT IF A CONFLICT ARISES WITH TYPICAL DIMENSION STRINGS. SEE PLAN DETAIL SHEETS **A311 - A31X**.
G. ALL INTERIOR DOORS ARE LOCATED WITH INTERIOR OF JAMB AT HINGE SIDE 6 INCHES FROM ADJACENT WALL, UNLESS NOTED OTHERWISE.
H. DOORS REFERENCED BY A DOOR NUMBER INDICATE A NEW DOOR OR SOME MODIFICATION TO AN EXISTING DOOR. SEE DOOR SCHEDULE. DOORS WITHOUT DOOR NUMBER REFERENCES ARE EXISTING DOORS TO REMAIN, WITH NO WORK OR MODIFICATION REQUIRED.
I. ALL CORRIDORS TO RECEIVE ABUSE-RESISTANT GYPSUM BOARD TO **[DESIGNATE HEIGHT]**.
J. FOR MARKERBOARDS AND TACKBOARDS INDICATED BY SYMBOL, SEE **AXXX**. EXACT LOCATION TO BE DETERMINED IN THE FIELD WITH ARCHITECT AND OWNER.
K. PROVIDE CODE COMPLIANT WOOD BLOCKING OR SHEET METAL PLATES IN HOLLOW WALL SYSTEMS FOR ATTACHMENT OF ANY WALL MOUNTED ACCESSORIES INCLUDING, BUT NOT LIMITED TO, SHELVING, CASEWORK, TOILET ACCESSORIES, TOILET PARTITIONS, LIGHT FIXTURES, BENCHES, COAT RODS, AUDIO VISUAL EQUIPMENT, SECURITY CAMERAS, MARKER BOARDS, MIRRORS, ETC.
L. WALL ACCESSORIES SUCH AS FIRE EXTINGUISHER CABINETS AND PAPER TOWEL DISPENSERS THAT REQUIRE A SEMI-RECESSED INSTALLATION SHALL NOT REDUCE THE FIRE RATING OF THE WALL. IF A DETAIL IS NOT PROVIDED WITHIN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL CONSULT THE ARCHITECT FOR PROPER DETAILS PRIOR TO INSTALLING THE ACCESSORY.
M. PARTITION TYPES AT INFILL WALLS SHALL MATCH ADJOINING EXISTING WALLS PROVIDING FOR A FLUSH, SMOOTH TRANSITION IN THE FINISHED SURFACE. MATCH BASE IN AREAS WHERE BASE IS OTHERWISE INDICATED TO REMAIN, RUNNING FROM AN INTERIOR CORNER OR OTHER DEFINED EDGE.
N. PATCH AND REPAIR ALL GYPSUM BOARD SURFACES WHERE DEMOLITION OF ADJOINING OR INTERSECTING PARTITIONS HAS RESULTED IN LESS THAN A FINISHED CONDITION. PATCHES SHALL BE FLUSH AND SMOOTH.
O. EXISTING ROOMS THAT ARE NOT INDICATED TO BE AFFECTED BY THE WORK ARE TO BE PROTECTED FROM DAMAGE AND/OR PAINT DEGRADATION. SHOULD THE GENERAL CONTRACTOR AFFECT THE CONDITION OR FINISH OF THESE ROOMS, THE SURFACE OR SPACE SHALL BE RESTORED TO ORIGINAL CONDITION.
P. REFERENCE DRAWING **A00X** FOR GENERAL DEMOLITION PLANS. WHERE NEW CONSTRUCTION ABUTS EXISTING CONSTRUCTION IN THE SAME PLANE, FINISHES SHALL BE FLUSH. VERIFY ALL DIMENSIONS TO EXISTING ELEMENTS.
Q. THE FINISH FLOOR ELEVATION OF THE NEW ADDITION SHALL MATCH THAT OF THE EXISTING BUILDING.
R. NOTIFY THE ARCHITECT OF ANY AND ALL DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK. FAILURE TO NOTIFY THE ARCHITECT WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PERFORM THE WORK AS INTENDED BY THE CONTRACT DOCUMENTS.
S. VERIFY EXISTING DIMENSIONS, CONDITIONS AND CLEARANCES PRIOR TO THE SUBMISSION OF SHOP DRAWINGS.

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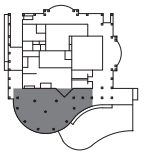


key plan

sheet title
FLOOR PLAN

sheet number
A101

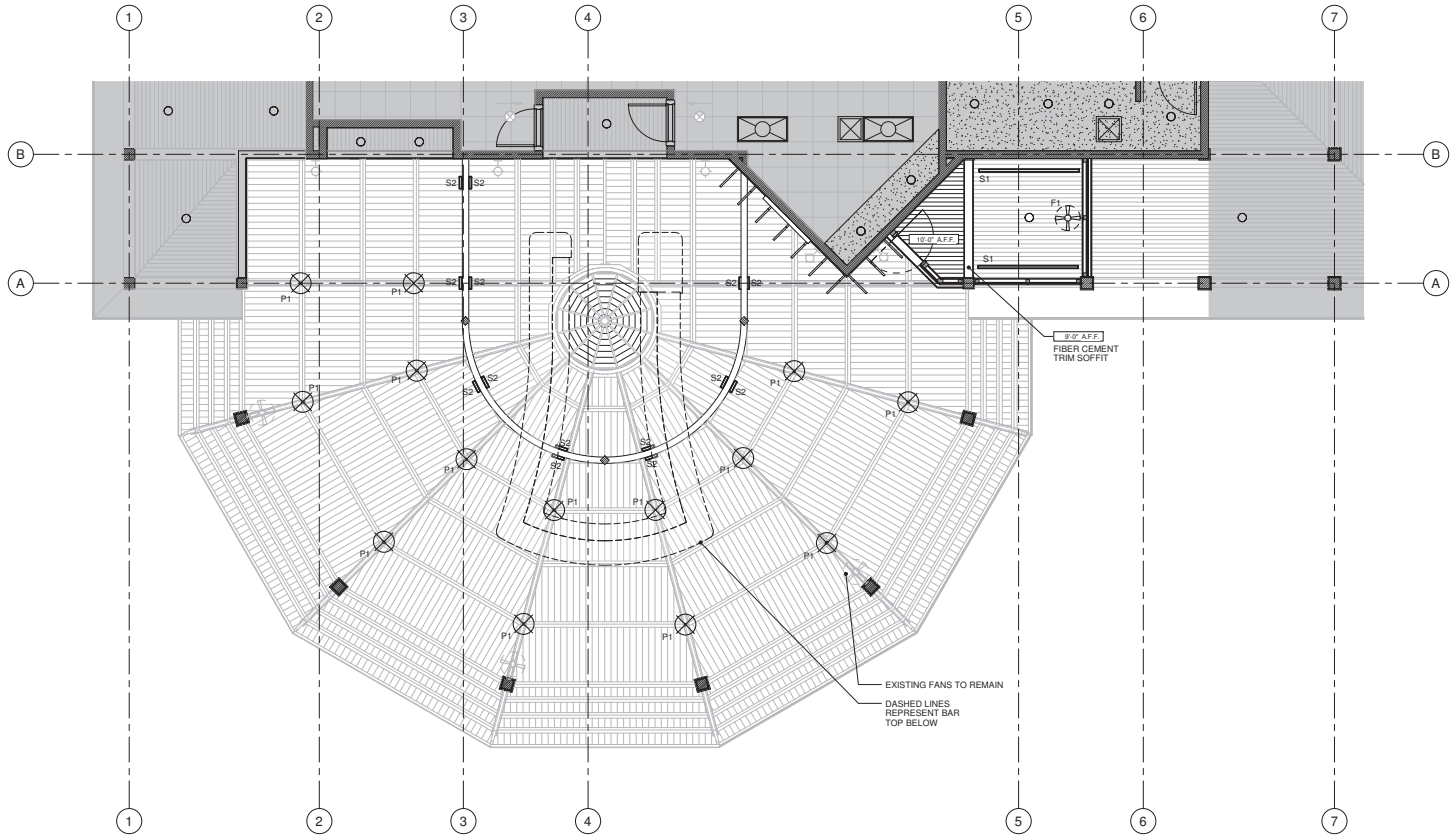
drawn by: Author print date:

GENERAL RCP NOTES:

A. IN ANY UNBRACED AREA OF CEILING WHICH IS LESS THAN 1000 SF, IT IS REQUIRED THAT SPRINKLER HEADS AND OTHER PENETRATIONS BE INSTALLED WITH A 2" OVERSIZED RING, SLEEVE, OR ADAPTER THROUGH THE CEILING TILE TO ALLOW FOR ONE INCH OF FREE MOVEMENT IN ALL HORIZONTAL DIRECTIONS.
B. HEIGHT OF CEILING ABOVE FINISH FLOOR IS TAKEN FROM FLOOR SURFACE DIRECTLY BELOW. CEILING HEIGHT TO BE 10'-0" AFF UNLESS NOTED OTHERWISE.
C. THE BUILDING IS IN A SEISMIC CATEGORY "D" AND ALL CODE RELATED CEILING REQUIREMENTS WILL APPLY. SEE CEILING DETAIL SHEET **A1XX**.
D. SPRINKLER HEADS IN GYPSUM BOARD CEILINGS SHALL BE CENTERED AND ALIGN WITH RECESSED LIGHT FIXTURES IF APPLICABLE.
E. PROVIDE CEILING ACCESS PANELS IN GWB CEILINGS TO PROVIDE ACCESS TO ELECTRICAL, MECHANICAL AND PLUMBING DEVICES THAT REQUIRE SERVICE FOR MAINTENANCE. CONFER WITH A/E PRIOR TO PLACEMENT.

RCP LEGEND:

- BEAD BD CEILING - MATCH EXISTING
- S1 — SURFACE MOUNTED LIGHT FIXTURE
- S2 — SURFACE MOUNTED LIGHT FIXTURE
- P1 — PENDENT LIGHT
- F1 — WALL MOUNTED FAN
- X'-X" — HEIGHT ABOVE FINISHED FLOOR SEE GENERAL NOTE B
- NOT IN SCOPE



A1 FIRST FLOOR RCP - PELICAN'S NEST BAR
1/4" = 1'-0"

0 2' 4' 8'

N
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revisions

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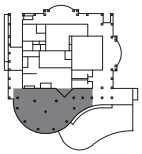
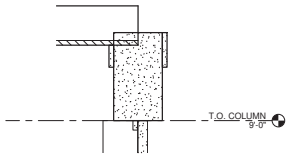


key plan

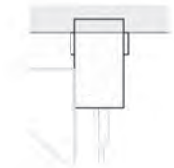
sheet title
REFLECTED CEILING PLAN

sheet number
A111

drawn by: Author print date:



G3 DETAIL - SERVICE ROOF
1 1/2" = 1'-0" (REFERENCE: A301)



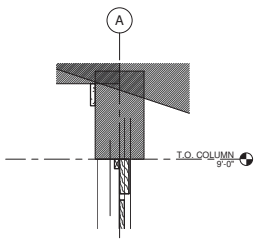
G4 DETAIL - T.O. TEXTURED WALL
1 1/2" = 1'-0"

CONSTRUCTION SUBSYSTEMS:

- S1 CONCRETE SLAB ON GRADE
- S2 CONCRETE SLAB ON GRADE WITH IPE DECK BOARDS
- S3 WOOD JOIST WITH IPE DECK BOARDS
- W1 WOOD STUDS WITH FIBER CEMENT LAP SIDING
- R1 LOW-SLOPE SINGLE PLY MEMBRANE ROOF SYSTEM

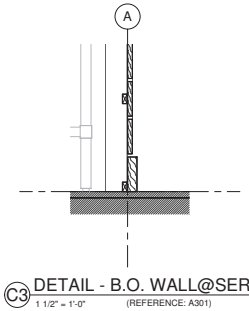
GENERAL DETAIL NOTES:

A. IT IS THE INTENT OF THIS BUILDING DETAILING THAT THE CONTINUITY OF THE AIR BARRIER (SYSTEM) AND THE WATER BARRIER (SYSTEM), BE CONSTRUCTED WITHOUT BREAKS, IN BOTH THE HORIZONTAL AND THE VERTICAL PLANE. WHEREAS DETAILS OF ALL TRANSITIONS CANNOT BE REASONABLY DRAWN, THE GENERAL CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ARCHITECT ANY AND ALL SITUATIONS WHICH ARE REASONABLY BELIEVED TO DISRUPT THE INTENDED CONTINUITY, SO THAT SUPPLEMENTARY DIRECTION MAY BE PROVIDED.
B. SEQUENCING OF CONSTRUCTION. WHILE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, SHALL OCCUR IN A PROGRESSIVE MANNER THAT PROPERLY LAPS ANY AND ALL WATERPROOFING COMPONENTS TO SHED WATER AWAY FROM THE INTERIOR OF THE BUILDING.
C. STUD CONFIGURATIONS ARE DIAGRAMMATIC TO THE POINT THAT THEY INDICATE THE REQUIRED FACE OF STUD TO WHICH OTHER MATERIALS ARE ATTACHED. ADDITIONAL STUD FRAMING MAY BE REQUIRED, BEYOND THE INDIVIDUAL STUDS INDICATED, TO EITHER PROVIDE ATTACHMENTS FOR MATERIAL EDGE CONDITIONS, OR TO SATISFY THE REQUIREMENTS OF THE STEEL STUD DESIGNER OR MANUFACTURER AS OUTLINED IN THE SPECIFICATIONS.
D. UNDER-SLAB VAPOR RETARDER SHALL BE INSTALLED CONTINUOUS, WITH ALL SEAMS LAPPED AND JOINTS TAPED. ALL ROUGH-IN PENETRATIONS OF THE VAPOR RETARDER SHALL BE DETAILED WITH A COMPATIBLE TAPE OR MASTIC THAT AFFORDS THE SAME LEVEL OF MOISTURE PROTECTION AND VAPOR RETARDER CONTINUITY. THE ARCHITECT SHALL REVIEW THE VAPOR RETARDER INSTALLATION PRIOR TO CONCRETE SLAB PLACEMENT. PROVIDE SUFFICIENT NOTICE TO THE ARCHITECT TO SCHEDULE SUCH REVIEW.
E. PLAN AND SECTION DETAILS UTILIZING BRICK VENEERS REQUIRE SEISMIC BRICK TIES OF TYPE AND WITH SPACING AS INDICATED IN THE SPECIFICATIONS, TYPICAL. LACK OF BRICK TIES INDICATED GRAPHICALLY, WHETHER FOR CLARITY OR SIMPLY OMISSION, DOES NOT RELIEVE THE GENERAL CONTRACTOR OF THE RESPONSIBILITY FOR THEIR INCLUSION IN ACCORDANCE WITH THE SPECIFICATIONS.
F. THROUGH WALL FLASHINGS, THOUGH INDICATED BELOW FINISH FLOOR TYPICALLY, SHALL BE STEPPED UP TO OCCUR AT FINISH FLOOR AT ANY SITUATION WHERE A HARD SURFACE (I.E. A SIDEWALK) ABUTS THE FACE OF THE BUILDING. SUCH STEPPED TRANSITIONS SHALL PROVIDE FOR CONTINUITY IN THE FLASHING ITSELF. WEEP HOLE SHALL NOT BE LOCATED LOWER THAN ADJOINING EXTERIOR GRADE.
G. FORM END DAMS IN FLASHING AT WINDOW & DOOR HEADS AND OTHER LOCATIONS AS REQUIRED TO DIRECT THE FLOW OF WATER TO THE EXTERIOR.
H. DO NOT SEAL WEEPS OR FLASHING TERMINATIONS TO THE EXTERIOR.
I. **SYMBOL** INDICATES CAST STONE SHAPE. SEE SHEET **A3XX** FOR ADDITIONAL DETAIL AND DIMENSIONS.
J. CAST STONE SHAPES SHALL BE FACTORY FABRICATED TO RETURN AROUND CORNERS, i.e. NO MITERED CORNERS ALLOWED.
K. ALL ARCHITECTURALLY EXPOSED STRUCTURAL STEEL TO RECEIVE HIGH PERFORMANCE COATING SYSTEM. SEE SPEC SECTIONS **051200 AND 099100**.
L. SEAL ALL PENETRATIONS OF SHEATHING AND AIR BARRIER WITH COMPATIBLE CLOSED CELL FOAM INSULATION.
M. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM OTHER METALS TO AVOID GALVANIC ACTION.

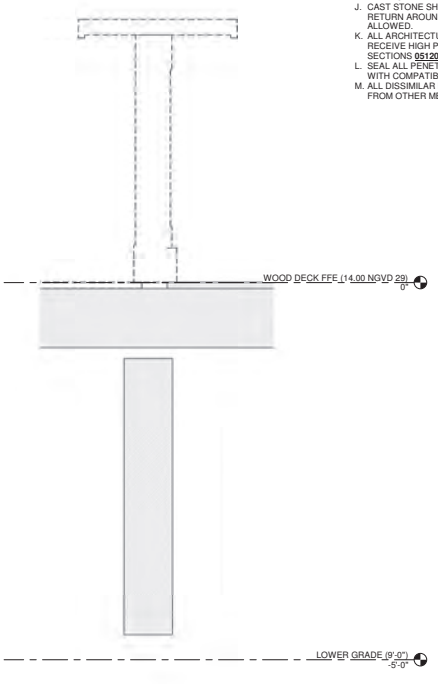


E3 DETAIL - T.O. WALL@SERVICE
1 1/2" = 1'-0" (REFERENCE: A301)

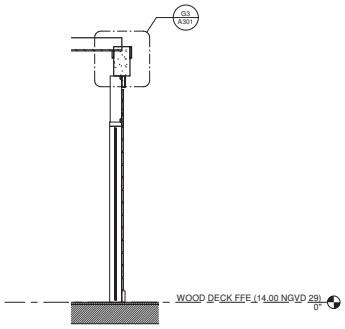
E4 DETAIL - SIGNAGE
1 1/2" = 1'-0" (REFERENCE: A301)



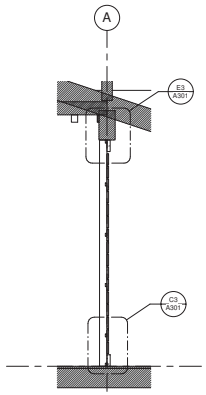
C3 DETAIL - B.O. WALL@SERVICE
1 1/2" = 1'-0" (REFERENCE: A301)



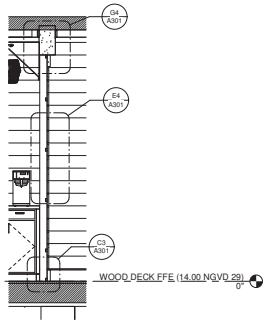
A6 SECTION DETAIL - BAR DEMO
1 1/2" = 1'-0" (REFERENCE: A101)



A1 SECTION - SERVICE 1
1/2" = 1'-0" (REFERENCE: A101)



A3 SECTION - SCREEN WALL
1/2" = 1'-0" (REFERENCE: A101)



A4 SECTION - TEXTURED WALL
1/2" = 1'-0" (REFERENCE: A101)

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sheet title: WALL SECTIONS & SECTION DETAILS

sheet number: A301

drawn by: Author print date:

DOOR SCHEDULE									
DOOR					FRAME				
NUMBER	TYPE	RATING	WIDTH	HEIGHT	TYPE	HEAD	JAMB	SILL	NOTES
115	V		3'-0"	7'-0"	F1				

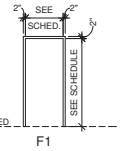
GENERAL DOOR SCHEDULE NOTES:

A. THE FOLLOWING SCHEDULE OF DOORS AND FRAMES IS PREPARED AS A SELECTION OF MATERIALS, CONFIGURATIONS, RATINGS AND DETAILS FOR DOORS, DOOR FRAMES AND OTHER INTERIOR FRAMES. TECHNICAL REQUIREMENTS OF MATERIALS CAN BE FOUND IN THE SPECIFICATIONS.
B. FOR DOOR NUMBERS SEE FLOOR PLANS.
C. FOR DOOR TYPES SEE ELEVATIONS ON SHEET A401.
D. FOR DOOR FRAME TYPES AND ELEVATIONS SEE SHEET A401.
E. SEE SPECIFICATIONS FOR HARDWARE SET SCHEDULES.

DOOR ABBREVIATION. LEGEND

HM	HOLLOW METAL
T	TEMPERED GLASS

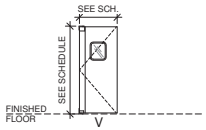
FRAME LEGEND



F1

HM WELDED FRAME
NOTE A

DOOR LEGEND



V

ELIASON CORP.
PMP-2 TRAFFIC DOOR
DOUBLE ACTING
ABS
VISION GLASS - IMPACT RATED

DOOR SCHEDULE NOTES:

A. PRIME PAINT HOLLOW METAL FRAME WITH BITUMINOUS COATING PRIOR TO FRAME INSTALL.

DOOR HARDWARE NOTES:

A. X

CONSTRUCTION NOTES

(APPLY TO THIS SHEET ONLY)

1 WRAP HEAD AND JAMBS WITH SELF-ADHERING FLEXIBLE FLASHING IN SHINGLE FASHION INTO DOOR OPENING

2 STRIP IN BRAKE METAL (OR MTL FLASHING) VERTICAL LEG WITH FLEXIBLE FLASHING. EXTEND A MINIMUM OF 4 INCHES ONTO SHEATHING.

3 FABRIC REINFORCEMENT/MESH AT CORNERS

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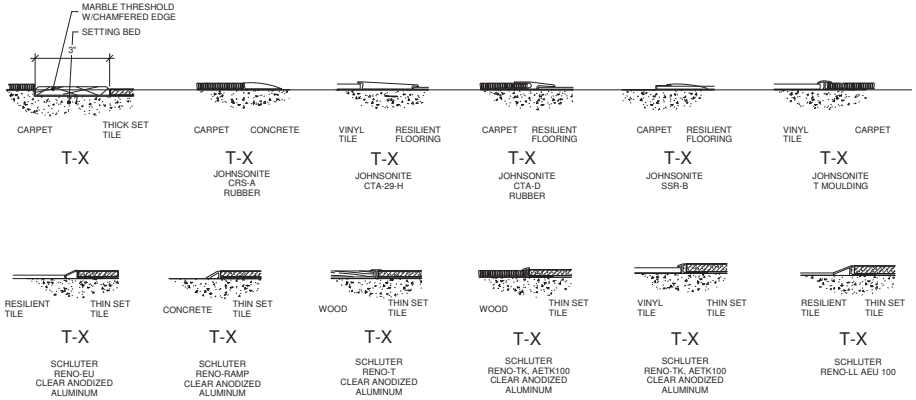
sheet title: **DOOR LEGEND, SCHEDULE & DETAILS**

sheet number: **A401**

drawn by: Author
print date:



F1 FLOOR TRANSITION DETAILS

6" = 1'-0"

FLOOR FINISHES

KEY	FINISH MATERIAL	MANUF.	ITEM NUMBER/COLOR/FINISH	SIZE	NOTES
CFT 1	CERAMIC FLOOR TILE 1				
CFT 2	CERAMIC FLOOR TILE 2				
CFT 3	CERAMIC FLOOR TILE 3				
CONC P	CONCRETE		EPOXY PAINTED		
CONC S	CONCRETE		SEALED		
CPT 1	CARPET TILE 1				
CPT W	CARPET WALK OFF TILE				
EPOX R	EPOXY RESIN COATED CONCRETE				PROVIDE INTEGRAL COVE BASE
LVT 1	LUXURY VINYL TILE 1				DIRECT GLUE HIGH PERFORMANCE LUXURY VINYL TILE WITH SILENCING LAYER - INLET (0926V), COARSE (26595)
SWV 1	SEAMLESS WELDED VINYL 1				HOMOGENOUS SHEET WITH QUANTUM GUARD HP FINISH - BIOSPEC MD. WELD RODS TO MATCH COLOR.
SWV 2	SEAMLESS WELDED VINYL 2				HETEROGENOUS SHEET. WELD RODS TO MATCH COLOR.

BASE & TRIM FINISHES

KEY	FINISH MATERIAL	MANUF.	ITEM NUMBER/COLOR/FINISH	SIZE	NOTES
CBT 1	CERAMIC BASE TILE				
CG 1	CORNER GUARD 1				
CG 2	CORNER GUARD 2				
RB 1	RUBBER BASE 1				
SWV	SEAMLESS WELDED VINYL				
WB 1	WOOD BASE 1				

PAINT/WALL FINISHES

KEY	FINISH MATERIAL	MANUF.	ITEM NUMBER/COLOR/FINISH	SIZE	NOTES
AWP 1	ADVANCED WALL PROTECTION 1				
CWT 1	CERAMIC WALL TILE 1				
CWT 1	CERAMIC WALL TILE 2				
DWP 1	DECORATIVE WALL PANEL 1				
PT 1	PAINT 1 (CEILING)				
PT 2	PAINT 2 (TRIM)				
PT 3	PAINT 3 (WALL)				
PT 4	PAINT 4 (EPOXY)				
PT 5	PAINT 5 (ACCENT)				

CEILING FINISHES

KEY	FINISH MATERIAL	MANUF.	ITEM NUMBER/COLOR/FINISH	SIZE	NOTES
ACT 1	ACOUSTICAL CEILING TILE 1				9/16" SUPRAFINE GRID
ACT 2	ACOUSTICAL CEILING TILE 2				9/16" SUPRAFINE GRID
ACT 3	ACOUSTICAL CEILING TILE 3				9/16" SUPRAFINE GRID
EXP	EXPOSED: NO CEILING				PAINT EXPOSED STRUCTURE:
GWB 1	GYPSUM WALL BOARD 1				

CABINETRY & MILLWORK

KEY	FINISH MATERIAL	MANUF.	ITEM NUMBER/COLOR/FINISH	SIZE	NOTES
PL 1	PLASTIC LAMINATE 1 (BASE)				
PL 2	PLASTIC LAMINATE 2 (COUNTER)				
PL 3	PLASTIC LAMINATE 3 (ELEVATOR)				
QZ 1	QUARTZ				
SS 1	SOLID SURFACE				

CASEWORK HARDWARE/SPECIALITIES

KEY	FINISH MATERIAL	MANUF	ITEM NUMBER/COLOR/FINISH	SIZE	NOTES
CH 1	CASEWORK HARDWARE 1				
CH 2	CASEWORK HARDWARE 2				

FINISH SCHEDULE

RM NO.	ROOM NAME	FLOOR	BASE	WALL	CEILING	CASEWORK	NOTES
101	RETAIL						
101	RETAIL						
102	OFFICE						
102	OFFICE						
103	STORAGE						
103	STORAGE						
103A	ELEC						
103A	ELEC						
103B	COMM						
103B	COMM						
104	DRESS.						
104	DRESS.						
105	KITCHEN						
105	KITCHEN						
106	OFFICE						
106	OFFICE						
107	BATHROOM						
107	BATHROOM						
108	COOLER/FREEZER/STORAGE						
108	COOLER/FREEZER/STORAGE						
108B	FREEZER						
109	HOUSE KEEPING						
109	HOUSE KEEPING						
110	REC ROOM						
110	REC ROOM						
111	STO.						
111	STO.						
112	STO.						
112	STO.						
113	WOMEN						
113	WOMEN						
114	MEN						
114	MEN						
115	SERVICE						
116	LOWER DECK						
117	BAR DECK						
118	BAR						
119	OUTDOOR CIRCULATION						
120	OUTDOOR CIRCULATION						

GENERAL FINISHES NOTES:

A. PRIOR TO INSTALLATION AND FABRICATION, CONTRACTOR SHALL COORDINATE WITH ARCHITECT AND INTERIOR DESIGNER TO REVIEW ALL FLOOR PATTERNS AND FINISHES.
B. PRIOR TO PAINTING, PAINTING CONTRACTOR SHALL SUBMIT TO ARCHITECT/INTERIOR DESIGNER EACH PAINT COLOR FINISH ON AN 8 1/2" X 11" SHEET OF CHIPBOARD FOR PRELIMINARY APPROVAL. FOR FINAL APPROVAL BY ARCHITECT, DESIGNER, AND OWNER PRIOR TO PAINTING, THE PAINTING CONTRACTOR SHALL PAINT EACH COLOR WITH THE DESIGNATED FINISH ON A 4' X 4' PIECE OF GYPSUM BOARD. SAMPLE BOARDS SHALL BE REVIEWED AND APPROVED AT THE JOB SITE WITH APPROPRIATE LIGHTING.
C. PAINT METAL WALL-MOUNTED ACCESS DOORS, GRILLS, RETURN AIR GRILLES, COVER PLATES, FAN COIL UNITS, FIRE EQUIPMENT CABINETS, AND ELECTRICAL CABINETS TO MATCH THE ADJACENT SURFACE UNLESS NOTED OTHERWISE.
D. ALL INTERIOR DOORS SHALL BE STAINED TO MATCH DESIGNER'S SAMPLE.
E. ALL INTERIOR DOOR FRAMES SHALL BE PAINTED **PT-X**, SEMI-GLOSS FINISH.
F. ALL FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTER LINE OF CLOSED DOORS.
G. FLOOR PATTERN TO CONTINUE UNDER ALL OPEN WOODWORK WORK SURFACES UNLESS NOTED OTHERWISE.
H. CARPET SHALL BE DIRECT GLUE APPLICATION. FLOORING CONTRACTOR SHALL MAKE ADJUSTMENTS TO ACCOMMODATE FOR ANY DIFFERENCES IN THE PILE HEIGHT OF THE CARPET OR TRANSITION FROM OTHER MATERIAL.
I. PRIOR TO ORDERING, SUB-CONTRACTORS FOR FLOORING, PAINTING, AND MILLWORK SHALL SUBMIT TO ARCHITECT/DESIGNER AN 8" x 8" SAMPLE OF EACH MATERIAL SPECIFIED FOR FINAL APPROVAL.
J. PRIOR TO ORDERING CARPET OR ROLLED FLOORING, CONTRACTOR SHALL PROVIDE SEAMING DIAGRAM TO ARCHITECT/DESIGNER.
K. ALL CARPETS SHALL BE INSTALLED IN A PATTERN AS DIRECTED BY OWNER'S INTERIOR DESIGNER OR ARCHITECT.
L. PRIOR TO ORDERING WALL COVERING, CONTRACTOR SHALL SUBMIT A MOCKUP OF SEAMING.
M. IF ANY DISCREPANCIES OR OMISSIONS ARE NOTED IN THESE DRAWINGS, CONTACT INTERIOR DESIGNER/ARCHITECT PRIOR TO ORDERING OR COMMENCING WORK.
N. ALL PAINTED GWB WALLS SHALL BE **EGGSHELL** FINISH, UNLESS NOTED OTHERWISE.
O. ALL PAINTED CMU WALLS SHALL BE **SEMI-GLOSS** FINISH, UNLESS NOTED OTHERWISE.
P. ALL PAINTED GWB CEILINGS SHALL BE **PT-X FLAT** FINISH, UNLESS NOTED OTHERWISE.
Q. IN AREAS INDICATED BY THE FINISH SCHEDULE TO BE PAINTED AND WHERE NO CEILING IS INDICATED, PAINT SHALL EXTEND TO THE BOTTOM OF THE FLOOR OR ROOF STRUCTURE (TYPICAL). REFER TO THE FINISH SCHEDULE FOR PAINTING OF EXPOSED STRUCTURE.
R. ALL METAL GUARDRAILS, STRINGERS, AND SUPPORT STRUCTURE SCHEDULED TO RECEIVE PAINT SHALL BE PAINTED **PT-X**, FINISH: ALKYD ENAMEL SEMI-GLOSS.
S. ELEVATOR FLOORING SHALL BE **TBD**. ELEVATOR CAB WALLS SHALL BE **TBD**.
T. ALL LAMINATE COUNTERTOPS SHALL BE **TBD**.
U. ALL UPPER AND LOWER CABINET FACES, SUPPORTS, AND SKIRTS SHALL BE **TBD**, UNLESS OTHERWISE NOTED.
V. FURNISHINGS SHOWN ARE FOR THE PURPOSE OF ESTABLISHING SPACE REQUIREMENTS AND FOR LOCATING UTILITIES. ALL FURNISHINGS ARE PROVIDED BY OWNER AND ARE NOT IN CONTRACT.
W. ALL ELECTRICAL RECEPTACLE AND SWITCH PLATE COLORS SHALL BE **BRUSHED STAINLESS STEEL**.
X. SEE TRANSITION DETAILS **XX/AXXX** FOR TRANSITION BETWEEN FLOORING MATERIALS.

GENERAL CASEWORK NOTES:

NOTES APPLY TO ALL CASEWORK, NOT JUST THOSE APPEARING ON THIS SHEET.

A. CONTRACTOR SHALL FIELD VERIFY ALL WALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO FABRICATION OF CASEWORK.
B. BASE AND STORAGE CABINETS ARE 24" DEEP UNLESS NOTED OTHERWISE.
C. WALL CABINETS AND OPEN SHELVES ARE 14" DEEP UNLESS NOTED OTHERWISE.
D. ALL COUNTERTOPS ARE AT 36" AFF UNLESS NOTED OTHERWISE. COUNTERTOPS TO RECEIVE A 4" HIGH BACKSPLASH WITH THE SAME MATERIAL AS THE COUNTER U.N.O.
E. THERE SHALL BE ONE (1) ADJUSTABLE SHELF IN 24" HIGH WALL CABINETS; TWO (2) ADJUSTABLE SHELVES IN 30" HIGH WALL CABINETS; THREE (3) ADJUSTABLE SHELVES IN 54" HIGH WALL CABINETS, U.N.O.
F. ALL SHELVES IN WALL AND BASE CABINETS SHALL BE ADJUSTABLE. SHELVES OVER 36" LONG SHALL BE 1" THICK.
G. WALL AND BASE CABINET DOORS SHALL BE NO MORE THAN 24" WIDE UNLESS NOTED OTHERWISE.
H. BASE CABINET DRAWERS SHALL BE NO MORE THAN 30" WIDE UNLESS NOTED OTHERWISE.
I. CABINETS TO RECEIVE PLASTIC LAMINATE BASE U.N.O. BASE SHALL MATCH BASE CABINET FINISH AND PATTERN.
J. FILLER STRIPS NO GREATER THAN 1" WIDE AT WALL MAY BE USED AS REQUIRED. ALL FILLER STRIPS TO MATCH ADJACENT CABINETS.
K. PROVIDE FINISHED END PANELS WHERE REQUIRED AT BASE AND WALL CABINETS.
L. ALL CASEWORK COMPONENTS TO BE PLASTIC LAMINATE CLAD (COLOR AS SELECTED BY ARCHITECT) U.N.O. ALL SHELF TOPS, BOTTOMS, AND EDGES TO BE CLAD WITH PLASTIC LAMINATE UNLESS NOTED OTHERWISE.
M. PROVIDE GROMMETS AT ALL ELECTRICAL, DATA, AND PRINTER LOCATIONS TO BELOW WORK COUNTER. COORDINATE LOCATION WITH THE OWNER.
N. SEE SPECIFICATIONS SECTION 064023 - INTERIOR ARCHITECTURAL WOODWORK - FOR FURTHER DESCRIPTION OF CASEWORK.
O. COORDINATE EQUIPMENT OPENINGS WITH THE OWNER PROVIDED EQUIPMENT.
P. SEE KEY TO FINISHES FOR CASEWORK HARDWARE AND FINISHES.

FINISH SCHEDULE NOTES:

1. NOTE 1

SMHa inc.
491 HIBBEN STREET MOUNT PLEASANT SOUTH CAROLINA

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SEABROOK ISLAND CLUB

PELICAN'S NEST BAR RENOVATIONS

TMS #1470500085
3772 SEABROOK ISLAND RD,
JOHNS ISLAND, SC 29455

seal / signature

phase	date of issue
PLANNING COMMISSION SUBMITTAL	10-24-19

revisions

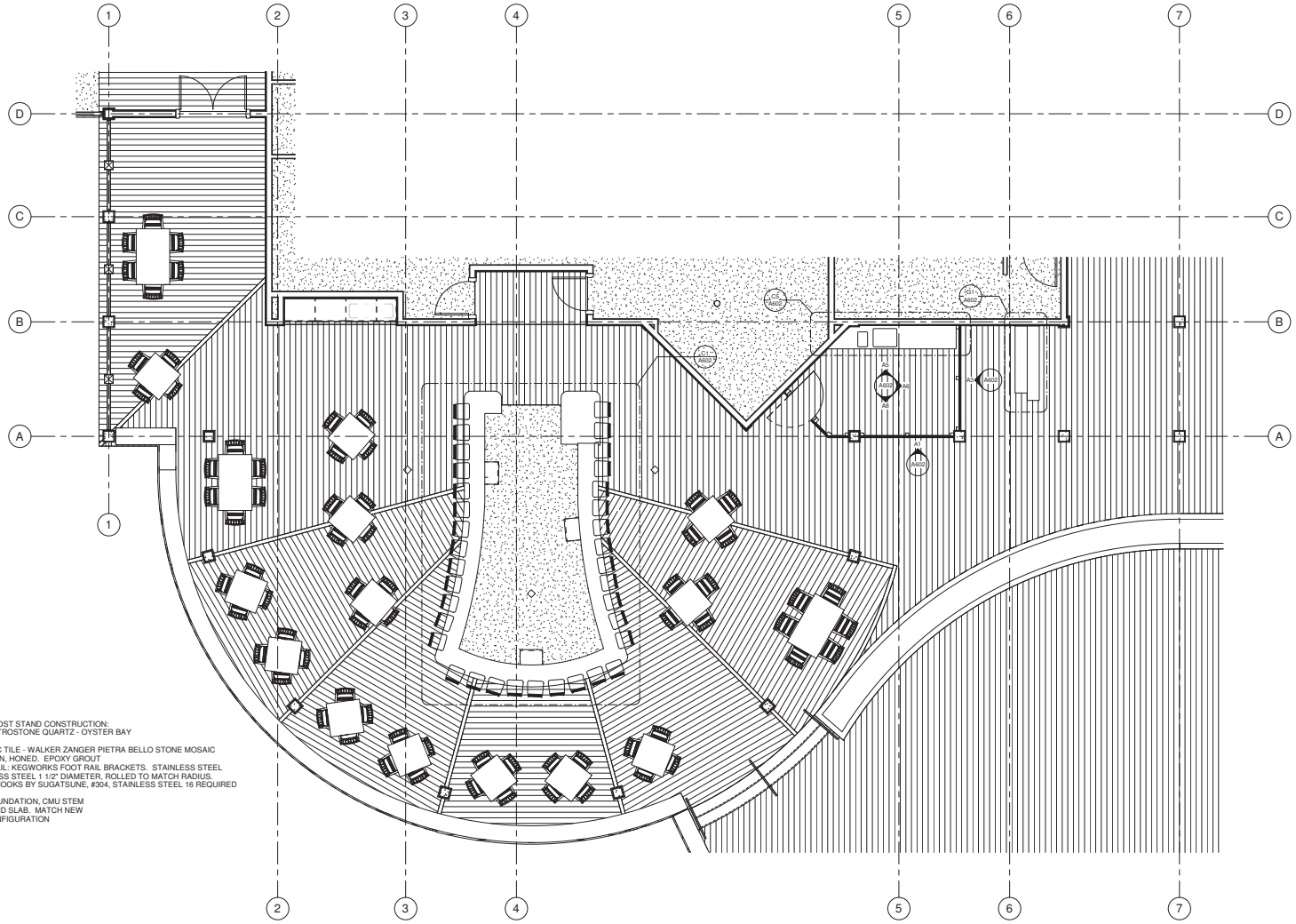
rev no.	description	date

key plan

sheet title
FINISH LEGEND, NOTES & DETAILS

sheet number
A600

drawn by: Author print date:



A1 FIRST FLOOR FINISH & FURNITURE PLAN
1/4" = 1'-0"

FLOOR FINISH LEGEND

XXX-#	MATERIAL TYPE AND PATTERN ORIENTATION
	CFT 1 - CERAMIC FLOOR TILE 1 (COLOR)
	CONC P - CONCRETE, EPOXY PAINTED (COLOR)
	CONC S - CONCRETE, SEALED (COLOR)
	CPT 1 - CARPET TILE 1 (COLOR)
	CPT W - CARPET WALK OFF TILE (COLOR)
	EPOX R - EPOXY RESIN COATED CONCRETE (COLOR)
	LVT 1 - LUXURY VINYL TILE 1 (COLOR)
	SWV 1 - SEAMLESS WELDED VINYL 1 (COLOR)

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SEABROOK ISLAND CLUB

PELICAN'S NEST BAR RENOVATIONS

TMS #1470500085
3772 SEABROOK ISLAND RD,
JOHNS ISLAND, SC 29455

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phase	date of issue
PLANNING COMMISSION SUBMITTAL	10-24-19

revisions

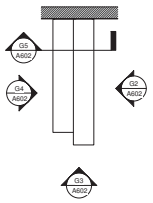
rev no.	description	date

key plan

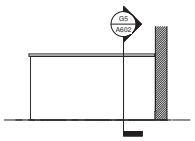
sheet title
FIRST FLOOR FINISH & FURNITURE PLAN

sheet number
A601

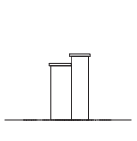
drawn by: Author print date:



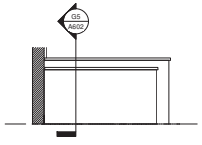
G1 PLAN - HOST STAND
3/8" = 1'-0" (REFERENCE: A101)



G2 HOST STAND - E
3/8" = 1'-0"

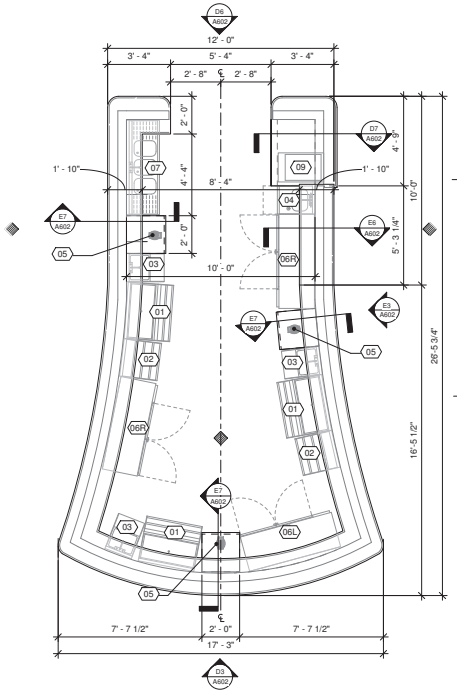


G3 HOST STAND - S
3/8" = 1'-0"

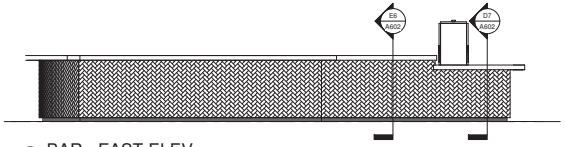


G4 HOST STAND - W
3/8" = 1'-0"

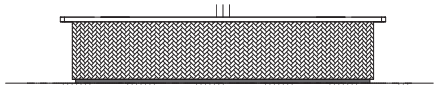
G5 SECTION - HOST STAND
3/4" = 1'-0"



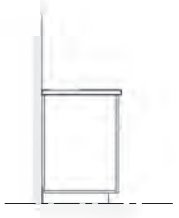
C1 PLAN - BAR
3/8" = 1'-0" (REFERENCE: A101)



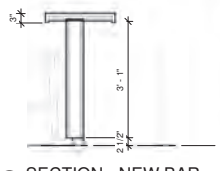
E3 BAR - EAST ELEV
3/8" = 1'-0"



D3 BAR - SOUTH ELEVATION
3/8" = 1'-0"

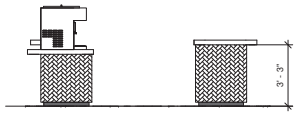


C3 SECTION - SERVICE
3/4" = 1'-0"



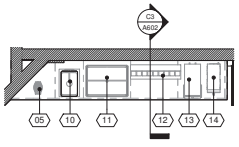
E6 SECTION - NEW BAR
3/4" = 1'-0"

E7 SECTION - POS
3/4" = 1'-0"

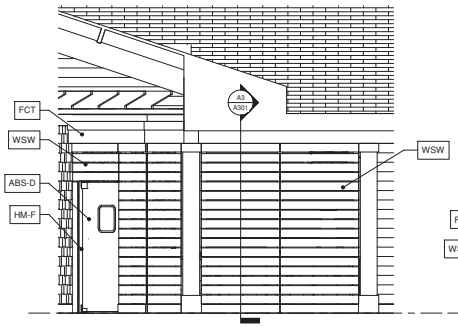


D6 BAR - NORTH ELEV
3/8" = 1'-0"

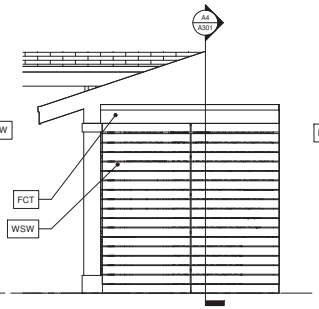
D7 SECTION - ADA BAR
3/4" = 1'-0"



C5 PLAN - BEVERAGE
3/8" = 1'-0"



A1 SERVICE - EXT. ELEV - S
3/8" = 1'-0"



A3 SERVICE - EXT. ELEV - E
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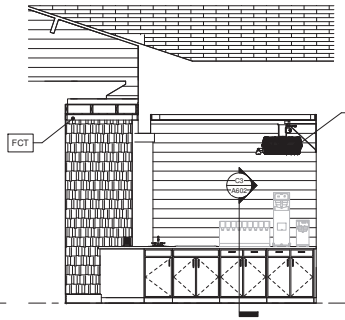
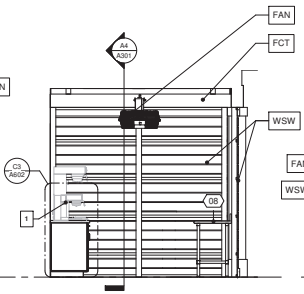
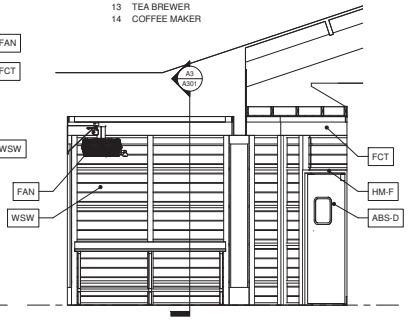


A5 SERVICE - INT. ELEV - N
3/8" = 1'-0"



A6 SERVICE - INT. ELEV - E
3/8" = 1'-0"



A8 SERVICE - INT. ELEV - S
3/8" = 1'-0"

CONSTRUCTION NOTES

(APPLY TO THIS SHEET ONLY)

1 SODA AND COFFEE EQUIPMENT - PROVIDED BY OWNER'S SUPPLIER

GENERAL CASEWORK NOTES:

NOTES APPLY TO ALL CASEWORK, NOT JUST THOSE APPEARING ON THIS SHEET.

A. CONTRACTOR SHALL FIELD VERIFY ALL WALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO FABRICATION OF CASEWORK.
B. BASE AND STORAGE CABINETS ARE 24" DEEP UNLESS NOTED OTHERWISE.
C. WALL CABINETS AND OPEN SHELVES ARE 14" DEEP UNLESS NOTED OTHERWISE.
D. ALL COUNTERTOPS ARE AT 36" AFF UNLESS NOTED OTHERWISE. COUNTERTOPS TO RECEIVE A 4" HIGH BACKSPLASH WITH THE SAME MATERIAL AS THE COUNTER U.N.O.
E. THERE SHALL BE ONE (1) ADJUSTABLE SHELF IN 24" HIGH WALL CABINETS; TWO (2) ADJUSTABLE SHELVES IN 30" HIGH WALL CABINETS; THREE (3) ADJUSTABLE SHELVES IN 54" HIGH WALL CABINETS, U.N.O.
F. ALL SHELVES IN WALL AND BASE CABINETS SHALL BE ADJUSTABLE. SHELVES OVER 36" LONG SHALL BE 1" THICK.
G. WALL AND BASE CABINET DOORS SHALL BE NO MORE THAN 24" WIDE UNLESS NOTED OTHERWISE.
H. BASE CABINET DRAWERS SHALL BE NO MORE THAN 30" WIDE UNLESS NOTED OTHERWISE.
I. CABINETS TO RECEIVE PLASTIC LAMINATE BASE U.N.O. BASE SHALL MATCH BASE CABINET FINISH AND PATTERN.
J. FILLER STRIPS NO GREATER THAN 1" WIDE AT WALL MAY BE USED AS REQUIRED. ALL FILLER STRIPS TO MATCH ADJACENT CABINETS.
K. PROVIDE FINISHED END PANELS WHERE REQUIRED AT BASE AND WALL CABINETS.
L. ALL CASEWORK COMPONENTS TO BE PLASTIC LAMINATE CLAD (COLOR AS SELECTED BY ARCHITECT) U.N.O. ALL SHELF TOPS, BOTTOMS, AND EDGES TO BE CLAD WITH PLASTIC LAMINATE UNLESS NOTED OTHERWISE.
M. PROVIDE GROMMETS AT ALL ELECTRICAL, DATA, AND PRINTER LOCATIONS TO BELOW WORK COUNTER. COORDINATE LOCATION WITH THE OWNER.
N. SEE SPECIFICATIONS SECTION 064023 - INTERIOR ARCHITECTURAL WOODWORK - FOR FURTHER DESCRIPTION OF CASEWORK.
O. COORDINATE EQUIPMENT OPENINGS WITH THE OWNER PROVIDED EQUIPMENT.
P. SEE KEY TO FINISHES FOR CASEWORK HARDWARE AND FINISHES.

GENERAL ELEVATION NOTES:

A. BUILDING ELEVATIONS SHOW RELATIVE GRADE ABUTTING THE BUILDING. REFERENCE CIVIL DRAWINGS FOR MORE SPECIFIC EXTERIOR GRADING INFORMATION.

EXTERIOR FINISH LEGEND - BASIS OF DESIGN

MARK	MATERIAL
ABS-D	ABS DOOR
ESS	EXPOSED STRUCTURAL STEEL - EXTERIOR
FAN	EXTERIOR SURFACE MOUNTED FAN
FCF	FIBER CEMENT FASCIA
FCP	FIBER CEMENT PANEL
FCT	FIBER CEMENT TRIM
HM-F	HOLLOW METAL FRAME
LF-E1	LIGHT FIXTURE - EXTERIOR - PENDANT
LF-E2	LIGHT FIXTURE - EXTERIOR - SURFACE MOUNTED
SC-E	SECURITY CAMERA - EXTERIOR
SI-E	SIGNAGE - EXTERIOR
WSW	WOOD SCREEN WALL

SPECIALTY EQUIPMENT AND FIXTURES

(BY OWNER UNLESS NOTED OTHERWISE)

01 UNDERBAR ICE BIN
02 UNDERBAR BOTTLE DISPLAY
03 UNDERBAR ADD-ON BLENDER STATION
04 UNDERBAR HAND SINK
05 POINT OF SALE
06L SELF CONTAINED BACK BAR REFRIDGERATOR
06R SELF CONTAINED BACK BAR REFRIDGERATOR
07 THREE COMPARTMENT BAR SINK
08 WORK TABLE
09 MECHANICAL CONTROL BARREL FREEZER
10 DROP-IN SINK W/SIDE SPLASHES
11 DROP-IN ICE BIN
12 SODA DISPENSER
13 TEA BREWER
14 COFFEE MAKER

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SEABROOK ISLAND CLUB

PELICAN'S NEST BAR RENOVATIONS

TMS #1470500085
3772 SEABROOK ISLAND RD, JOHNS ISLAND, SC 29455

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phase: **PLANNING COMMISSION SUBMITTAL**
date of issue: **10-24-19**

revisions

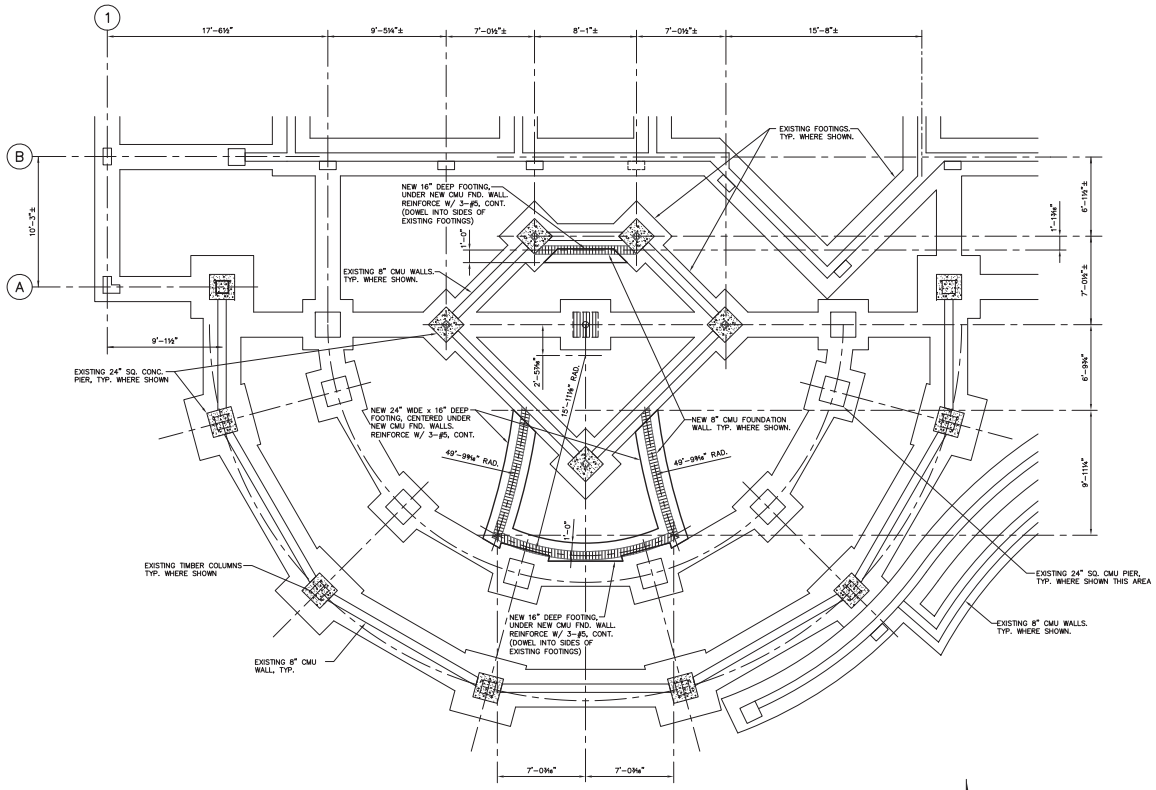
rev no.	description	date

key plan

sheet title: **ELEVATIONS & CASEWORK DETAILS**

sheet number: **A602**

drawn by: Author print date:



FOUNDATION PLAN: NEW FOUNDATION AT BAR
¼"=1'-0"

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SEABROOK ISLAND CLUB
PELICAN'S NEST BAR RENOVATIONS

SEABROOK ISLAND, SC

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phase: 50% CONSTRUCTION DOCUMENTS
date of issue: 10-07-19

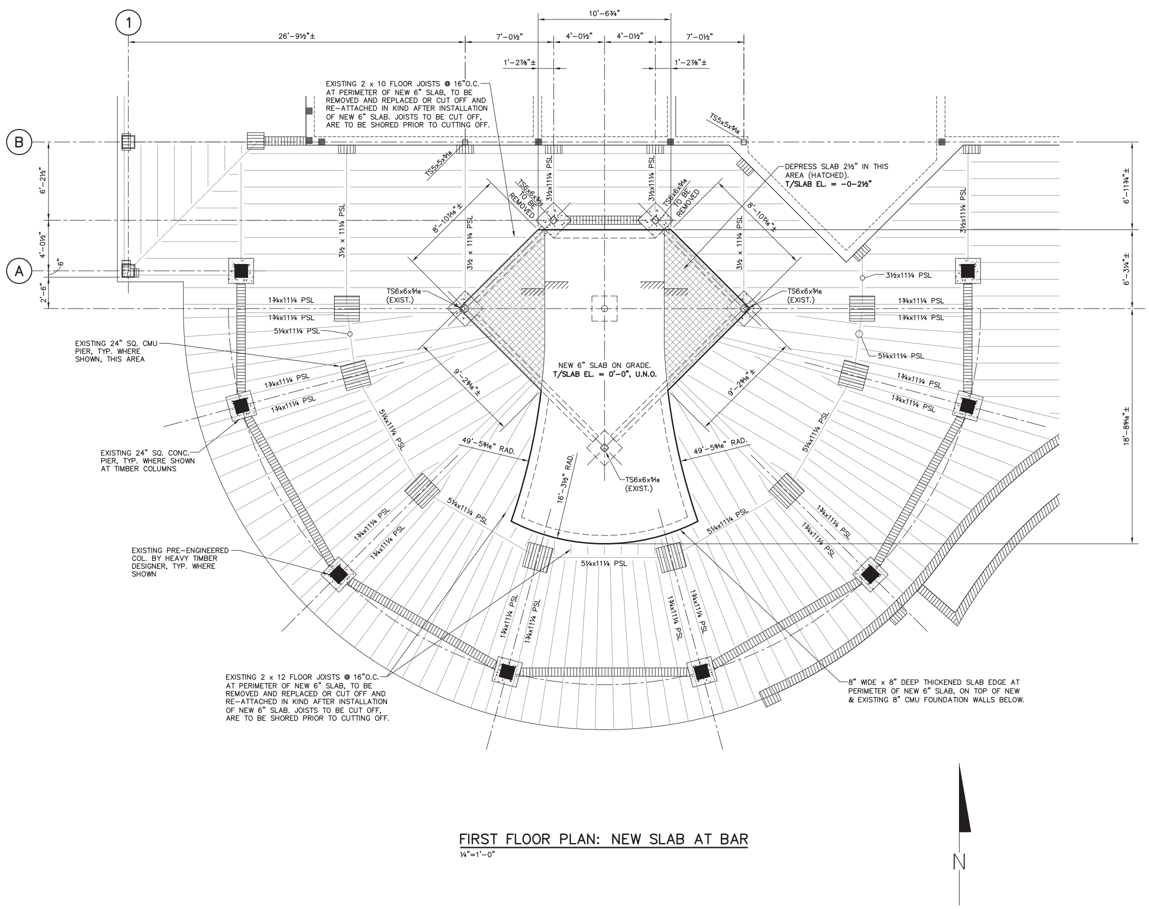
revisions
rev no. | description | date

key plan

sheet title
FOUNDATION PLAN - PELICAN'S NEST BAR

sheet number
S301

drawn by: print date:



FIRST FLOOR PLAN: NEW SLAB AT BAR
¼"=1'-0"

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project number 1923

SEABROOK ISLAND CLUB
PELICAN'S NEST BAR RENOVATIONS
SEABROOK ISLAND, SC

seal / signature

phase: **50% CONSTRUCTION DOCUMENTS**
date of issue: **10-07-19**

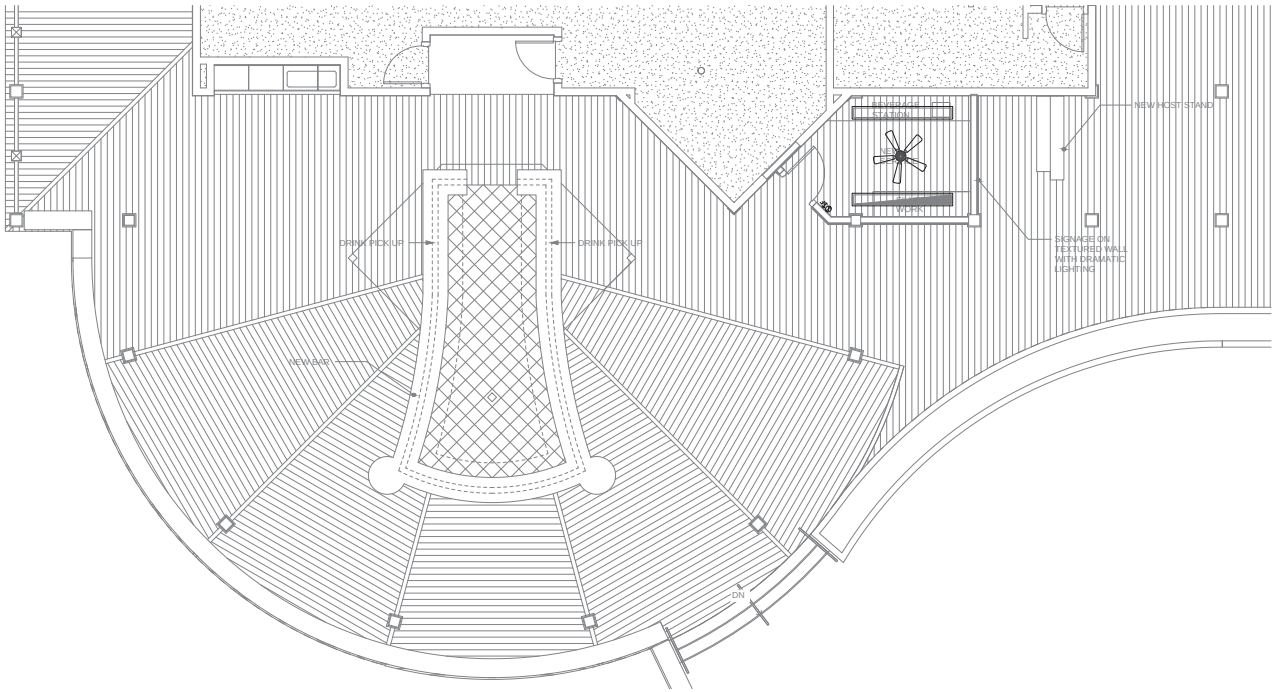
revisions
rev no. | description | date

key plan

sheet title
FIRST FLOOR SLAB PLAN - PELICAN'S NEST BAR

sheet number
S302

drawn by:
print date:



1 E104 LIGHTING RENOVATION PLAN - PELICAN'S NEST BAR

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

NOT FOR CONSTRUCTION

eti ENGINEERING, LLC
5705 Bush River Road
Columbia, SC 29212
803.233.8366 (Phone)
803.233.4371 (Fax)
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Project Manager:
Bryson Tucker PE, v101

ETI #1905-03213

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project number **1923**

SEABROOK ISLAND CLUB

RENOVATIONS - PHASE I

SEABROOK ISLAND, SC

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phase | date of issue

CONSTRUCTION DOCUMENTS **10-07-19**

revisions

rev no.	description	date

key plan

sheet title

LIGHTING RENO. PLAN - PELICAN'S NEST BAR

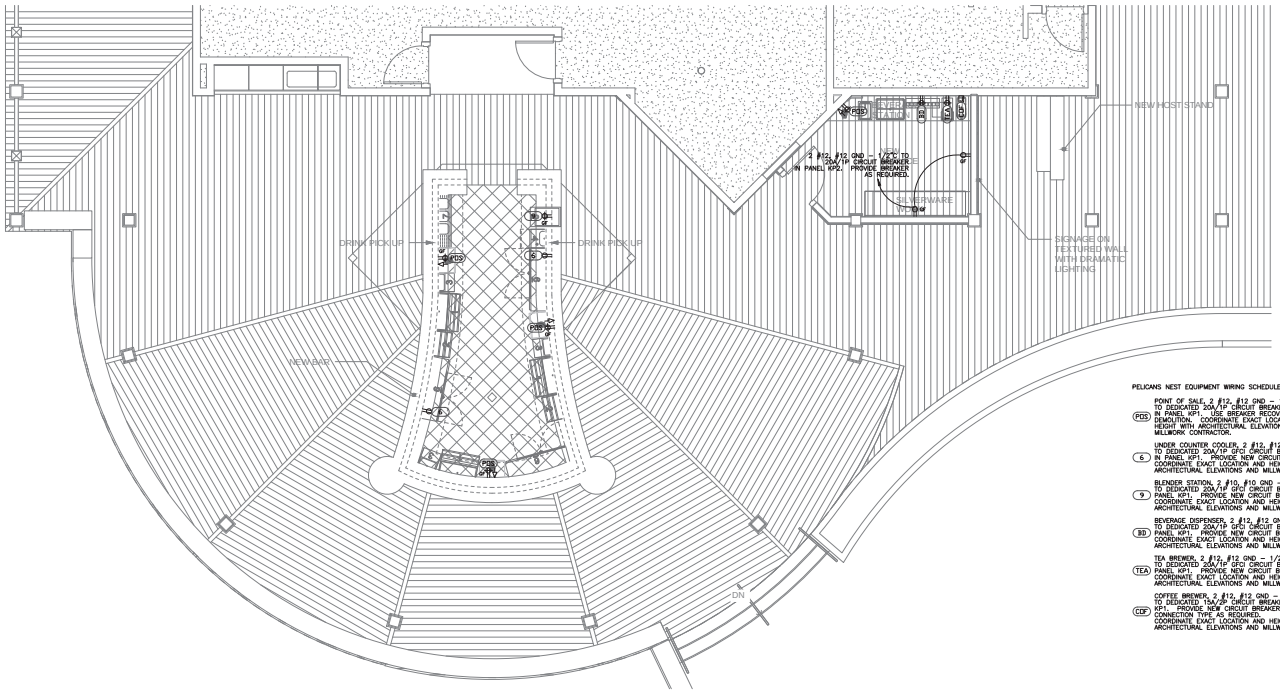
sheet number

E100

drawn by: TMD | print date:

N

PROJECT NORTH | TRUE NORTH



POWER & COMMUNICATIONS RENOVATION PLAN - PELICAN'S NEST BAR

1 / E204

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

PELICANS NEST EQUIPMENT WIRING SCHEDULE:

(POS) POINT OF SALE, 2 #12, #12 GND – 1/2"C TO DEDICATED 20A/1P CIRCUIT BREAKER EACH IN PANEL KP1. USE BREAKER RECOVERED FROM DEMOLITION. COORDINATE EXACT LOCATION AND HEIGHT WITH ARCHITECTURAL ELEVATIONS AND MILLWORK CONTRACTOR.

(6) UNDER COUNTER COOLER, 2 #12, #12 GND – 1/2"C TO DEDICATED 20A/1P GFCI CIRCUIT BREAKER EACH IN PANEL KP1. PROVIDE NEW CIRCUIT BREAKER. COORDINATE EXACT LOCATION AND HEIGHT WITH ARCHITECTURAL ELEVATIONS AND MILLWORK CONTRACTOR.

(9) BLENDER STATION, 2 #10, #10 GND – 3/4"C TO DEDICATED 20A/1P GFCI CIRCUIT BREAKER IN PANEL KP1. PROVIDE NEW CIRCUIT BREAKER. COORDINATE EXACT LOCATION AND HEIGHT WITH ARCHITECTURAL ELEVATIONS AND MILLWORK CONTRACTOR.

(BD) BEVERAGE DISPENSER, 2 #12, #12 GND – 1/2"C TO DEDICATED 20A/1P GFCI CIRCUIT BREAKER IN PANEL KP1. PROVIDE NEW CIRCUIT BREAKER. COORDINATE EXACT LOCATION AND HEIGHT WITH ARCHITECTURAL ELEVATIONS AND MILLWORK CONTRACTOR.

(TEA) TEA BREWER, 2 #12, #12 GND – 1/2"C TO DEDICATED 20A/1P GFCI CIRCUIT BREAKER IN PANEL KP1. PROVIDE NEW CIRCUIT BREAKER. COORDINATE EXACT LOCATION AND HEIGHT WITH ARCHITECTURAL ELEVATIONS AND MILLWORK CONTRACTOR.

(CGF) COFFEE BREWER, 2 #12, #12 GND – 1/2"C, TO DEDICATED 15A/2P CIRCUIT BREAKER IN PANEL KP1. PROVIDE NEW CIRCUIT BREAKER. PROVIDE CONNECTION TYPE AS REQUIRED. COORDINATE EXACT LOCATION AND HEIGHT WITH ARCHITECTURAL ELEVATIONS AND MILLWORK CONTRACTOR.

NOT FOR CONSTRUCTION

N

PROJECT NORTH

TRUE NORTH

eti ENGINEERING, LLC
5755 South Rivers Road
Columbia, SC 29212
803.233.8366 (Phone)
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Project Manager:
Bryson Tucker PE, v101

ETI #1905-01213

SMHa
architecture • planning • interiors

project number **1923**

SEABROOK ISLAND CLUB

RENOVATIONS - PHASE I

SEABROOK ISLAND, SC

seal / signature

phase

date of issue

CONSTRUCTION DOCUMENTS **10-07-19**

revisions

rev no.	description	date

key plan

sheet title

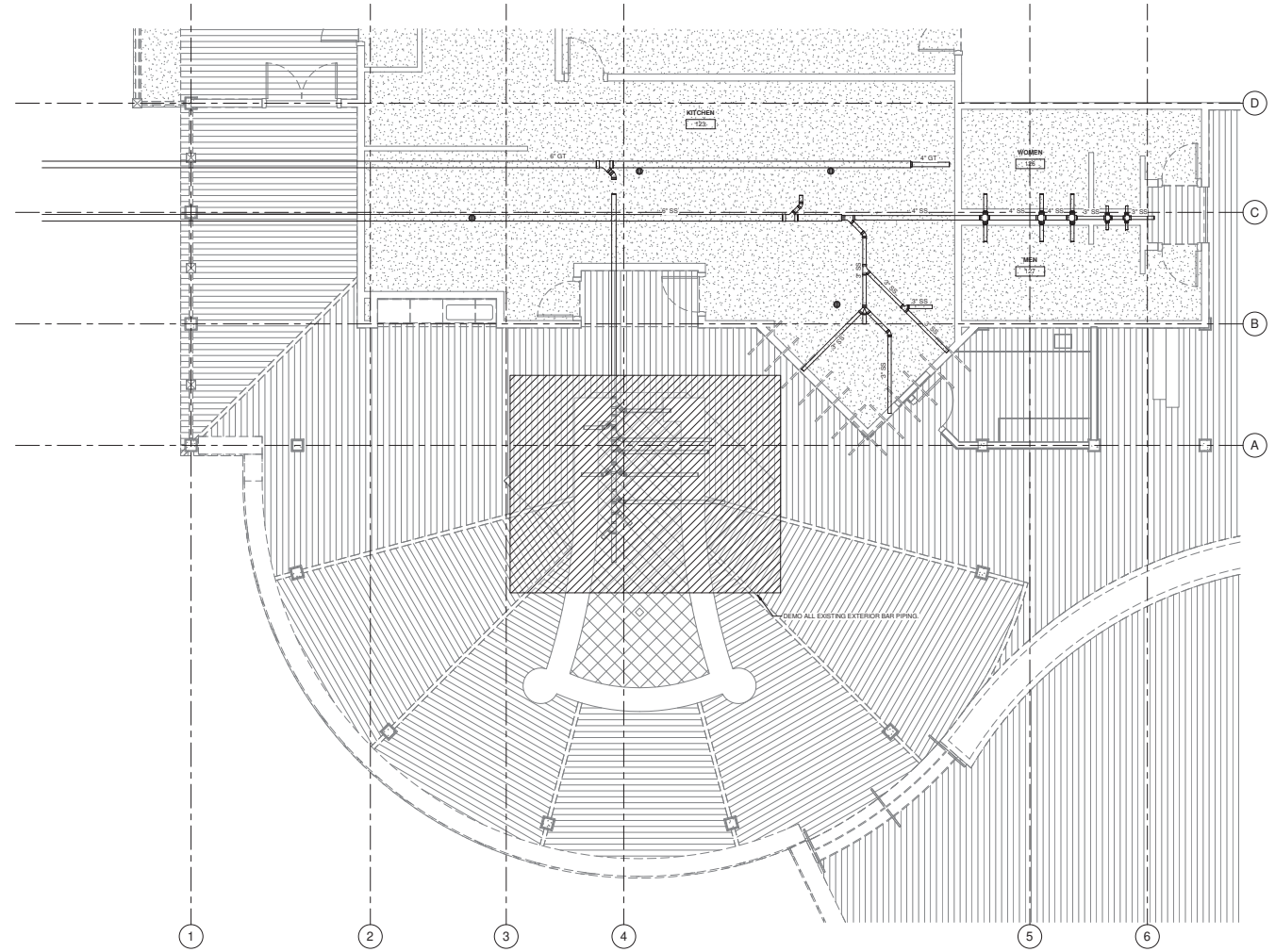
POW. & COMM. RENO. PLAN - PELICAN'S NEST BAR

sheet number

E200

drawn by: TMD

print date:



1 GROUND FLOOR - PLUMBING DEMOLITION - PELICAN'S NEST BAR
1/4" = 1'-0"

MECA
Mechanical Engineering Consulting Associates, Inc.

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Designed:	WAM
Approved:	KLS
Job Number:	149161
Plot Date:	10/07/2019

SMHa
architecture • planning • interiors

project number **1923**

SEABROOK ISLAND CLUB

SEABROOK ISLAND, SC

seal / signature

phase: **REVIEW DOCUMENTS**

date of issue: **10-07-19**

revisions

rev no.	description	date

NOT FOR CONSTRUCTION

key plan

sheet title: **PELICAN'S NEST - GROUND FLOOR - PLUMBING DEMOLITION**

sheet number: **PD101**

drawn by:

print date:

MEMORANDUM

TO: Planning Commission Members

FROM: Joseph M. Cronin, Town Administrator

SUBJECT: Updated Beachfront Management Plan

MEETING DATE: November 6, 2019

The Planning Commission is asked to review and submit a recommendation to Town Council in favor of adopting a five-year update to the town's Comprehensive Beachfront Management Plan.

The towns Beachfront Management Plan was first adopted by Seabrook Island Town Council on November 19, 1992, with the passage of Ord. 1991-06. The town's plan was last updated in late 2014. The updated plan was subsequently adopted by Town Council with the passage of Ord. 2014-05 on December 16, 2014.

Sec. 48-39-350(A)(10) of the SC Code of Laws requires that a local beachfront management plan "must be updated at least every five years in coordination with the [South Carolina Department of Health and Environmental Control] following its approval."

Earlier this year, the town engaged Coastal Science and Engineering (CSE) to assist with an update of the town's plan. CSE has prepared an updated version of the draft plan, which is attached for the Planning Commission's review and recommendation.

Staff Recommendation

As this plan is required by state law to be updated every five years, staff recommends in favor of **APPROVAL** of the ordinance adopting the updated version of the Town of Seabrook Island Comprehensive Beachfront Management Plan.

Upon receiving the Planning Commission's recommendation, the updated plan will be submitted to SIPOA and SCDHEC-OCRM for review and comment. The plan will then go to Town Council for a public hearing, followed by adoption by ordinance.

Respectfully submitted,

Joseph M. Cronin
Town Administrator

SOUTH CAROLINA CODE OF LAWS

Title 48 - Environmental Protection and Conservation

CHAPTER 39

Coastal Tidelands and Wetlands

SECTION 48-39-350. Local comprehensive beach management plan.

(A) The local governments must prepare by July 1, 1991, in coordination with the department, a local comprehensive beach management plan which must be submitted for approval to the department. The local comprehensive beach management plan, at a minimum, must contain all of the following:

(1) an inventory of beach profile data and historic erosion rate data provided by the department for each standard erosion zone and inlet erosion zone under the local jurisdiction;

(2) an inventory of public beach access and attendant parking along with a plan for enhancing public access and parking;

(3) an inventory of all structures located in the area seaward of the setback line;

(4) an inventory of turtle nesting and important habitats of the beach/dune system and a protection and restoration plan if necessary;

(5) a conventional zoning and land use plan consistent with the purposes of this chapter for the area seaward of the setback line;

(6) an analysis of beach erosion control alternatives, including renourishment for the beach under the local government's jurisdiction;

(7) a drainage plan for the area seaward of the setback zone;

(8) a post disaster plan including plans for cleanup, maintaining essential services, protecting public health, emergency building ordinances, and the establishment of priorities, all of which must be consistent with this chapter;

(9) a detailed strategy for achieving the goals of this chapter;

(10) a detailed strategy for achieving the goals of preservation of existing public access and the enhancement of public access to assure full enjoyment of the beach by all residents of this State. The plan must be updated at least every five years in coordination with the department following its approval. The local governments and the department must implement the plan by July 1, 1992.

(B) Notwithstanding the provisions of Section 48-39-340, if a local government fails to act in a timely manner to establish and enforce a local coastal beach management plan, the department must impose and implement the plan or the State Comprehensive Beach Management Plan for the local government. If a local government fails to establish and enforce a local coastal beach management plan, the government automatically loses its eligibility to receive available state-generated or shared revenues designated for beach/dune system protection, preservation, restoration, or enhancement, except as directly applied by the department in its administrative capacities.

HISTORY: 1988 Act No. 634, Section 3; 1990 Act No. 607, Section 3; 1993 Act No. 181, Section 1235; 2018 Act No. 173 (H.4683), Section 7, eff May 3, 2018.

TOWN OF SEABROOK ISLAND

ORDINANCE NO. 2019-12

ADOPTED _____

AN ORDINANCE AMENDING THE TOWN CODE FOR THE TOWN OF SEABROOK ISLAND, SOUTH CAROLINA; CHAPTER 32, WATERWAYS AND BEACHES; ARTICLE II, BEACHFRONT MANAGEMENT; DIVISION I, GENERALLY; SECTION 32-20, PLAN ADOPTED; SO AS TO ADOPT AN UPDATED COMPREHENSIVE BEACH MANAGEMENT PLAN FOR THE TOWN OF SEABROOK ISLAND

WHEREAS, the Town of Seabrook Island's current Beachfront Management Plan was first adopted by Seabrook Island Town Council on November 19, 1992, with the passage of Ord. 1991-06; and

WHEREAS, an updated version of the Town's Beachfront Management Plan was subsequently adopted by Seabrook Island Town Council with the passage of Ord. 2014-05 on December 16, 2014; and

WHEREAS, Section 48-39-350 of the South Carolina Code of Laws requires that beachfront municipalities must update their beachfront management plan at least every five years in accordance with applicable South Carolina laws and regulations; and

WHEREAS, with the assistance of the Town's consultant, Coastal Science and Engineering, the Town's Planning Commission prepared an updated Comprehensive Beach Management Plan, and during a duly called meeting on November 6, 2019, submitted a recommendation to Seabrook Island Town Council in favor of adopting the same; and

WHEREAS, the Town has submitted its updated Comprehensive Beach Management Plan to the South Carolina Department of Health and Environmental Control's Office of Ocean and Coastal Resources Management (SCDHEC–OCRM) for review and comment; and

WHEREAS, the Town Council believes its updated Comprehensive Beach Management Plan to be in the best interest of the Town, in furtherance of its duty to protect the Town's natural resources and in compliance with the provisions of South Carolina Code Section 48-39-350; and

WHEREAS, a draft version of the updated Comprehensive Beach Management Plan was publicized and made available by the Town so that residents and property owners would have an opportunity to review the draft document and provide feedback to the Town; and

WHEREAS, a public hearing on the updated Comprehensive Beach Management plan was duly advertised and held on December 17, 2019, with public comments duly noted;

NOW, THEREFORE, pursuant to the authority granted by the Constitution and the General Assembly of the State of South Carolina, **BE IT ORDAINED BY THE MAYOR AND COUNCIL FOR THE TOWN OF SEABROOK ISLAND**:

SECTION I. Amending Section 32-20 of the Town Code. The Town Code for the Town of Seabrook Island, South Carolina; Chapter 32, Waterways and Beaches; Article II, Beachfront

Management; Division I, Generally; Section 32-20, Plan Adopted; is hereby amended to read as follows:

Section 32-20 – Plan Adopted

~~An~~ The updated Comprehensive Beach Management Plan for the Town of Seabrook Island, ~~a copy of which~~ dated ~~December 16, 2014~~ _____, 2019, is ~~attached [to Ord. No. 2014-05] and made a part hereof~~hereby adopted by reference as if fully set forth herein, ~~is adopted by the Town of Seabrook Island~~ and shall constitute the town's comprehensive beach management plan in accordance with applicable South Carolina Law.

SECTION 2. Severability. If any section, subsection, paragraph, clause, or provision of this ordinance shall be deemed to be unconstitutional, unenforceable, or otherwise invalid by the final decision of a court of competent jurisdiction, it shall be construed to have been the legislative intent of Town Council to pass said ordinance without such unconstitutional provision, and the validity of all remaining sections, subsections, paragraphs, clauses, or provisions of said ordinance shall not be affected thereby. If said ordinance, or any provision thereof, is held by the final decision of a court of competent jurisdiction to be inapplicable to any person, group of persons, property, kind of property, circumstances or set of circumstances, such holding shall not affect the applicability thereof to any other persons, property or circumstances.

SECTION 3. Conflicting Ordinances. All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby modified so as to conform with the provisions of this ordinance.

SECTION 4. Effective Date. This ordinance shall be effective from and after the date of adoption.

SIGNED AND SEALED this _____ day of _____, 2019, having been duly adopted by the Town Council for the Town of Seabrook Island on the _____ day of _____, 2019.

First Reading: November 19, 2019
Public Hearing: December 17, 2019
Second Reading: December 17, 2019

TOWN OF SEABROOK ISLAND

_____
[TBD], Mayor

ATTEST

_____
Faye Allbritton, Town Clerk

TOWN OF SEABROOK ISLAND

ORDINANCE NO. 2019-12

Exhibit A

Town of Seabrook Island Comprehensive Beachfront Management Plan

Town of Seabrook Island
Comprehensive Beach Management Plan

Document Control

Document Status	Approved, December XX, 2019 Town of Seabrook Island - Town Council [Mayor and Council Members TBD]
Current Version	2019 Council Approved
Date	December XX, 2019
Authors	Dr. Tim Kana – *Coastal Science and Engineering* Dr. Patrick Barrineau – *Coastal Science and Engineering* Robert Driscoll – *Town Planning Commission*
Plan Coordination	*Town Of Seabrook Island, Planning Commission* Robert Driscoll – *Chairman* Ken Otstot Wayne Billian Cathy Patterson Stan Ullner
Plan Guide	South Carolina Department of Health and Environmental Control - Office of Ocean and Coastal Resource Management *Interim Guidance for the Development of Local Comprehensive Beach Management Plans - Revised 2012*

Version	Release Date	Reason for Update
1992 Plan	November 19,1992	Initial Plan
2014 Plan Update	December 16, 2014	Plan Update Complete Revision
2019 Plan Update	December XX, 2019	Plan Update Partial Revision

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Cover/Document Version

Initial "Beachfront Management Plan" Adopted by the Town of Seabrook Island
November 19, 1992
Updated December 16, 2014
This Version Adopted by the Town of Seabrook Island
December XX, 2019

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Town of Seabrook Island
Comprehensive Beach Management Plan

Section 1 Introduction

This Town of Seabrook Island Comprehensive Beach Management Plan is the second update to the Town's original Beach Management Plan finalized in 1992. The Plan is consistent with the South Carolina State Beachfront Management Act and was updated in accordance with the guidelines provided by the South Carolina Department of Health and Environmental Control's Office of Ocean and Coastal Resources Management. This Plan update was a joint effort from the Town of Seabrook Island leadership and staff, the Seabrook Island Property Owners Association, the Seabrook Island Club and St. Christopher Camp and Conference Center. The planning process was intended to gain a common understanding of the important elements of the Plan and a commitment by each of the organizations to carry out its responsibilities under the Plan.

Definitions for the above organization names and other terms used throughout this Plan are provided in Section 7.8 "Definitions" of this Plan.

The format and breadth of items included in the Plan are intended to satisfy the requirements of the State Beachfront Management Act. This Act is designed to protect both life and property, protect unique ecological habitats, and preserve the beach for future use by the citizens of South Carolina. The Act then established eight state policies to guide the management of ocean beaches:

a. Protect, preserve, restore, and enhance the beach/dune system;
b. Create a comprehensive, long-range beach management plan and require local beach management plans for the protection, preservation, restoration, and enhancement of the beach/dune system, each promoting wise use of the state's beachfront to include a gradual retreat from the system over a forty-year period;
c. Severely restrict the use of hard erosion control devices and encourage the replacement of hard erosion control devices with soft technologies which will provide for the protection of the shoreline without long-term adverse effects;
d. Encourage the use of erosion-inhibiting techniques which do not adversely impact the long-term well-being of the beach/dune system;
e. Promote carefully planned nourishment as a means of beach preservation and restoration where economically feasible;

f. Preserve existing public access and promote the enhancement of public access for all citizens including the handicapped and encourage the purchase of lands adjacent to the Atlantic Ocean to enhance public access;
g. Involve local governments in long-range comprehensive planning and management of the beach/dune system in which they have a vested interest; and
h. Establish procedures and guidelines for the emergency management of the beach/dune system following a significant storm event.

The Act further directs DHEC OCRM to implement the forty-year retreat policy by designating a Baseline and Setback Line and regulating development of oceanfront properties seaward of the Setback Line. The Act also provides for establishment of a long-range comprehensive State plan for management of the beach and dune resources that is intended to be consistent with and supportive of the individual local beachfront counties and municipalities beach management plans that address local conditions and issues that may not be addressed in the state plan. The specific DHEC OCRM requirements for subjects to be covered in the plan are included in Section 7.6 "Local and Comprehensive Beach Management Plan Requirements." We believe this Seabrook Island Comprehensive Beach Management Plan meets these policies, requirements and objectives.

Beach Replenishment

The most important issue facing the Town of Seabrook Island with respect to its Beach Management Plan are the preservation of a dry sand beach, a robust dune system and the existing revetment through coverage with wind driven sand and vegetation. The details of how this is to be accomplished are described in Section 5 "Erosion Control Management" of this Plan. Here is a summary of those issues.

Seabrook Island encompasses 3.6 miles of ocean and inlet sandy beach between Captain Sams Inlet and the North Edisto River Inlet. It receives sand from Kiawah Island and has a positive sand budget (increasing total sand on the beach) as evidenced by net gains totaling almost 2 million cubic yards (cy) since about 1980. Maintenance of the shoreline is entirely dependent on Captain Sams Inlet and is subject to ongoing encroachment by the migration of the inlet down the coast. The inlet migration results in both erosion and accretion of different sections of the beach that have produced as much as 1,000 feet (ft) of deposition in some areas and hundreds of feet of erosion at other sections.

About 30 percent of the shoreline (6,000 ft) on the upcoast portion of the island is an area that is referred to in Seabrook Island beach studies as a conservation zone over which Captain Sams Inlet is allowed to freely migrate. The US Fish and Wildlife

Service designated most of this same area as a critical habitat for the piping plover. The community has managed inlet migration by: (a) relocating Captain Sams Inlet back to its 1963 position first in 1983 and then again in 1996 and 2015; and, (b) allowing normal migration to resume unimpeded within a desired range between those relocations.

Approximately 22 percent of Seabrook Island's shoreline has accreted or gained upward of 1,000 ft of beach and dune width since 1980, burying seawalls and expanding the Captain Sams Inlet conservation zone. These Beach Trust lands (as described in Section 4.2.4 "Beachfront Development Regulations") beyond the seawall and the property owners' property lines provide a major natural buffer between Seabrook Island's development and the beachfront. Major accumulations of sand along the northern half of Seabrook Island since 1983 have resulted in much greater effective setbacks of oceanfront houses and community infrastructure and provided much added storm protection for those properties.

Approximately 20 percent of Seabrook Island's shoreline (from the North Edisto River Inlet to Renken Point) is situated along a 20-ft-deep marginal channel of the North Edisto River Inlet. There is a natural tendency for this channel to encroach on Seabrook Island. Soon after the island's initial development in the early 1970s, property owners constructed protective seawalls. In the 1980s, sections of the seawall failed or were in danger of catastrophic collapse because of complete erosion of the beach. In 1990, the Property Owners Association sponsored a soft-engineering dredging project that was designed to realign the northern channel seaward and nourish the beach. Since realignment in 1990, this channel remains seaward of its relocated position as a result of periodic mechanical transfers of sand from accretion zones and natural recovery of the beach. No additional dredging has been required since the 1990 channel realignment.

The remainder of Seabrook Island's beach extends one mile along North Edisto River Inlet. It receives sand from the oceanfront and depends on maintenance of a wet-sand beach fronting the seawall at the southeast corner of the island. When the beach is severely eroded along any portion of the seawall adjacent to the Seabrook Island Club facilities, sand moving down the coast and around the point is lost into the channel of the North Edisto River Inlet. This exacerbates erosion along the Edisto River beach front, including the St. Christopher Camp shoreline.

Seabrook Island installed about 8,800 linear feet of seawalls in response to erosion in the 1970s and early 1980s. Since 1983, soft-engineering solutions have been favored and those soft solutions have effectively buried all but 2,500 linear feet of the seawall and added upward of 100 acres of beach/dune habitat. Seabrook Island has

sponsored annual monitoring surveys of the beach through 2018 and uses the resulting data to track sand movement.

Restoration and maintenance of Seabrook Island's beach over the past 35 years have required three relocations of Captain Sams Inlet and one realignment of the northern channel of North Edisto River Inlet. In addition, there have been ~10 small-scale beach maintenance events between 1982 and 2019 involving a cumulative total of about 1.5 million cubic yards of sand taken from beach sections that have been accreting (adding) sand and transferring it down the coast to erosion hot spots. The net result has been the addition of over 50 acres of beachfront lands seaward of the seawall. Almost all of Seabrook Island's oceanfront buildings are positioned landward of the OCRM Setback Line with only five structures that are not beach access boardwalks seaward of that Setback Line.

Seabrook Island requires a shorefront management strategy that differs from other South Carolina beaches because of the dynamics of Captain Sams Inlet and North Edisto River Inlet. The Property Owners Association has funded and implemented a three-part plan for beach maintenance (a detailed description of this three-part plan can be found in Section 5 "Erosion Control Management"):

> Maintain a 6,000-ft shoreline inlet conservation zone over which Captain Sams Inlet and its associated shoals are allowed to migrate.
>
> Relocate Captain Sams Inlet to its approximate 1963 position at the furthest point up the coast every 15–20 years.
>
> Transfer sand periodically from areas of rapid accretion to erosion hot spots, thereby maintaining an uninterrupted flow of sand down the coast and around the southern point of Seabrook Island.

Three decades of beach surveys, which track sand movement along Seabrook Island, confirm that each part of the strategy is critical. In the event that any or all of these strategies cannot be effectively implemented, the ultimate backup plan is to allow the beach to retreat no farther than the existing revetment or seawall.

All beach management activities at Seabrook Island have been funded by the Property Owners Association through assessment of its members. Community expenditures to date total about $8 million in 2019 dollars for all soft-engineering solutions to beach erosion. Prorated over the 12 thousand feet of developed shoreline and the 35-year period since initial beach restoration efforts began, the expenditures have averaged about $225,000 per year or $20 per foot of shoreline per year. Compared to most beachfront communities, this is a very modest investment. A common

measurement of beach management costs is how it compares to the values of the beachfront properties, which for Seabrook Island has been about 0.1% of those property values.

Threatened and Endangered Species Critical Habitat

The Town's beach management approach is also beneficial to the piping plover, a threatened species with Seabrook Island as one of its federally designated critical habitats. The piping plover is a species preferring an ephemeral unvegetated habitat. Each time Captain Sams Inlet has been relocated, it has allowed new beaches, ponds, and sheltered mud flats to form and has helped to maintain the sparsely vegetated character of the conservation zone that is Seabrook Island's piping plover habitat. A description of the Town's wildlife protection plans is included in Section 2.4. "Natural Resource and Ecological Habitats" of this Plan.

In early July of 2014, the US Fish and Wildlife Service (USFWS) designated Seabrook Island as a critical habitat for the loggerhead sea turtle. Maintenance of a robust beach along the entirety of the island's coastline, consistent with the island beach replenishment plan, is essential to the continued success of nesting here by this important threatened species. The specifics of any new USFWS requirements applicable on Seabrook Island's beaches as a result of the critical habitat designation will be addressed as they are issued. Most, if not all of what we expect to be required, is already a part of our current operations and future plans. A more detailed discussion of the loggerhead sea turtle and Seabrook Island's nesting habitat is provided in Section 2.4 "Turtle Nesting" below.

Plan Approvals and Maintenance

This Plan has been adopted locally by the involved organizations and submitted to the State of South Carolina DHEC OCRM for review and approval. Upon State approval, the Plan will then become a part of the State Beachfront Management Plan. The Beachfront Management Act calls for updating the Plan every five years in coordination with DHEC OCRM. Accordingly, the Town of Seabrook Island will schedule that update process for completion no later than the fourth quarter of 2019.

Plan Summary

a. The Plan provides a detailed discussion of the history and success of Seabrook Island's soft-engineering beach replenishment strategy. The Seabrook Island Property Owners Association with the full support of the Town of Seabrook Island has a specific plan and schedule to implement the beach replenishment strategy. One of the objectives of this replenishment strategy is to maintain a dry sand beach along the entire Seabrook Island beachfront for the benefit of

the beach users and wildlife, particularly the nesting loggerhead sea turtles. We believe this beach replenishment strategy is consistent with the State's policies and objectives of the State Beachfront Management Act. If we are unable to implement some or all of the strategy, the alternative is to maintain the existing revetment or seawall as the last line of defense against erosion of the Island's oceanfront and riverfront. This very important part of our Plan is as described above and in Section 5 "Erosion Control Management" of this Plan.

b. The Plan calls for a continuation of a beach access system for Seabrook Island residents and authorized guests that includes twelve access points that are well marked and well maintained by the Property Owners Association.

c. Seabrook Island's Turtle Patrol organization provides support to nesting loggerhead sea turtles that come to our island. New nests are identified/located, sampled, protected from predators and regularly maintained and monitored. Tracking of the number of nests and the success rate of hatchlings leaving the nest for the ocean indicates this effort has paid off with significant improvements in those success rates.

d. This Plan update has confirmed that Seabrook Island's general zoning and land use plan is consistent with the purposes of the Beach Management Act and thoroughly protects the area seaward of the Setback Line from unwanted development. With the exception of the Seabrook Island Club facility and St. Christopher Camp, all of the beach fronting properties are zoned for residential use and no added commercial activities along the beachfront are anticipated or intended.

e. Seabrook Island is blessed with significant access to ponds and marsh areas that provide storm water drainage to all of the roads and interior properties. The only drainage going directly into the ocean across the beaches comes from the immediately adjacent properties. With a primarily porous sand area adjoining the beach there is little water even reaching the beach. In the process of updating the Plan, we have not identified any changes in drainage strategy that are contemplated or needed.

f. The Comprehensive Emergency Plan for the Town of Seabrook Island was last updated May 6, 2019. That plan includes provisions for necessary evacuations, rescue of any distressed residents, maintenance of essential services, protection of public health, emergency procedures for removal of refuse and rebuilding of homes and other structures and any damaged roads. Additionally, it establishes priorities for any needed recovery and includes provisions coordinating recovery efforts with the Seabrook Island Club and the

Property Owners Association. Where applicable, these provisions extend to the beaches of Seabrook Island.

Section 1.1 Purpose

The purpose of this Plan update is to define how the Town and the Property Owners association will manage the beaches in accordance with the South Carolina Beach Management Act while providing access and preserving its wildlife environment, its critical habitats and recreational value for residents and visitors. Also, the Plan update process provided a platform for gaining support from the affected organizations (Town, Property Owners Association, Seabrook Island Club and St. Christopher Camp and Conference Center) for the provisions of the Plan

Section 1.2 History of Plan Approvals and Revisions

The initial Beachfront Management Plan for the Town of Seabrook Island was approved and adopted by the Town Council on November 21, 1992. This 2019 update is the second revision to that plan and was initiated by the Town Council with a request to the Town Planning Commission to begin the planning process in early 2019.

The Plan update was developed under the leadership of the Planning Commission and the work of a number of the island's staffs and volunteer residents with expertise in the local flora, fauna, beach recreation and beach maintenance issues. The most important beach replenishment plan provisions were developed with the assistance of Coastal Science & Engineering Inc. (CSE), the firm that has prepared beach restoration plans and monitored the shoreline of Seabrook Island for the past 35 years. CSE prepared the replenishment strategy as described in Section 5 "Erosion Control Management" of this Plan.

The approval process for this Plan update started with the Town of Seabrook Island Planning Commission, which reviewed the draft document and recommended in favor of its adoption on November 6, 2019. The document was then posted for public review and comment in early November 2019. The Property Owners Association Board approved a resolution in favor of the Plan's adoption during its [Date TBD] board meeting. The Seabrook Island Town Council formally adopted the Plan on December 17, 2019, following a public hearing held on the same date. Revisions to the Plan were made to accommodate recommendations from each of the approving [should this be reviewing?] organizations, as well as comments received from the public.

Jessica Boynton, the Coastal Services Project Manager, from the South Carolina Department of Health and Environmental Control's Office of Ocean and Coastal

Resources Management provided review, direction, and advice throughout the process.

Section 1.3 Overview of Municipality/History of Beach Management Approaches

The Town of Seabrook Island was formed in 1987 upon a vote of a majority of its residents. The Town is made up of a large portion of Seabrook Island that is bordered on: (a) the east and south by the ocean; (b) the south and west by the Edisto River; (c) the west and north by Bohicket Creek up to the northeastern edge of the Bohicket Marina; and then, (d) across an uneven line back to the ocean. Map 2.1 "Town of Seabrook Island" graphically depicts these Town borders. All of the beachfront property within the Town is inside the Property Owners' gate. The Town and the Property Owners Association each have specific responsibilities with respect to the beach area. Some of those responsibilities are as follows:

Responsibilities of the Property Owners Association:

Funds, manages and implements beach replenishment projects.

Provides, supervises and maintains the beach access points and access parking including boardwalks/walkways, handicap access and official vehicle access (maintenance, security, emergency and turtle patrol).

Provides and maintains the island roads that are necessary to reach the beach access points.

Issues fire permits for residents and visitors to build fires at the beach and educates those seeking permits on the rules to be followed in setting and extinguishing fires.

Assists the Town in communicating beach management messages like the turtle friendly "turn out the lights" campaign and preparing signage for display at the beach entrances describing the beach rules and educating visitors on the local wildlife.

Often acts as the first point of contact for residents and visitors with beach issues. Where applicable, notifies the appropriate agency (fire, police, rescue/ambulance or Town) for assistance.

Responsibilities of the Town of Seabrook Island:

Preparation, adoption and update of the Town Beach Management Plan.

Proper signage and enforcement of the Town Code and its beach related provisions as listed in Section 7.5 “Laws and Ordinances, Rules and Regulations” of this Plan.

Provision of beach patrol services during peak months when usage of the beach is typically the highest. Beach patrol services generally run from the beginning of April through the end of September. The town currently contracts with a third-party provider for beach patrol services. All beach patrol officers possess an open water lifeguard certification from the U.S. Lifesaving Association. They also receive extensive first aid training, including cardio-pulmonary resuscitation (CPR) and the use of automated external defibrillators (AED's). Members of beach patrol render a variety of services to beachgoers, including: first aid assistance, water rescue, swim assistance, boat assistance, treatment of jellyfish and other stings, reuniting lost children with their families, and providing general information to the public. Several beach patrol employees have also been deputized by the town as a code enforcement officers. Under the terms of the contract, at least one code enforcement officer must be on the beach at all times when beach patrol is present. Code enforcement officers are authorized to issue citations for any violation of the town’s beach ordinance.

No changes to the above responsibilities are anticipated.

Section 1.4 Current Beach Management Issues

The Town of Seabrook Island beach management issues are not unlike those of other South Carolina beach communities. Here is a summary of the important areas identified in our beach management planning process:

a. Like many other beach municipalities, beach erosion is the most important issue to address. Without restating the detailed description of our island’s erosion concerns and planned solutions that are fully described in detail in Section 5 “Erosion Control Management” of this Plan, the issue can be simply described as follows: (a) as long as the Captain Sams Inlet on the north shore of the island remains in a well-defined band of migration, the natural flow of sand down from Kiawah Island will maintain and even accrete sand along the Island shore; (b) if the inlet migrates too far south (west), much of the dry sand beach and dunes will be lost to erosion; (c) occasional relocation of the inlet is a proven solution to Seabrook Island’s sand erosion; and, (d) some sand scraping from areas of excess sand accretion on the island shoreline may be required to supplement the natural sand migration from Kiawah Island.

b. Providing beach access is an important part of how we manage the island's beaches. Our conclusion from the process of developing this Plan update is that the current number and placement of access points are sufficient. Continued monitoring of the accessibility of emergency and maintenance vehicles onto the beach at Boardwalk #1 will be required to try to prevent erosion changes from blocking beach entry. Similarly, handicap access will need to be monitored so that repair of erosion damage may be made where required.

c. There are three vehicle beach access points on the island. One is adjacent to Boardwalk #1 with a locked gate accessible only by those authorized to drive on the beach. This access leads to the ocean side of the island beaches but requires a 4-wheel drive vehicle to safely reach the entire ocean-fronting beach. The primary emergency access for the Edisto River area is through St. Christopher Camp. While this access point is not a public one, St. Christopher Camp has consented to its use in emergency situations. As with the other vehicle entrances, a 4-wheel drive vehicle may be required. The secondary river-fronting beach access point is on the north end of the Pelican Watch Villas property and is accessible through a locked gate that is to be used only in the event of an emergency and only by authorized personnel. As a part of this Plan update, the Town and Property Owners Association have agreed to use the Property Owners 4-wheel drive security vehicles to help where the normal emergency vehicles cannot properly reach the required areas. The Town also has 4-wheel drive vehicle capability that can be used in situations where lead-time to reach the incident is acceptable.

d. Some of the residents and visitors using the beaches may not be aware of the Town Code and Property Owners Association rules dealing with use of the beach. Additional signage listing the more important beach rules of both the Property Owners Association and the Town and enforcement alternatives is under consideration.

e. Over time there have been concerns expressed over dogs being allowed off leash on the beaches. Over the years, the Town has listened to concerns from all sides on this issue and has attempted to balance the interests of those involved. Following receipt of a citizen petition in February 2019, the Town Council engaged representatives from a variety of interests to conduct a comprehensive review and update of the Town's beach rules for pets ordinance. On September 24, 2019, the Seabrook Island Town Council unanimously adopted amendments to its ordinance. Beginning October 24, 2019, the beaches of the Town will be divided into three zones:

Restricted Area: The restricted area begins at a line extending from Boardwalk #1 (Community Center Boardwalk) to the Atlantic Ocean and continues in a northeasterly direction to Captain Sams Inlet. Within the restricted area, no pets shall be allowed at any time, whether on or off a leash. The purpose of this zone is primarily to restrict the presence of dogs in the critical habitats for shorebirds and strand-feeding dolphins, and to accommodate the gradual migration of Captain Sams Inlet over time. The restricted area also acts as a de facto designated swimming area where beachgoers may enjoy the beach without the presence of dogs, whether on or off a leash.

Limited Restriction Area: The limited restriction area begins approximately 300 yards northwest of a line extending from Boardwalk #9 (Pelican Watch Boardwalk) to the Edisto River and continues in a northwesterly direction to Privateer Creek. Within the limited restriction area, pets must be on a leash at all times. The purpose of this zone is to ensure that dogs are effectively restrained in areas most commonly used by youth campers at the St. Christopher Camp and Conference Center. The limited restriction area also acts as a designated location where owners and their dogs may use and enjoy the beach while on a leash, but without the presence of off-leash dogs.

General Beach Area: In all other areas of the beach, the following seasonal rules shall apply:

Peak Season (April 1 – September 30): Pets must be on a leash between the hours of 10:00 am and 5:00 pm, which is typically when the highest concentration of beachgoers are present on the beach. At all other times, pets may be off a leash, provided they remain effectively controlled while on the beach;

Off-Peak Season (October 1 – March 31): Pets may be off a leash at all times, provided they remain effectively controlled while on the beach.

This balanced approach allows for dog owners to enjoy and exercise their pets on the beach, while protecting sensitive areas and respecting the wishes of users who may be concerned about dogs on the beach. The specific Town Code provisions for dog owners are provided in Section 7.5 “Laws and Ordinances/Rules and Regulations” of this Plan.

f. An issue on many beaches around the country, for both the human visitors and the loggerhead sea turtles, is holes that beachgoers dig on the beach. If the holes are not filled in by the people digging them, they may constitute a

potential danger for beach goers and the loggerhead turtles. The Property Owners Association beach rules require filling of any sand holes when leaving the beach. Enforcement of this rule requires continued attention and added signage to remind users of the applicable rules and added signage is under consideration.

g. Distribution and adequacy of parking is always a concern for support of beach access. As beach usage patterns shift with the amount of dry sand beach available along the coastline, parking needs will correspondingly change. The Property Owners Association has agreed to permit overflow parking on designated grass areas off of the road surface. The number of bicycle racks has been increased to encourage this alternate mode of transportation and the parking load is expected to be better balanced after the Captain Sams Inlet is relocated and the Boardwalk #1 beaches are replenished and become more hospitable to visitors.

h. The designation of the Seabrook Island beaches as a critical habitat for the loggerhead sea turtle by the US Fish and Wildlife Service in July 2014 is an important issue as well. We believe the current strategies of: (1) a strong and very active Turtle Patrol organization; (2) the applicable Town ordinances and rules and regulations of the Property Owners Association with respect to the use of the beach; (3) the island "lights out" campaign; (4) extensive resident and Island visitor education programs by the Turtle Patrol and, (5) a sound beach replenishment plan that is sensitive to both nesting turtles and emerging hatchlings, are consistent with the federal critical habitat strategies. If and when state and federal agencies provide relevant guidance, action by the Town or the Property Owners may be required. Section 4.2.2 "Turtle Nesting" of this Plan describes our process for support of loggerhead sea turtles.

Section 2. Inventory of Existing Conditions

Section 2.1 General Characteristics of the Beach

Seabrook Island is a two-mile long barrier island with another approximately 1-mile-long sandy shoreline extending along the North Edisto River inlet. The Island's maximum length of about 3.6 miles occurs when Captain Sams Inlet is positioned near the Kiawah Seabrook Town line across the Kiawah Spit. The Island is bounded on the northeast by the Kiawah River and Captain Sams Inlet, on the southwest by the Edisto River and on the north by Bohicket Creek. Seabrook Island is about 20 miles southwest of the Charleston Harbor. Figure 2.1a depicts the Town's borders as well as parcel boundaries.

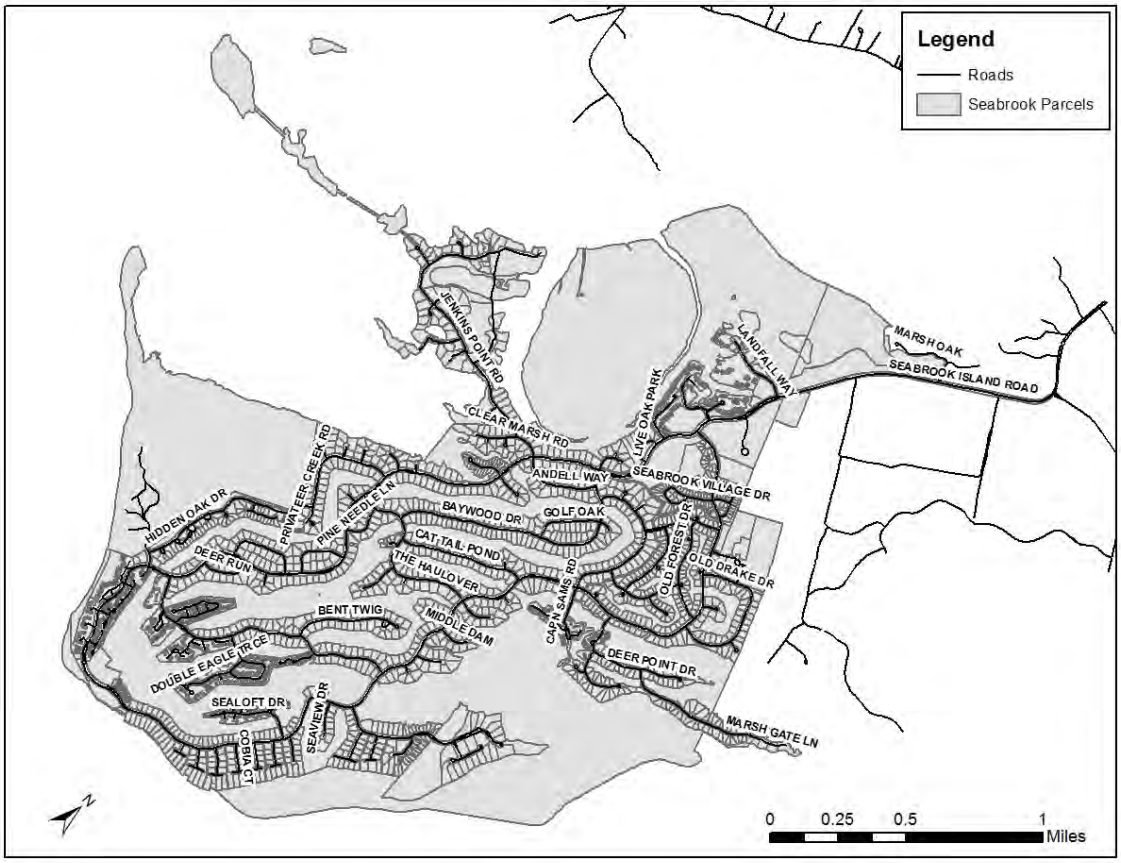


Figure 2.1a Town of Seabrook Island

The Seabrook Island beaches are composed of well-sorted, fine to very fine sands from the Stono and Kiawah Rivers. Some areas, generally on the lower coast portion of the Island, have a dry sand beach that varies from narrow areas that are a few yards wide to areas with widths of 100 yards or more. These dry sand beaches are along the Edisto River shore and between the Seabrook Island Club Facilities and Renken Point. At the time of this BMP update (2019), we are early in the Captain Sams Inlet down coast migration cycle, following the most recent inlet relocation project in June 2015. Down coast areas around the previous inlet position are still adjusting to the change with some eroding areas along North Beach now in an accretion cycle. Portions of the northern section of Seabrook's beach exhibit a dune system up to 300 yards wide or more. The dry sand beaches on the Edisto River depend on maintaining a sand bridge around the southwest point of the island and proper location of Captain Sams Inlet to provide the flow of sand down the coast to feed that bridge and maintain the river front beach. The changes in the profile of the various parts of Seabrook Island's beaches are described in great detail in Section 5 "Erosion Control Management" of this Plan.

Tides in the vicinity of Seabrook Island have a mean tide range of about 5 feet. Waves along the shoreline tend to be relatively small due to protection from the south by Deveaux Bank and from the north and east from an almost continuous partially submerged sandbar. These small and low energy waves are a key component of sand movement depositing sand that is released from the Kiawah and Stono Rivers on a steepening beachfront. The magnitude of these deposits and how they are distributed is highly variable.

The process by which the beaches of Seabrook Island are accreted and eroded are very complex and Section 5 "Erosion Control Management" of this Plan describes this process in detail. In summary, sand generally flows down the coast from Kiawah Island and the resulting shape of Seabrook Island's beaches is dependent on the position of Captain Sams Inlet and the adequacy of the sand bridge around the south corner of the island.

2.1.1 General Land Use Patterns

Seabrook Island is primarily a residential community and, given the location and the Island's amenities, it includes a large number of retired and seasonal residents. The resulting land uses are primarily residential and then, in support of the residents and visitors, recreational. Section 2.3 "Beachfront Developments and Zoning" describes the various zones in some detail. They are summarized as: (a) single family; (b) multi family; (c) recreational (Seabrook Island Club golf, tennis, horse stables and swimming); and, (d) conservation (primarily marsh area). Much of the Island is already developed, so no major changes in land use are planned or anticipated. A map of the Island's zones is provided in Section 7.1 "Beach Management Overlays."

A part of the logic that leads us to avoid major changes in the Island's land use strategy is that the makeup of the population of the Island is reasonably stable. With a stable population mix and modest growth rates, the usage rate of the Island's beaches is not expected to dramatically change. Paddle boarding, kite surfing and other recreational activities may become more important factors necessitating changes in beach rules over time but those must be addressed as they are identified. With that in mind, there are no specific plans for rules or other changes in the Plan. In support of this conclusion, below is a summary of the Town population makeup.

Demographic statistics of Table 2.1a derived from the US Census Bureau describe the makeup of the local population and provide some insight into the trends in anticipated land use patterns. These statistics represent only those who self-reported as full time residents at the time of the census, and would not include property owners who have primary residences elsewhere or the many vacationers who greatly expand the population, mostly in the summer months.

The Town of Seabrook Island is over half female as with almost all US communities, particularly those with about half of the residents being over 65 years of age. This has been the case now for nearly two decades, according to US Census Bureau Data collected in 2000, 2010, and 2017. The 65-and-older population of Seabrook Island has grown since the 2010 census, and moreso since 2000, while the other two population classes described in the Table have decreased in proportion over the same time period. This demographic trend is reflected in many American communities at present, and significant changes in this population mix are not anticipated. Additionally, the lack of proximity to schools and major employment opportunities suggests populations will remain stable with little changes to the rate of change for any particular group.

Town of Seabrook Island Population Statistics							
	2017		2010 Census		2000 Census		% Change,
	#	%	#	%	#	%	2010 to 2017
Total Population	1,689	100%	1,714	100%	1,250	100%	-1.5%
By Sex							
Male	805	47.7%	839	48.9%	591	47.3%	-4.1%
Female	884	52.3%	875	51.1%	659	52.7%	1.0%
By Age							
0 to 18	49	2.9%	72	4.2%	37	3.0%	-31.9%
19 to 64	644	38.1%	782	45.6%	698	55.8%	-17.6%
65 and older	996	59.0%	860	50.2%	515	41.2%	15.8%

Table 2.1. Demographic statistics on the population of the Town of Seabrook Island, with sub-populations divided by sex and age. There has been a decrease in the number of legal minors (e.g. under 18 years of age) on Seabrook Island, but the total population and proportion of males and females has remained relatively constant since the 2000 census.

Many Island visitors are relatives of residents who have second homes on Seabrook Island, while some are also independent vacationers. There are no data available on the demographics of these groups, but we have no reason to believe that their inclusion within Table 2.1 and our projections would create meaningful changes in land use or the popularity of the Seabrook Island beaches. Again, without significant changes in the makeup of the residents and probably only an increase in number of Island visitors, but not a shift in how they use the beaches, major beach management changes are probably not required.

2.2.1 Beach Uses

Seabrook Island beaches are broadly used by the Town's residents and vacationers for activities including the following:

a. Walking on the beach for exercise as well as enjoyment of wildlife and scenery is the most prevalent beach use, and typically occurs all day.

b. Dog walking provides the above benefits, as well as an opportunity to exercise and socialize pets.
c. More passive recreational activities like sun bathing, reading, and building sand castles are popular as well.
d. Swimming is always popular, so long as the water is warm enough.
e. Beach cycling on fat-tire bikes is a popular activity when the weather permits.
f. Surf fishing attracts some visitors to the beaches and inlets.
g. Surfing, kayaking, canoeing, paddle boarding, wind surfing and kite surfing all continue growing in importance as recreational activities.
h. Horseback riding to, from, and along the beach is a regular activity that must be organized, coordinated and led by the Seabrook Island Club equestrian staff.
i. Bird watching often complements beach walks.
j. Sailing is occasionally observed with small vessels that can be carried to the water from one of the beach access points, directly from St. Christopher Camp, a private residence, or an inland waterway dock.

While there is some variation in where along the shore these activities are most popular, walkers use the entire beach span while sunbathing and swimming tend to concentrate closer to the access points and where parking is available. Beach width is also a significant factor in how the activities are distributed, and has affected some of the recreational activities along the East Beach area where erosion has encroached upon wax myrtles and created a narrower beach than along adjacent shorelines at Capt. Sams Inlet and near St. Christopher Camp.

2.2.2 Benefits and Values of the Beach

The beaches of Seabrook Island are a major draw for people relocating here, people establishing vacation homes here and those vacationing here. The many recreational activities listed in Section 2.2.1 above, the simple beauty of the beach and the variety of wildlife to be seen are factors in what makes our Island a “paradise” for many of us. With all of this in mind, a portion of every category of commercial activity inside of the Property Owners Association security gate is supported by the draw of the beach. Outside of a small clothing and sundries shop and golf and tennis pro shops at the Seabrook Island Club there are no retail outlets in this area. The Club has restaurant facilities whose business is stimulated by beach visitors. Landfall Way and Bohicket Marina, within the Town of Seabrook Island, but outside of the Property Owners Association gate, have restaurants, retail establishments, offices, marina facilities and beauty shops that indirectly benefit from the residents and visitors attracted by the beach.

All forms of maintenance and support for the homes of Seabrook Island could also be, in part, attributable to the attraction the beach provides for those living and visiting

here. Landscape maintenance, house painting, HVAC or heating/cooling repair, pest control, cleaning services, appliance repair are just some of the categories of this economic activity.

The resale value of homes on Seabrook Island are supported and clearly enhanced by the attractiveness of our access to the ocean

Probably the most direct economic activities that can be attributed to the beach are Town licensing of rental property owners and the revenue those owners receive from renting their homes. The Club (restaurant, sundries shop golf, tennis and stables) and Property Owners Association revenues (Lake House fees) from vacationers might also qualify as being beach related economic activity.

Specific dollar figures for these economic activities are not readily available and precise judgments on how to apportion these amounts between beach related activities and other factors are not easily established. The attraction of the beach is a central consideration for almost all residents and visitors to the Island. Separating the beach from the other motivations for being here is probably not a fruitful pursuit.

Section 2.3. Beachfront Developments and Zoning

The Town of Seabrook Island is primarily an already developed residential and resort community with appropriate zoning for those purposes. There are Town zones other than for single family and multiple family residences and commercial recreational properties but they do not alter the basic residential/resort nature of the community. Other than continued conversions of a small number of single-family vacant properties into conservation use we do not anticipate significant changes in Town zoning and specifically no changes impacting the beaches are planned or expected. Similarly, other than filling in the few remaining single family dwelling zoned properties adjacent to the beach, there are no anticipated developments along the beach. A detail map of the Town zones is included in Section 7.1 “Beach Management Overlays” of this Plan.

Table 2.2 below lists the various Town zone categories and how they relate to beach use and beach management.

Table 2.2 Land Use/Zone Category	
Land Use Zone Category	**Use/Beach Implications**
Agricultural – Conservation District (AGC)	The purpose of this district is to protect and conserve wetlands and other sensitive environmental areas. Uses are restricted to open air recreation and erosion control devices.
Agriculture-General District (AG)	The purpose of this district is to promote agriculture as a primary use and to accommodate limited, low-density, single-family residential development as a secondary use. It is anticipated that a change in zoning designation to Planned Development (PD) will be necessary for any substantial, non-agricultural development of property in this district. Permitted uses include public and private recreation facilities, general agriculture, and accessory uses.
Single-Family Residential (SR)	The purpose of this district is to provide for quiet, low-density residential neighborhoods, discourage unwarranted encroachment by prohibiting commercial uses, and to prohibit other uses which would interfere with the development or continuation of single-family uses. Additionally, this district is intended to discourage nonconforming uses as well as traffic on minor streets.
Planned Development district (PDD)	A PDD is a tract of land initially zoned agricultural-general (AG) which is at least five (5) acres in area. It must be under single, corporation, firm, partnership, or association ownership and planned and developed as an integral unit. The purpose of the PDD is to provide for the development of planned or residential communities that may incorporate residential dwellings and certain limited commercial and office uses designed to serve the inhabitants of the district.
Commercial-Retail / Office District (CRO)	Uses within this district are limited to retail trade and professional services.
Light Industrial-Service & Maintenance District (LI)	Uses within this district are strictly limited to the housing of amenity equipment and its repair, cleaning, maintenance and laundering services; the siting and operation of wastewater treatment facilities, and storage and office areas attached to the above-referenced uses.
Government Property	None of this zone is adjacent to the beach and it is made up of the footprints of the Town Hall and the Town's Utility Commission facility.

2.3.1 Beachfront Structural Inventory

A table listing all of the structures seaward of the Setback Line is included in Section 7.2 “Structure Inventory Table” as Table 7.2. This table includes tax map numbers, distance to the Setback Line and Baseline and an indication of where there is an erosion control structure included.

The Baseline and Setback Line are established by the State as described in Section 4.1.2 “Beachfront Setback Area.” There are, of course, set back lines for regulating property development not related to the beach but, for purposes of this Plan, Baseline and Setback Line are meant to be the State established lines along the beach.

The pictures/maps on the following pages show the Seabrook Island structures that are seaward of the Setback Line. The orange lines are the beach access boardwalks that are the responsibility of the Property Owners Association. The pink lines are private beach access points that are used by individual property owners and town home/condominium residents and visitors. These structures are wood walkways, stairways and bridges over the revetment or seawall that lead from the homes, townhouses, condominiums, villas or beach access entry points (and parking areas) to the beach. These beach access structures are consistent with OCRM guidelines for such structures. The double red line indicates the position of the 2017 updated baseline and setback lines designated by OCRM. The blue double line indicates the setback line’s position as of 2012, following the previous delineation. Yellow dots indicate structures seaward of the 2017 setback line.

There are 12 Property Owners Association beach access boardwalks and 34 private accesses that extend beyond the Setback Line and the Baseline. In addition, there are thirty-eight structures that are seaward of the Setback Line. A more detailed description and discussion of these structures is included later in this Section 2.3.1.

Figure 2.3.1 (a) shows the west end of the Island’s beach from the Pelican Watch Villas to the Seabrook Island Club facilities.

Figure 2.3.1 (b) shows the Island’s beach from the Seabrook Island Club facilities to Boardwalk #5 or Renken Point.

Figure 2.3.1 (c) shows north-central portion of the Island’s beach from Boardwalk #5 or Renken Point to Boardwalk # 1b.

Figure 2.3.1 (d) shows northeast end of the Island’s beach from Boardwalk # 1b to Capt. Sams Inlet or North Beach.

FIGURE 2.3.1 (a) West Seabrook Island Beach accesses and structures seaward of the Setback Line

FIGURE 2.3.1 (b) South Beach Seabrook Island beach accesses and structures seaward of the Setback Line

FIGURE 2.3.1 (c) Boardwalk #5 or Renken Point to Boardwalk #1b or North Beach Seabrook Island beach accesses and structures seaward of the Setback Line

FIGURE 2.3.1 (d) Boardwalk #1 to Capt Sams Inlet or North Beach Seabrook Island beach accesses and structures seaward of the Setback Line

There are thirty-eight structures that are not beach access boardwalks that are Seaward of the Setback Line. The vast majority of these (32 of 38) are beach-front dwellings, many of which are located between Renken Point and the Captain Sams Inlet zone. Three are swimming pools, one private and two located at the Beach Club. The remaining three structures are the Beach Club buildings at the southern tip of the Island.

For the previous edition of this plan, written in 2014, there were only five structures located seaward of the OCRM setback line. The newly-drawn lines, proposed in 2017, moved the state setback landward by ~100 feet in the vicinity of the Beach Club and up to ~150 ft in the area around Oyster Catcher Court. According to detailed aerial imagery of Seabrook Island collected in January 2014 and September 2019, only one building has been constructed on the ocean front shoreline over the same time period. This is reflected in the demographic statistics discussed earlier; Seabrook Island is developed to an appropriate degree, and without significant changes in the economic opportunities or property costs in the area significant population changes are not to be expected. By extension, this means new construction should be relatively limited compared to other locations around the Lowcountry experiencing rapid growth and sprawl.

Because the thirty-eight structures seaward of the setback line were already in place before the line was moved landward, they are not in direct violation of any statute prohibiting development within this area. That being said, some future repairs or renovation projects on these properties may be affected by OCRM regulations.

Section 2.4. Natural Resource and Ecological Habitats

Seabrook Island is typical of South Carolina barrier islands in that it is characterized by a beach and dune ridge system. Where wave energy is low or virtually nonexistent, the island is surrounded by tidal marsh. Navigable waters occur on the Atlantic and North Edisto River sides of the island, providing access to the island at various beach points. On the north and northeast margins of the island, Captain Sams Inlet and the Kiawah River provide limited access for kayaks, canoes or other small boats without motors. The Town Code prohibits landing of any motored craft on the island anywhere on the beach seaward of the mean high-water mark, except in the case of emergency. Prior to its development, the Island was dominated by a maritime forest ecosystem, and much of the island still reflects the characteristics of that ecosystem. The live oak trees have never been logged.

Seabrook Island contains significant saltwater wetlands, maritime forest, maritime shrub thicket, dune fields and sand beaches. Additionally, there are small, isolated freshwater wetlands. These interlocking and interacting habitats provide for a variety

of plant and animal species. Ecologically, barrier islands such as Seabrook Island are comprised of habitats that are characterized to varying degrees by instability.

The **maritime forest** exhibits the greatest stability. The tree canopy is dominated by southern live oak (*Quercus virginiana*), laurel oak (*Q. laurifolia*), southern magnolia (*Magnolia grandiflora*), and loblolly pine (*Pinus taeda*). Conspicuous understory plants include sabal palmetto (*Sabal palmetto*), southern red cedar (*Juniperus silicicola*), and yaupon holly (*Ilex vomitoria*) among others. The maritime forest forms the relatively stable core of Seabrook Island that has endured over long periods of time (decades through centuries). One can view the maritime shrub thickets, saltwater wetlands, dune fields, and sand beaches as being progressively less stable over time.

Because of their high mobility, the more conspicuous animals that occupy the maritime forest can also be found in the maritime shrub thicket and to some extent the dune fields. These include whitetail deer (*Odocoileus virginianus*), raccoons (*Procyon lotor*), grey fox (*Urocyon cinereoargenteus*), grey squirrel (*Sciurus carolinensis*), bobcat (*Felis rufus*) and coyote *(Canis latrans).* Other species occur with less frequency. Birds are conspicuous inhabitants of all habitats. An exhaustive list of species is beyond the scope of this Beach Management Plan. For example there have been approximately 170 species of birds seen (including rare sightings) on Seabrook Island. The Property Owners website has an extensive list of the mammals, birds, reptiles, amphibians, arachnids, and insects that can be found on Seabrook Island in all of these habitats. This list can be viewed on https://www.associationvoice.com/Page/15432~190050/SEABROOK-WILDLIFE) under the “Resources” tab by selecting “Wildlife Resources”.

Marsh margins, back dune areas, and road margins along properties that are not heavily landscaped are dominated by **maritime shrub ticket**. Dominant plants here include wax myrtle (southern bayberry) (*Myrica cerifera*), southern red cedar (*Juniperus silicicola*), and the sea myrtle or groundsel-tree (*Baccharis spp.*). Other, less common, species form an important part of the plant community here. In addition to the animal species listed under the maritime forest, the Virginia opossum (*Didelphis virginiana*) is a common inhabitant seen throughout the island.

The **saltwater wetlands** are dominated by salt marsh cordgrass (*Spartina alterniflora*). Black needle rush (*Juncus roemerianus*) grows along the upper reaches of the marsh. Glasswort (*Salicornia virginica*), saltwort (*Batis maritime*), salt meadow hay (*Spartina patens*), and sea ox-eye (*Borrichia frutescens*) are common along the upper margin of the marsh. Marsh rats (*Holochilus sciureus*) and Norway rats (*Rattus norvegicus*) are common mammals found here. One consequence of Seabrook

Island's positive sand budget has been the natural addition of several dozen acres of salt marsh in the Captain Sams Inlet conservation zone.

Because they can build and disappear over very short time spans (a twenty foot high dune can disappear completely in less than a year, even without a heavy storm), **dune fields** are one of the least stable habitats on Seabrook Island. Because the sandy soil drains rapidly, plants here are drought and salt tolerant. Sea oats (*Uniola paniculata*) have widely branching roots that extend deep into the sand, providing some stability. Other conspicuous species include bitter panicgrass (*Panicum amarum*), American beachgrass (*Ammophila*), silver-leaf croton (*Croton punctatus*), dune prickly-pear (*Opuntia pusilla*), beach morning-glory (*Ipomoea stolonifera*), dune sandbur (*Cenchrus tribuloides*, mound-lily yucca (*Yucca gloriosa*), and seashore elder (*Iva imbricate*) among others.

The least stable habitat is the **dry sand beach**. Harsh conditions (constantly shifting soil, salt exposure, etc.) preclude plants from growing here. Beaches are in a constant state of flux. There are invertebrate animals that live on and in the beach and these serve as food for shorebirds and crabs. The sand beach above the spring high tide level is important for nesting loggerhead sea turtles. See Section 2.4.2 "Turtle Nesting" of this Plan for more detailed information.

All relevant entities (The Town of Seabrook Island, the Seabrook Island Property Owners Association, The Seabrook Island Club, and St. Christopher Camp and Conference Center) share the goal of the protection and conservation of coastal natural resources, ecological habitats and native wildlife.

2.4.1 Threatened and Endangered Species

Several plant and animal species have been designated by either federal or state agencies as endangered or threatened. A number of other species have been identified as being of special concern by the South Carolina Department of Natural Resources (SCDNR) because of threats to habitat and food resources and therefore exhibit restricted or declining populations. These species are, or may be, found along the beachfront of Seabrook Island.

Endangered, Threatened and Protected Species Regularly or Potentially Found Along the Shoreline of Seabrook Island, South Carolina.

Species	Scientific Name	Federal Status *	State Status*	Habitat
Loggerhead Sea Turtle	*Caretta caretta*	T	T	Beach
Leatherback Sea Turtle	*Dermochelys coriacea*	E	-	Beach

TABLE 2.4.1a. Federal- and state-protected species with habitat on Seabrook Island.

Species	Scientific Name	Federal Status *	State Status*	Habitat
Island Glass Lizard	*Ophisaurus compressus*	-	SC	Dunes
Brown Pelican	*Pelecanus occidentalis*	-	SC	Beach
Wilson's Plover	*Charadrius wilsonia*	-	T	Beach/Dunes
Piping Plover	*Charadrius melodus*	T	T	Beach/Dunes
Red Knot	*Calidris canutus*	C	-	Beach
Least Tern	*Sternula antillarum*	-	T	Beach/Dunes
Seabeach Amaranth	*Amaranthus pumilus*	T	T	Dunes
Sweetgrass	*Muhlenbergia filipes*	-	SC	Dunes
Beach Morning Glory	*Ipomoea pes-caprae*	-	SC	Dunes
*E = endangered, T = threatened, SC = species of concern, C = candidate for listing				

The leatherback sea turtle, the only federally endangered species on the above list, is occasionally seen in the vicinity of Seabrook Island. It rarely if ever nests here with longtime Turtle Patrol members reporting no known nests in the last 20 years. There are three federally threatened species. Of these, only the loggerhead sea turtle nests here (see Section 2.4.2 "Turtle Nesting"). Suitable habitat for the seabeach amaranth occurs here but it is not known to exist here at this time. The SCDNR and the USFWS regularly monitor Seabrook Island for the presence of this plant. The Wilson's plover and least tern are listed as state threatened. Both species have nested here before (approximately 11-23 years ago) but, extensive erosion at the northeast end of the island has removed suitable nesting habitat and they no longer nest here. The island glass lizard, brown pelican, sweetgrass, and beach morning glory are state listed as being of special concern. The red knot is a candidate for federal listing as a threatened species. The SCDNR and the USFWS regularly monitor the presence and abundance of these species.

The diamondback terrapin occurs on Seabrook Island. It is believed to be the only turtle that lives exclusively in brackish water. Although they live in tidal marshes, estuaries, and lagoons, diamondback terrapins prefer to nest on sand beaches where their nests are susceptible to predation by crabs, raccoons, canids (foxes, coyotes, dogs), and others. Diamondback terrapin populations are rapidly declining, mostly due to habitat destruction in other parts of the State (e.g., road construction) and nest predation, so they are of concern to many naturalists. Their population is not monitored on Seabrook Island.

The US Fish and Wild Life Service has designated Seabrook Island as a critical habitat for the piping plover. The northeast end of the island, from Boardwalk #1, is part of the critical habitat for the piping plover. The piping plover do not nest on Seabrook Island but do overwinter here to rest and feed. These birds move around between

Seabrook Island, Kiawah Island and Deveaux Bank. The Town of Seabrook Island advises visitors and residents not to approach any shorebirds or to allow their dogs to chase them. Since the 2015 relocation of Captain Sams Inlet as described in Section 5 "Erosion Control Management" of this Plan, there is somewhat expanded habitat for the piping plover on our island and volunteers from the SC Department of Natural Resources, the Town of Seabrook Island, and the Seabrook Island Property Owners Association are monitoring this important population. The SCDNR monitoring is scheduled to continue through 2024-2025.

The Town of Seabrook Island Code restricts access to dogs either on leash or off leash across the entire beach. Restriction do differ, depending on precise location along the beach. In the area to the northwest of the Pelican Watch boardwalk, beginning 300 yards northwest of Boardwalk #9, dogs are permitted only on leashes. Between Boardwalk #1 and Captain Sams Inlet, no domestic pets are permitted. In between these locations, dogs are permitted off leash under supervision of their owners at certain times. This is intended to leave a piping plover habitat without any dogs in the northeast corner of the island.

As described elsewhere in this Plan, enforcement of the Town of Seabrook Island Ordinances is through the Town's code enforcement officers who are authorized to issue a summons for violations. These enforcement officers are made aware of illegal activities through personal observation, from the Property Owners' security staff and through complaints from local property owners who are very sensitive to the preservation objectives that the code is intended to achieve. The Property Owners Association security staff enforces its rules and regulations relating to the beach above the high watermark. The Town's contracted beach patrol enforces its beach ordinances. In both cases, enforcement is supplemented by notice from local residents who may observe activities constituting violations of either SIPOA rules or the Town's ordinances.

2.4.2 Turtle Nesting

The Seabrook Island Turtle Patrol has been active for more than ~30 years. There are over 100 patrol members supporting the main objective of maximizing the successful migration of turtle hatchlings from the nest into the ocean. Members work under a permit from the State of South Carolina Department of Natural Resources or DNR. Each patrol member is registered with the State and given special training and certifications by DNR to probe for fresh turtle eggs, and relocate nests that are at high risk of being destroyed.

Seabrook Island participates in a University of Georgia sea turtle DNA study initiated in 2009. The Turtle Patrol collects a single egg from each nest to be used in identifying

the mother. Many insights into the nesting habits of Loggerhead sea turtles have been gained through this study.

The process used to protect and optimize the sea turtle nests is as follows:

a. Teams patrol the beach each morning from early May until the end of nesting season in October. Any incidence of turtle "crawls" (identified by a distinctive track pattern on the beach) are reported to the state.
b. All observed crawls are carefully probed by a thoroughly trained "first responder".
c. The nest is either left in situ or moved to a safe location where the eggs are reburied.
d. Once the nest is secure, whether left in situ or moved, a wire covering prevents small mammals from stealing the eggs (aka *predation*). The nest is then marked with a sign cautioning the public.
e. DNA samples are collected and submitted to DNR as well as the UGA study.
f. The GPS coordinates of the final nest location and, where applicable, the original nest location are recorded.

Patrol members inspect previously found and protected nests to identify any changes including ghost crab holes and fire ants, along with any evidence of hatchling activity such as emergence. When there is evidence hatchlings have left the nest, a follow-up inspection is scheduled to determine statistics such as hatch success and hatchling mortality rates. These statistics are then reported to DNR.

Table 2.4.2a and Figure 2.4.2a depict trends and statistics for the Seabrook Island sea turtle nests. Rates of hatch success typically fall around 65-75%, although in 2014 there was an abnormally high rate of success. This may be related to the relatively small number of nests inventoried that year (32, in most years somewhere around 60 or 70 nests). Additionally, the number of nests inventoried by the patrol has increased steadily in the Turtle Patrol's foundation in 1990 (Figure 2.4.2). The 3-year moving average, shown as a red curve in Figure 2.4.2a, confirms total nest counts have increased from around 15-20 per year in the 1990s to ~60 per year during the 2010s. The most recent year (2019) saw the highest number of nests to date (90), which parallels record nest numbers throughout South Carolina and neighboring states.

TABLE 2.4.2a. Sea turtle nest inventory data, Seabrook Island, 2010-2019. These data have been collected by the Turtle Patrol on Seabrook Island since 1991, and are available online at: http://www.seaturtle.org/nestdb/index.shtml?view_beach=55&year=2019

Seabrook Island Turtle Patrol Sea Turtle Nest Inventory Data										
	2019	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**
Total Nests	90	31	70	60	75	32	74	73	38	68
Total Nests Inventoried	90	31	70	60	74	32	74	72	34	63
Eggs to Date	10,090	3,137	8,374	6,544	8,539	3,674	8,318	8,533	4,303	7,235
Emerged Hatchlings	6,252	1,820	5,508	4,601	5,590	2,252	6,011	6,038	2,652	4,138
Eggs/Nest Average	117.9	102	118.6	109.5	116.4	114.5	115	118.9	117.4	105.7
Average Incubation Days	53.2	53.1	54.8	51.9	53.5	54.5	54	56.3	54.8	51.9
Total % Hatch Success	68.3	66.2	70.9	76	71	80.6	77.1	78	70.6	67.3
Total % Live Hatchlings	60.7	59.3	64.8	70.2	65.5	62.1	71.9	71	63.9	60.7
Nests Relocated	52	25	57	48	47	28	61	54	25	51

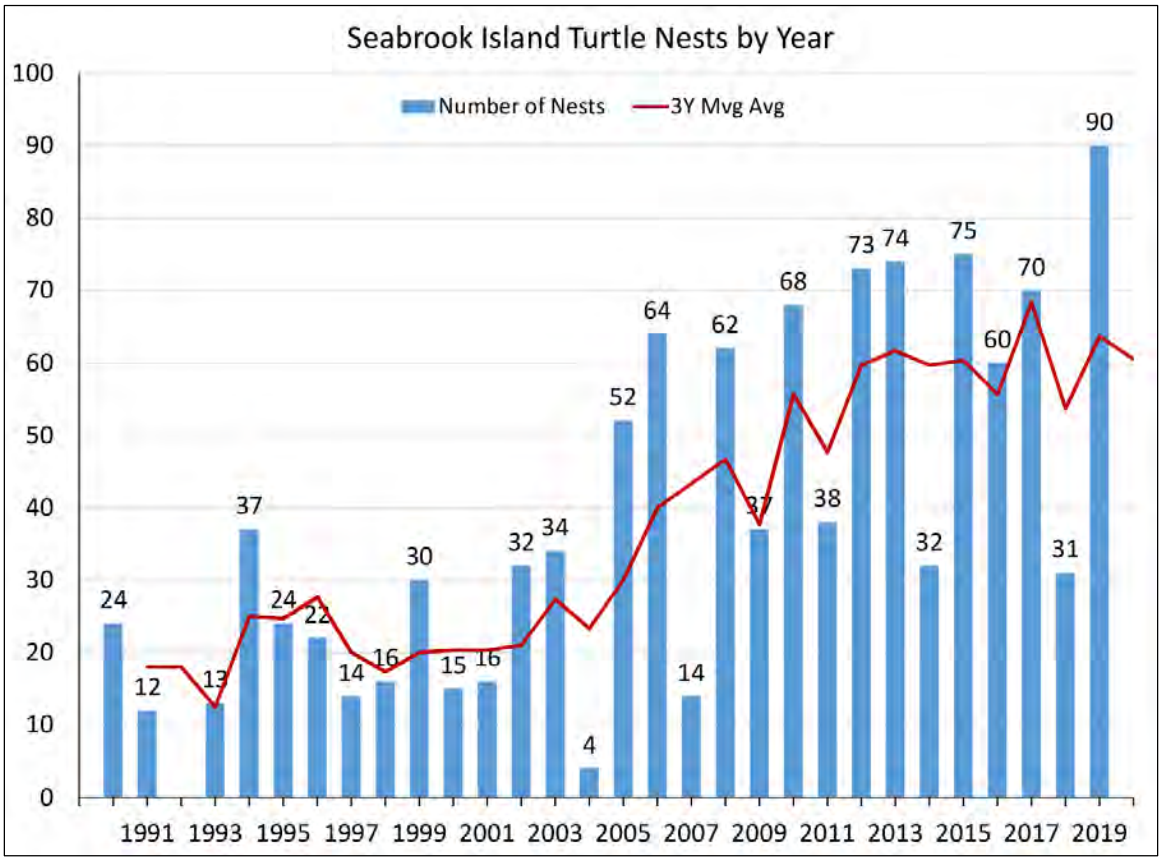


FIGURE 2.4.2a. Sea turtle nest counts, Seabrook Island, 1990 to 2019. Nest counts have steadily increased over the past ~30 years, likely because of the efforts of local and state-wide organizations to promote conservation and efforts such as lights-off ordinances designed to protect endangered turtle species.

Section 2.5. Existing Beach Access and Map

The Seabrook Island Property Owners portion of the Town of Seabrook Island, which includes all the Town's beaches, was planned and designed as a private residential and resort community. To this end, beach access is intended to include access by Seabrook Island property owners and their invited guests. The property through which these resident/visitor beach access points go is deeded to the Property Owners Association. They manage, monitor, and maintain these access boardwalks.

The Island's designers understood the importance of beach access and included 12 separate access points for island residents and visitors to easily reach the entire beach along the ocean as well as the area up to the St. Christopher Camp property line along the Edisto River front. All of the access points except #7, #8 and #9 have wood boardwalks starting at the parking areas and leading to the beach. For the three without complete wood walkways, the surfaces are concrete and/or sandy/dirt paths that are well maintained with good drainage and are not prone to be muddy. Where they are needed, the boardwalks include stairways and ramps over the seawalls/revetments. Parking was also included in the design to accommodate the likely visitor load at each entry point and larger parking lot facilities were included both at Boardwalk #1 and, as a part of and shared by the Seabrook Island Club main facilities, supporting boardwalks #8 and #9. For the access points without parking lots, there are concrete pads for normal parking and overflow parking is permitted on the adjacent grass off of the roadway surface.

The access point entrances include trashcans, dispensers for dog waste bags, clearly visible signs indicating the access point and its identification number and parking spaces as well as overflow parking off of the street on the shoulder grass areas. All of the walkways have bicycle racks making one of the more common arrival modes more practical. These racks were installed to reduce the need for parking facilities and to reduce vehicle traffic on the roads. Table 2.5a "Resident/Visitor and Private Beach Access Points" lists both these resident/visitor beach access points as well as some thirty-four private beach accesses that allow for individual residences, villas or other multifamily projects to access the beach. Some of these private beach accesses have walks connecting with the resident/visitor boardwalks, minimizing the number of paths through the dunes. St. Christopher Camp also has four private beach access points for the use of its visitors. Public bathrooms are available at Boardwalk #1 as well as at the Club facilities between Boardwalks #8 and #9.

Each private access point added subsequent to the Town's incorporation has been approved by the Town, permitted by the county where required and is constructed consistent with the OCRM guidelines. All of the accesses meet the requirements of being no more than 6 feet wide with no more than a 144 Sq. Ft. pad or landing area

seaward of the Setback Line. All are built entirely of wood to meet the State requirements. The Town considers these accesses to be consistent with the community's needs by: (a) supporting beach use; (b) providing a safe beach path for beach adjacent properties that doesn't require climbing over the revetment; and, (c) reducing parking and foot traffic load on the more public access points. Most properties where this private access approach is practical have already implemented their own access and, if any of the few remaining properties request authorization to add their own access, the Town's policy is to approve those requests provided they meet the State and Town requirements.

All of the island area up the coast from the Boardwalk #1b is fronted by marsh, lakes or ponds that preclude direct access to the beach area from the Island and, therefore, beach access points up the coast from Boardwalk #1 are considered impractical or "not applicable" (as noted in the Table 2.5 "Public and Private Beach Access Points").

Section 2.3.1 "Beachfront Structural Inventory" includes pictures/maps of both the public and private access points. Table 2.5a below (on the next page) lists each of the resident/visitor and private access points. For the resident/visitor access points the local facilities and distances from adjacent public entry points are listed. The numbers of parking spaces are also indicated with available overflow spaces listed in parenthesis. Boardwalks #1, #2, #8 and #9 all have the prerequisite parking and other facilities to match the access point amenities requirements specified by OCRM to be classified as Neighborhood Public Access Parks or Community Access Parks. As a consequence of its beach accesses, the Seabrook Island beaches meet the State's criteria for parking, signage and other amenities in support of beach access from Captain Sams Inlet down around the Edisto River Inlet to St. Christopher Camp.

Table 2.5a
Seabrook Island Beach Management Plan
Resident/Visitor and Private Beach Access Points

Type of Facility	Location (approximate)	Description	Distance to adjacent boardwalks	Facilities
Resident/Visitor			Up/Down the Coast	
"Resident/Visitor Access Point"	Oystercatcher / Ocean Forest Lane	Boardwalk #1B	NA/450 yards	Trash receptacle and clear beach access signage – No parking provided
Neighborhood Resident/Visitor Access Park	Rolling Dune Rd	Boardwalk #1	450 yards/125 yards	Trash receptacle; walkover / boardwalk surface access, signage, on-street parking for 60 vehicles
Neighborhood Resident/Visitor Access Park	Rolling Dune Rd	Boardwalk #2	125 yards/940 yards	Trash receptacle; walkover / boardwalk surface access, signage, on-street parking for 29 vehicles
Resident/Visitor Access Point	3627 Loggerhead Ct	Boardwalk #3A	940 yards/135 yards	Trash receptacle; walkover / boardwalk surface access, signage, on-street parking for 7 (+3) vehicles
Resident/Visitor Access Point	3640 Pompano Ct	Boardwalk #3B	135 yards/130 Yards	Trash receptacle; walkover / boardwalk surface access, signage, on-street parking for 7 (+10) vehicles
Resident/Visitor Access Point	3652 Cobia Ct	Boardwalk #4	130 yards/120 yards	Trash receptacle; walkover / boardwalk surface access, signage, on-street parking for 10 (+8) vehicles
Resident/Visitor Access Point	3718 Bonita Ct	Boardwalk #5	120 yards/125 yards	Trash receptacle; walkover / boardwalk surface access, signage, off-street parking for 8 (+3) vehicles

Table 2.5a **Seabrook Island Beach Management Plan** *Resident/Visitor and Private Beach Access Points*				
Type of Facility	Location (approximate)	Description	Distance to adjacent boardwalks	Facilities
Resident/Visitor Access Point	3738 Amberjack Ct	Boardwalk #6	125 yards/110 yards	Trash receptacle; walkover / boardwalk surface access, signage, off-street parking for 3 (+8) vehicles
Resident/Visitor Access Point	3738 Amberjack Ct	Boardwalk #7	110 yards/550 yards	Trash receptacle; walkover / boardwalk surface access, signage, off-street parking for 4 (+7) vehicles
Community Resident/Visitor Access Park	3756 Seabrook Island Rd	Boardwalk #8	550 yards/425 yards	Trash receptacle; walkover / boardwalk surface access, signage, off-street parking for 90 vehicles
Community Resident/Visitor Access Park	3810 Seabrook Island Rd	Boardwalk #9	425 yards/350 yards	Trash receptacle; walkover / boardwalk surface access, signage, off-street parking for 121 vehicles
Resident/Visitor Access Point	1301 Pelican Watch Villas	Boardwalk #12	350 yards/350 yards	Trash receptacle; walkover / boardwalk surface access, signage, off-street parking for 4 (+6) vehicles
Private				
Private Access Point	1301 Seabrook Island Rd	Pelican Watch Villas	Not Applicable	None
Private Access Point	1301 Seabrook Island Rd	Pelican Watch Villas	Not Applicable	None
Private Access Point	338 Seabrook Island Rd	Beach Club Villas	Not Applicable	None
Private Access Point	332 Seabrook Island Rd	Beach Club Villas	Not Applicable	None
Private Access Point	328 Seabrook Island Rd	Beach Club Villas	Not Applicable	None
Private Access Point	3804 Seabrook Island Rd	Dolphin Point Villas	Not Applicable	None

Table 2.5a
Seabrook Island Beach Management Plan
Resident/Visitor and Private Beach Access Points

Type of Facility	Location (approximate)	Description	Distance to adjacent boardwalks	Facilities
Private Access Point	3752 Seabrook Island Rd	Private Residence	Not Applicable	None
Private Access Point	3748 Seabrook Island Rd	Private Residence	Not Applicable	None
Private Access Point	3736 Seabrook Island Rd	Private Residence	Not Applicable	None
Private Access Point	3732 Seabrook Island Rd	Private Residence	Not Applicable	None
Private Access Point	3728 Seabrook Island Rd	Private Residence	Not Applicable	None
Private Access Point	3724 Seabrook Island Rd	Private Residence	Not Applicable	None
Private Access Point	3755 Beach Ct	Private Residence	Not Applicable	None
Private Access Point	3759 Beach Ct	Private Residence	Not Applicable	None
Private Access Point	3758 Beach Ct	Private Residence	Not Applicable	None
Private Access Point	3756 Beach Ct	Private Residence	Not Applicable	None
Private Access Point	3743 Amberjack Ct	Private Residence	Not Applicable	None
Private Access Point	3747 Amberjack Ct	Private Residence	Not Applicable	None
Private Access Point	3738 Amberjack Ct	Private Residence	Not Applicable	None
Private Access Point	3715 Bonita Ct (Renken Pt)	Private Residence	Not Applicable	None
Private Access Point	3723 Bonita Ct	Private Residence	Not Applicable	None
Private Access Point	3659 Cobia Ct	Private Residence	Not Applicable	None
Private Access Point	3642 Pompano Ct	Private Residence	Not Applicable	None
Private Access Point	3629 Loggerhead Ct	Private Residence	Not Applicable	None
Private Access Point	3632 Loggerhead Ct	Private Residence	Not Applicable	None

Table 2.5a
Seabrook Island Beach Management Plan
Resident/Visitor and Private Beach Access Points

Type of Facility	Location (approximate)	Description	Distance to adjacent boardwalks	Facilities
Private Access Point	3630 Loggerhead Ct	Private Residence	Not Applicable	None
Private Access Point	3611 Beachcomber Run	Private Residence	Not Applicable	None
Private Access Point	3612 Beachcomber Run	Private Residence	Not Applicable	None
Private Access Point	3610 Beachcomber Run	Private Residence	Not Applicable	None
Private Access Point	2281 Seascape Ct	Private Residence	Not Applicable	None
Private Access Point	2285 Seascape Ct	Private Residence	Not Applicable	None
Private Access Point	2284 Seascape Ct	Private Residence	Not Applicable	None
Private Access Point	2273 Seascape Ct	Private Residence	Not Applicable	None
Private Access Point	2247 Catesbys Bluff Ct	Private Residence	Not Applicable	None

Section 3. Beachfront Drainage Plan

The Town of Seabrook Island is fortunate that its roads, golf courses, private properties and other surfaces that generate storm water runoff into a system of storm drains that empty into marshes and ponds and not onto or across the beaches. Runoffs from the residential lots, the Seabrook Island Club commercial property, and from the St. Christopher Camp facility, where the properties are immediately adjacent to the beach, reach the ocean from the portion of the properties that tilt towards the water. However, as much of this property is made up entirely of a deep sandy base (20+ feet), most of the normal rain runoff is absorbed before it reaches the beach.

All storm water from the roads, parking lots and golf courses on the Island drain away from the beach and into the ponds or marsh area. For the Seabrook Island Club commercial property that is adjacent to the revetment, there are two swimming pools with associated decks and walks, a restaurant and bar with a large wood deck/patio and a special events building with a brick patio that all, at least partially, drain directly into the ocean but which are graded such that even in a major storm, there should not be any beach erosion or pollution from drainage. All wastewater generated on the Island is directed via pumps and/or piping to the Town's wastewater treatment facility.

The Seabrook Island Property Owners Association Storm Drainage Report is included in this Plan in Section 7.7 "Storm Drainage Report." The Association manages drainage for the beachfront areas within the Town.

Section 4. Beach Management and Authorities

Below is a summary of the federal and state agencies that participate in or support the Town of Seabrook Island Beach Management Plan and beach management process.

Federal Agencies

There are six federal agencies that directly affect Seabrook Island beach management.

a. The US Army Corps of Engineers (USACE) is responsible for providing engineering services to the United States and plays a major role in permitting beach renourishment projects including those like our periodic Captain Sams Inlet relocation.

b. The US Fish and Wildlife Service (USFWS) is the federal agency responsible for the protection of federal fish and wildlife species and their habitats, specifically those that are imperiled, threatened, or endangered. This is the agency that declared Seabrook Island as a critical habitat for the loggerhead sea turtle and the piping plover. They support the federal permitting process with expertise to evaluate the impact of planned projects on fish and wildlife.

c. The Federal Emergency Management Agency (FEMA) is part of the Department of Homeland Security and is responsible for reducing the loss of life and property and protecting the United States from hazards, including natural disasters. They provide a wide variety of support functions that are key to disaster preparedness and response.

d. The National Oceanic and Atmospheric Administration (NOAA) is a federal agency housed within the Department of Commerce. The mission of the NOAA is to protect federal trust resources, provide mapping of navigation channels, monitor and forecast weather, monitor coastal dynamics and conditions, and manage the nation's coast. The groups under this service combine to manage all of the staffs that monitor and manage our coastal resources. This includes the National Marine Fisheries Service (NMFS), which oversees NOAA's fisheries and sea turtles while they are in the water, and which designates Essential Fish Habitat under the Magnuson-Stevens Act of 1976 (Amended 2013).

e. The United States Coast Guard (USCG) is the federal agency responsible for protecting the nation's waterways and coastline as part of the Department of Homeland Security. For the Town of Seabrook Island, this group's major support functions are security, water safety and rescue.

f. The United States Geological Survey (USGS) is a federal agency housed within the Department of the Interior. The mission of the USGS is to serve the nation by providing reliable scientific information to describe the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy and mineral resources; and enhance and protect our quality of life. This group provides Seabrook Island with the best scientific information available in support of our disaster planning and recovery activities.

State Agencies

There are four State agencies that are the most critical to the Seabrook Island beach management process:

a. The Department of Health and Environmental Control (DHEC) is the state's health and environmental management agency and houses the Office of Ocean and Coastal Resource Management (OCRM). The DHEC OCRM (formerly known as the South Carolina Coastal Council) is the State's coastal management agency. As such, this State department is Seabrook Island's major interface for all beach management questions and support including this Comprehensive Beach Management Plan. This group plays a major role in reviewing and permitting the beach renourishment projects that are critical to the Town's beach management strategy.

b. The South Carolina Department of Natural Resources (DNR) is the principal advocate for and steward of the State's natural resources. For Seabrook Island, this is the group providing direct support to the island's wildlife preservation efforts.

c. The South Carolina Department of Transportation (DOT) is responsible for planning, constructing and maintaining State roads and bridges, and providing mass transit services in the State. From Seabrook Island's beach management perspective, this agency's most important function is maintaining the evacuation routes to be used in any disaster event that calls for an evacuation.

d. The South Carolina Emergency Management Division (EMD) provides major disaster preparation, response, and recovery assistance. For Seabrook Island a major disaster would include a hurricane, tsunami, tornado, wildfire or earthquake.

Section 4.1 State Authorities

4.1.1 Overview of State Policies (Beachfront Management Act)

The South Carolina, Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management (DHEC-OCRM) is responsible for the management of the state's beaches and coastal areas. In 1988, the State Beachfront Management Act was adopted by the General Assembly. This Act increased the state's authority to manage the coastal zone and beaches.

The Act includes several key legislative findings, including (summarized):

a. the importance of the beach and dune system in protecting life and property from storms, providing significant economic revenue through tourism, providing habitat for important plants and animals, and providing a healthy environment for recreation and improved quality of life of all citizens;

b. unwise development has been sited too close to and has jeopardized the stability of the beach/dune system;
c. the use of armoring in the form of hard erosion control devices such as seawalls, bulkheads, and rip-rap to protect erosion-threatened structures has not proven effective, has given a false sense of security, and in many instances, has increased the vulnerability of beachfront property to damage from wind and waves while contributing to the deterioration and loss of the dry sand beach;
d. inlet and harbor management practices, including the construction of jetties which have not been designed to accommodate the longshore transport of sand, may deprive downdrift beach/dune systems of their natural sand supply;
e. it is in the State's best interest to protect and promote increased public access to beaches for visitors and South Carolina residents alike: and,
f. a coordinated state policy for post-storm management of the beach and dunes did not exist and that a comprehensive beach management plan was needed to prevent unwise development and minimize adverse impacts.

As previously described in Section 1 "Introduction," the Beachfront Management Act then established eight state policies to guide the management of ocean beaches:

a. Protect, preserve, restore, and enhance the beach/dune system;
b. Create a comprehensive, long-range beach management plan and require local beach management plans for the protection, preservation, restoration, and enhancement of the beach/dune system, each promoting wise use of the state's beachfront to include a gradual retreat from the system over a forty-year period;
c. Severely restrict the use of hard erosion control devices and encourage the replacement of hard erosion control devices with soft technologies which will provide for the protection of the shoreline without long-term adverse effects;
d. Encourage the use of erosion-inhibiting techniques which do not adversely impact the long-term well-being of the beach/dune system;
e. Promote carefully planned nourishment as a means of beach preservation and restoration where economically feasible;
f. Preserve existing public access and promote the enhancement of public access for all citizens including the handicapped and encourage the purchase of lands adjacent to the Atlantic Ocean to enhance public access;
g. Involve local governments in long-range comprehensive planning and management of the beach/dune system in which they have a vested interest; and,
h. Establish procedures and guidelines for the emergency management of the beach/dune system following a significant storm event.

DHEC-OCRM is responsible for implementing these policies through a comprehensive management program that includes research and policy development, state and local planning, regulation and enforcement, restoration, and extension and education activities.

4.1.2 Beachfront Setback Area

Sections § 48-39-280 of the Beachfront Management Act, as amended, requires DHEC-OCRM to establish and periodically review (once every eight to ten years) the position of the two lines of beachfront jurisdiction, the Baseline and the Setback Line, as well as the average annual erosion rate for all oceanfront land that is developed or potentially could be developed. The purpose of these jurisdictional lines is to implement § 48-39-280(A) of the statute, which reads as follows:

"A policy of beach preservation is established. The department must implement this policy and utilize the best available scientific and historical data in the implementation. The department must establish a baseline that parallels the shoreline for each standard erosion zone and each inlet erosion zone."

The Baseline is the more seaward line of jurisdiction and is typically located at the crest of the primary sand dune. The Setback Line is the landward line of jurisdiction and is established landward of the Baseline at a distance equal to 40 times the average annual erosion rate, as calculated from the best historical and scientific data, or at a minimum distance of 20 feet landward of the Baseline for stable or accretional beaches.

To establish the Baseline position, the shoreline must first be classified as an inlet zone or a standard zone. Areas that are close to inlets and have non-parallel offshore bathymetric contours and non-parallel historical shoreline positions are classified as inlet zones, while all other areas are classified as standard zones. Inlet zones are further classified as stabilized if jetties, groins, or seawalls are present, or as unstabilized. In unstabilized inlet zones, the Baseline is located at the most landward shoreline position at any time during the past 40 years, unless the best available data indicates the shoreline is unlikely to return to its former position. No other data such as: historical inlet migration; inlet stability; channel and ebb delta changes; sediment bypassing; or sediment budgets indicated other data should be considered for Seabrook Island. This Baseline position was established by reviewing historical aerial photographs and selecting the most landward shoreline position.

In stabilized inlet zones and standard zones, the Baseline is located at the crest of the primary oceanfront sand dune using beach survey data or dune field topographic data such as LiDAR or Light Detection and Ranging. If the shoreline is armored with a seawall or bulkhead and no sand dune exists, then a theoretical dune crest position is calculated from beach survey data.

Setback Area Regulations (summary)

- No new construction is permitted in the setback area, with the exception of wooden walkways not more than six feet wide, wooden decks no larger than 144 square feet, public fishing piers, golf courses, normal landscaping, pools that were located landward of existing functioning erosion control structures, groins, or structures permitted by an OCRM special permit. An OCRM permit is

required for all of the above actions except the construction of wooden walkways.

- Owners may replace habitable structures within the setback area that have been destroyed beyond repair by natural causes after notifying OCRM. The new structure must not exceed the original square footage and can be no further seaward than the original structure.
- No new erosion control devices are allowed in the setback area except to protect a public highway that existed prior to the enactment of the Beachfront Management Act.
- No new pools are allowed in the setback area, unless they are located as landward as possible of an existing, functional erosion control device. Pools that existed prior to 1988 may be repaired or replaced if destroyed beyond repair. The owner must certify that the new pool is located as landward as practical, is no larger than the original pool, and is constructed in such a manner that it cannot act as an erosion control device.

Maps of the Baseline and Setback Lines for the Town of Seabrook Island can be found in Section 7.2 "Structure Inventory Table" of this Plan.

Section 4.2 Local Government and Authorities

The Town of Seabrook Island is a municipality that was incorporated under the laws of the State of South Carolina in 1987. The Seabrook Island Property Owners Association, locally referred to as SIPOA, is a South Carolina non-profit mutual benefit corporation. The Town of Seabrook Island and SIPOA cooperatively manage Seabrook Island's beaches and land adjacent to the Atlantic Ocean and portions of the North Edisto River Inlet.

Here are the general boundaries for beach related responsibilities of the Town, the Property Owners Association as well as for St. Christopher Camp and the Seabrook Island Club that also play a role in beach management.

a. The Town of Seabrook Island is responsible for issues relating to the beach from the high water mark to 1 mile seaward of the low watermark including access by watercraft.
b. The Property Owners Association is responsible for the Beach Trust Properties (as described in Section 4.2.4 "Beachfront Development Regulations") between the property owners' property lines and the high water mark, for all of the island's roads inside the gate and the beach access boardwalks. The Association also has the management and financial responsibility for the beach replenishment projects as described in Section 5 "Erosion Control Management."
c. St. Christopher Camp, as the owner of much of the Island's Edisto River beach front, has an important role in beach management by agreeing to provide

access through their property and use of their beach vehicle access road for emergencies. St. Christopher Camp has deed-covenant-based rights to use the Property Owners' roads for access to their property.

d. The Seabrook Island Club, as another significant beachfront owner, supports beach access adjacent to their Club facilities and shares their parking lots with beach visitors. They also have deed covenant based rights for their members, guests and employees to use the Property Owners Association roads for access to their property.

4.2.1 The Town of Seabrook Island's Comprehensive Plan

The Comprehensive Plan of the Town of Seabrook Island was adopted in 2009 and most recently revised in July 2019. It specifically recognizes that the "ocean and beach front areas" of the island "are critically important to the community." Overall, the Comprehensive Plan seeks to support the community's vision that Seabrook Island is to be:

> *"…a residential community where growth is managed, commercial development activities are limited and the natural environment is preserved, while respecting the rights of individuals and their property."*

In support of this vision, the Town's comprehensive plan articulates multiple goals, including to protect and preserve the island's wetlands, sand dunes, wildlife and trees, and to ensure that future development on the island compliments and enhances the natural beauty and residential character of the community. Similarly, the Seabrook Island Property Owners Association has articulated a goal of protecting Seabrook Island's "pristine beach environment…while providing easy access and accommodations to owners and guests alike."

The full text of the Comprehensive Plan for the Town of Seabrook Island may be viewed at the Town Hall at 2001 Seabrook Island Road.

4.2.2 Hazard Mitigation Plan

The Town of Seabrook Island was among the original signatories to The Charleston Regional Hazard Mitigation Plan, adopting it as an official plan of the Town in 1999. From the inception, the Regional Hazard Mitigation Plan sought to identify and determine appropriate mechanisms to address the various types of hazards facing the Charleston region. See, www.charlestoncounty.org/ Charleston Regional Hazard Mitigation Plan.

4.2.3 Disaster Preparedness and Evacuation Plans

The Town of Seabrook Island, the Seabrook Island Property Owners Association and the Seabrook Island Club have each developed detailed emergency plans. The development of these plans was carefully coordinated to make them complimentary to each other and they include agreements to cooperate in emergencies with detailed and robust preparedness and specific emergency response actions. All three of these plans were developed with the help of Scott Cave of Atlantic Business Continuity Services. They address a wide variety of emergencies including hurricanes, tornados, earthquakes, tsunamis, fires, floods, and other less likely or less impactful situations.

The organizations have agreed to jointly participate in a Disaster Recovery Council, including representatives of the Town, the Property Owners Association, the Seabrook Island Club and St. Christopher Camp. In the event of a disaster, this council will share information and coordinate the response and recovery efforts.

Major components of the Town's and other Island organizations' disaster plans, the Town Code and the associated memoranda of understanding among the Island's responsible entities provide:

a. The organizations have agreed to reasonably coordinate and share their individual assets and facilities for use during an emergency or disaster event. They have agreed to use these assets and facilities during times of emergency for the benefit of "citizens of the Town and all those in need within the Town's municipal limits," consistent with each entity's obligations to its own constituents.
b. The Town has been designated as having primary responsibility to communicate with island residents concerning potential or imminent threats. The Town has the final authority for the content of those communications. All of the organizations have mutually pledged to coordinate message content in communications to their respective constituencies.
c. The Town's Mayor is designated as the official with authority to declare a state of emergency and to order an evacuation of the Town when determined to be appropriate in respect of a disaster event.
d. The Seabrook Island Property Owners Association, which normally has responsibility for security operations for the gated portion of the Town, is authorized to arrange for disaster security services, such as those needed to deny access through the Property Owners Association security gate to all persons not engaged in emergency response.
e. The Town will identify the individuals responsible to make the preliminary damage assessment and establish initial recovery roles of those who are to be the first and second groups of persons to reenter the Island following an evacuation. In addition, the Town is responsible for communicating information

to governmental entities and Island residents.

f. The Town and Property Owners Association have agreed that as a general proposition, the removal of debris from the roadways of private communities is the responsibility of such communities. However, there are occasions where the magnitude of the disaster may compel the involvement of the Town. Following an emergency or disaster, the Town will determine, based on the criteria set forth in the applicable Town ordinance, whether such conditions exist sufficient to warrant removal of all or a portions of the debris from private roadways in the manner set forth in Title 14 of the Town code and will notify the Property Owners Association of its determination.
g. Where applicable, the Town will determine when resident reentry to the island is permitted, how to best communicate information regarding reentry and to coordinate with Charleston County concerning damage inspections.

4.2.4 Beachfront Development Regulations

Beach Trust Property

The original developer of Seabrook Island agreed by recorded protective covenant that it would hold in trust for the benefit of Seabrook Island residents all property lying between the high water marks of the Atlantic Ocean and North Edisto River, and the front property lines of oceanfront property. The Property Owners Association succeeded to the Beach Trust Obligations of the covenant upon assuming ownership of the property. Because of the Association's 1983, 1996, and 2015 projects to relocate Captain Sams Inlet, significant amounts of new beach trust property were created seaward of the 1983 line totaling between 165 and 220 acres of accreted beaches, dunes, washover, lagoons and marsh habitat.

As trustee of this and all other land constituting beach trust property, the Seabrook Island Property Owners Association is enjoined by *protective covenant from ever subdividing, selling or otherwise disposing of that property in any manner that would "permit its use for the erection of any structure whatsoever," absent agreement of contiguous landowners.* In addition, beachfront property owners are prohibited from ever removing or otherwise lowering the elevation of sand dunes or ridges located on beach trust property. Finally, it is unlawful for any person to destroy, cut or trim flora or trees in the beach trust area absent permits from the Town, OCRM and SIPOA. Even with the requisite permits, such trimming is prohibited below 6 feet from ground level.

Development Regulation of Other Property

As part of the Environmental Performance Standards' portion of its 2011 Development Standards Ordinance or DSO, and in recognition of the environmental sensitivity of the island, the Town has expressly agreed to enforce, "to the letter of the law,"

Chapter 39 of the South Carolina Coastal Management Act when considering any construction permit application. Adding to the stringency of this overall position, the Town's DSO also provides that adherence to the minimum setback specified by Chapter 39 for construction within a half mile of the Atlantic Ocean is required, but only if that setback is greater (more landward) than two other alternative construction setbacks that are set forth in the DSO itself. Also, according to the DSO, guidelines of OCRM relating to storm water management must be complied with in zoning, building or other construction permits for Seabrook Island property within a half mile of the Atlantic Ocean. And similarly, prior approval must be sought and obtained from OCRM before seeking approval from the Town for a permit to construct any walkway or stairs seaward of the OCRM forty-year Setback Line if the structure is to exceed six feet in width.

The Environmental Performance Standards (Article 9) portion of the DSO may be found at the Town's website www.townofseabrookisland.org/ Government / Ordinances / Development Standards Ordinance.

4.2.5 Regulations on Beach and Shoreline Protection

As described immediately above and elsewhere in this Plan update, the Town Development Standards Ordinance does not allow new structures seaward of the Setback Line except for beach access walkways. There are thirty-eight existing structures seaward of that Setback Line. These structures were built with the proper permits that were consistent with the State's policy at the time; the setback line has moved landward around the structures since installation. The Town of Seabrook Island does not intend to approve any added structures that do not meet the requirements of the South Carolina Coastal Management Act or its own Development Standards Ordinance. The Town plans, building code and zoning preclude any new development that is not consistent with the South Carolina forty-year retreat policy.

4.2.6 Other Regulations on Beach Management

Further evidencing its view that the "ocean and beach front areas" of the Island "are critically important to the community," the Town of Seabrook Island has enacted an array of other protections for those areas, including: regulating dune alteration, removal and/or fencing; prohibiting removal or destruction of sea oats and other dune vegetation; prohibiting unauthorized overnight use of the beaches; prohibiting unauthorized use of non-official vehicles on the beaches; prohibiting disturbance or otherwise causing harm to the nests of loggerhead sea turtles and the nests of endangered species of birds; excluding domestic animals from the beaches, except dogs on lead or off lead at the specified times in designated areas; prohibiting littering of the beaches; prohibiting negligent or under the influence operation of watercraft; prohibiting the non-emergency launching or retrieval of watercraft from the beaches,

except for sailboats, surfboards, paddleboards, rafts, inner tubes, canoes, kayaks or other similar (non-motorized) vessels; and prohibiting any commercial activity seaward of the State established Setback Line (except for the grandfathered and Town licensed Seabrook Island Club facilities on the south corner of the island).

Unless otherwise specified, violation of any of these restrictions subjects the violator to a fine up to $500, or imprisonment up to 30 days, or both. A copy of the applicable sections of the Town Code, entitled "Beachfront Management," are included in Section 7.5 "Laws and Ordinances/Rules and Regulations" of this Plan.

Section 5.0 Erosion Control Management

This section of the Town of Seabrook Island Comprehensive Beach Management Plan addresses the shoreline history, condition of the beach, long-term erosion rates, and various beach maintenance and shore protection projects implemented by the community and individual property owners. It draws on 40 years of coastal erosion studies and annual beach monitoring surveys dating back to 1978 (Table 5.1).

Seabrook Island is a mixed-energy, mesotidal barrier island (Hayes 1975, 1994) fully under the influence of North Edisto River Inlet and Captain Sams Inlet. Its 18,940-ft-long (~3.6 miles) shoreline* includes:

~5,930-ft-long inlet conservation zone (Captain Sams Inlet migration area) at the updrift end (northeast of OCRM 2575).

~4,085-ft-long developed oceanfront ("North Beach" north of Renken Point—OCRM 2540).

~3,755-ft-long developed shoreline along the "northern marginal" channel of North Edisto River Inlet.

~5,170-ft-long developed shoreline along the main channel of North Edisto River (Fig 5.1a).

Renken Point marks a turn in the shoreline (vicinity of OCRM 2540) between the Kiawah–Seabrook strand beach and two beach segments along North Edisto River Inlet.

OCRM (formerly South Carolina Coastal Council) classified the Seabrook Island shoreline northeast of OCRM monument 2565 (Seabrook Island Beach Monitoring Line 24) as an unstablized inlet zone. The remainder of the island was classified as a

stabilized inlet zone under the Beach Management Act (BMA) of 1988 (amended 1990) (Town of Seabrook 1991) (Fig 5.0b). The latter classification was made due to the presence in 1988 of a continuous line of shore-protection structures (seawalls, revetments, and bulkheads) extending ~8,800 ft from OCRM 2565 (vicinity of the 13th hole of the Seabrook Island Club's Ocean Winds golf course) to Pelican Watch Villas (near OCRM 2505—Line 06).

[*Measured from the 1963, 1983, and 1996 position of Captain Sams Inlet to a point ~2,500 ft west of the Seabrook Island development/St. Christopher Camp border along North Edisto River Inlet (i.e. – between local beach survey lines 1 to 40—CSE 2014, Table 2). The Kiawah–Seabrook boundary is situated ~100 ft north (east) of the 1963 inlet position.]

Section 5.1 Shoreline Change Analysis

Shoreline change along Seabrook Island has been analyzed by Stephen et al (1975), Hayes et al (1979), NOAA-NOS (1983), Anders et al (1990), and Kana and Andrassy (1993). Hayes (1977) demonstrated that Kiawah Island and Seabrook Island are accreting "beach-ridge" barrier islands isolated from adjacent segments of the coast by Stono Inlet and North Edisto River Inlet, two of the largest tidal rivers emptying along the South Carolina coast. The Kiawah-Seabrook beach strand is divided by Captain Sams Inlet, a relatively small, unstable inlet with a history of (south) westerly migration and periodic breaching of the updrift spit on the Kiawah Island side of the Inlet (Hayes et al 1979).

Coastal Erosion Studies

The following table is a catalog of coastal erosion studies and annual beach monitoring surveys that have been implemented at Seabrook Island dating back to 1978.

Table 5.1a *Seabrook Island Coastal Erosion Studies and Annual Beach Monitoring Surveys*
Baca, BJ, and TE Lankford. 1987. Environmental report on the Captain Sams Inlet relocation project (March 1983 to July 1987). Prepared for Seabrook Island POA. Coastal Science & Engineering Inc, Columbia, SC, 32 pp.
Basco, DR. 1993. Review of beach management plans: Seabrook Island, SC. Review Rept., Seabrook Island Property Owners Association; Coastal Engineering Center, Norfolk, VA, 25 pp.
Basco, DR, and GF Oertel. 2007. North Beach shoreline changes and management options. Final Report for Seabrook Island POA. Hollow-Core Reef Enterprises Inc / Beach Consultants Inc, Norfolk, VA, 19 pp.

Table 5.1a *Seabrook Island Coastal Erosion Studies and Annual Beach Monitoring Surveys*
CSE. 1988. Beach surveys along Seabrook Island, South Carolina, through July 1988. Final Report to Seabrook Island POA; Coastal Science & Engineering, Inc. (CSE), Columbia, SC, 31 pp. + appendices.
CSE. 1989. Beach restoration and shore protection alternatives along the south end of Seabrook Island. Feasibility Study for Seabrook Island POA. CSE, Columbia, SC, 38 pp. + appendices.
CSE. 1990. Seabrook Island, South Carolina, beach nourishment project. Survey Report No. 1 for Seabrook Island POA; CSE, Columbia, SC, 41 pp. + appendices.
CSE. 1991. Seabrook Island, South Carolina, beach nourishment project, 1990-1991. Survey Report No. 2 for Seabrook Island POA; CSE, Columbia, SC, 37 pp. + appendices.
CSE. 1992. Seabrook Island, South Carolina, beach nourishment project: performance evaluation and future needs. Survey Report No. 3 to Seabrook Island POA; CSE, Columbia, SC, 60 pp. + Attachment I and Appendix I.
CSE. 1993. Seabrook Island, South Carolina, beach nourishment project. Survey Report No. 4 to Seabrook Island POA; CSE, Columbia, SC, 34 pp. + Appendix I.
CSE. 1993. Performance evaluation of recent beach nourishment projects, South Carolina. Draft Report for USACE, Waterways Experiment Station, Vicksburg, Miss.; CSE, Columbia, SC, ~300 pp.
CSE. 1994. Seabrook Island, South Carolina, beach nourishment project. Survey Report No 5 to Seabrook Island POA; CSE, Columbia, SC, 46 pp + appendix.
CSE. 1995a. Seabrook Island, South Carolina, beach nourishment project. Survey Report No. 6A to Seabrook Island POA; CSE, Columbia, SC, 19 pp. + appendices.
CSE. 1995. Relocation of Captain Sams Inlet and beach restoration plan, Seabrook Island, South Carolina. Design Report, Seabrook Island POA; CSE, Columbia, SC, 159 pp + appendices.
CSE. 1995b. Relocation of Captain Sams Inlet and beach restoration plan, Seabrook Island, South Carolina. Design Report, Seabrook Island POA; CSE, Columbia, SC, 159 pp. + appendices.

Table 5.1a *Seabrook Island Coastal Erosion Studies and Annual Beach Monitoring Surveys*
CSE. 1995c. Assessment of the seawall along The Club at Seabrook Island. Technical Report (750A), The Club at Seabrook Island, Johns Island, SC; CSE, Columbia, SC, 30 pp. + appendices.
CSE. 1995d. Assessment of the Seabrook Island seawall along block 16, lots 1-33. Technical Report (750B), Seabrook Island POA, Johns Island, SC; CSE, Columbia, SC, 44 pp + appendices.
CSE (as CSE-Baird). 1997. Captain Sams Inlet relocation project, Seabrook Island, South Carolina. Survey Report No 1, Seabrook Island POA; CSE-Baird, Columbia, SC, 21 pp. + app.
CSE (as CSE-Baird). 1998. Seabrook Island 1996 inlet relocation. Survey Report No 2 to Seabrook Island POA; CSE Baird, Columbia, SC, 22 pp + appendices.
CSE (as CSE-Baird). 1999. Seabrook Island 1996 inlet relocation. Survey Report No. 3 to Seabrook Island POA; CSE Baird, Columbia, SC, 42 pp. + appendices.
CSE. 2000. Seabrook Island 1996 inlet relocation. Survey Report No 4 to Seabrook Island POA; CSE, Columbia, SC, 42 pp + appendices.
CSE. 2001. Seabrook Island 1996 inlet relocation. Survey Report No. 5 to Seabrook Island POA; CSE, Columbia, SC, 42 pp. + appendices.
CSE. 2002. Seabrook Island 1996 inlet relocation. Survey Report No. 6 to Seabrook Island POA; CSE, Columbia, SC, 46 pp. + appendices.
CSE. 2003. Seabrook Island 1996 inlet relocation. Survey Report No. 7 to Seabrook Island POA; CSE, Columbia, SC, 53 pp. + appendices.
CSE. 2004. Seabrook Island 1996 inlet relocation. Survey Report No 8 to Seabrook Island POA; CSE, Columbia, SC, 50 pp + appendices.
CSE. 2005. Seabrook Island 1996 inlet relocation. Survey Report No 9 to Seabrook Island POA; CSE, Columbia, SC, 59 pp + appendices.
CSE. 2006. Seabrook Island 1996 inlet relocation. Survey Report No 10 to Seabrook Island POA; CSE, Columbia, SC, 55 pp + appendices.
CSE. 2006. Seawall inspection – 2006. Summary Report to Seabrook Island POA; CSE, Columbia, SC, 14 pp + appendices.
CSE. 2007. Seabrook Island 1996 inlet relocation. Survey Report No 11 to Seabrook

Table 5.1a *Seabrook Island Coastal Erosion Studies and Annual Beach Monitoring Surveys*
Island POA; CSE, Columbia, SC, 57 pp + appendices.
CSE. 2008. Seabrook Island 1996 inlet relocation. Survey Report No 12 to Seabrook Island POA; CSE, Columbia, SC, 59 pp + appendices.
CSE. 2009a. Seabrook Island 1996 inlet relocation. Survey Report No 13 to Seabrook Island POA; CSE, Columbia, SC, 61 pp + appendices.
CSE. 2009b. Captain Sams inlet relocation project: analysis of potential impacts of inlet relocation on Kiawah Spit. Technical Report to Seabrook Island POA. CSE, Columbia, SC, 94 pp + appendices.
CSE. 2011. Captain Sams inlet relocation project: design report. Report to USACE for Seabrook Island POA. CSE, Columbia, SC, 116 pp plus 7 appendices.
CSE. 2011a. Captain Sams inlet relocation project: review & analysis of alternatives. Supplementary Report 1 to USACE for Seabrook Island POA. CSE, Columbia, SC, 27 pp.
CSE. 2011b. Captain Sams inlet relocation project: analysis of downdrift impacts. Supplementary Report 2 to USACE for Seabrook Island POA. CSE, Columbia, SC, 33 pp.
CSE. 2011c. Captain Sams Inlet Relocation Project. Biological Assessment. Prepared for USACE, CSE, Columbia SC 77 pp.
CSE. 2011d. Captain Sams Inlet Relocation Project. Draft Essential Fish Habitat Assessment. Prepared for USACE, CSE, Columbia SC 35 pp.
CSE. 2014. Seabrook Island 1996 inlet relocation. Monitoring Report Year 14 to Seabrook Island POA; CSE, Columbia, SC, 72 pp + appendices.
CSE. 2015. Captain Sams Inlet Relocation 2015. Seabrook Island South Carolina. Final Report. Prepared for Seabrook Island Property Owners Association. CSE, Columbia, SC 61 pp + app.
CSE. 2016. Captain Sams Inlet Relocation Project. Monitoring Report – Year 1. Prepared for Seabrook Island Property Owners Association. CSE, Columbia, SC 77 pp + app.
CSE. 2017. Captain Sams Inlet Relocation Project. Monitoring Report – Year 2. Prepared for Seabrook Island Property Owners Association. CSE, Columbia, SC 73 pp + app.
CSE. 2018. Captain Sams Inlet Relocation Project. Monitoring Report – Year 3. Prepared for Seabrook Island Property Owners Association. CSE, Columbia, SC 73 pp + app.

Table 5.1a *Seabrook Island Coastal Erosion Studies and Annual Beach Monitoring Surveys*
Dean, RG. 1993. Seabrook Island: independent review of erosional/depositional processes and remedial measures. Consulting Report, Seabrook Island POA; Gainesville, FL, 13 pp.
Hayes, MO, TW Kana, and JH Barwis. 1980. Soft designs for coastal protection at Seabrook Island, SC. In Proc *17th Conference on Coastal Engineering*, ASCE, New York, NY, pp 897-912.
Hayes, MO, TW Kana, JH Barwis, and WJ Sexton. 1979. Assessment of shoreline changes, Seabrook Island, South Carolina. Management Report for Seabrook Island Company; Research Planning Inst Inc, with Environmental Research Center Inc, Columbia, SC, 16 pp + appendices.
Hayes, MO, SJ Wilson, DM FitzGerald, LJ Hulmes, and DK Hubbard. 1975. Coastal processes and geomorphology. In *Environmental Inventory of Kiawah Island*, Environmental Research Cntr, Inc, Columbia, SC, 165 pp.
Imperato, DP. 1984. Sandy depositional environments of the North Edisto tidal basin. Unpublished MS Thesis, Department of Geology, University of South Carolina, Columbia, 134 pp
Imperato, D.P, W.J. Sexton, and MO Hayes. 1988. Stratigraphy and sediment characteristics of a mesotidal ebb-tidal delta, North Edisto Inlet, South Carolina. Jour. Sediment Petrol, Vol. 58, pp 950-958.
Hayes, MO, WJ Sexton, DD Domeracki, TW Kana, J Michel, JH Barwis, and TM Moslow. 1979. Assessment of shoreline changes, Seabrook Island, South Carolina. Summary Report for Seabrook Island Company; Research Planning Inst Inc, with Environmental Research Center Inc, Columbia, SC, 86 pp + appendices.
Kana, T.W. 1981. Survey of the northern marginal flood channel of North Edisto Inlet — October 1981. Technical Memorandum for Seabrook Island Company, Charleston, SC; RPI, Columbia, SC, 24 pp. + app.
Kana, TW. 1983. Soft-engineering alternatives for shore protection. In Proc Coastal Zone '83, ASCE, New York, NY, pp 912-929.
Kana, TW. 1986. The relocation of a tidal inlet for erosion control. Abstract: 9th Applied Geology Conf (West Point, NY), pg 342.
Kana, TW. 1987. Beach surveys along Seabrook Island, South Carolina: June 1986 to August 1987. Final Report to Seabrook Island POA; CSE, Columbia, SC, 49 pp + appendices.

Table 5.1a *Seabrook Island Coastal Erosion Studies and Annual Beach Monitoring Surveys*
Kana, TW. 1988. *Beach Erosion in South Carolina*. M Goodwin and F Rogers (eds), South Carolina Sea Grant Consortium, Charleston, SC, SCSG-SP-88-1, 55 pp (approximately 2,000 copies in print).
Kana, TW. 1988. USA — South Carolina. Chap 62, *Artificial Structures and Shorelines* (HJ Walker, ed), Kluwer Academic Publ, Dordrecht, Netherlands, pp 593-605.
Kana, TW. 1989. Erosion and beach restoration at Seabrook Island, South Carolina. Shore and Beach, Vol 57(3), pp 3-18.
Kana, TW. 1989. Beach nourishment through inlet relocation. In Proc Beach Preservation Technology '89, Florida Shore & Beach Pres Assoc, Tallahassee, pp 293-302.
Kana, TW. 1990. *Conserving South Carolina Beaches Through the 1990s: A Case for Beach Nourishment*. South Carolina Coastal Council, Charleston, SC, 33 pp.
Kana, TW. 1993. South Carolina beach nourishment projects: successes and failures. In P Bruun (ed), Proc. Hilton Head Island Intl Coastal Symposium; co-sponsors Journal of Coastal Research, South Carolina Coastal Council, and South Carolina Shore & Beach Pres Assoc (6-9 June 1993), Hilton Head Island, SC, pp 255-260.
Kana, TW, and CJ Andrassy. 1993. Performance evaluation of recent South Carolina nourishment projects. Final Report, Contract DACW39-92-C-0115, USACE, Waterways Experiment Station, Vicksburg, Miss. CSE, Columbia, SC, 314 pp + appendices.
Kana, TW, and MO Hayes. 1979. Design options for breaching Kiawah Island spit and stabilizing Captain Sams Inlet. Memorandum Rept, Seabrook Island Co, Charleston, SC; Research Planning Inst Inc, Columbia, SC, 25 pp.
Kana, TW, and JE Mason. 1988. Evolution of an ebb-tidal delta after an inlet relocation. In DG Aubrey (ed), *Hydrodynamics and Sediment Dynamics of Tidal Inlets*, Springer-Verlag, New York, NY, pp 382-411.
Kana, TW, and WJ Sexton. 1982. Shoreline stability along Block 16, Seabrook Island: recent trends and alternatives for shore protection and beach improvement. Report for Seabrook Island Property Owners; RPI, Columbia, SC, 37 pp.
Kana, TW, and J Siah. 1983. Breach at Captain Sams Creek near the dike across "old" Captain Sams Inlet. Memorandum for Seabrook Island Company, Charleston, SC; RPI, Columbia, SC, 13 pp.

Table 5.1a *Seabrook Island Coastal Erosion Studies and Annual Beach Monitoring Surveys*
Kana, TW, BJ Baca, and ML Williams. 1986. Beach surveys and environmental monitoring along Seabrook Island, South Carolina: August 1985 — June 1986. Report to Seabrook Island POA; CSE, Columbia, SC, 58 pp. + appendices.
Kana, TW, and PA McKee. 2003. Relocation of Captain Sams Inlet – 20 years later. In: Proc. Intl. Conf. on Coastal Sediments 2003. Clearwater FL 12 pp.
Kana, TW, WJ Sexton, and MO Hayes. 1980. Dredging and realignment of the northern marginal flood channel of North Edisto Inlet. Feasibility Study for Seabrook Island Company, Charleston, SC; RPI, Columbia, SC, 44 pp + app.
Kana, TW, SJ Siah, and ML Williams. 1984. Alternatives for beach restoration and future shoreline management, Seabrook Island, SC Feasibility Study for Seabrook Island POA; RPI Coastal Science & Engineering Div, Columbia, SC, 130 pp.
Kana, TW, WJ Sexton, LC Thebeau, and MO Hayes. 1981. Preliminary design and permit application for breaching Kiawah Spit north of Captain Sams Inlet. Final Report for Seabrook Island Company; Research Planning Institute Inc, Columbia, SC, 43 pp.
Katmarian, RE. 1995a. Assessment of the seawall along *The Club at Seabrook Island*. Tech Rept, The Club at Seabrook Island, SC; Coastal Science & Engineering Inc, Columbia, SC, 31 pp + appendices.
Katmarian, RE. 1995b. Assessment of the Seabrook Island seawall along Block 16, Lots 1-33. Tech Rept, Seabrook Island Property Owners Association, SC; Coastal Science & Engineering Inc, Columbia, SC, 44 pp + appendices.
Mason, J.E. 1986. Morphologic evolution of a relocated tidal inlet: Captain Sams Inlet, South Carolina. Tech. Rept, Dept. Geol, Univ. South Carolina, Columbia, 149 pp.
Moslow, TF. 1980. Stratigraphy of mesotidal barrier islands. Unpublished PhD Dissertation, Univ South Carolina, Columbia, 187 pp.
Seabrook. 1991. Beach management plan (adopted 8 August 1991). Town of Seabrook Island, SC, 10 sections plus 8 exhibits.
Sexton, WJ. 1981. Natural bar bypassing of sand at Captain Sams Inlet, South Carolina. Unpubl MS Thesis, Dept Geol, University of South Carolina, Columbia, 148 pp.

Table 5.1a *Seabrook Island Coastal Erosion Studies and Annual Beach Monitoring Surveys*
Sexton, WJ, and MO Hayes. 1980. Assessment of changes at Captain Sams Inlet, Seabrook Island, South Carolina, September 1979 through April 1980. Final Report for Seabrook Island Company, Charleston, SC, RPI, Columbia, 20 pp.
Sexton, WJ, and MO Hayes. 1980. Beach stability at Seabrook Island, South Carolina, December 1979 through October 1980. Final Report for Seabrook Island Company, Charleston, SC, RPI, Columbia, 22 pp.
Sexton, WJ, and MO Hayes. 1981. Shoreline stability of Seabrook Island, South Carolina, March through July 1981. Interim Report for Seabrook Island Company, Charleston, SC, RPI, Columbia, 20 pp.
Sexton, WJ, and MO Hayes. 1982. Natural bar bypassing of sand at a tidal inlet. In Proc Coastal Engineering '82, ASCE, New York, NY, pp 1479-1495.
Sexton, WJ, SP Dinnel, and TW Kana. 1981. Effects of the continued migration of the northern marginal flood channel of North Edisto Inlet. Technical Report for Seabrook Island Company, Charleston, SC; RPI, Columbia, SC, 17 pp.
Sexton, WJ, MO Hayes, and TW Kana. 1982. Shoreline stability of Seabrook Island, South Carolina, March 1981 through January 1982. Final Report for Seabrook Island Company, Charleston, SC, RPI, Columbia, 26 pp.

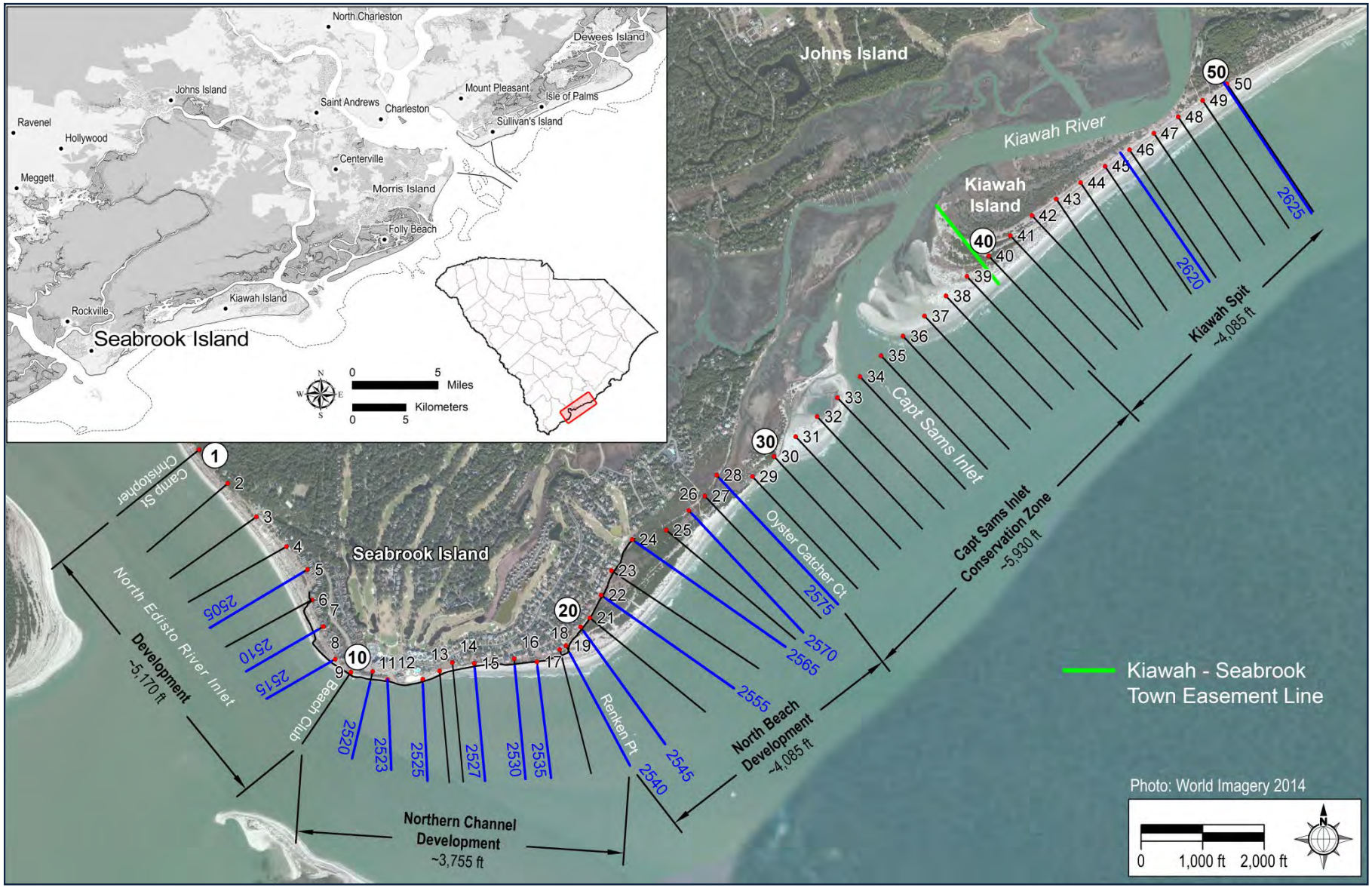


FIGURE 5.1a Seabrook Island showing the major features along the coast. Approximately one-third of the shoreline is the Captain Sams Inlet conservation zone over which the inlet has migrated during the past ~50 years.

Seabrook Island derives its sand supply from Kiawah Island, and Kiawah receives its sand from Stono Inlet via the process of "shoal bypassing" (Gaudiano and Kana 2001). Kiawah has a positive sand budget that has served to provide Seabrook Island with a relatively healthy sand supply over the past couple of centuries. By comparison, Botany Island, the adjacent barrier island to the (south) west, has a negative sand budget as reflected in its severe shoreline recession since the 1850s (Fig 5.1a). Hayes et al (1979) sketched the developing shoreline offset between Seabrook Island and Botany Island that was over 1 mile by the 1970s.

A 1924 US Coast & Geodetic Survey (now NOAA National Ocean Service—NOS) chart illustrates the shoreline offset at North Edisto River Inlet as well as the presence of a small inlet at the southern tip of Seabrook Island and another small inlet at the updrift end of the Island (Fig 5.1b). Hayes et al (1979) compiled sketches of the various small inlets along Seabrook Island dating back to 1661 (Fig 5.1c). This led Hayes et al to conclude that the Kiawah River Inlet (aka Captain Sams Inlet) has a history of downcoast migration and periodic breaching of the Kiawah Spit on a "40–80 year cycle." The most recent natural breach of the Kiawah Spit occurred in 1948 or 1949 (Hayes et al 1979) and is clearly visible on historical aerial photos, the earliest of which dates back to 1939 (source: US Dept. of Agriculture Soil Conservation Service). As Figure 5.1c suggests, Captain Sams Inlet has at various times over the past century discharged along most of Seabrook Island's oceanfront.

The NOAA–NOS (1983) Cooperative Shoreline Study, used by Anders et al (1990) in their US Army Corps of Engineers report, provided six "official" historical shorelines for Seabrook Island between 1851/54 and January 1983 (Fig 5.1d). These data confirm that the Seabrook Island shoreline jumped thousands of feet seaward between the 1850s and 1920 and since then has undergone slower rates of change. The NOAA data also confirm that Captain Sams Inlet has migrated over a nearly 2-mile-long corridor between "Beachwalker Park" (a public access area at the western end of Kiawah Island near OCRM 2625) and the present development along Seabrook Island (vicinity of "Oyster Catcher Court" near OCRM 2575).

Anders et al (1990) computed average shoreline movement every 50 meters along the South Carolina coast, demonstrating that Seabrook Island grew seaward by upward of 5 meters per year (m/yr), while adjacent Botany Island receded at rates well over 5 meters per year since the 1850s (Fig 5.1e). The actual rate of shoreline change for Seabrook Island determined by Anders et al (1990) generally diminishes over time (Table 5.1b). By 1983, Seabrook Island was developed and upward of 8,800 linear feet of shoreline was stabilized by shore-protection structures (discussed in Sections 2.3.1 and 5.3 of this Plan). Thus, shoreline changes since then have been influenced by the presence of structures as well as various beach-restoration measures.

TABLE 5.1b. Average shoreline change rates for Seabrook Island determined by Anders et al (1990) using official NOAA–NOS (1983) shorelines. [*Minor <3.0 ft/yr — Moderate <10 ft/yr — Major >10 ft/yr]

TABLE 5.1(a)			
Period	**Rate (m/yr)**	**Rate (ft/yr)**	**Trend***
1852–1921	6.4	21.0	Major Accretion
1921–1933	3.9	12.8	Major Accretion
1933–1964	0.8	2.6	Minor Accretion
1964–1974	2.1	6.9	Moderate Accretion
1974–1983	0.5	1.6	Minor Accretion

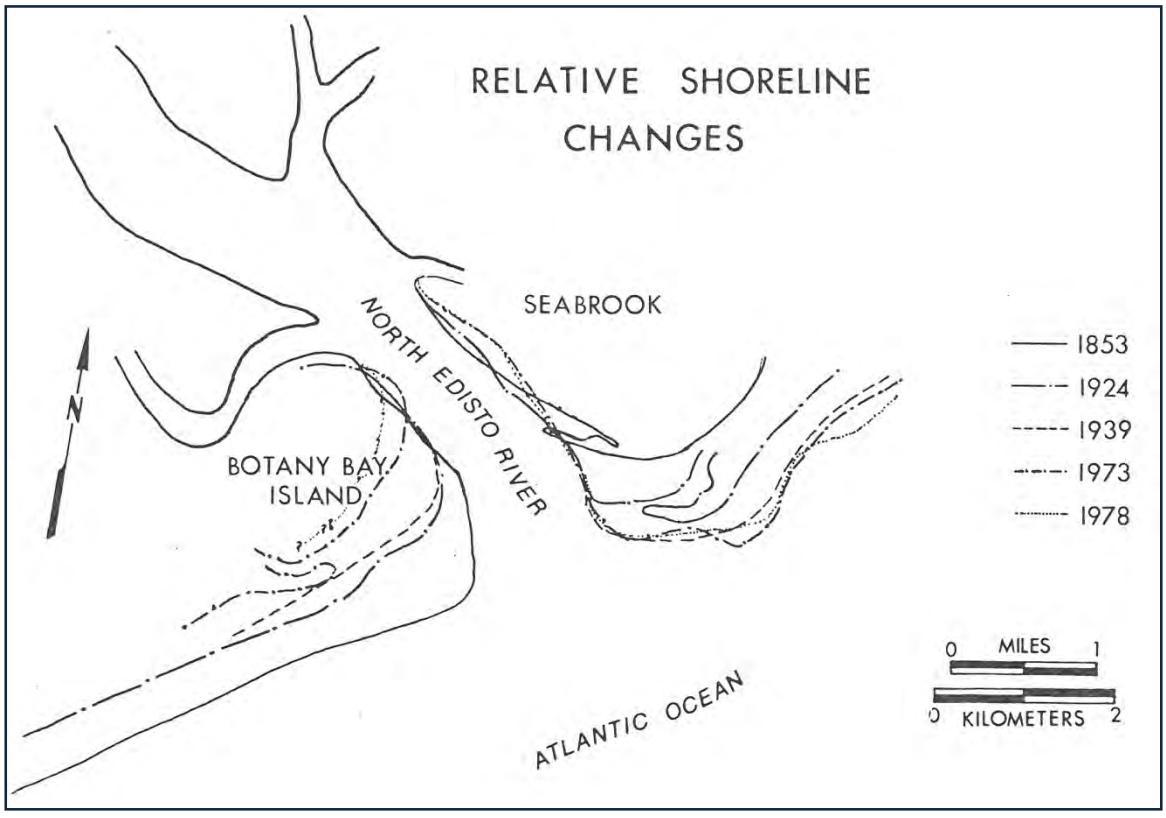


FIGURE 5.1a Sketch of historical shorelines at North Edisto River Inlet (from Hayes et al 1979).

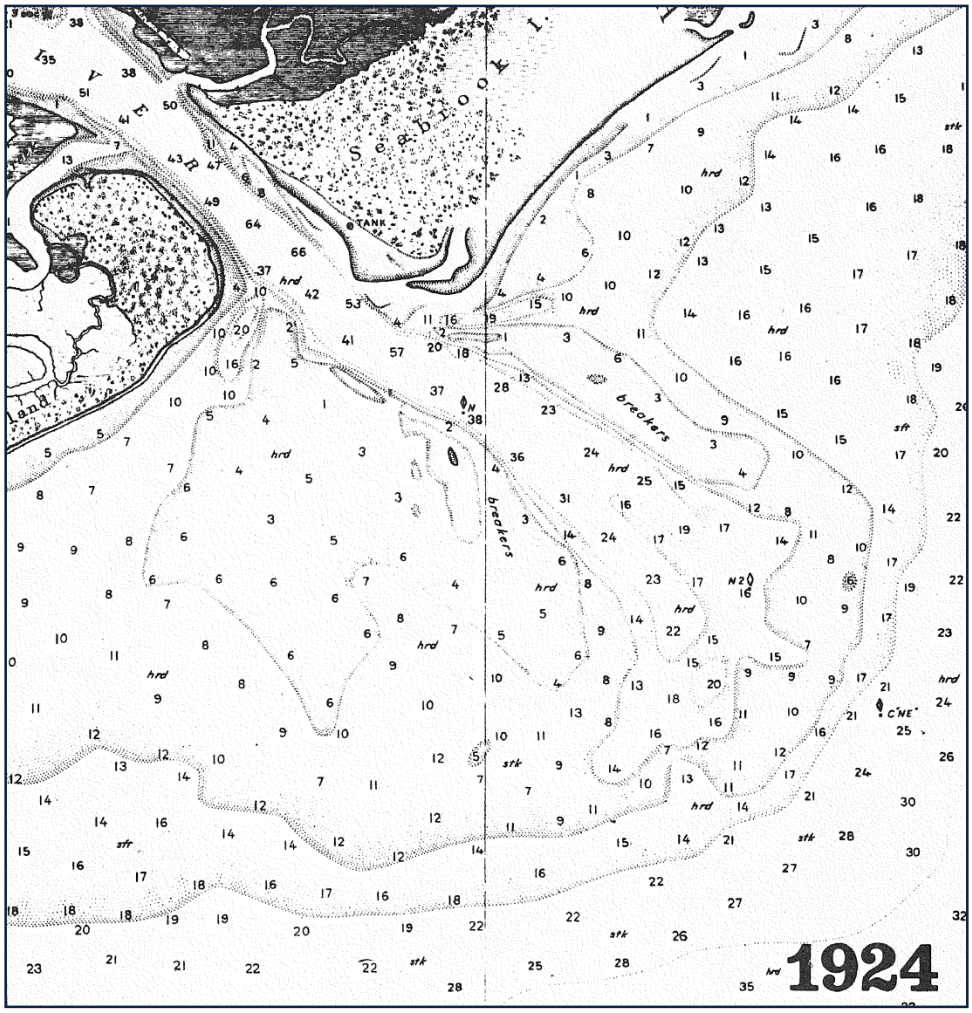


FIGURE 5.1b Section of USCGS (now NOAA–NOS) chart of Seabrook Island prepared in 1924. Note two small inlets discharging at either end of Seabrook Island prior to any development. [From Hayes et al 1979]

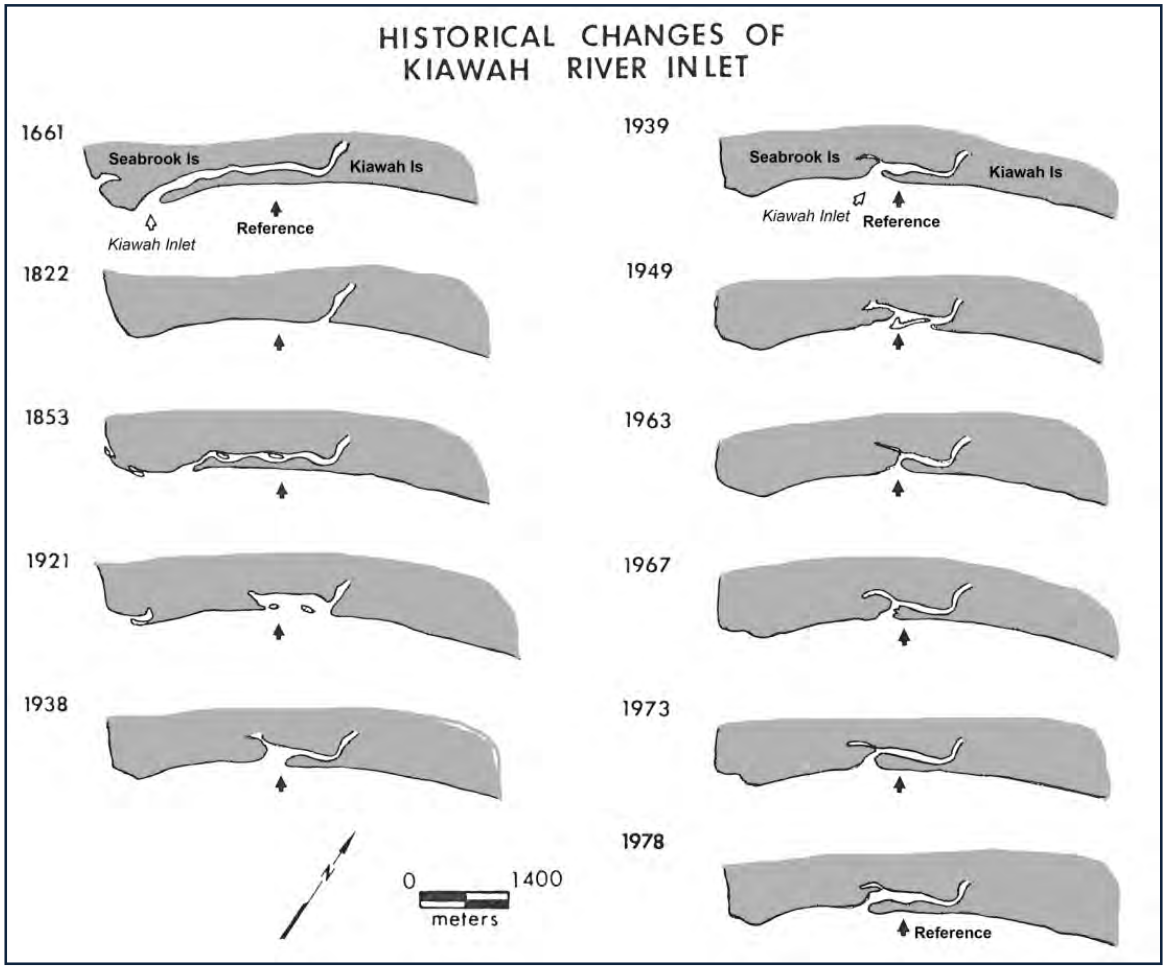


FIGURE 5.1c Sketch of Seabrook Island shorelines showing various locations of Captain Sams Inlet (aka Kiawah River Inlet). [From Hayes et al 1979]

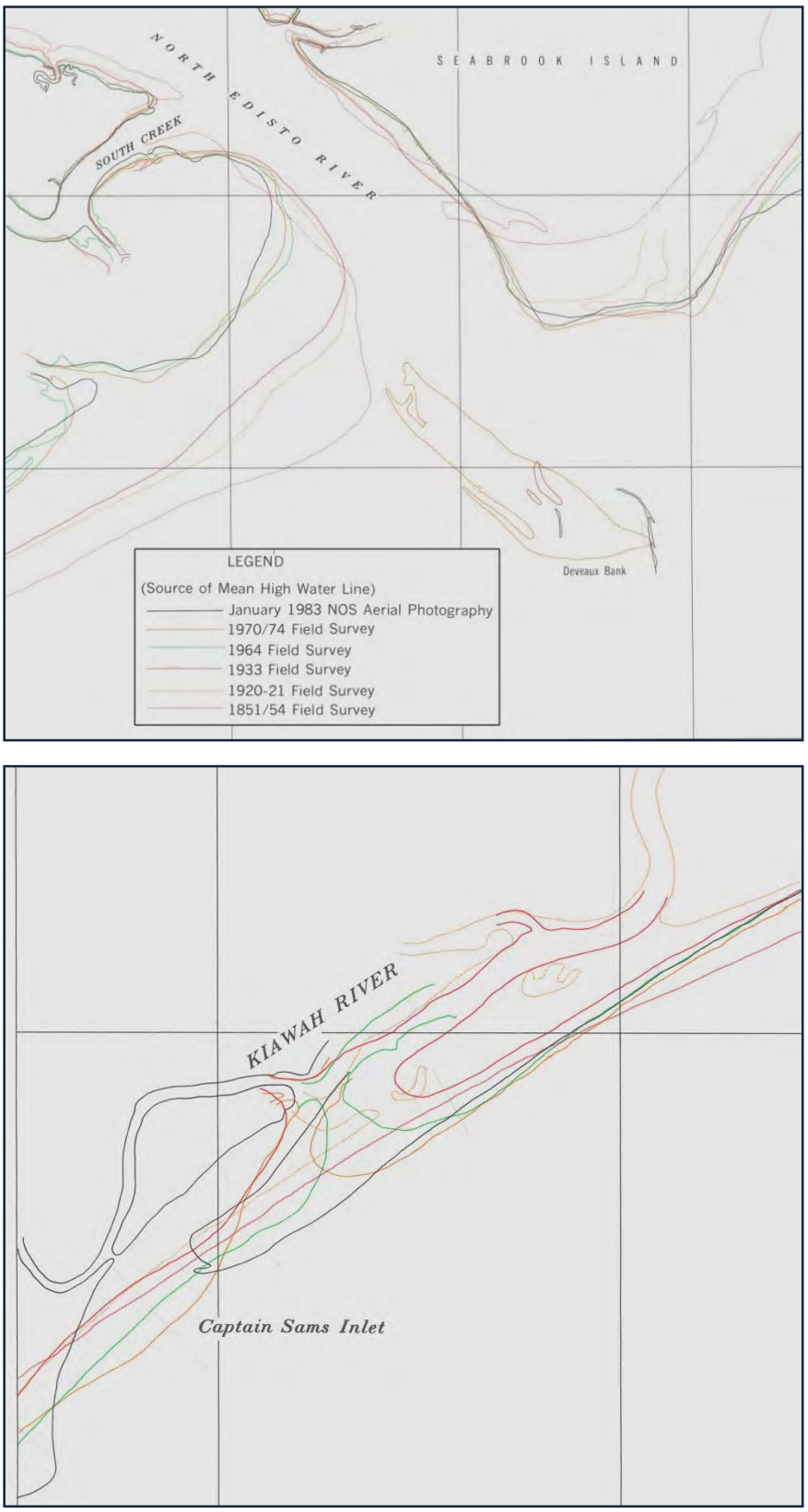


FIGURE 5.1d Official historical shorelines developed by NOAA–NOS Cooperative Shoreline Study (1983) for the Seabrook Island area.

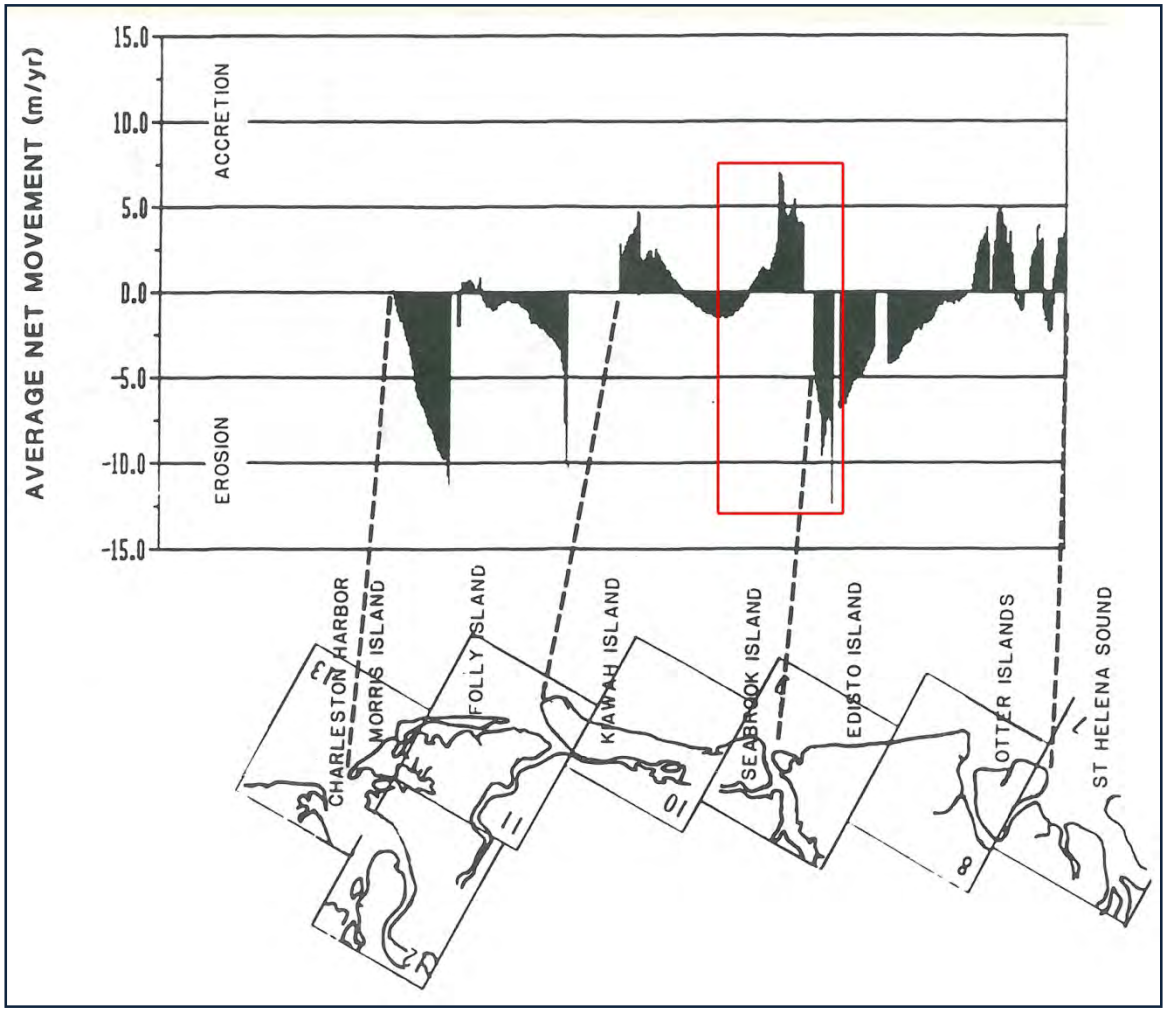


FIGURE 5.1e Average net shoreline movement along the central South Carolina coast for the period 1851–1983. [From Anders et al 1990, Fig 27]

Hayes et al (1979) were the first to recognize that Seabrook Island's shoreline is impacted by the position of Captain Sams Inlet. Not only does inlet migration shorten the island, it produces more irregularity in the downcoast beach the further the inlet migrates. Figure 5.1f shows the 1972 (and 1963) aerial photo with the 1982 shoreline superimposed. As the inlet moves toward Seabrook Island, land in area D is lost while new land forms in area C. The shoals of Captain Sams Inlet (referred to as the "ebb-tidal delta" by Hayes 1980) trap sand and interrupt normal sand transport to Seabrook Island. One important effect is an increasing curvature of the downcoast area (between B and C on Fig 5.1f). The erosion arc near the leading edge of the ebb-tidal delta is produced by changes in wave angles (and energy) such that focused, rapid erosion impacts a segment of the shoreline.

One of the earliest sites needing coastal structures for shore protection was the 13th hole of the golf course in 1975 (Hayes et al 1979). Figure 5.1f shows the fairways to and from the hole under construction in 1972 (v-shaped, cleared land between labels B and C). During the 1970s and early stages of Seabrook Island's development, some segments of shoreline were losing dozens of feet per year while others were gaining land rapidly. The area along segment A was eroding at a moderate rate leading to the first shore-protection structures around 1973 (Hayes et al 1979).

Hayes et al (1979) recommended relocation of Captain Sams Inlet to mitigate the direct impacts of the inlet on Seabrook Island. A relocation was expected to allow sand in the ebb-tidal delta to migrate onshore and rebuild the beach. Sexton (1981) and Sexton and Hayes (1982) had documented natural "bypassing" events whereby a small shoal of Captain Sams Inlet accreted along the downcoast side of the ebb-tidal delta after a channel avulsion (forceful separation or detachment), adding new sand to Seabrook Island in area C. This produced a sudden jump in shoreline position hundreds of feet seaward and demonstrated the importance of "episodic bypassing" of sand between tidal deltas and the beach.

Since the 1980s, Seabrook Island's shoreline has evolved primarily in relation to the artificial relocations of Captain Sams Inlet (1983 and 1996) and a channel-realignment/beach nourishment project. This latter project addressed encroachment of the northern channel on the Island's development in the area between Renken Point and the Seabrook Island Club facilities (OCRM 2520) in 1990 (area A on Fig 5.1f).

Kana and Andrassy (1993) compiled historical high-water and low-water shorelines from aerial photography obtained between November 1963 and January 1992 (Fig 5.1g). Bold arrows and lines highlight the major trends in shoreline movement and inlet position. The maize of lines northeast of the "1982" inlet represents the corridor over which Captain Sams Inlet migrated (Seabrook Island's present inlet conservation zone). The remaining segment along the oceanfront (east of Renken Point) has grown

seaward to form “North Beach.” A shoal off the southern end of Seabrook Island (off Renken Point) grew and moved landward, forcing the northern channel of North Edisto River Inlet toward Seabrook Island and undermining downcoast section of the beach sometimes referred to as South Beach. Figure 5.1h isolates two dates from the Kana and Andrassy (1993) analysis showing the relationship between the 1963 low-water shoreline and the 1983 (post-inlet relocation) shoreline. After the inlet was relocated, the shoals of the abandoned inlet gradually migrated onshore and spread downcoast.

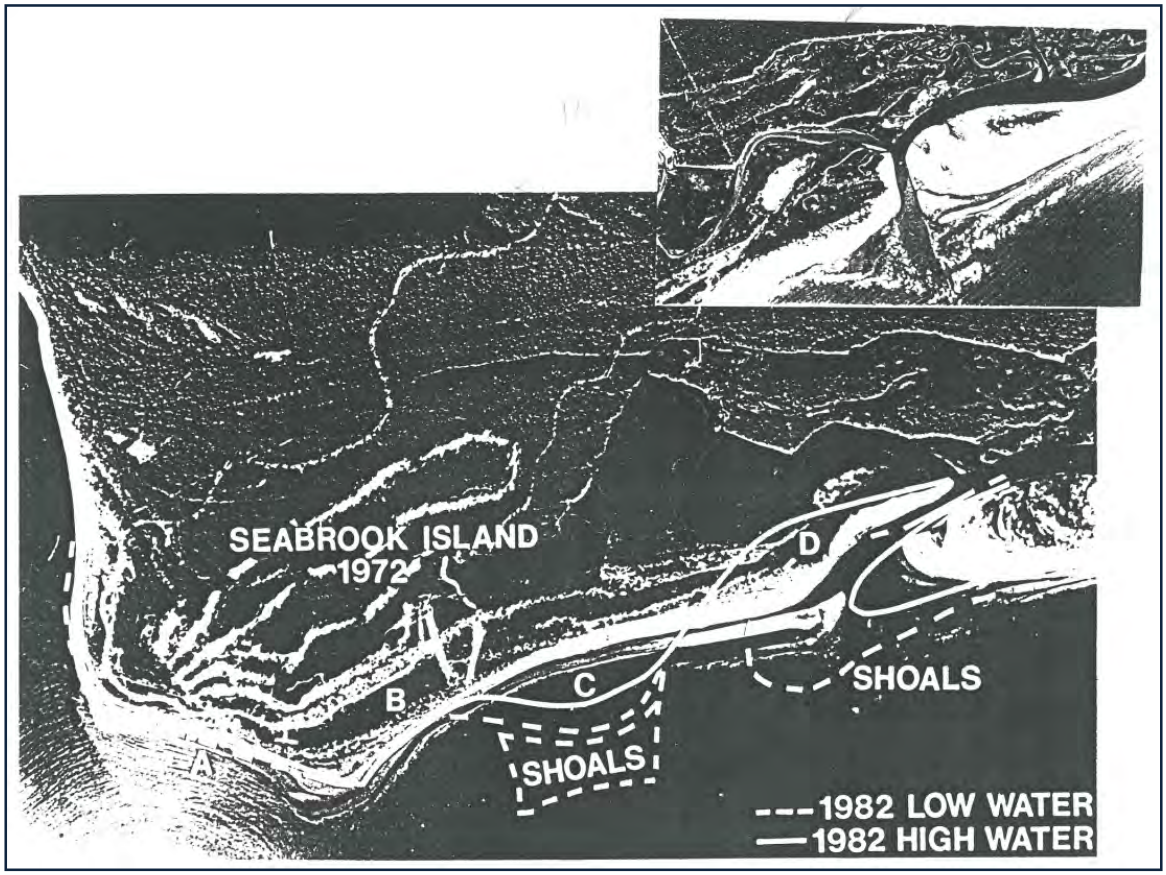


FIGURE 5.1f Seabrook Island in 1972 with the 1982 shoreline superimposed. Reaches A, B, C, and D are referenced in the text. The shoreline morphology becomes increasingly irregular as Captain Sams Inlet (Reach D) migrates toward North Edisto River Inlet (Reach A and left margin of the image). The inset photo shows Captain Sams inlet in 1963. [After Kana 1989]

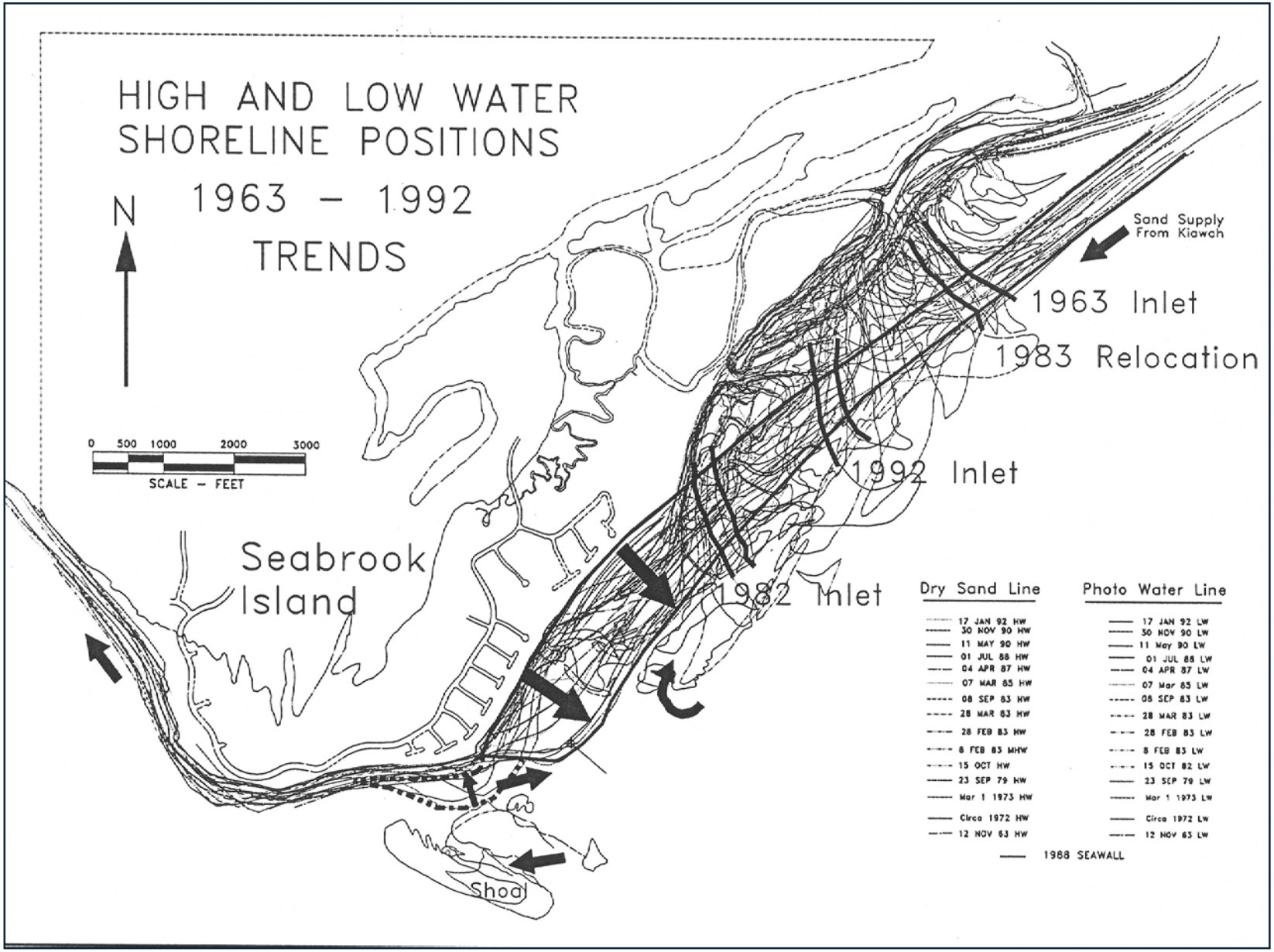


FIGURE 5.1g High and low water shoreline positions along Seabrook Island between November 1963 and January 1992. Bold lines and arrows highlight trend of accretion along North Beach and erosion at Renken Point. Positions of Captain Sams Inlet at various times are highlighted. [After Kana and Andrassy 1993]

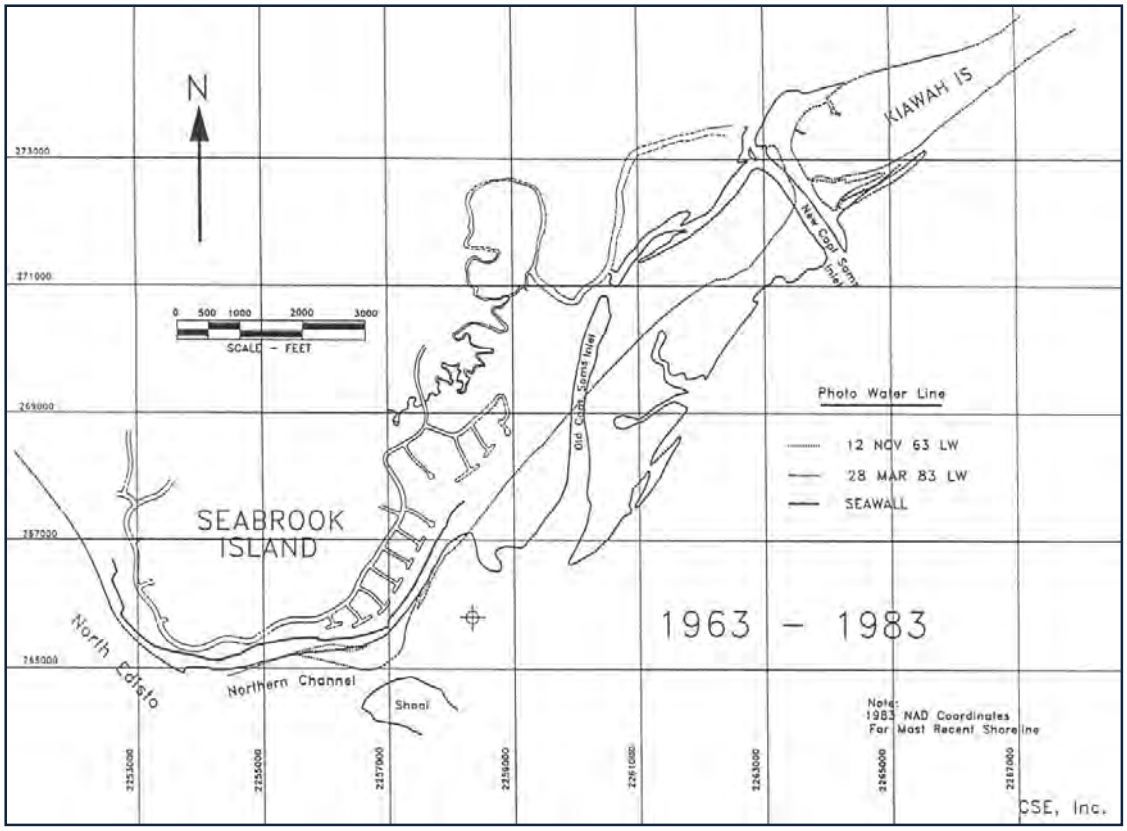


FIGURE 5.1h Low-water shorelines in November 1963 (on which the 1983 inlet relocation point was based) and 28 March 1983, one month after Captain Sams Inlet was relocated. The extensive intertidal bars of the abandoned inlet migrated onshore and downcoast over the next several years. [After Kana & Andrassy 1993]

Figure 5.1i provides updated historical shorelines for Seabrook Island, adding data from 2019. The most recent date reflects conditions after the 2015 relocation of Captain Sams Inlet (back to its 1963 and 1983 position). The 2019 shoreline is well seaward of the 1964 shoreline in nearly all segments of the coast. A developing erosional arc is visible along North Beach, repeating the previously observed finding of focused erosion associated with inlet migration.

OCRM sets official erosion rates for the island and determines placement of development control lines. Figure 5.1j shows the present OCRM Baseline (set in 2017) and the OCRM Setback Line. OCRM has determined that Seabrook Island has a long-term (nominally 40-year) accretion trend. Therefore, the Setback Line is a minimum of 20 ft landward of the Baseline as prescribed under the Beach Management Act. For most of Seabrook Island, the Baseline is immediately landward of the seawall (most landward shoreline during the past ~40 years). As described in Section 2.3.1 "Beachfront Structural Inventory," 38 structures encroach on the Setback Line. The official OCRM Baseline/Setback Line maps are included in Section 2.3.1 and table of coordinates are provided in Section 7.2 "Structure Inventory" of this Plan.

Seabrook Island's shoreline history after 1970 is directly linked to development of the Island and various shore-protection and beach-restoration measures. Table 5.1c provides a summary of major shoreline events to give context for subsequent sections of this Plan.

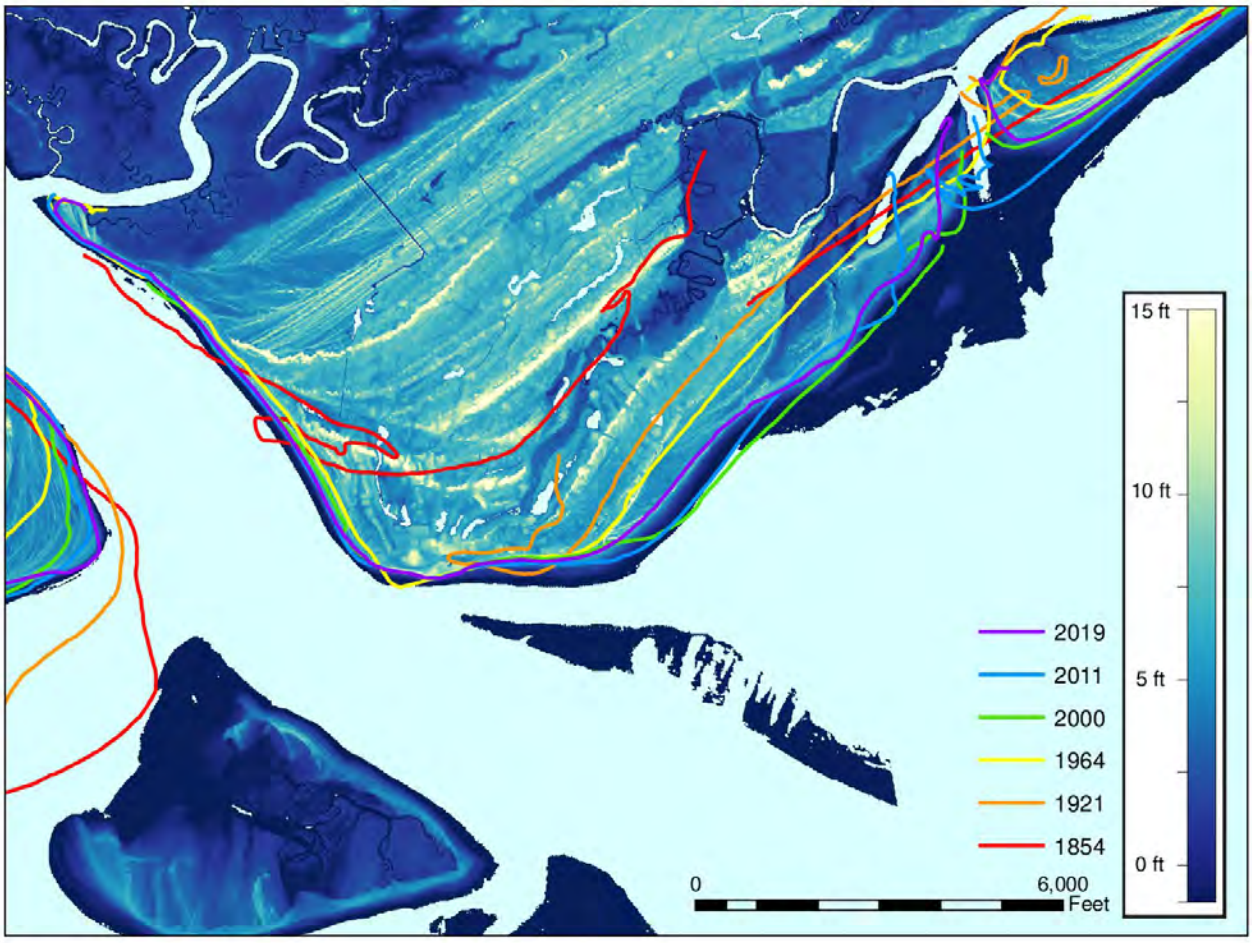


FIGURE 5.1i Updated historical shorelines combining the NOAA–NOS (1983) data with shorelines from 2019 superimposed on a 2016 high-resolution elevation model showing the various ridges along Seabrook Island and the neighboring Kiawah Spit (to the east) and Botany Bay (to the west). Previous shoreline positions are often associated with topographic highs on South Carolina barriers, due to the accumulation of dune sand into a high continuous ridge during periods of shoreline stability.

FIGURE 5.1j Official 2017 OCRM Setback Line for a portion of Seabrook Island superimposed on a 2019 rectified aerial orthophotograph. Landward translation of the setback line between the 2017 re-drawing and previous issuance in 2012 resulted in several dozen structures along Seabrook Island now being located seaward of the setback line. Image taken close to high tide.

TABLE 5.1c (shown on 7½ pages). Seabrook Island — major shoreline events (after CSE 2007).

FIGURE T-1. Aerial view of Seabrook Island in November 2013.

1948 Captain Sams Inlet breaches the Kiawah Spit near present-day Beachwalker Park, creating multiple channels. A single channel becomes dominant by early 1950s (Fig T-2).

1963 Mouth of Captain Sams Inlet is aligned with the mouth of Captain Sams Creek about 1.5 miles north of the present-day Oyster Catcher beach access. This shoreline and inlet configuration becomes the model for the 1983 and 1996 inlet relocations (Fig T−3).

1960s Seabrook Island's beach is healthy and generally growing seaward. In some places like Renken Point, the rate of growth is over 30 feet per year (ft/yr).

Circa 1970 Seabrook Island becomes a planned-unit development. Roads, golf course, and lots are platted using the existing dune/vegetation line as a basis for the plan. (Development allowed behind the normal limit of tides and waves without regard to historical shoreline trends.)

FIGURE T-2. Vertical photograph (1949) of Seabrook Island before development. Sometime in 1948, Captain Sams Inlet breached the Kiawah Spit near present-day Beachwalker Park (right side of image). The northeastern channel became dominant in the 1950s.

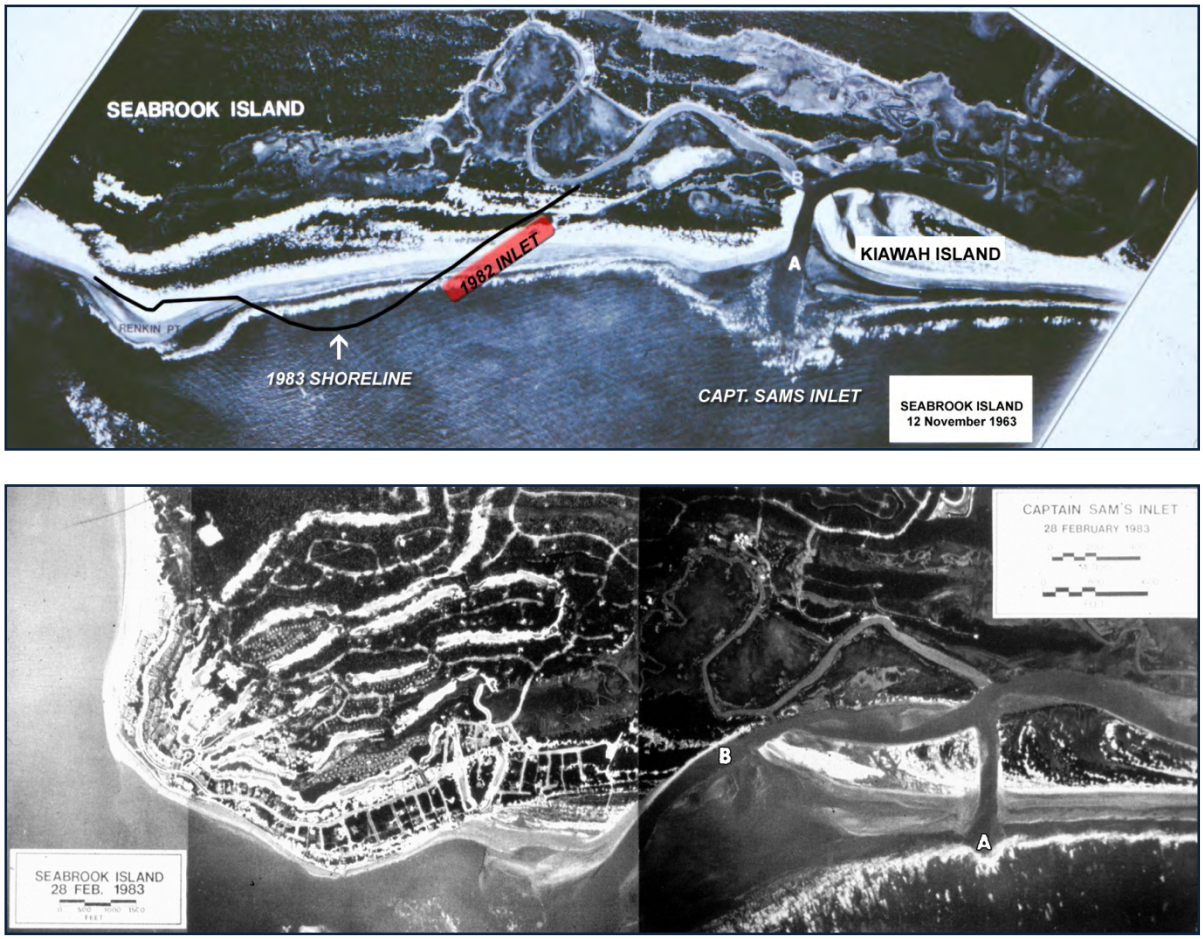


FIGURE T-3. Seabrook Island and Captain Sams Inlet in 1963 (upper) and 1983 (lower). The 1963 condition served as a model for the plan to relocate Captain Sams Inlet. Lower photo shows the new channel (A) open before the old channel (B) was closed on 4 March 1983.

1970s Seabrook Island is in a rapid erosion cycle with some areas like Renken Point eroding at over 20 ft/yr.

1973 Beach Club under construction.

1974 Erosion impacts the Beach Club before construction is complete. First shore-protection measures consist of large sand bags, sandbag groins, and sheet-pile bulkheads (Fig T-4).

FIGURE T-4. Shore-protection structures at the Beach Club in September 1974 prior to the club's opening.

1975–1981 Succession of sandbag revetments, timber and concrete bulkheads/seawalls, and quarry-stone revetments are installed along Seabrook Island between Pelican Watch Villas and the 13th fairway of the golf course (~2 miles). Individual property owners are generally responsible for the cost of shore-protection structures that, by the late 1980s, totals over $5 million for the island (Fig T-5).

1979 RPI (c/o Prof Miles Hayes) completes the first shoreline assessment of the island, identifies three principal erosion-causing processes, and recommends soft solutions involving inlet relocation and nourishment.

SEP 1979 Hurricane *David* causes extensive damage to the seawall (Fig T-6). Mouth of Captain Sams Inlet is near the Oyster Catcher beach access. Seabrook Island's only dry beach areas are a 2000-ft reach around Oyster Catcher and the North Edisto Inlet shoreline along Pelican Watch Villas.

FIGURE T-5. During the early 1980s, much of Seabrook lacked any beach even at low tide. [UPPER] View north from Renken Point at mid tide. [LOWER] Oblique aerial (1982) looking north at low tide showing no beach around Renken Point.

FIGURE T-6. Collapse of the concrete seawall at Renken Point in September 1979 during Hurricane *David*.

MAR 1983 First relocation of Captain Sams Inlet ~1.5 miles north to its 1963 position. Old inlet closed by trucks hauling sand from the new channel basin. Cost of project is (~)$300,000 (Fig T-7).

LATE 1980s North Beach is restored by natural processes as sand from the delta of abandoned Captain Sams Inlet migrates onshore, adding over 1 million cubic yards to Seabrook Island's beach. North Beach is upward of 1,000 ft wide in places, a dry beach is restored, and the rock revetment north of Renken Point begins to be buried by windblown sand.

FIGURE T-7. February-March 1983.

[UPPER] Excavation of the basin for the new channel by land-based equipment.

[MIDDLE] The new channel across the Kiawah Spit and closure dike under construction in the distance on 18 February two weeks before project completion.

[LOWER] Closure of the old channel on a falling tide on 4 March 1983.

1980s Several sections of the seawall (south of Renken Point) breach during minor storm events (Fig T-8). No new sand reaches Beach Club Villas or Pelican Watch Villas for nearly a decade, causing loss of the dry beach.

1989 The northern channel of North Edisto Inlet is forced shoreward by the shoal off Renken Point, causing dangerous encroachment along the seawall (Fig T-8). At Amberjack Court, the channel 50 ft from the wall is 22 ft deep. Property owners continue to add rock in this area to shore up the seawall.

FIGURE T-8. [UPPER] Encroachment of the northern channel (deep blue area) of North Edisto Inlet and lack of maintenance leads to [LOWER] collapse of a section of seawall near Beach Court in 1983.

FEB 1990 The northern channel is realigned by an ocean-going dredge (Great Lakes Dredge & Dock Company – dredge *Illinois*) that builds a parallel channel 600 ft seaward while filling the existing channel along the seawall (Fig T-9). The project adds 685,000 cubic yards to the beach between Renken Point and Pelican Watch Villas. A narrow dry beach exists south of Renken Point for less than one year before the project adjusts. A narrow wet-sand beach persists through the 1990s, giving the seawall protection. Cost of nourishment project is $1.6 million.

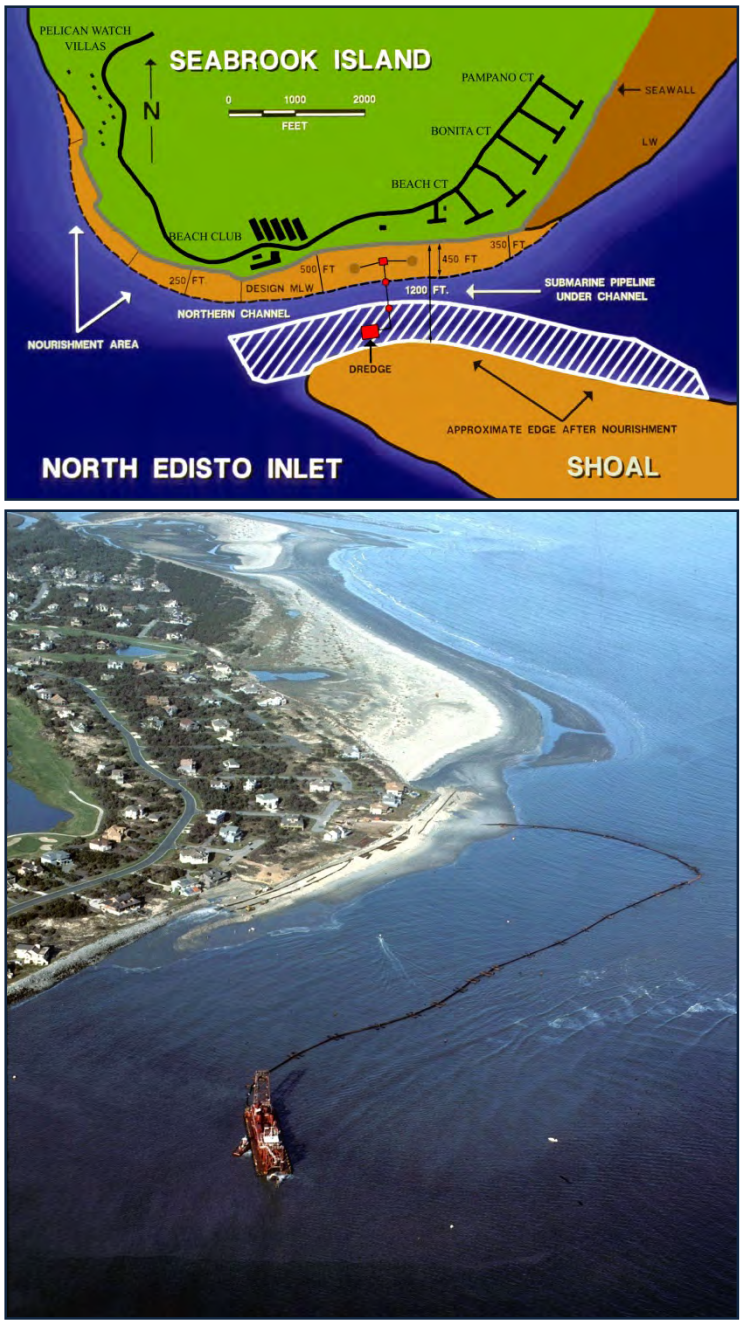


FIGURE T-9. [UPPER] 1989 plan for realignment of the northern channel and nourishment south of Renken Point. [LOWER] Start of dredging operations in February 1990 at Renken Point.

CIRCA 1995 Nourishment losses south of Renken Point begin to reverse as the area stabilizes and begins a long period of accretion by natural and artificial means. Captain Sams Inlet has migrated about 3,000 ft since the 1983 relocation.

APR 1996 Captain Sams Inlet relocated again to its 1963/1983 position (Fig T-10). Cost of construction is (~)$400,000, which is comparable to the cost of one oceanfront lot at this time.

1998–2001 Winter sand scraping around the abandoned inlet is implemented to accelerate adjustment of the shoreline. An outer dike is constructed 500 ft seaward of the closure dike, leaving a small lagoon between the two dikes. This creates a straighter, longer North Beach and leads to more efficient sand transport to the south.

2002–2007 Winter sand scraping from North Beach is performed to transfer ~350,000 cubic yards to South Beach. This adds to the natural sand transport from north to south and accelerates recovery of South Beach. By 2005, only about 1,200 ft of shoreline (vicinity of the Beach Club and Beach Court) lack a dry beach during normal high tides.

FIGURE T-10. The second relocation of Captain Sams Inlet in April 1996. [UPPER] First tide into the channel basin on 4 April during a rising tide. [LOWER] The new channel (left side) before completion of the closure dike across the old channel.

2007–2008 Migration of Captain Sams Inlet leads to focused erosion along North Beach. After review of outside opinions and alternatives, the POA Environmental Committee decided to initiate engineering and permitting for the third inlet relocation project.

2008 Permit application submitted for third relocation of Captain Sams Inlet.

2009–2012 Additional reviews, studies, and revisions to permit application. Permit application resubmitted in 2010 and issued by SC DHEC OCRM in January 2012 and by USACE in October 2012. The SC permit was appealed by one Seabrook Island property owner and is under review by SC Administrative Law Court.

2008–2015 Captain Sams Inlet continues to migrate to the west, reaching the approximate location of the 1996 channel. Erosion intensifies along portions of North Beach. Without sand-scraping, sediment supply to the rest of Seabrook Island is reduced, resulting in erosion of the area near the Seabrook Island Club facilities.

FIGURE T-11. Composite image of Captain Sams Inlet area from the Seabrook side in January 2014. The lagoon formed in the abandoned 1996 channel is on the left side of the image.

2009 Portions of Kiawah spit which have been stable for a least 40 years become developable under periodic revisions to state jurisdictional setback lines. The new lines leave a wide buffer of foredunes for protection and terminate near the Town of Kiawah Island/Town of Seabrook Island easement boundaries positioned immediately north of the 1983 and 1996 positions of Captain Sams Inlet.

2013 Kiawah Development Partners (owners of Kiawah spit) sell the land to Kiawah Partners, who announce plans to build 50 homes on the spit north of Captain Sams Inlet.

2014 Kiawah Partners request a modification of the proposed alignment of Captain Sams Inlet relocation to place the cut ~400 ft south of its planned location near the Town easement line.

2014 In December, the Administrative Law Court dismisses the lawsuit against SIPOA (which was brought by a property owner in 2012), clearing the way for the third inlet relocation to occur.

2015 Between 18 May and 18 June, Captain Sams Inlet is relocated for the third time (Fig T-12). The contractor, RE Goodson Construction Inc (Darlington SC) opened the new channel on 2 June, although significant flow did not occur until 12 June because of a "plug" of marsh at the landward end. The first closure attempt on 4 June failed. The old channel was successfully closed during the second attempt on the evening of 11 June. Final grading and equipment removal occurred on 18 June. Total construction cost was $930,500. The volumes required for channel and dike construction were ~165,000 cy. (CSE 2015)

2016 First monitoring survey after the third inlet relocation project is completed March–April.

2016 Seabrook Island is selected for an ASBPA Best Restored Beaches Award [American Shore and Beach Preservation Association—www.asbpa.org]. Hurricane *Matthew*, a Category 1 hurricane, tracks along the South Carolina coast, impacting Seabrook Island with a storm surge ~5 ft above normal tides on 8 October.

2017 Second annual monitoring survey (after the 2015 inlet relocation) is completed in January. Hurricane *Irma* entered the U.S. as a Category 4 storm in the Florida Keys on 10 September. Despite tracking up the Florida peninsula and moving inland west of South Carolina, the storm's broad diameter produced high waves and a storm surge of 5 ft in Charleston. This caused extensive overwash along the coast, but did not breach the closure dike at old Captain Sams Inlet.

FIGURE T-12. Oblique aerial image of Captain Sams Inlet area from the Seabrook side in July 2015, following the third inlet relocation project. The ebb tidal spit along the east bank of the old inlet channel is clearly visible in the foreground (blue highlight), and the new channel's associated ebb tidal delta is visible in the breakers adjacent to Kiawah Spit (red highlight).

5.1.1 Beach Profiles

OCRM maintains a statewide network of monuments and control points for beach profiles established in the late 1980s (Eiser et al 1988). Seabrook Island has 14 OCRM profile lines (see Fig 5.1.1a) numbered 2510 to 2575. Several additional lines (e.g. – 2505) were added by the Property Owners Association using the OCRM numbering system to track changes in more detail. Some of these lines are coincident with earlier survey lines established and monitored by Hayes et al (1979). The Seabrook Island Company (early developer of the island in the 1970s) retained Research Planning Institute Inc or RPI to conduct annual beach profile and shoreline monitoring studies following the Hayes et al (1979) shoreline erosion assessment. Annual reports (e.g. – Sexton & Hayes 1980, 1981; Sexton et al 1982) began a long-running series of beach erosion surveys of Seabrook Island that continues through the present (see CSE 2018).

Beginning in 1985, responsibility for annual beach monitoring was transferred to RPIs successor company, Coastal Science & Engineering Inc (CSE). The Seabrook Island Company also transferred responsibility for oceanfront monitoring and maintenance to the Seabrook Island Property Owners Association around that time. All subsequent beach surveys and restoration activities have been funded by the Property Owners Association with data and results made available to the Town of Seabrook Island and OCRM.

Yearly measurements of beach conditions are a critical element of Seabrook Island's beach management strategy. Given the complexity and variability of beach conditions over the length of Seabrook Island under the influence of two inlets, beach measurements provide an objective means of tracking sand volumes, detecting cycles of erosion or accretion, and identifying developing erosion hot spots. Seabrook Island's profile network has expanded over time to the present suite of 50 survey lines (includes lines along the Kiawah Spit) (Fig 5.3a and Table 5.4a). The network of profiles along with supplementary field surveys has provided data for preparation of digital terrain models or DTMs of beach topography and channel bathymetry. Figure 5.3b is an example DTM from 1997 using data collected ~1.5 years after the 1996 Captain Sams Inlet relocation project (see Table 5.4a for station equivalents to present survey lines).

Seabrook Island profiles were originally surveyed by the Emery (1961) method (Sexton & Hayes 1981), then by rod and level or total station in the mid-1980s (Kana et al 1984) to low tide wading depth. By the late 1980s, surveys were extended further offshore to capture data in the adjacent channels or to map inlet shoals associated with old and new Captain Sams Inlet (e.g. – Mason 1986, Kana & Mason 1988). In 1996, surveys were performed with the aid of a differential geographic positioning system or GPS. By 2000, real-time kinematic or RTK GPS equipment became available for public use.

RTK-GPS increased productivity in the field and provided a denser network of data points compared with prior surveys.

Since the 2000s, surveys have been performed using a Trimble™ model R8 GNSS RTK GPS (or the more recent R10 GNSS) that provides centimeter-level accuracy in the horizontal and vertical direction and coordinate data in x–y–z format (geographic position and datum-based elevation). Bathymetry data are obtained by linking the GPS data collector to a precision fathometer. Raw data over water are presently (2019) collected at 20 Hz (20 points per second), and then filtered during post-processing to provide manageable data sets. Raw data in x–y–z format are converted to x–z pairs (distance-elevation) to yield profiles that can be directly over lain and compared with earlier surveys (see CSE 2018).

Seabrook Island's beach and bathymetry data are analyzed by standard methods for evaluating the profile condition (CERC 1984, Kana 1993, Kana et al 2015). Basic units of measure are the absolute quantity of sand contained within a given length of beach and the change in the quantity of sand between two surveys. Quantity estimates are derived by applying profile changes over representative shoreline reaches and cross-shore boundaries, using the average-end-area method. Normally, along straight beaches, some uniform depth limit for volume calculations can be established and used over time for consistency of comparisons. Seabrook Island's shoreline, by contrast, is fronted by two major channels of varying depth as well as by Captain Sams Inlet.

Surveys in the early 1980s had only limited coverage into deeper water and did not include sand to the bottom of the channels. By the 1990s, more profiles were established and most were surveyed into deeper water. Therefore, over time, Seabrook Island's computation boundaries along the northern channel (Seabrook Island Club facility to Renken Point) have been modified to more or less match the local depth of the channel (where data were available), which yields more realistic estimates of sand volumes connected with the beach.

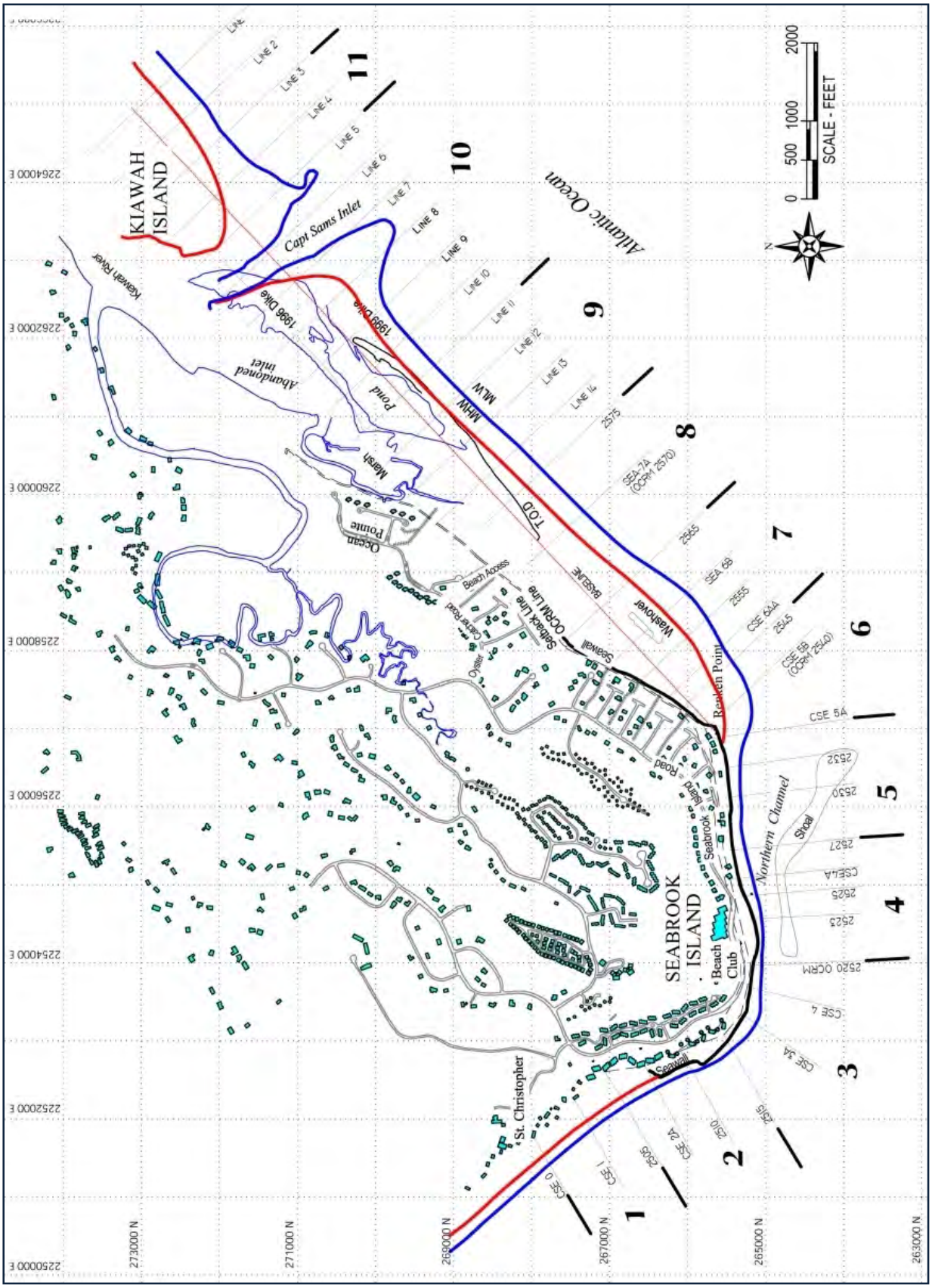


FIGURE 5.1.1a. Network of beach monitoring lines used between 1997 and 2011. The equivalent OCRM line numbers are indicated. Groups of lines define erosion analysis "reaches" described in Section 5.1.2. In 2011, several lines were added to the network (see Fig 5.0a) and the azimuths around Renken Point were modified (CSE 2011, 2014).

TABLE 5.1.1a. Seabrook Island beach monitoring lines utilized in 2018 using prior profiles established by RPI, CSE, and OCRM. New line names (1–50) were developed to simplify locating profiles. Previous names are provided for reference with earlier reports. Offsets and cutoffs reference volume calculation starting and ending points along each profile in 2014 based on the location of adjacent channel centerlines and other factors (CSE 2014).

Seabrook Line #	Previous Name	Northing	Easting	Offset (ft)	Cutoff (ft)	Distance to Next (ft)	Lens Limit (ft NAVD)
1	SBK40	269,104	2,250,763	150	500	760	-14
2	SBK39	268,533	2,251,249	125	600	720	-14
3	CSE0	267,962	2,251,736	80	3000	691	-4
4	CSE1	267,455	2,252,247	120	3000	455	-4
5	2505	267,066	2,252,603	125	3000	480	-5
6	CS2A	266,551	2,252,678	35	3000	500	-9
7	2510	266,096	2,252,874	60	3000	638	-8
8	CSE3	265,541	2,253,074	40	3000	446	-18
9	CS3A	265,319	2,253,340	20	3000	479	-11
10	CSE4	265,332	2,253,710	115	3000	364	-11
11	2520	265,195	2,253,962	20	450	639	-15
12	2523	265,201	2,254,560	0	250	323	-15
13	2525	265,342	2,254,848	20	500	246	-16
14	CS4A	265,483	2,255,066	110	600	342	-16
15	2527	265,471	2,255,437	15	460	652	-19
16	2530	265,550	2,256,113	96	550	390	-23
17	2532	265,495	2,256,502	0	700	505	-23
18	5A	265,706	2,256,889	100	1000	295	-23
19	5B	265,771	2,256,994	20	1400	480	-16
20	CSE6	266,089	2,257,244	20	1400	450	-6
21	6AA	266,245	2,257,402	20	1400	490	-6
22	6A	266,631	2,257,592	20	3000	470	-6
23	6B	267,047	2,257,768	10	3000	610	-6
24	2565	267,575	2,258,121	20	3000	400	-6
25		267,735	2,258,700	420	3000	430	-6
26	7A	268,069	2,259,083	160	3000	370	-6
27		268,316	2,259,356	150	3000	385	-6
28	2575/CSE8	268,670	2,259,557	118	2000	430	-6
29	SBK14	268,646	2,260,165	-367	3000	500	-8.5
30	SBK13	268,988	2,260,530	-390	3000	500	-8.5
31	SBK12	269,325	2,260,897	-440	3000	500	-8.5
32	SBK11	269,667	2,261,262	-700	3000	500	-8.5
33	SBK10	269,989	2,261,606	-600	3000	500	-8.5
34	SBK9	270,346	2,261,990	-800	3000	500	-8.5
35	SBK8	270,700	2,262,349	-800	3000	500	-8.5
36	SBK7	271,034	2,262,722	-800	3000	500	-8.5
37	SBK6	271,376	2,263,087	-800	3000	500	-8.5
38	SBK5	271,718	2,263,451	-800	3000	500	-8.5
39	SBK4	272,051	2,263,807	-800	3000	500	-8.5
40	SBK3	272,399	2,264,179	-370	3000	500	-8.5
41	SBK2	272,744	2,264,546	0	3000	500	-8.5
42	SBK1	273,085	2,264,911	0	3000	360	-8.5
43	-500	273,365	2,265,325	340	3000	500	-8.5
44	-1000	273,645	2,265,740	280	3000	500	-8.5
45	-1500	273,924	2,266,154	230	3000	500	-8.5
46	-2000	274,204	2,266,569	150	3000	500	-8.5
47	-2500	274,484	2,266,983	140	3000	500	-8.5
48	-3000	274,763	2,267,398	110	3000	500	-8.5
49	-3500	275,043	2,267,812	90	3000	500	-8.5
50	-4000	275,323	2,268,227	125	3000	0	-8.5

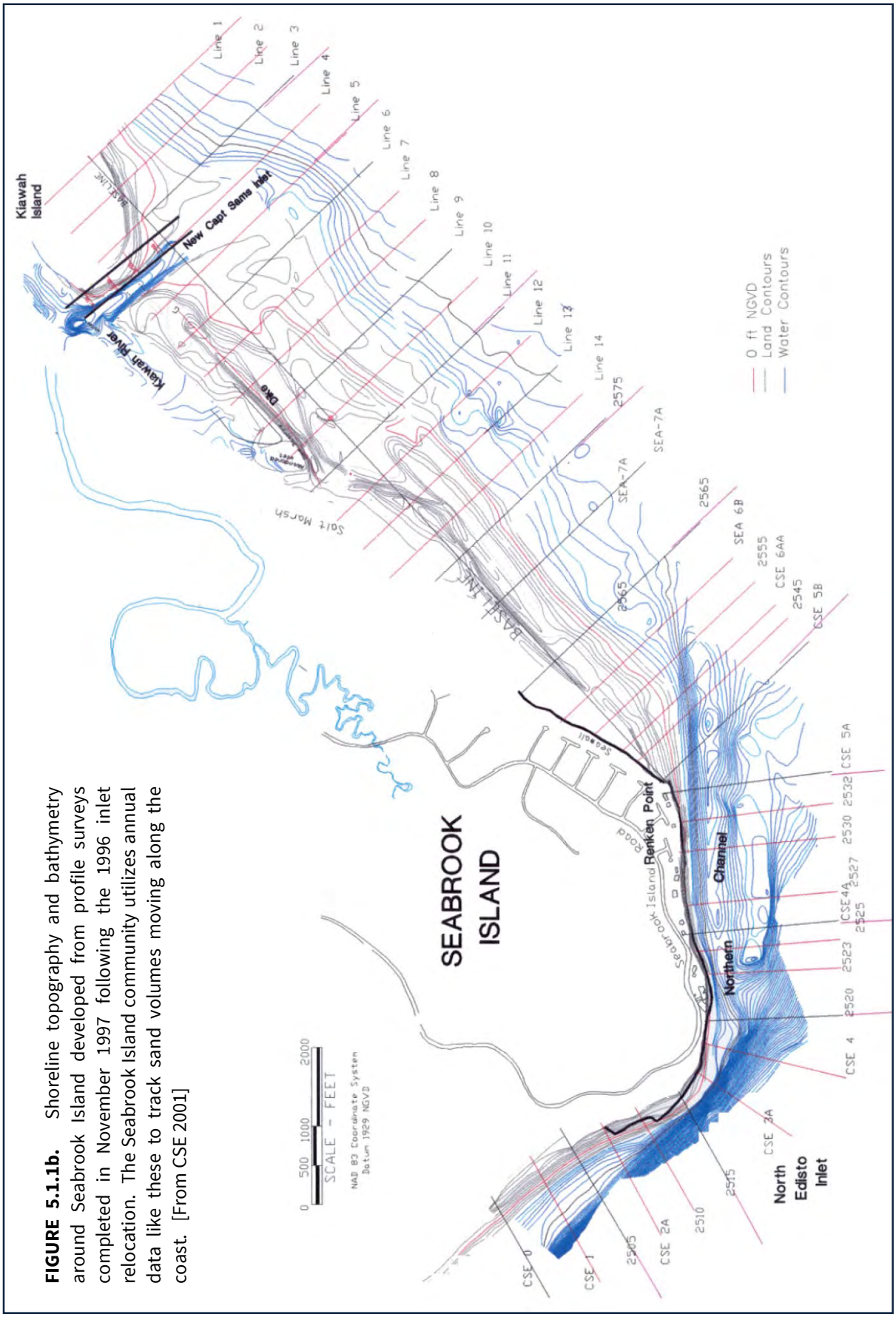


FIGURE 5.1.1b. Shoreline topography and bathymetry around Seabrook Island developed from profile surveys completed in November 1997 following the 1996 inlet relocation. The Seabrook Island community utilizes annual data like these to track sand volumes moving along the coast. [From CSE 2001]

Seabrook Island's beach volumes are tracked by "unit-volume" results as well as aggregate totals by reach. Unit volume is the quantity of sand contained in one unit-length of shoreline between defined cross-shore boundaries (typical units are given in cubic yards per foot—cy/ft). Figure 5.1.1c illustrates the concept of unit volume for a range of beach conditions.

Seabrook Island has tracked sand volumes by "reaches," which are segments of shoreline having similar orientations or exposures to inlet channels (see Fig 5.1.1a). Each reach can be considered a sand box containing a particular volume of sand between the backshore and some limiting depth offshore. The volume of sand in each reach has been measured yearly and compared with earlier data to compute volumetric erosion or accretion rates and track the movement of sand along the island (discussed in Section 5.1.2).

Figures 5.1.1d–g provide a sample of comparative profiles for several localities along Seabrook Island. These are placed by survey line number and proceed upcoast from North Edisto River Inlet to North Beach (see Fig 5.1.1a for profile locations). Figures 5.1.1d and 5.1.1e illustrate conditions around the southern tip of the island along North Edisto River Inlet and along the northern marginal channel of the inlet. Shoals on the north side of North Edisto River Inlet are separated from the beach by a shallower channel that has periodically encroached on Seabrook Island. Beach monitoring by the community tracks the movement of the north shoal (Fig 5.1.1e) as well as the volume of sand between the seawall and middle of the northern channel. Ten reaches are referenced between Camp St. Christopher and Captain Sams Inlet. An 11th reach covers the southern end of the Kiawah Spit.

Figure 5.1.1f (Line 17) is situated along the deepest part of the northern marginal channel in Reach 5. Severe encroachment of the channel into the seawall in 1990 led to a channel realignment project by dredge in February (see Table 5.1c). Since 1990, sand has accumulated along this segment of beach, leaving a wider dry beach and dune area while pushing the northern channel further from the seawall.

Figure 5.1.1g shows example profiles from the developed section of North Beach at Line 20 (OCRM 2555). This segment of Seabrook Island (Reach 6) has widened considerably since the 1980s as a result of sand bypassing after each inlet relocation event. The beach in this area is~200 ft wider in 2019 compared with 1989 and contains multiple, low dune ridges. The next section summarizes volumetric changes developed from the network of profiles along Seabrook Island.

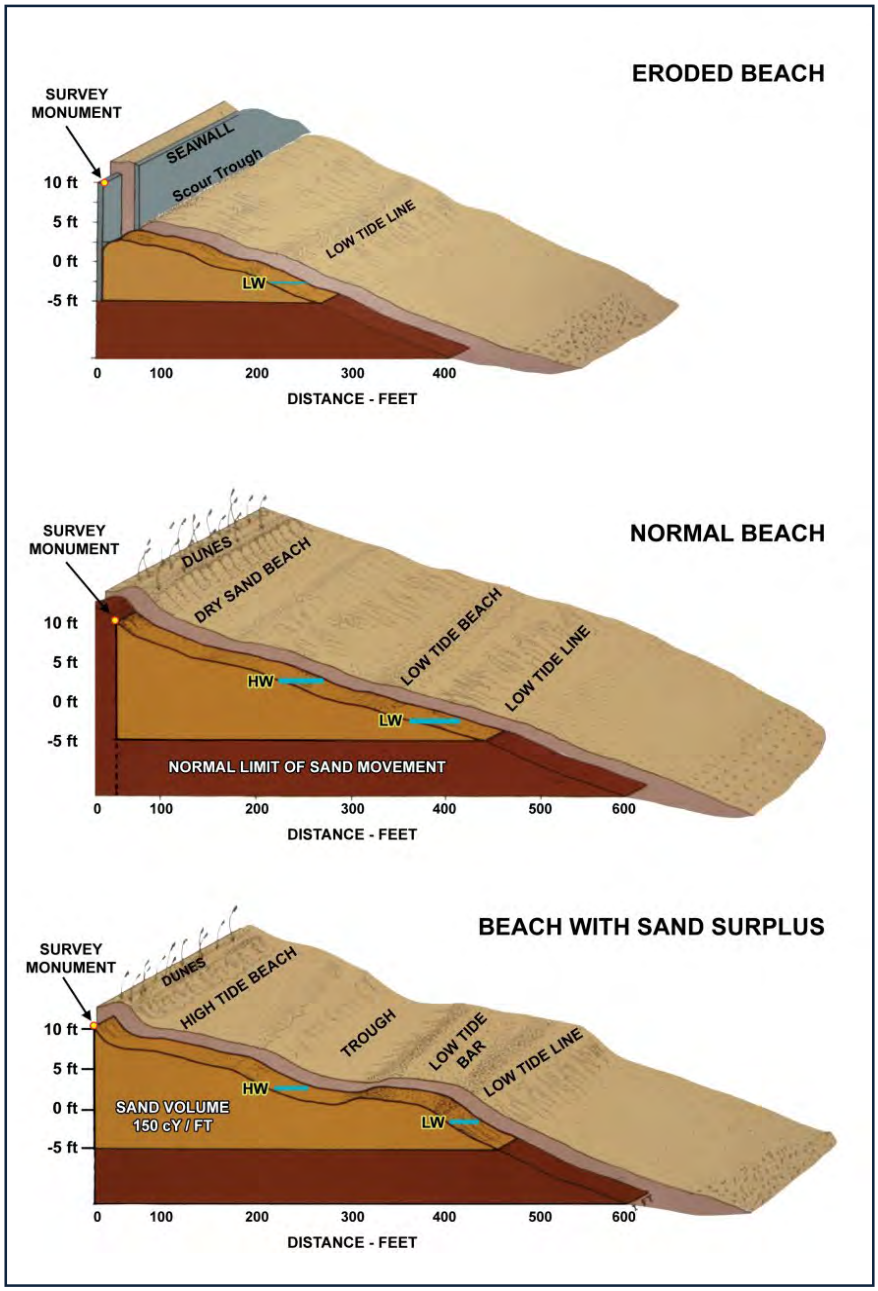


FIGURE 5.1.1c. Concept of unit volume—the quantity of sand contained in one unit length of shoreline between defined cross-shore boundaries. The examples illustrate relative volumes for an eroding beach backed by seawalls, a normal beach, and an accreting beach. Seabrook Island typically exhibits all three conditions at any time (from Kana 1990).

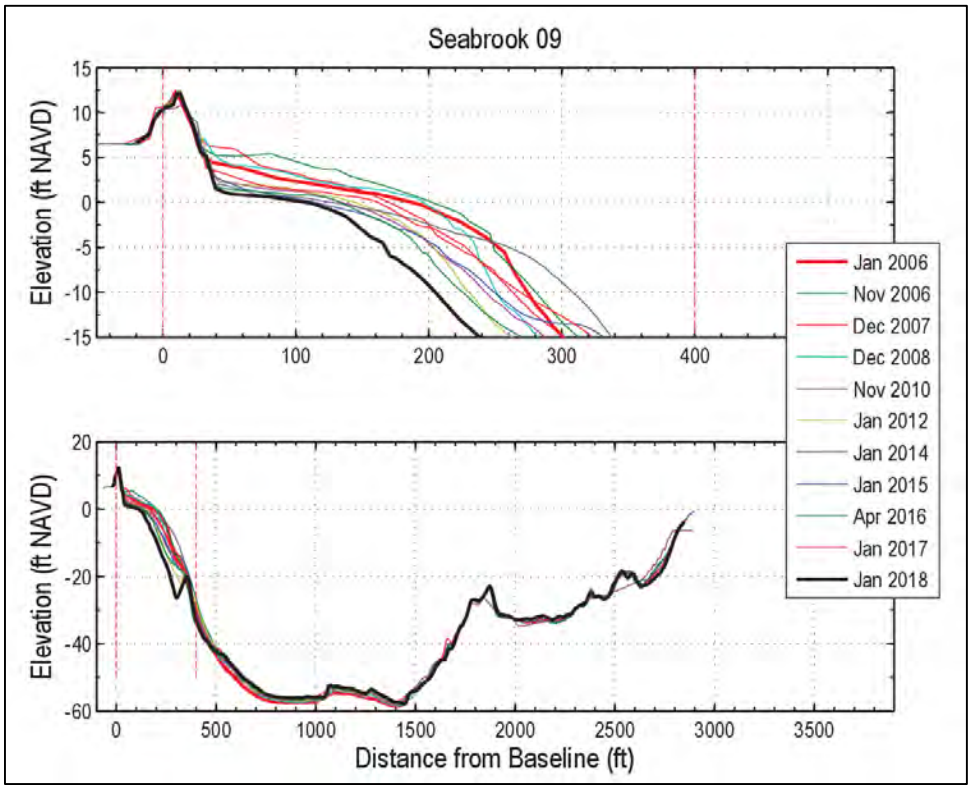


FIGURE 5.1.1d. Profiles from **Reach 3** (see Fig 5.1j) at Line 09 (old CSE 3A) near Beach Club Villas on North Edisto River Inlet. The beach is a relatively narrow platform fronting a seawall at the edge of the main channel of North Edisto River Inlet, one of the deepest natural inlets along the South Carolina coast.

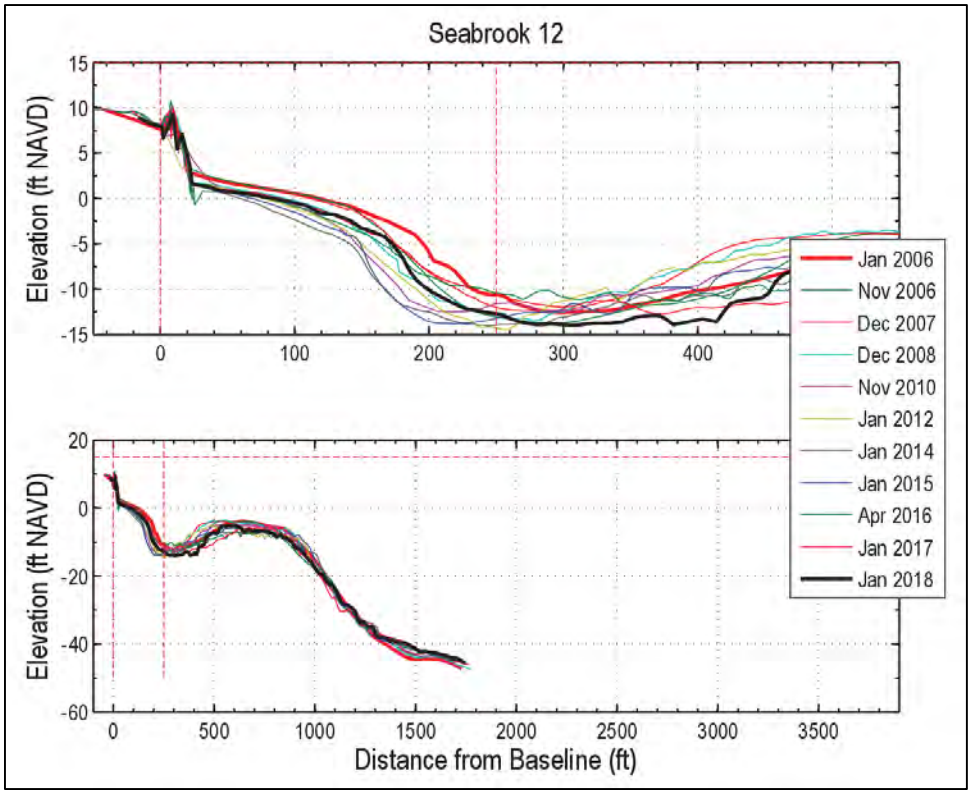


FIGURE 5.1.1e. Profiles of Line 12 from **Reach 4** in the vicinity of the Seabrook Island Club facilities.

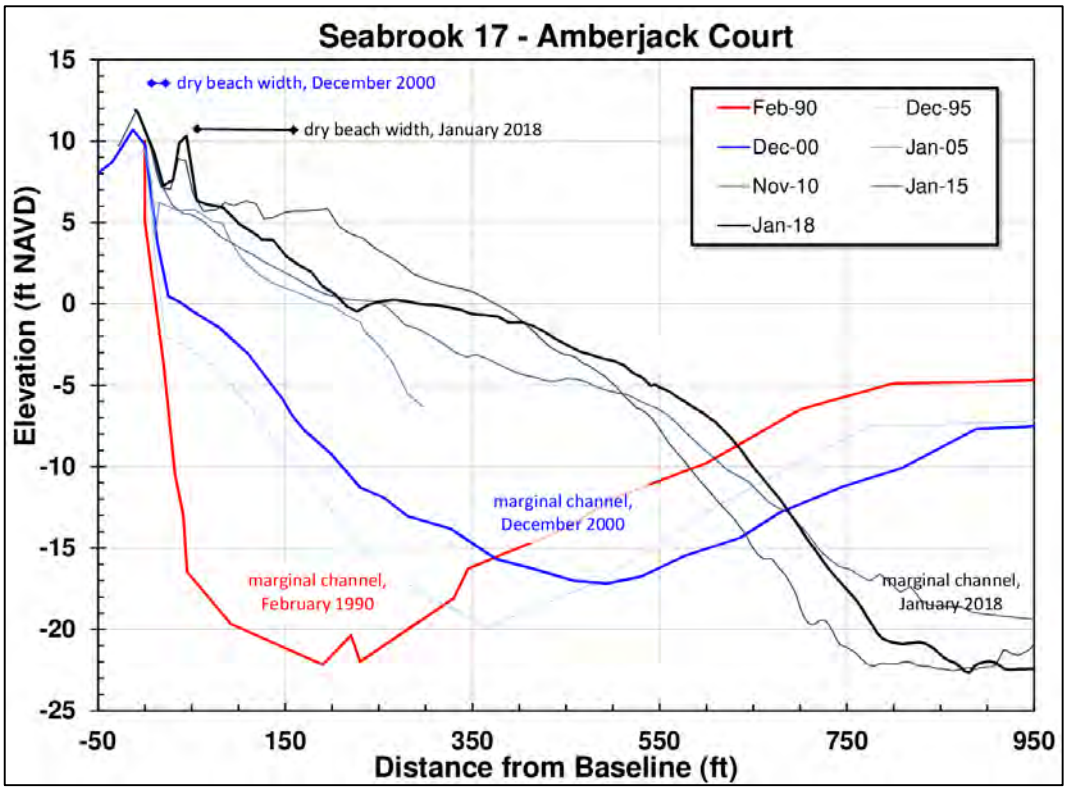


FIGURE 5.1.1f. Profiles from Line 17 in **Reach 5** adjacent to the northern marginal channel of North Edisto River Inlet. Severe encroachment of the channel in 1990 led to a channel realignment by dredge.

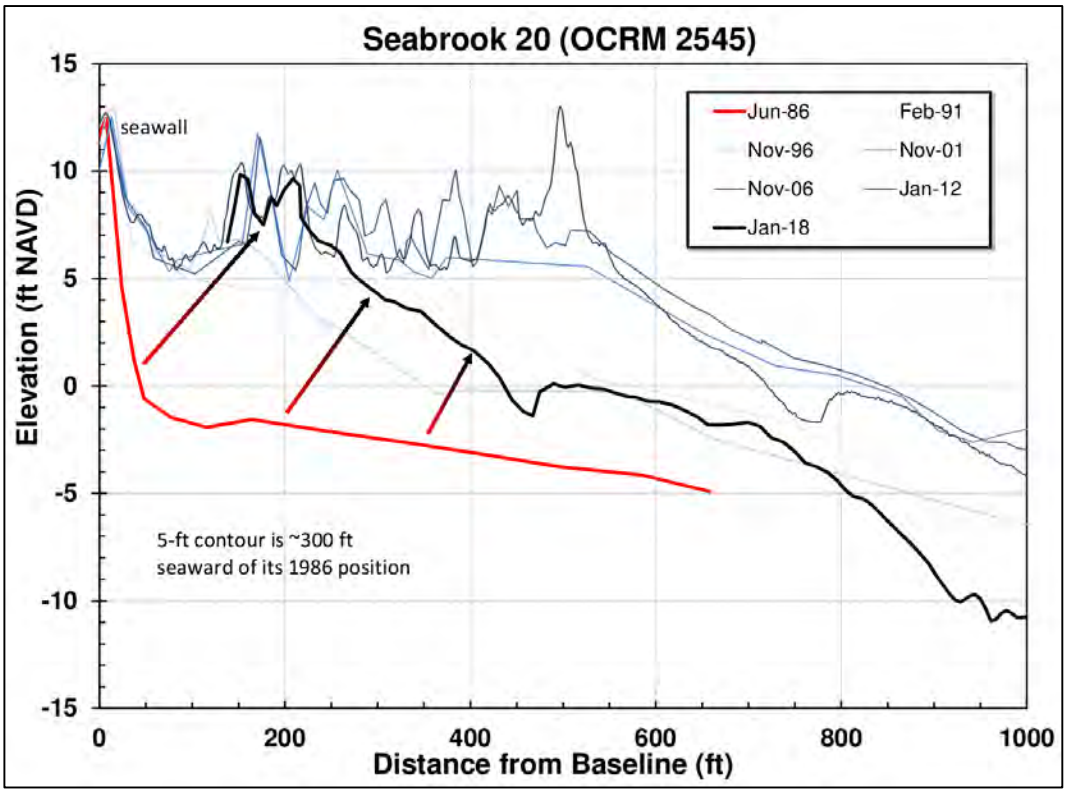


FIGURE 5.1.1g. Profiles from Line 20 (**Reach 6**) along Seabrook Island dating back to 1986, illustrating major growth of the beach and dune system along this section of the island.

5.1.2 Long Term Erosion Rates and Shoreline Change

CSE (1989) evaluated shoreline/volume changes prior to the 1990 channel realignment/nourishment project along the northern channel using four reaches (A–D, see Fig 5.1f). They detected a cycle of changes along Reach A (beach downcoast of Renken Point—OCRM 2540) linked to the position of Captain Sams Inlet (Fig 5.1.2a). Shoreline change data suggested that erosion tends to precede each inlet relocation and continues for several years after Captain Sams Inlet shifts upcoast before Reach A begins to accumulate sand. As Figure 5.1.2a indicates, this cycle of erosion and accretion is super-imposed on a long-term trend of accretion, consistent with NOAA-NOS (1983) and Anders et al (1990).

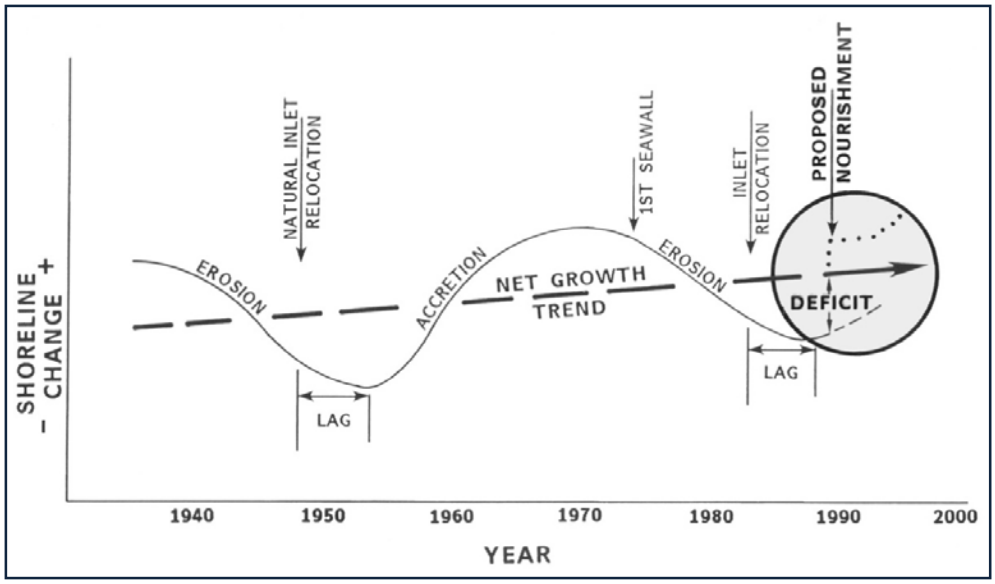


FIGURE 5.1.2a. Cycle of shoreline change along the downcoast half of Seabrook Island (south of OCRM 2540) based on historical shoreline analysis. Net trend is accretion at century time scales. Accretion periods lag inlet relocations by about five years. A 1990 project (proposed nourishment) involved placement of sand from North Edisto River Inlet in an attempt to accelerate recovery of the beach. [From CSE 1989]

Other reaches along Seabrook Island were determined to change in relation to the position of Captain Sams Inlet with periods of rapid accretion followed by erosion. Figure 5.1.2b (from Kana & McKee 2003) shows the reach trends between 1983 and 2004. After the 1983 inlet relocation, Reach D (closest to the inlet) and Reach C rapidly gained sand. Reach B (southern half of North Beach) continued to erode for two years, and Reach A (northern channel and North Edisto River Inlet area) eroded for six more years after inlet relocation before the erosion trend reversed. The cycles of erosion and accretion for the four reaches combined show a net gain in sand volume over time (Fig 5.1.2c). Between 1983 and 2004, Seabrook Island gained over 1.75 million cubic yards. (Note: ~685,000 cy were added by dredging and channel realignment in 1990, and the balance was gained by way of Captain Sams Inlet relocation projects.)

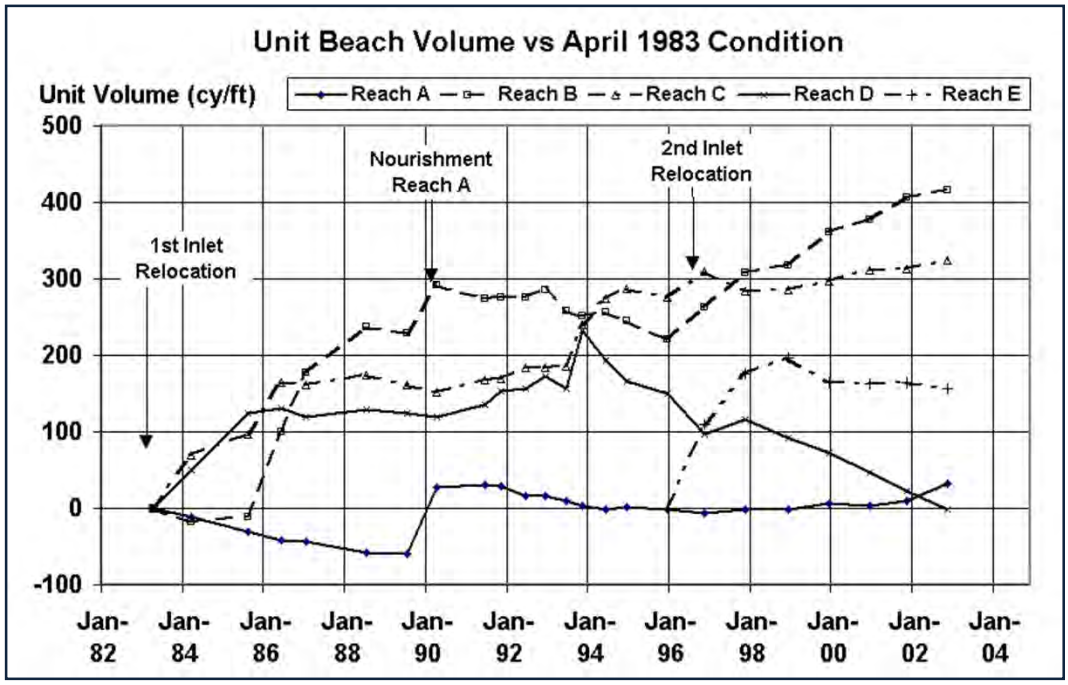


FIGURE 5.1.2b. Average unit-volume profile changes by reach along Seabrook Island since inlet relocation (March 1983). See Figure 5.1f for reach locations. [After Kana & McKee 2003]

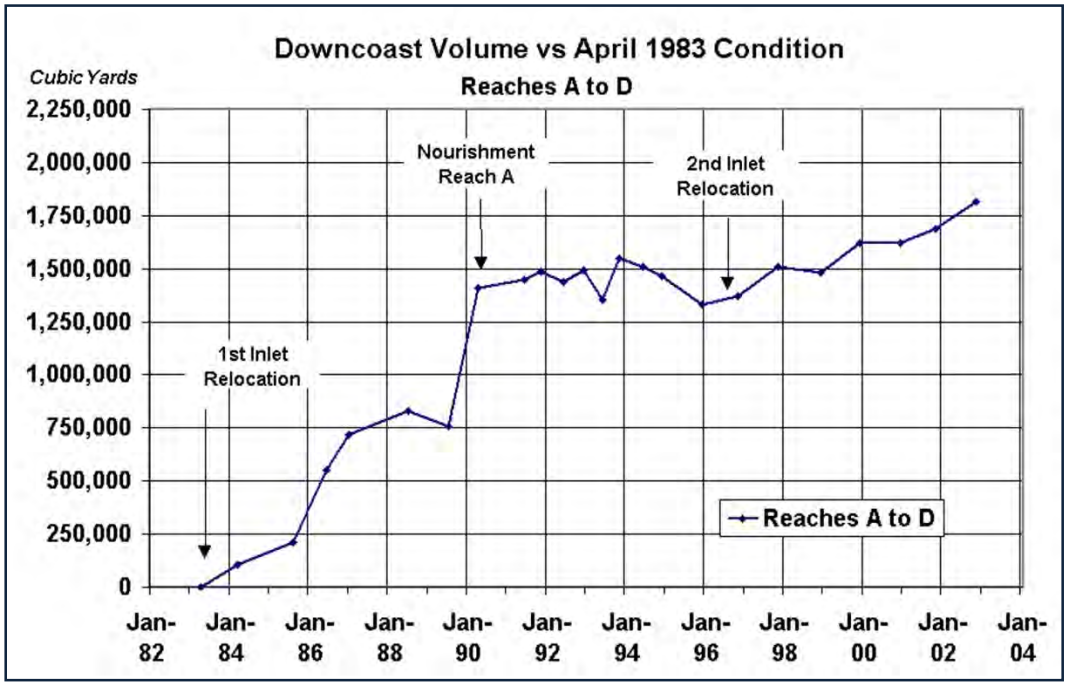


FIGURE 5.1.2c. Net volume change along Seabrook Island after the first inlet relocation (March 1983). The northern channel was realigned in February 1990, adding ~685,000 cy to the total. [After Kana & McKee 2003]

Figure 5.1.2d shows the impact of the 1983 inlet relocation along North Beach between February 1983 and January 1987. Soon after the old inlet was closed by a sand dike, the shoals of the ebb-tidal delta coalesced into intertidal sand bars and migrated onshore. By late 1984, the bars attached to the beach and began spreading downcoast, finally reaching Renken Point (OCRM 2540—promontory at lower left corner of each image) by January 1987. Conditions in April 1987 are shown in Figure 5.1.2e (source: Kana 1989).

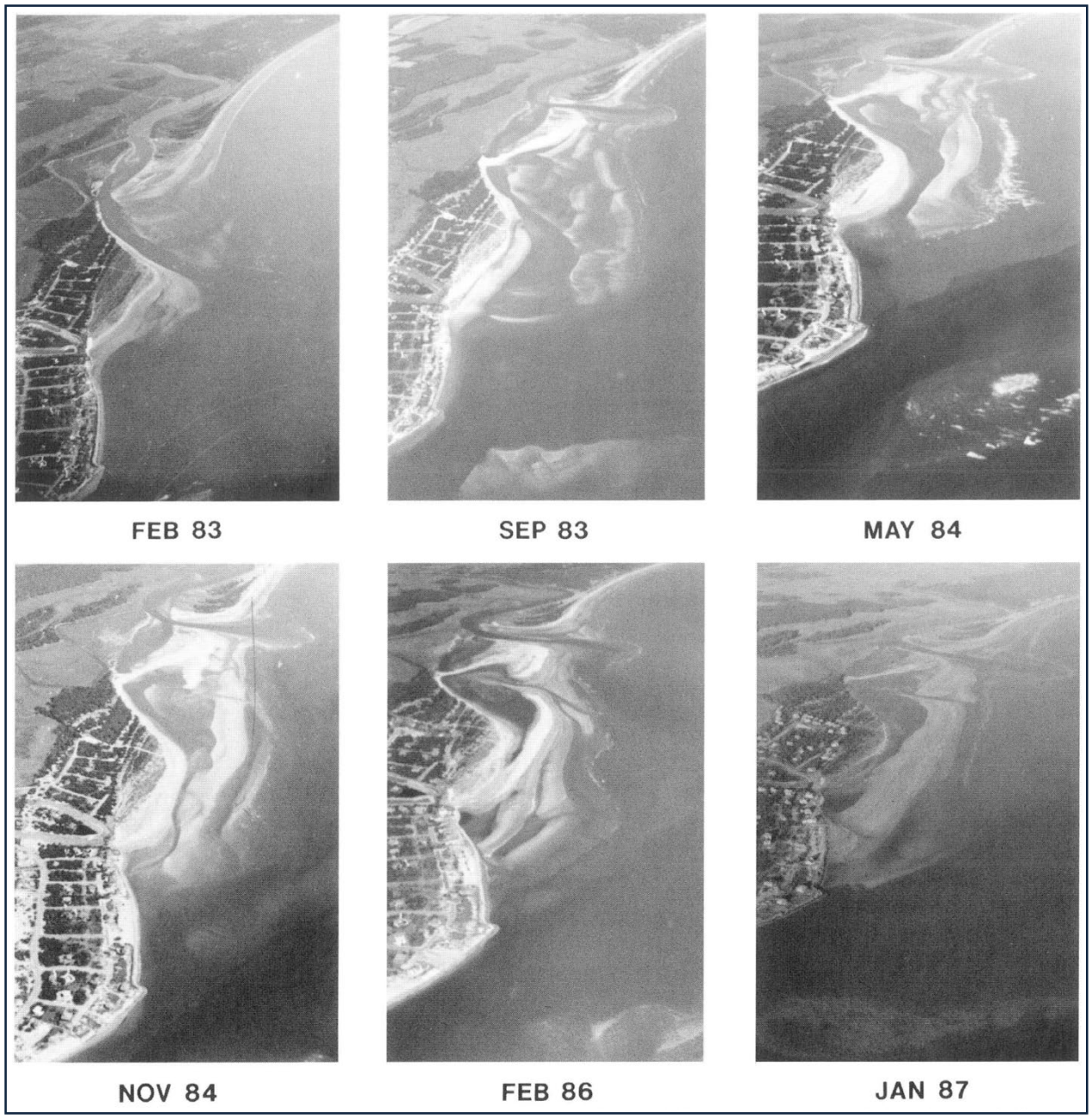


FIGURE 5.1.2d. Collapse of abandoned delta shoals and eventual accretion along the downdrift shoreline of Seabrook Island after the 1983 inlet relocation. New channel is at the top of each photo. [After Kana 1989]

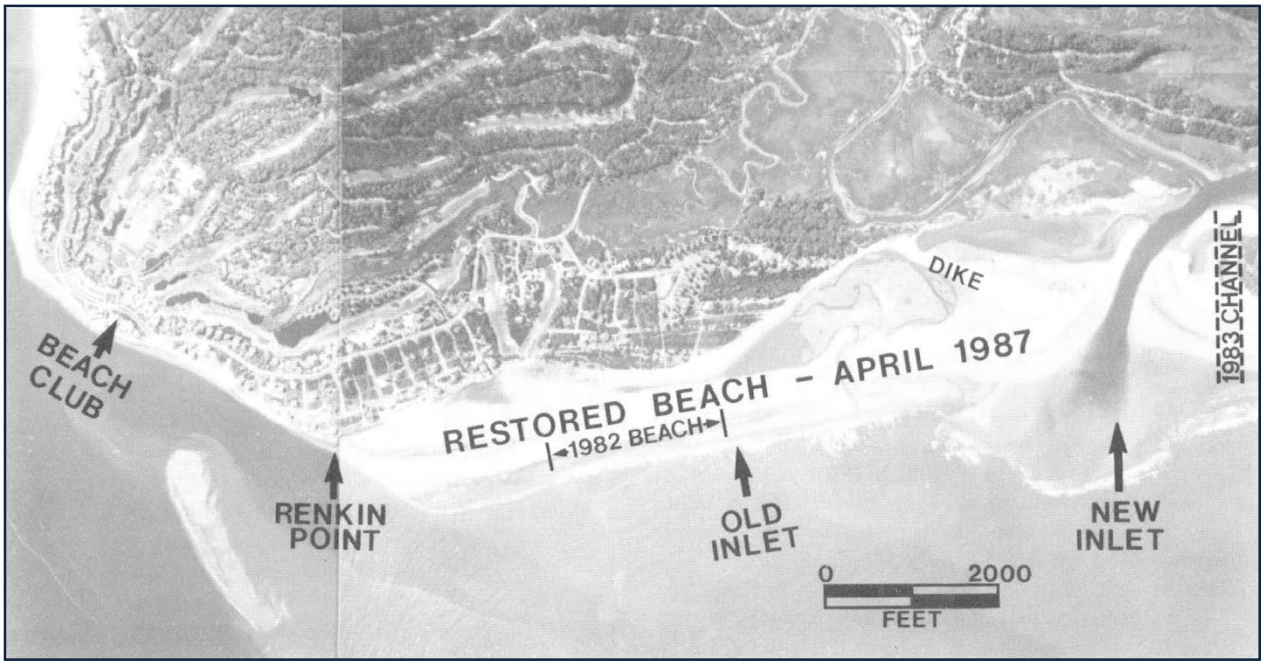


FIGURE 5.1.2e. Seabrook Island in April 1987 after natural restoration by inlet relocation. Area south of Renken Point remained unrestored. (Photo: Courtesy of Seabrook Island POA) [After Kana 1989]

Since the 1990 northern channel realignment, the erosion and accretion are tracked using 8–11 reaches (number varies in relation to Captain Sams Inlet position). The first eight reaches encompass a portion of St. Christopher Camp (Reach 1) and the developed shoreline of Seabrook Island. Reaches 2–6 are south of Renken Point and the remaining reaches are north of the area. Each year, the condition of the beach is updated and the sand volumes contained within each reach are tracked to fixed cross-shore boundaries or the center of the adjacent channel. Unit volumes are averaged by reach and the differences between the earliest and most recent survey provides a measure of the net change. Erosion or accretion rates are then annualized over the available time period.

Figures 5.1.2f to 5.1.2i show the 14-year average, unit-volume change rate by reach. The cross-shore calculation limits were given earlier in Table 5.1.1a. These results incorporate the impact of the 2015 relocation of Captain Sams Inlet, and several projects in which excess sand was excavated from Captain Sams Inlet shoals and placed south of Renken Point (detailed in Section 5.2.1).

Because new survey lines, spacings, and depth limits were used following the 2006 survey, direct volumetric comparisons made between older (1990 to 2006) and younger (2006 to 2018) data are not possible without complex analysis. Nevertheless, comparison of the two data sets and trends from reach to reach show inflection toward positive or negative volume changes.

Figures 5.1.2f-g show the 30-year changes for profiles along the North Edisto River Inlet:

- Reach 1 (St. Christopher Camp) gained 3.5 cy/ft/yr from 1990 to 2006, and has lost ~0.4 cy/ft/yr since 2006.
- Reach 2 (Seabrook Island development at Pelican Watch Villas) gained 3.3 cy/ft/yr from 1990 to 2006, and gained 2.9 cy/ft/yr from 2006 to 2018.
- Reach 3 (Beach Club Villas area) gained 2.3 cy/ft/yr from 1990 to 2006 and lost 4.6 cy/ft/yr from 2006 to 2018.

The changes along Reaches 1 and 2 have been relatively steady, whereas Reach 3 has undergone a ~15-year cycle of accretion and erosion. These results somewhat underestimate the full change because calculations are cut off well before the centerline of the North Edisto River Inlet.

Figure 5.1.2g-h shows the 30-year change rates for South Beach along the northern marginal channel of the North Edisto River Inlet:

- Reach 4 (Seabrook Island Club area) gained an average of 1.8 cy/ft/yr from 1990 to 2006, and lost 1.2 cy/ft/yr from 2006 to 2018.
- Reach 5 (Beach Court–Amberjack Court area) gained 5.3 cy/ft/yr from 1990 to 2006, and 8.1 cy/ft/yr from 2006 to 2018.
- Reach 6 (Renken Point) gained 24.1 cy/ft/yr from 1990 to 2006, and has lost 18.0 cy/ft/yr since.

Fig 5.1.2i shows the 30-year accretion/erosion trends for North Beach between Renken Point and Seabrook Island's north (eastern) most development near Oyster Catcher beach access: Reach 7 gained 6.2 cy/ft/yr from 1990 to 2006, and lost 20.4 cy/ft/yr from 2006 to 2018; Reach 8 gained 6.7 cy/ft/yr between 1990 and 2006, but has lost an average of 15.0 cy/ft/yr since. As both graphs illustrate, this section of Seabrook Island has experienced large fluctuations in the shoreline (unit beach volume) but little net change. Both reaches were much healthier in 1990 than the rest of Seabrook Island as a result of the large gains in beach width after the 1983 inlet relocation (see Fig 5.1.2e).

It can be shown that volumetric erosion/accretion rates are related to linear beach-width changes (or unit area changes) according to the dimensions of the active littoral zone (CERC 1984, Kana et al 2013). For example, along high-energy beaches where the average dry-beach level is (~)+6 ft NAVD and the limit of measureable bottom change is −21 ft NAVD, 1 cy/ft of erosion/accretion equates to 1 ft of beach recession/growth. Along Seabrook Island's ocean coast, the normal cross-shore limit of yearly sand transport and bottom change is (~) −12 ft NAVD (Kana et al 2015). Thus, 1 cy/ft of erosion/accretion equates to ~1.5 ft of beach recession/growth.

Table 5.1.2a lists the estimated equivalent linear erosion/accretion rates for 1990 to 2019 for the previously referenced reaches along Seabrook Island. Note the rates along the northern channel and the North Edisto River Inlet use different factors according to the assumed depth limit for the active littoral zone. Three additional reaches are tracked around Captain Sams Inlet in conjunction with its annual beach surveys.

This period sets the "initial" condition (1995) when beach condition was near a minimum *after* the 1990 nourishment project in the area south of Renken Point (see center graph in Fig 5.1.2h). The year 1995 began a sustained period of beach expansion around Seabrook Island, aided by the 1996 relocation of Captain Sams Inlet. Volumes began to decline around 2010, signaling the need to plan for another inlet relocation project. This documentation of the cycle of erosion and accretion along Seabrook Island points to the difficulty of determining discrete erosion (or accretion) rates from reach to reach. The two sets of rates in Table 5.1.2a are specific to "decadal" scale time periods. The first period (~1990-~2006) generally exhibits higher rates of change than the second period (2006-2018).

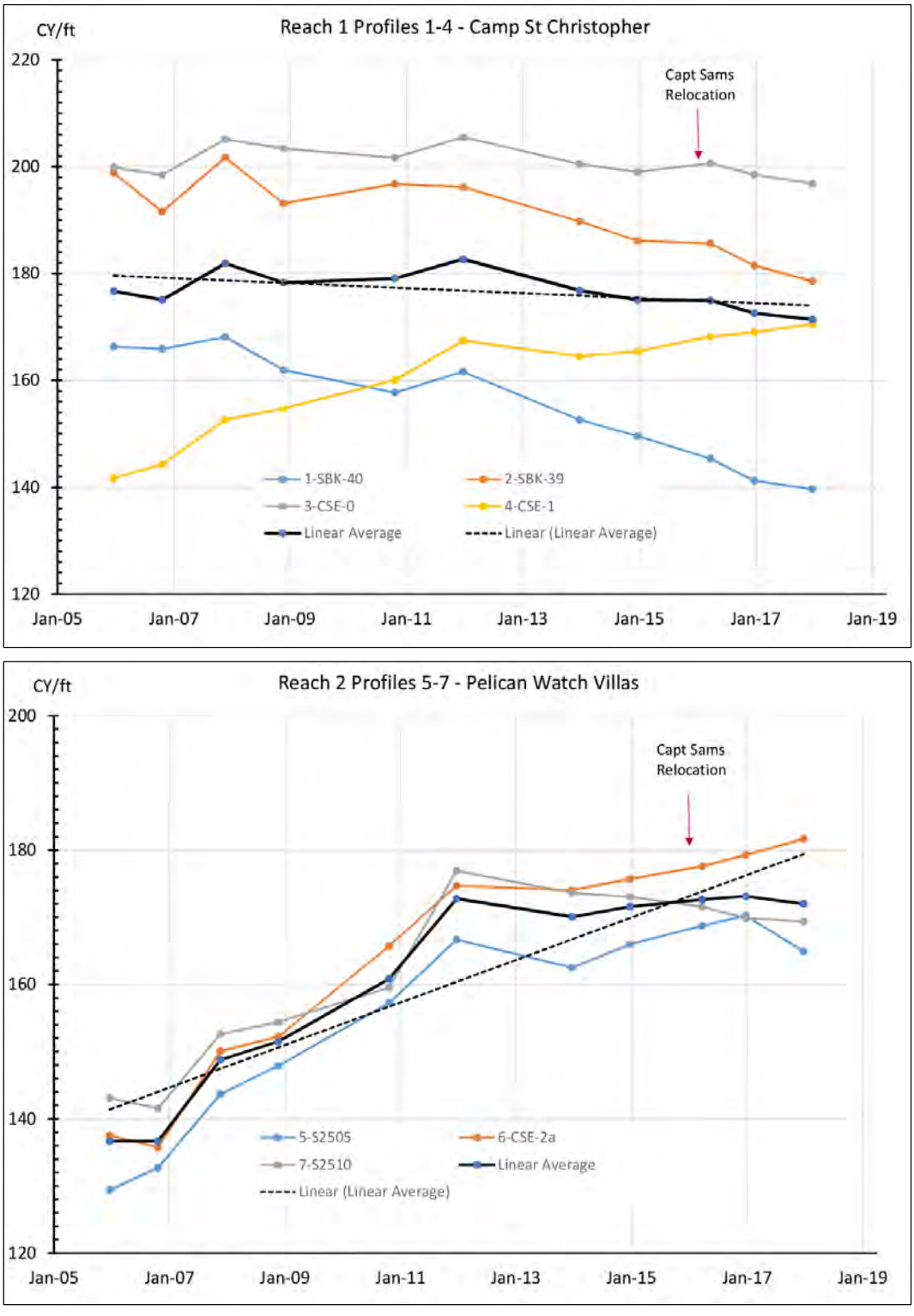


FIGURE 5.1.2f. Reaches 1–2 showing the 14-year average unit-volume change rate by station. Order of transects is from downcoast to upcoast (generally southwest to northeast). Linear average of all stations within the reach is shown in black.

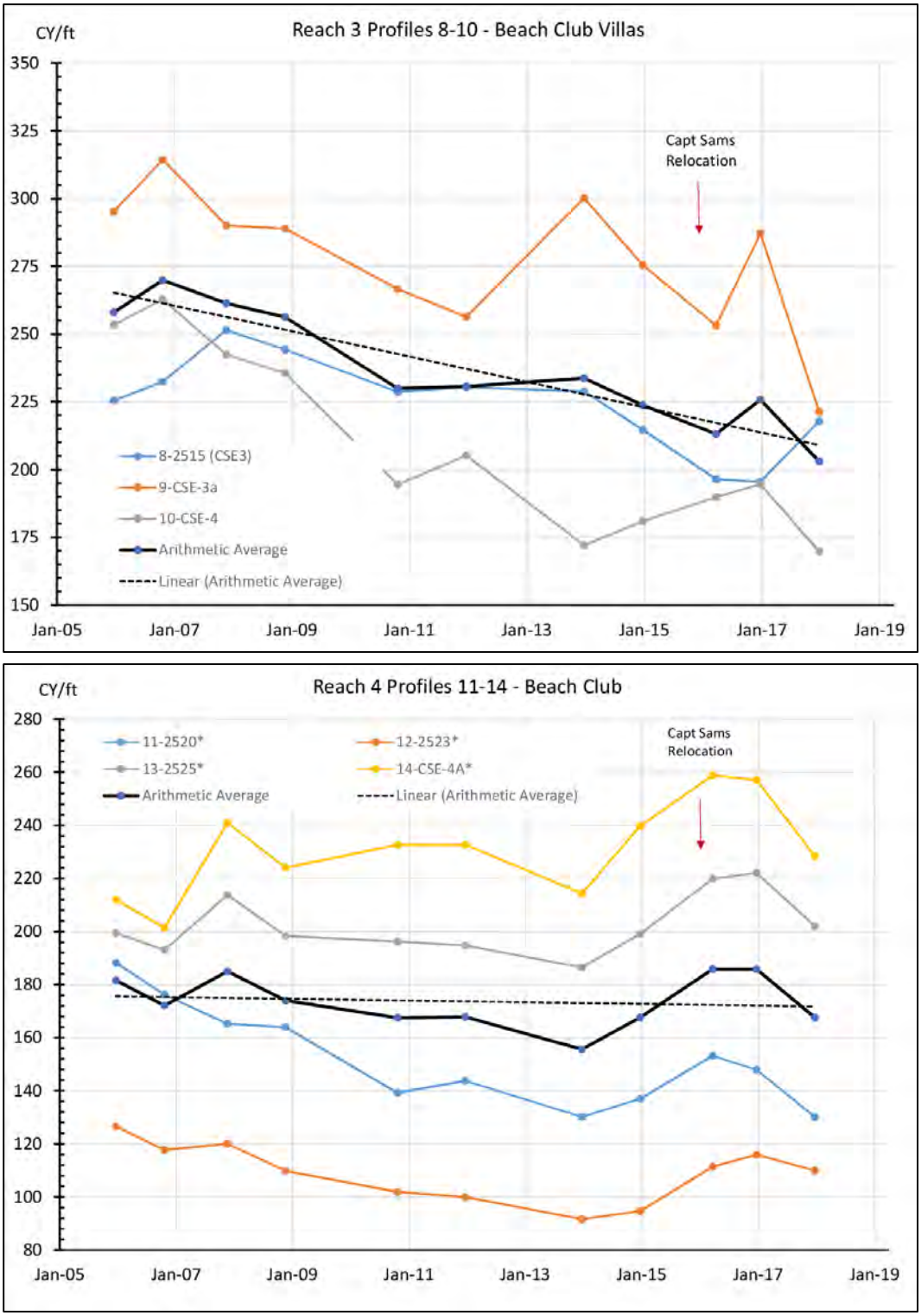
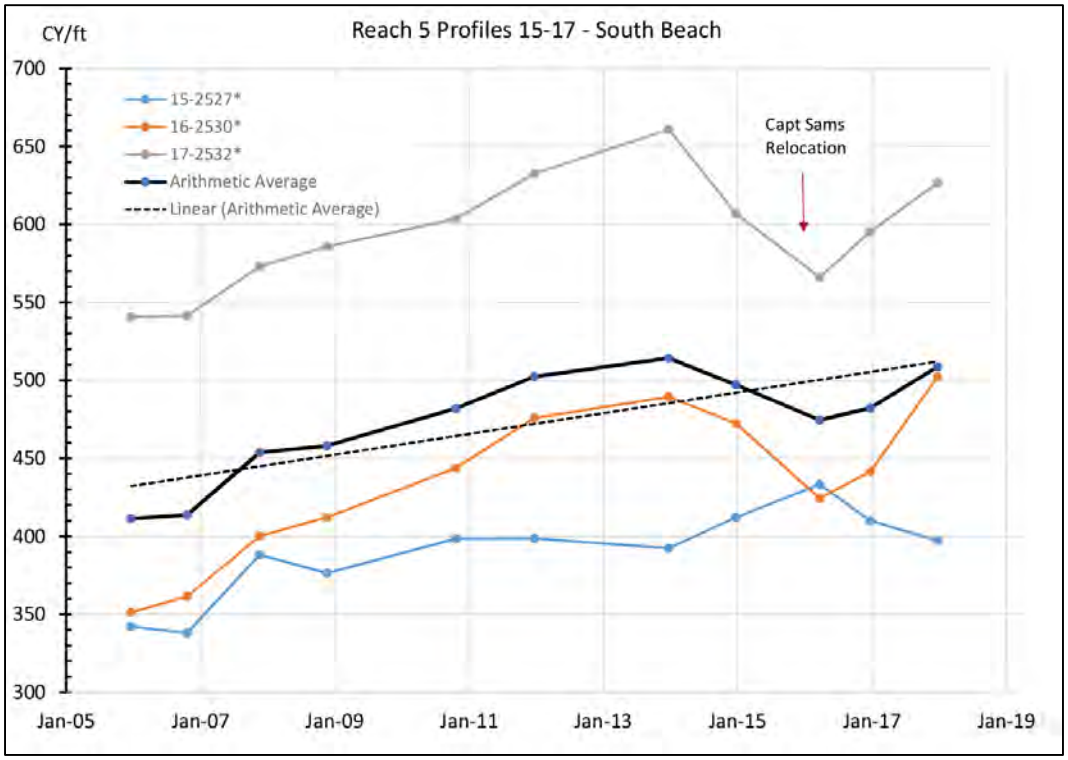


FIGURE 5.1.2g. Reaches 3–4 showing the 14-year average unit-volume change rate by station. Order of transects is from downcoast to upcoast (generally southwest to northeast). Linear average of all stations within the reach is shown in black.



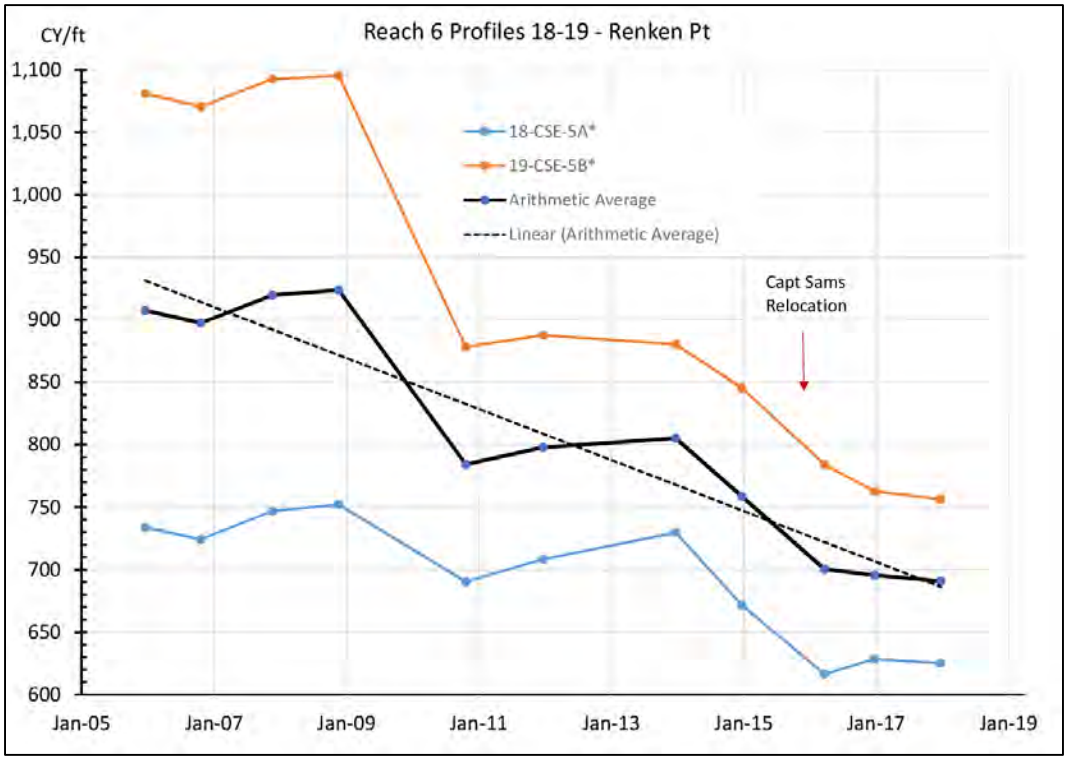


FIGURE 5.1.2h. Reaches 5–6 showing the 14-year average unit-volume change rate by station. Order of transects is from downcoast to upcoast (generally southwest to northeast). Linear average of all stations within the reach is shown in black.

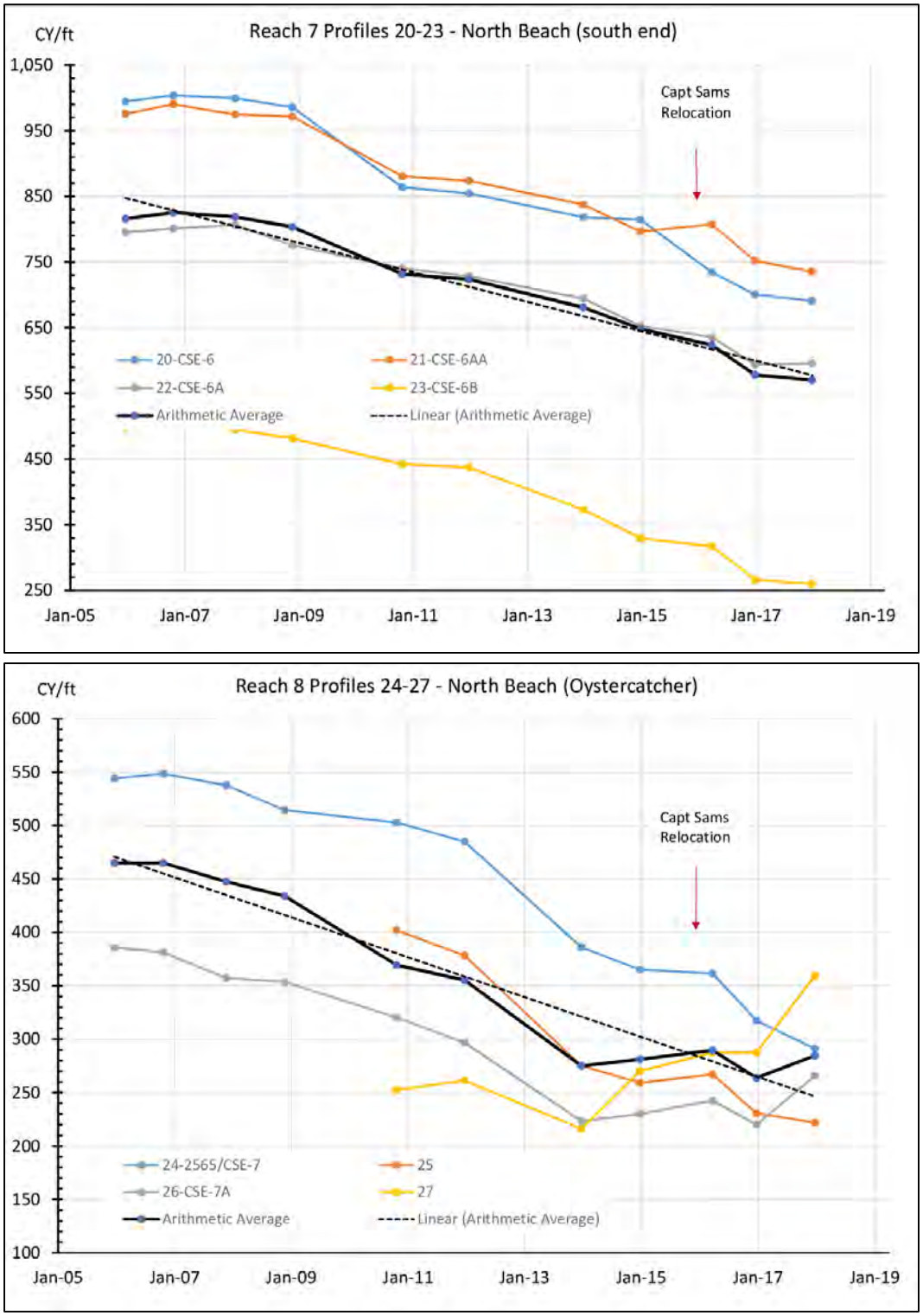


FIGURE 5.1.2i. Reaches 7–8 showing the 14-year average unit-volume change rate by station. Order of transects is from downcoast to upcoast (generally southwest to northeast). Linear average of all stations within the reach is shown in black.

TABLE 5.1.2a. Summary of volumetric and estimated equivalent linear erosion/accretion rates for the period 2006 to 2018. *DOC (depth of closure) — The estimated offshore depth in feet NAVD beyond which there is no measureable change in bottom elevation in connection with cross-shore sand transport at yearly to decadal scales (Kraus et al 1998). **Source: CSE (2014) — See original source for profile calculation limits. ***Factor assumes berm elevation is +6 ft NAVD and DOC as indicated in the table. Factor = 27/(6−DOC)

Reach	Applicable Profiles	Locality	DOC*	Volume Change Rate, 1990 to 2006** (cy/ft/yr)	Volume Change Rate, 2006 to 2018** (cy/ft/yr)	Factor***	Equivalent Linear Rate, 2006 to 2018(ft/yr)
1	3–4	North Edisto River Inlet	−5	+3.5	-0.4	2.4	-1.1
2	5–7	North Edisto River Inlet	−8	+3.3	+2.9	1.9	+5.6
3	8–10	Northern Channel	−12	+2.3	-4.6	1.5	-6.9
4	11–14	Northern Channel	−21	+1.8	-1.2	1.0	-1.2
5	15–17	South Beach	−12	+5.3	+8.1	1.5	+12.1
6	18–19	Renken Point	−12	+24.1	-18.0	1.5	-27.1
7	20–23	North Beach	−12	+6.2	-20.4	1.5	-30.7
8	24–28	North Beach	−12	+6.7	-15.0	1.5	-22.5

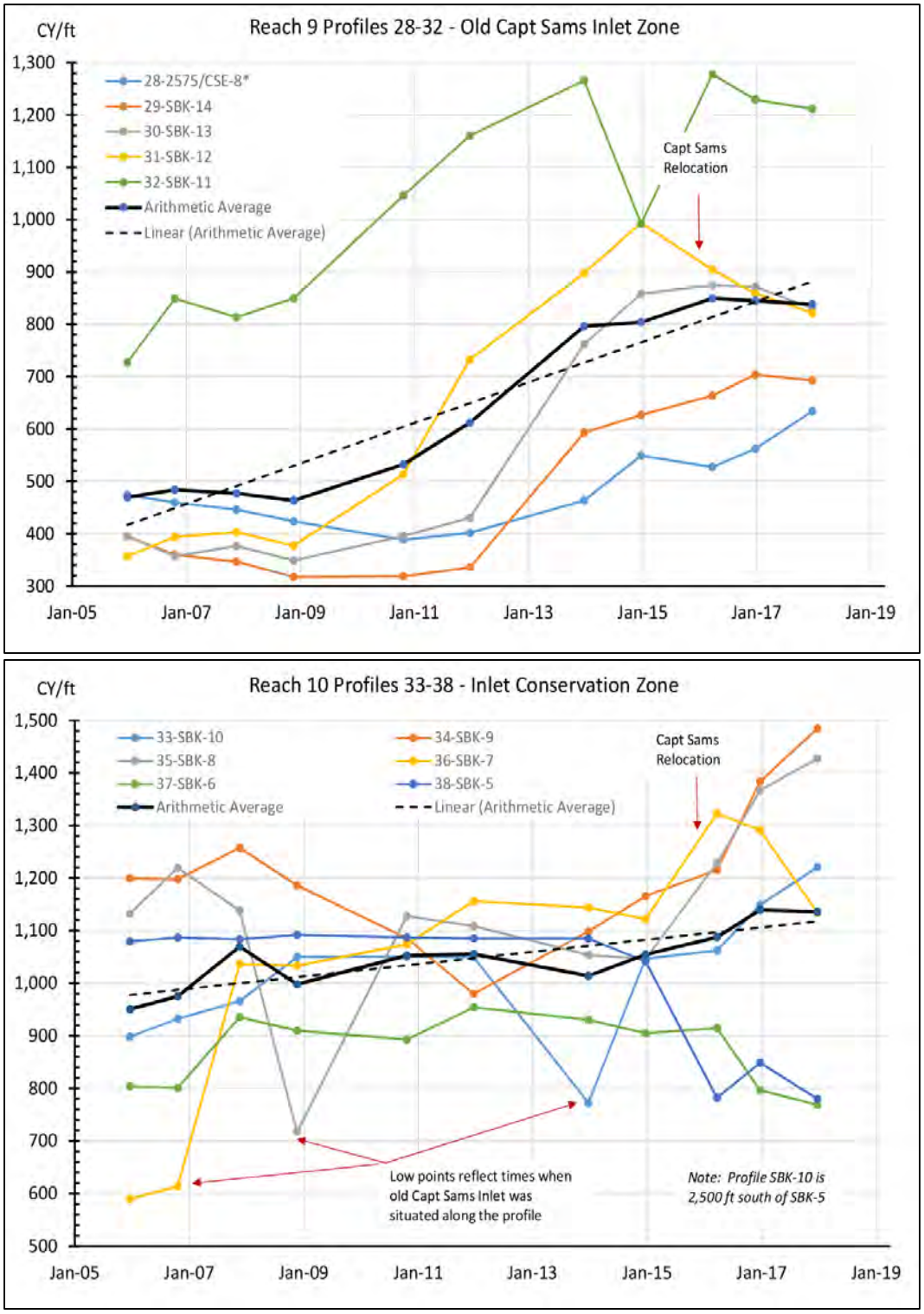


FIGURE 5.1.2j. Reaches 9–10 showing the 14-year average unit-volume change rate by station. Order of transects is from downcoast to upcoast (generally southwest to northeast). Linear average of all stations within the reach is shown in black.

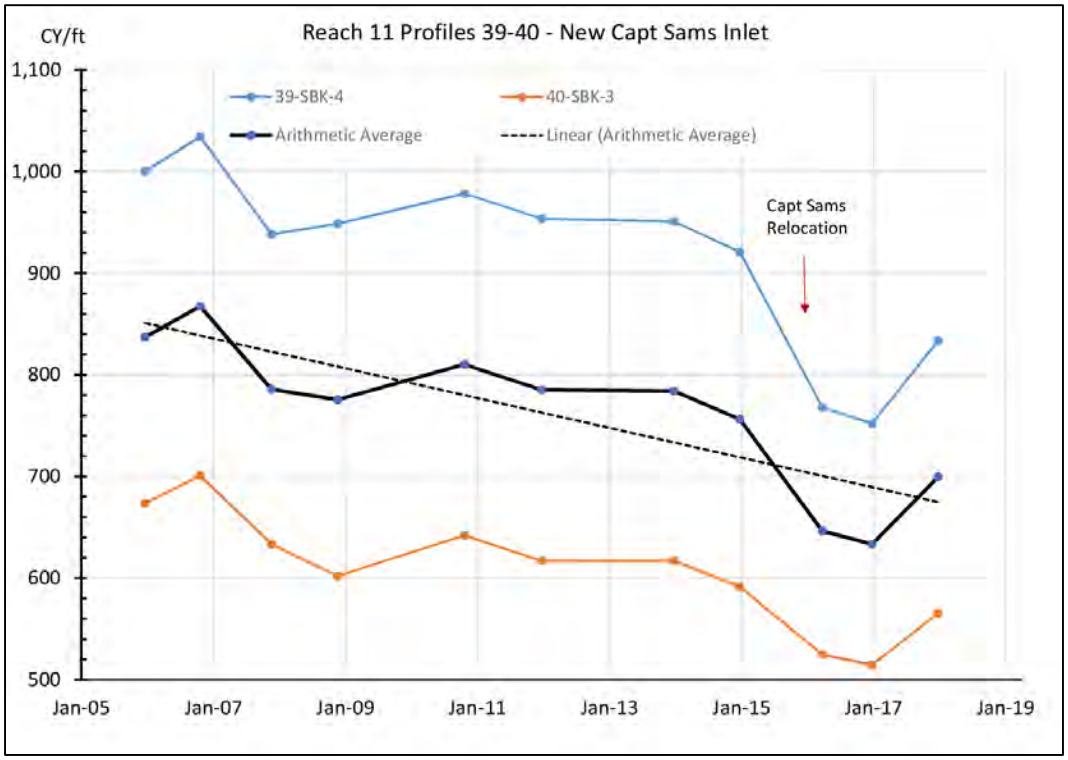


FIGURE 5.1.2k. Reach 11 showing the 14-year average unit-volume change rate by station. Order of transects is from downcoast to upcoast (generally southwest to northeast). Linear average of all stations within the reach is shown in black.

Reach 9 (Fig 5.1.2j, upper) lost volume for a decade following the 1996 inlet relocation project. This reflects onshore movement and downcoast spreading of sand from the abandoned inlet. (Note some of the reduction was associated with excavations and downcoast transfers of sand between 1998 and 2007.) Since 2008, the reach has gained volume as Captain Sams Inlet shoals have migrated into the area.

Reach 10 (Fig 5.1.2j, lower) is near the mouth of Captain Sams Inlet from 2005–2012. As the inlet migrates, the channel passes each monitoring line in sequence, producing a rapid loss of sand followed by recovery of the profile volume. The recovery of volume occurs on the Kiawah side of the channel after the inlet migrates through each profile line.

Reach 11 (Fig 5.1.2k) is situated around the 1963/1983 and 1996 position of Captain Sams Inlet. Soon after each inlet relocation, profiles in this reach tend to rapidly recover then gain sand at a steadier pace in connection with the sand supply moving downcoast along Kiawah Island (CSE 2009; Kana et al 2013). Survey data reveal Reach 11 lost an average of 9.8 cy/ft/yr between 2006 and 2018 (surveys in December/January of each year). Changes along the Kiawah Spit are also tracked as part of this reach, in anticipation of future inlet relocation projects.

Figure 5.1.2l shows recent results of surveys along the Kiawah Spit. Between 2006 and 2018, the spit gained 26.1 cy/ft/yr. The accreting trend conforms to the long-term trend for the area (CSE 2009). Kana and Mason (1988) and Kana et al (2013) hypothesized that the ebb-tidal delta of Captain Sams Inlet acts to hold sand along the Kiawah Spit in much the same way as a jetty prevents sand from moving along the coast. As the inlet and delta migrate toward Seabrook Island, the point of maximum trapping moves, causing the "salient" in the updrift shoreline to move with it. The salient, a minor protrusion in the beach strand, then erodes back to the normal strand line. For additional details on Kiawah Island beach changes, see CSE (2009) and Kana et al (2013).

Note that Figures 5.1.2f-l reflect conditions before the 2015 relocation of Captain Sams Inlet. Each inlet relocation resets conditions for the next cycle of shoreline change. Captain Sams Inlet migrates (north) east to (south) west due to spit growth under the influence of net longshore transport (Hayes et al 1979, Kana & Mason 1988, CSE 2009, Kana et al 2013). Prior to the 1983 inlet relocation, average annual migration rates were around 200–225 ft/yr (Hayes et al 1979). The rate of migration since has averaged 160 ft/yr. The rate of inlet migration is faster at the ocean end of the channel than the river end because of the natural tendency for the new channel to rotate south over time. When relocated, the channel typically discharges directly offshore, perpendicular to the strand line. As it migrates toward Seabrook Island, it tends to rotate and discharge obliquely to the strand. This demonstrates the dominant influence of longshore transport along the seaward side of the Kiawah Spit (CSE 2009, Kana et al 2013).

The average rate of migration the first decade after inlet relocation was ~135 ft/yr. Between 2006 and 2014, the rate accelerated to ~180 ft/yr. This acceleration is due to channel rotation as well as the dominance of south (westerly) sand transport. The further south Captain Sams Inlet migrates, the more it is sheltered by the shoals of the North Edisto River Inlet. Waves from the south diminish and have less effect than conditions when the inlet is situated further upcoast along the Kiawah Spit. As Hayes et al (1979) demonstrated, variations in longshore transport around the shoals of inlets accounts for the varying and cyclic shoreline changes along the beach.

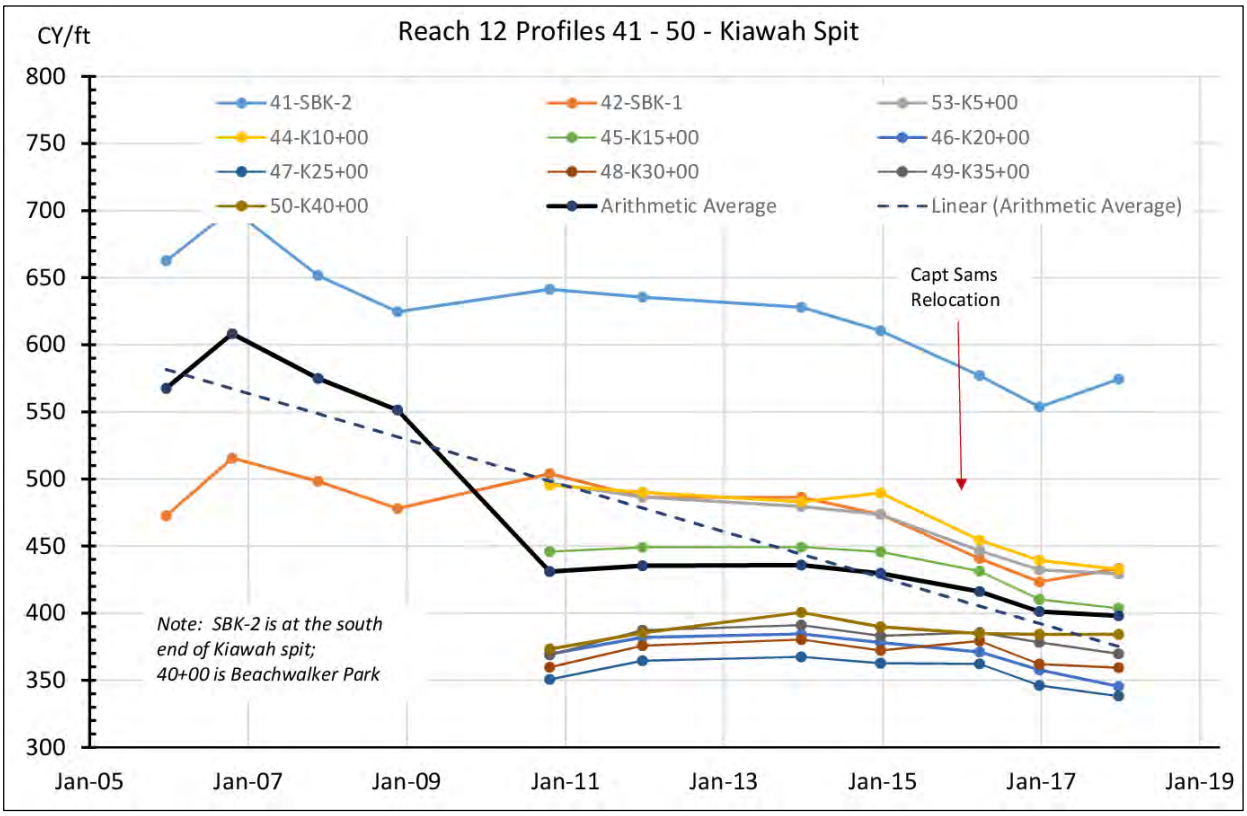


FIGURE 5.1.2l. **[UPPER]** Volume changes in reach 12 along Kiawah Spit since 2005. The western half of the reach has eroded since 2010, while the eastern half (including the area near the neck of the spit) has accreted. **[LOWER]** Kiawah Spit at low tide in January 2019. The large dry-sand beach on the down-stream side of the spit suggests it is growing southwest towards Seabrook as the inlet channel migrates down shore.

5.1.3 2015 Captain Sams Inlet Relocation Project

Captain Sams Inlet was successfully relocated for the third time between 18 May and 18 June 2015 (Figure 5.1.3a). The inlet was moved ~3,000 feet (ft) north(east) of its previous position and ~250–400 ft from its relocated positions in 1983 and 1996. New Captain Sams Inlet entered Kiawah River near the mouth of Captain Sams Creek several hundred feet downcoast of the Seabrook–Kiawah town boundary line across Kiawah spit. RE Goodson Construction Inc (Darlington SC) completed the work using land-based equipment including up to six off-road dump trucks, four bulldozers, and two tracked excavators.

The construction sequence was similar to prior projects. A basin was excavated to a depth of approximately −10 ft NAVD across Kiawah spit. Excavations were used to build a low-profile sand dike along the centerline of the spit. The basin was opened to tides at the seaward end on 2 June 2015 after removal of ~140,000 cubic yards (cy). Because of wetlands at the river end of the basin, a full connection with Kiawah River was not possible on the day of the opening. This likely contributed to some difficulty during the first closure attempt on 4 June because flows in the old inlet remained strong.

Excavations from the basin were stockpiled at the end of Kiawah spit prior to closure with as much as 70,000 cy prepositioned above final grade of the dike. A second stockpile was constructed on the Seabrook side of the channel with initially ~4,000 cy. The contractor made the first closure attempt on 4 June at low tide, but had insufficient height on the closure dike to keep pace with the incoming tide. The dike breached and a dump truck and bulldozer became mired in soft sand, settling into the channel. They were removed without incident under US Coast Guard supervision on 10 June with damages covered by the contractor's insurance.

Final closure to the old channel occurred at 11 p.m. on 11 June 2015 at low tide. The dike was built up ahead of the rising tide and was completed to specifications several days later. With closure on 12 June, flows through the new channel accelerated, removing the "plug" of wetlands at the landward end of the basin. For a couple of days, prior to equilibration, the new channel produced a jet of water on the flood tide, which damaged a few private floating docks that were later repaired by SIPOA.
All equipment was removed from the beach by 18 June 2015, and the project area was left to adjust naturally. Despite temporary setbacks (as noted above), which were similar to events during the first and second inlet relocations, the 2015 project was completed in record time with minimal disruption to use of the area.

The third inlet relocation called for movement of ~165,000 cy to build the closure dike. About 140,000 cy were obtained from the basin and the balance from accreting shoals

adjacent to the old channel. Total construction cost was $930,000 with no adjustments.

During construction in May and June 2015, the Seabrook Island Turtle Patrol monitored the job site each morning and provided clearance before work commenced. Several turtle nests were laid in the vicinity within incident during the period of construction. The only night work performed was during the final closure sequence. Figure 5.1.3b shows the "as-built' survey using a digital terrain model (DTM) of data collected by CSE. Details of the survey are contained in the report.

FIGURE 5.1.3a. Captain Sams Inlet before and after inlet relocation in 2015. Kiawah spit is to the right and Captain Sams Creek is at the upper right corner of each image. Ortho-rectified aerial photos were prepared by Independent Mapping Consultants Inc (Charlotte NC).

FIGURE 5.1.3a. Digital terrain model (DTM) of the completed channel and dike based on RTK-GPS measurements by CSE on 18 June 2015, the day before construction stopped.

Section 5.2 Beach Alteration Inventory

Seabrook Island has required numerous beach alterations in response to localized erosion since the mid-1970s. The primary measures implemented in the 1970s were sandbags, quarry-stone groins, sandbag revetments, concrete sheet-pile bulkheads/seawalls, and quarry-stone revetments. Sand scraping was also performed at various localities in the late 1970s with some small-scale projects involving transfers of sand from accreting shoals on the Seabrook Island side of Captain Sams Inlet to erosion hot spots such as the area around the 13th hole of the golf course. Records of specific 1970s projects by the Seabrook Island Company (developer) or individual homeowners are not available.

The last segments of the seawall/revetment were constructed in the early 1980s with an ~1,800-ft section connecting the Renken Point and golf course segments and an ~900-ft-long bulkhead extending west along the North Edisto River Inlet fronting Pelican Watch Villas. No structures have been placed north (east) of the 13th hole (~OCRM 2565) or along St. Christopher Camp property. By 1983, the community shifted to an emphasis on soft solutions to erosion. While individual property owners funded, maintained, and upgraded most of the seawalls (the SIPOA maintains wall segments at beach accesses), the Seabrook Island Company initiated work on the first relocation of Captain Sams Inlet. The Seabrook Island Company also funded larger-scale sand transfers immediately after the 1983 project.

Since 1984, there has been one nourishment (channel realignment) project via hydraulic dredge (February 1990), a second and third relocation of Captain Sams Inlet (1996 and 2015) and several transfers of sand by trucks from accreting zones around Captain Sams Inlet to the area south of Renken Point. Figure 5.2a highlights the location of various erosion control structures along Seabrook Island. Sandbag and quarry-stone groins were short-lived and became non-functional within a couple of years after installation (Hayes et al 1979). Therefore, no shore-perpendicular structures have interrupted sand flow along the Seabrook Island beach since ~1980s.

FIGURE 5.2a Location of shore-protection projects along Seabrook Island since the 1970s. Captain Sams Inlet relocation (1983, 1996, 2015) occurred between OCRM 2575 and the Kiawah/Seabrook Town easement line (outside image range, see Fig T-3).

5.2.1 Beach Renourishment

Beach nourishment is generally defined as the addition of sand from non-littoral sources to restore a deficit and otherwise advance the shoreline (CERC 1984, NRC 1995). Only one project at Seabrook Island meets this definition—the 1990 channel realignment project in which the shoal on the seaward side of the northern channel was dredged to create a new channel and the material was discharged into the existing channel, restoring a beach along ~5,600 ft of Seabrook Island's seawall. All other beach-widening projects involved manipulation of existing littoral sand sources:

- Three projects involving relocation of Captain Sams Inlet, the result of which was accelerated sand bypassing by natural processes to downcoast areas of Seabrook Island.
- Ten projects involving mechanical transfer of sand by trucks from accreting intertidal areas (vicinity of Captain Sams Inlet) to downcoast eroding areas.

All known soft-engineering projects are listed herein under Beach Renourishment (Table 5.2a) and are discussed in chronological order.

Event 1 1982 — Sand scraping and transfer involving ~70,000 cy was completed in October 1982 prior to the first relocation of Captain Sams Inlet. Excessive sand had accumulated off Oyster Catcher beach access at the expense of downcoast areas. Sand was excavated by pan earthmover, hauled to Renken Point at low tide, and placed along the seawall (Kana et al 1984).

Event 2–3 1983 — The first relocation of Captain Sams Inlet was accomplished between 23 January and 4 March 1983. Under a permit restriction that prohibited excavation during flood tide, the new channel was excavated "in-the-dry" as an enclosed basin. The new inlet was formed by a breach of the outer berm/dike (seaward end of the basin) during a rising tide and a breach of the inner berm/dike at high tide. Tidal action cut the full channel over several days. The abandoned inlet was closed during a falling tide by dozers pushing stockpiled sand from either side of the channel. See Figures T-3, T-7, and T-10 herein, and CSE (2011) for details of the project. Following inlet relocation, ~230,000 cy were excavated in the area of the abandoned inlet delta by earth movers and transferred to North Beach between the golf course and Renken Point for purposes of accelerating restoration of that section of beach. (Source: Kana et al 1984)

Event 4 1990 — The only true nourishment project to date along Seabrook Island was completed by dredge in February 1990. The borrow area was the north shoal of the North Edisto River Inlet in the area between Renken Point and the Beach Club (Lines 13–17). The borrow area paralleled the existing northern channel with its edge ~1,000 ft from the seawall. Because of severe encroachment of the northern channel against Seabrook Island's shoreline, no sand could pass Renken Point and

migrate under waves to the Beach Club and St. Christopher Camp. The project restored an intertidal beach and a shallow platform for longshore transport by waves (Kana 1989).

TABLE 5.2a. Beach renourishment* events along Seabrook Island. [* Includes mechanical sand transfers from one section of beach to another and inlet relocation. Applicable state permit numbers: (1) P/N 81-4C-192, (2) P/N 89-2T-120P, (3) P/N 95-1W-305P, (4) P/N 2001-1W-352P, (5) P/N SAC-2008-1870-2IG.]

Event	Date	Type*	Applicable Permit #	Method	Borrow Source	Locality	Placement Area / Lines	Volume (cy)	Cost	Sources	Contractor
1	Oct 1982	Transfer	N/A	Trucks	Intertidal bars	Lines 26-28	Beach 17-21	~70,000	N/A	Kana et al 1984	N/A
2	Jan-Feb 83	Inlet Relocation	1	Trucks	Kiawah Spit	Lines 39-40	Abandoned Inlet 31-38	175,000	$300,000 (1983)	Kana et al 1984, Kana 1989	Palmetto Land Clearing Inc
3	Mar-Apr 83	Transfer	1	Trucks	Abandoned Inlet Shoals	Lines 25-29	North Beach 20-24	230,000	~$290,000 (1983)	Kana et al 1984, CSE 1989	Palmetto Land Clearing Inc
4	Feb 1990	Nourishment	2	Dredge	North Shoal/ North Edisto Inlet	Lines 13-17	Renken Pt to Pelican Watch Villas 8-20;3-6	685,000	$1,660,000 (1980)	CSE 1990	Great Lakes Dredge & Dock Co
5	Mar-Apr 96	Inlet Relocation	3	Trucks	Kiawah Spit	Lines 39-40	Abandoned Inlet 31-38	140,000	$400,000 (1996)	SIPOA unpublished	Pace Construction Co
6	Apr-May 96	Transfer	3	Trucks	Abandoned Inlet Shoals	Lines 27-29	Closure Dike 31-34	~45,000	$110,000 (1996)	SIPOA unpublished	Westbank Construction Co
7	Feb-Apr 97	Transfer	3	Trucks	North Beach	Lines 28-32	Renken Point 18-21	75,560	$130,000 (1997)	SIPOA unpublished, CSE Baird 1998	RE Goodsen Construction Co
8	Feb 1998	Transfer	3	Trucks	North Beach - Inlet Shoals	Lines 24-36	Outer Dike 30-36	~80,000	~$80,000 (1998)	SIPOA unpublished, CSE Baird 1999	RE Goodsen Construction Co
9	Dec 99-Jan 00	Transfer	3	Trucks	North Beach - Inlet Shoals	Lines 25-33	Build up Dry Beach 25-33	~60,000	N/A	CSE 2001	RE Goodsen Construction Co
10	Jan 2002	Transfer	4	Trucks	North Beach - Inlet Shoals	Lines 25-33	South Beach 13-18	~65,000	N/A	CSE 2004	RE Goodsen Construction Co
11	Jan 2003	Transfer	4	Trucks	North Beach - Inlet Shoals	Lines 25-33	South Beach 13-18	~65,000	N/A	CSE 2005	RE Goodsen Construction Co
12	Jan-Feb 05	Transfer	4	Trucks	North Beach - Inlet Shoals	Lines 25-33	South Beach 12-18	93,100	$149,000 (2005)	CSE 2005	RE Goodsen Construction Co
13	Dec 06-Feb 07	Transfer	4	Trucks	North Beach - Inlet Shoals	Lines 25-33	South Beach 12-18	70,997	N/A	CSE 2008	RE Goodsen Construction Co
14	May-June 15	Inlet Relocation	5	Trucks	Kiawah Spit	Lines 39-40	Abandoned Inlet 31-38	165,000	$930,500 (2015)	CSE 2015	RE Goodsen Construction Co

Fill placement extended ~5,850 ft in the aggregate with the primary placement area between Line 8 and Line 20 (Beach Club to Renken Point). Approximately 10 percent of the fill was placed along the North Edisto River Inlet between Line 3 and Line 6. A gap was left between the fill areas because of the steep drop-off at the confluence of the northern channel and the North Edisto River Inlet (Lines 6–8). The 1990 project was the first nourishment in South Carolina to use an ocean-certified hydraulic dredge and the third to utilize sand from an active ebb-tidal delta (Hunting Island in 1975 and 1980 utilized ebb tidal delta shoals—Kana 2012). The project has performed well and has not required maintenance renourishment by dredge or realignment of the northern channel in 29 years (see results of beach surveys in Section 5.1.1).

As of 2018, the project area contains over twice the sand volume placed via the 1990 project. The primary maintenance of the project area has consisted of addition of ~223,000 cy (2003–2007) via sand transfers from North Beach to enhance the sand supply. This addition represents about 20 percent of the added sand volume between Renken Point and the Beach Club since 1990. Natural additions make up between 40 and 50 percent of the present sand volume. The rate of sand movement into the area has offset the natural tendency of the northern channel to encroach on the seawall and help push the channel further from Seabrook Island's development. This has allowed formation of a wider dry beach and protective dune along a major portion of the Renken Point—Beach Club beach (i.e. – Lines 13–19).

Events 5–6 1996 — The second relocation of Captain Sams Inlet was accomplished between 24 February and 12 April 1996. Construction methods and the position of the new inlet matched the 1983 inlet relocation. However, the closure dike was positioned ~500 ft seaward of the 1983 dike to closely align with the new strandline that formed after the 1983 project. A number of mechanical delays reduced the initial excavation volumes in the basin to ~140,000 cy (CSE unpublished project records). Upon opening of the new channel on 4 April and closure of the old channel on 12 April, a second contractor completed work on the closure dike to improve its integrity and achieve the design dimensions (listed as Event 6). Final work on the closure dike was completed by 15 May 1996.

Events 7–9 1997–2000 — As part of the second inlet relocation project, Seabrook Island POA performed sand scraping and beach reshaping in the vicinity of the abandoned shoals of Captain Sams Inlet. In three winter events between February 1997 and January 2000, ~215,000 cy were shifted from attaching shoals of the ebb-tidal delta to North Beach. The stated purpose (CSE 1995, CSE-Baird 1999) was to accelerate onshore attachment of the abandoned shoals of the old inlet; straighten the shoreline along North Beach to promote a flow of sand to the south under northeasterly waves, and build a protective outer dike (dune line) to protect habitat and preserve the littoral budget seaward of the new strandline. The outer dike was

positioned about 500 ft seaward of the 1996 closure dike. Once established, the new "outer beach" provided an 8,000-ft-long contiguous dry-sand beach along Seabrook Island by 2000. This was the longest, continuous dry beach for the island since the 1970s.

Events 10–13 2002–2007 — Seabrook Island performed four sand transfer events under a 2001 permit in which ~294,000 cy were transferred by trucks from North Beach and the attached shoals of Captain Sams Inlet to South Beach between Renken Point and the Beach Club. The purpose of this project was to extend the dry-sand beach, augment the flow of sand around Renken Point, and reduce exposure of existing seawalls. The dry-sand beach created by the project provided a source for dune growth, eventually leading to natural burial of the seawall around Beach Court and Amberjack Court as well as Renken Point. The dry-sand beach terminated at the Beach Club in 2007 but resumed 1,500–2,000 ft downcoast at Beach Club Villas.

Beach nourishment and sand transfer volumes are approximately as follows:

1) Beach Nourishment	1990	1 project	685,000 cy	Placed south of Renken Point
2) Inlet Relocations	1983, 1996, 2015	3 projects	~1,000,000 cy	Bypassed from ebb-tidal delta
3) Sand Transfers	1982, 1983, 1996, 1997, 1998, 2000, 2002, 2003, 2005, 2007	10 projects	~855,000 cy	Moved from accretion zone at North Beach and Captain Sams Inlet shoals to North Beach and South Beach

Event 14 2015 – The third relocation of Captain Sams Inlet was accomplished between 18 May and 18 June 2015. Construction methods matched the 1983 and 1996 inlet relocation projects, executing all work via mechanical means. The final position of the new channel was shifted ~400 ft south (west) of the 1983 channel alignment and rotated about 10 degrees south by mutual agreement with the upcoast property owner and Town of Kiawah Island. This change had the effect of shortening the design life of the project by ~2 years (equivalent to about two years of inlet migration), while increasing the buffer between Kiawah spit property and the new channel. The revised location also meant the landward end of the channel terminated about 200 ft short of the Kiawah River along an incipient fringing marsh that had evolved after the 1996 inlet relocation. The new channel was opened to tidal flows on 2 June. The first closure attempt (2 June) failed due to equipment malfunctioning and insufficient dike volume during the first high tide. The second attempt on 11 June was successful. Final buildup of the closure dike to grade was completed on 18 June. During the week after the old inlet was closed, natural processes scoured the new channel to the approximate design width and length, leaving the system to evolve naturally towards equilibrium.

These projects have improved Seabrook Island's beach well beyond its condition of 1980 (Kana et al 2013). A majority of shore-protection structures are buried as of 2014 with a field of vegetated dunes providing a buffer between the active beach and the seawall. Beach improvements have required a combination of nourishment, channel realignment, inlet relocation, and sand transfers to increase the sand supply and redistribute sand from accreting to eroding areas. Ongoing sand management is a fundamental need along Seabrook Island because of the cyclic beach changes associated with migration of Captain Sams Inlet. Soft-engineering solutions to erosion are now favored over the hard solutions implemented in the 1970s and early 1980s.

5.2.2 Emergency Orders and Sandbags

The following are the emergency orders and sandbagging events on Seabrook Island over the last several decades:

a. September 1979 – Post Hurricane David seawall repairs
b. September 1995 – Sandbagging
c. October 2005 – Sand scraping
d. May 2006 – Sand scraping

5.2.3 Previous Hurricane or Storm Events

Seabrook Island's shoreline dynamics are controlled primarily by Captain Sams Inlet and the North Edisto River Inlet. The shoreline moves in direct response to inlet migration and changes in offshore shoals and channel migration. Storms have played a secondary role in this setting (Hayes et al 1979, Kana 1989, Kana et al 2013).

Over the past 40 years, only one hurricane has caused significant damage along the oceanfront. Hurricane David (September 1979) generated high waves that propagated from the south, crossed the shoals of Deveaux Bank, and severely damaged the seawall in the vicinity of the Beach Club and Renken Point (Fig 5.2.3a). A section of the seawall breached and armor stone was washed across Seabrook Island Road in the event (R Cowan, pers comm, September 1979). This led to reconstruction of the sand dike to a higher elevation and addition of new, larger armor stone along the seaward face of the structure. Prior to David, concrete sheet-pile bulkheads and "riprap" revetments were commonly constructed with a crest elevation around +10 ft NGVD (approximate +9.0 ft NAVD). As the beach eroded along the seawall in the 1970s and 1980s; wave heights and run-up increased at the wall. This led to ad-hoc improvements by property owners at various levels of structural support (Katmarian 1995a,b)

South of the Beach Club, the dike crest was raised to between +13 ft and +15 ft NGVD (CSE 1995a,b). Armor-stone size was increased by adding 1–2 ton units (typical) over the original riprap-sized stones. Where vertical, concrete, sheet-pile bulkheads had

been installed (e.g. – Renken Point) a face of riprap and larger armor stone was added for scour protection.

For upward of a decade between 1975 and 1985, nearly all sections of the seawall required addition of larger rock because of settlement as the beach eroded. Two quarry-stone groins visible across the wet sand beach in October 1978 disappeared by 1980, likely due to continued settling into the sand as the profile eroded. Hurricane David likely cut away the beach more severely than any single event in the 1970s and left the groins well below the low-tide level. As the northern channel encroached on the seawall south of Renken Point, any armor stone from the groins settled and mixed with riprap that slumped downslope from the seawall.

Hurricane Hugo (Category 4) impacted the South Carolina coast on 21 September 1989. Making landfall at Isle of Palms about 35 miles to the north, its most damaging surge was north of Charleston Harbor. Seabrook Island, on the back side of the storm, did not sustain direct impact along the ocean coast. Damages were primarily due to high winds backing off the land and downing trees (R. Cowan, pers comm, 22 September 1989).

Hurricane *Matthew* impacted the area in October 2016. The center of circulation passed less than 50 miles offshore from Seabrook Island, and strong tropical storm-force conditions led to dramatic erosion and some property damage. Luckily, the last major impact was in 1989 with *Hugo*, so the beach and dunes contained enough sand to buffer strong storm conditions. In 2017, 2018, and 2019 there were a number of strong tropical systems making close passes along South Carolina including *Michael*, *Florence, Irma,* and *Dorian*. Additionally, the winter storm season of 2017-2018 brought a series of exceptionally strong nor'easter-type systems to the East Coast. The succession of strong low pressure systems late in the winter caused beach erosion on the order of a tropical storm or weak hurricane.

The US Army Corps of Engineers (USACE 2013) discussed the storms that have impacted nearby Edisto Island, ~6 miles south of Seabrook Island, during the past century. Edisto Beach is not only nearby, but also similarly exposed to tropical and extra-tropical storms with a southeast-facing ocean shoreline and southwest-facing inlet shoreline. According to USACE (2013), significant tropical storms impact the area at a frequency of one event per every four years. Extra-tropical storms, generating gale-force winds out of the northeast, occur several times per year but significant events have a frequency of one event per 1.5 years.

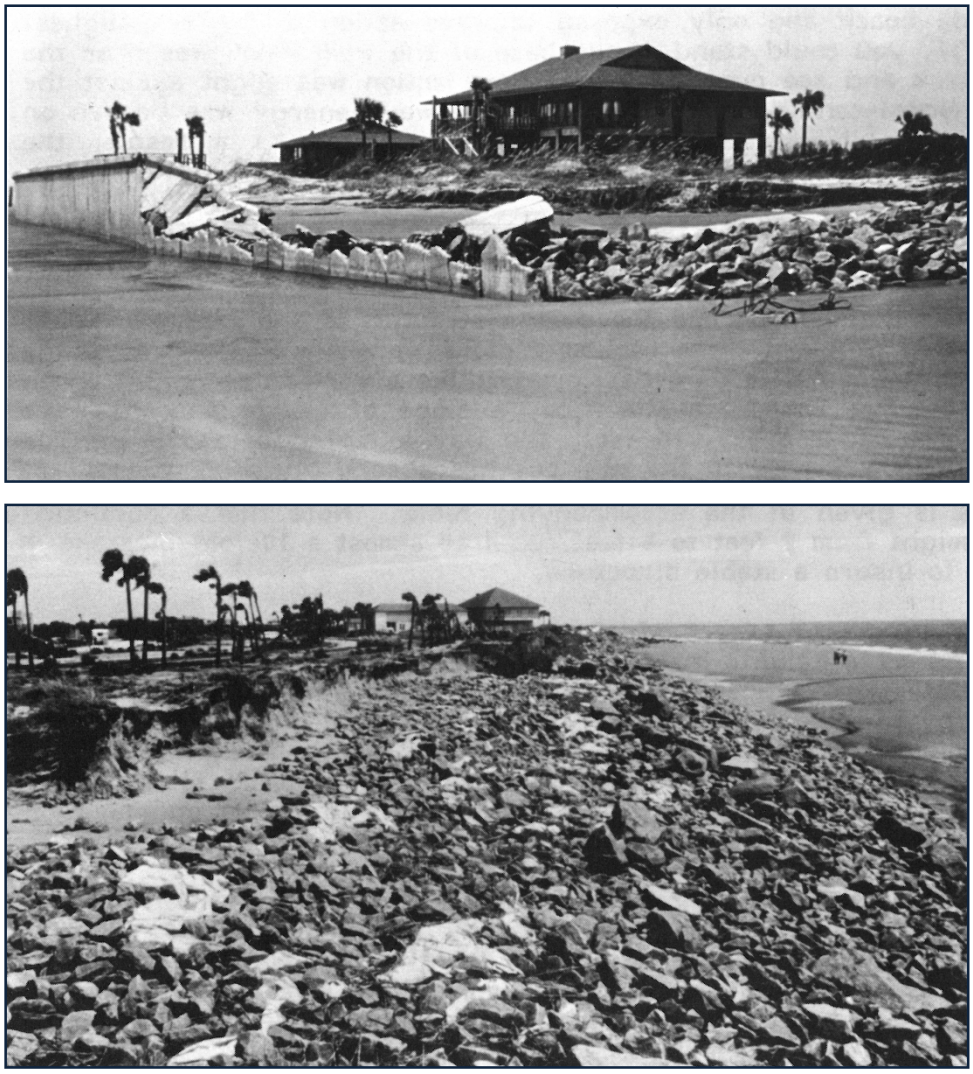


FIGURE 5.2.3a. Damages along Seabrook Island due to Hurricane *David* (5 September 1979). **[UPPER]** The concrete seawall and armor-stone "wingwall" at Renken Point on 7 September 1979. **[LOWER]** Collapsed riprap revetment south of the Beach Club on 5 September 1979. [Photos by WJ Sexton]

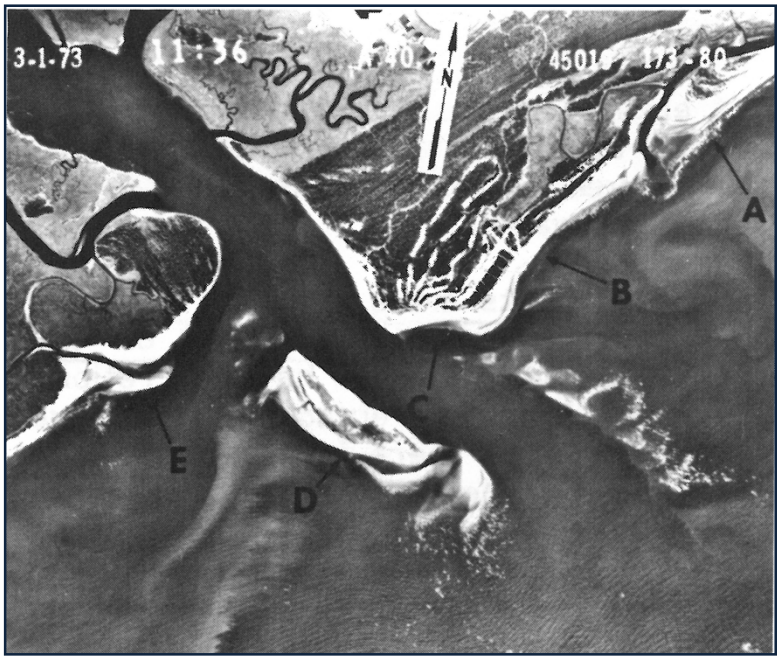
Major damaging events at Edisto Beach occurred in 1940, 1952, 1959, 1979, and 1989 (Table 5.2.3). During the past 25 years, there have been no major hurricane landfalls or significant damaging events impacting Edisto Beach (USACE 2013, pg 36) or Seabrook Island.

TABLE 5.2.3. Damaging storms at Edisto Beach (Source: USACE 2013)

11 August 1940	An unnamed hurricane impacted Edisto Island at high tide "damaging nearly every house on the island and completely destroying more than half of the approximately two hundred beachfront homes at the time." Seabrook Island was undeveloped at that time.
31 August 1952	Hurricane *Able* "completely destroyed many beach cottages and damaged many others." It also damaged Palmetto Boulevard along the north end of Edisto Beach near the Pavilion. This event likely triggered the first nourishment project in South Carolina (USACE 1952, 1965; Kana 2012) and construction of timber groins by the South Carolina Highway Department to protect the beachfront road along part of Edisto Beach (USACE 1952, Kana et al 2004).
29 September 1959	Hurricane *Gracie*, a Category 3 storm, made landfall on the south side of Edisto Island. The fishing pier was destroyed, 16 homes were "wrenched from their foundations, and 65 other homes severely damaged" (USACE 2013). The storm entered the coast at low tide, likely lessening damages.
5 September 1979	Hurricane *David* made landfall at Savannah (GA) as a Category 1 storm, then tracked north-northeast toward Charleston. It generated high waves and a 3–5 ft storm surge (en.wikipedia.org/wiki/Hurricane David). The storm produced severe damage to the seawall, leading to a major failure south of the Beach Club and collapse of an ~100-ft section of concrete sheet-pile wall at Renken Point (Fig 5.2.3a) (Kana & Sexton 1982).
21 September 1989	Hurricane *Hugo* entered South Carolina as a Category 4 storm, producing tides up to elevation 16.0 ft NGVD at Isle of Palms (Garcia et al 1989). The track of the storm ~40 miles to the north placed Seabrook Island in the favorable quadrant where the most damaging winds were directed offshore. There were no reported damages along the oceanfront at the Island because of the minimal storm surge and backing winds.

The impact of storms along Seabrook Island is partially buffered by protective shoals of the North Edisto River Inlet. Deveaux Bank is presently an island at the mouth of the inlet encompassing hundreds of acres of dunes and wetland habitat (Fig 5.2.3b). It serves to intercept waves from the south before they strike Seabrook Island's shoreline. At some times during the past 50 years, Deveaux Bank has been much smaller and offered less sheltering. For example, between 1973 and 1978, much of the emergent portion of Deveaux Bank eroded and left a remnant island further west (Fig 5.2.3c, Kana & Sexton 1982). This may have exacerbated damages during Hurricane David by allowing waves to propagate directly toward the Beach Club and Renken Point. By the mid 1980s, an emergent dune line had reformed to produce the nucleus of today's Deveaux Bank (CSE 1989).

FIGURE 5.2.3b. Aerial photo of Deveaux Bank in 2012. Deveaux Bank is presently a well-established island, which serves as a natural breakwater to the south shoreline of Seabrook Island.



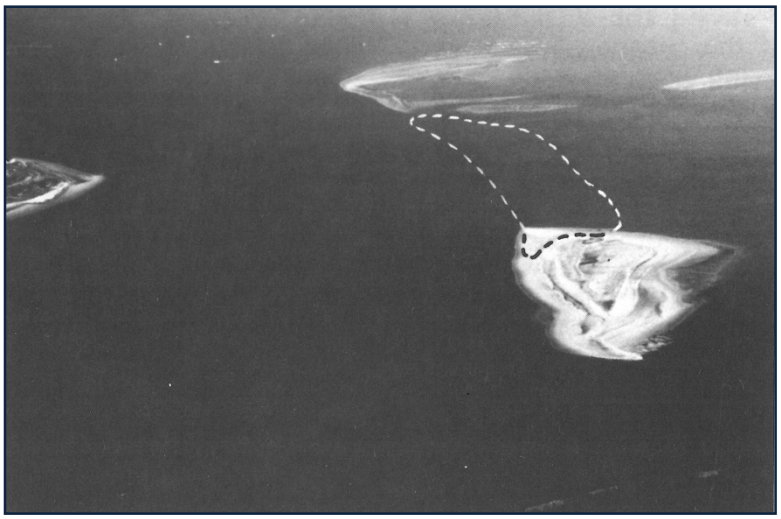


FIGURE 5.2.3c.

Deveaux Bank (D) off Seabrook Island in 1973 (upper), July 1978 (middle), and December 1979 (lower).

The middle oblique aerial shows the approximate location of the 1973 island that had eroded completely, leaving a gap for storm waves to propagate from the south toward Seabrook Island (left edge of photo).

[From Kana & Sexton 1982]

Section 5.3 Discussion of Erosion Control Alternatives

Seabrook Island has had to deal with erosion since the earliest days of the development dating back to the early 1970s (Hayes et al 1979). A full spectrum of erosion-control alternatives has been applied ranging from hard structural solutions (seawalls and groins) to soft-engineering solutions (beach nourishment, inlet relocation, sand transfers, and establishment of a no-development conservation zone). These measures, for the most part, have been implemented to control the migration of Captain Sams Inlet at the upcoast end of Seabrook Island.

Without periodic relocation or stabilization of the channel, Captain Sams Inlet would likely migrate through several rows of homes and shorten Seabrook Island by a rate of ~150–200 ft/yr. In similar settings (e.g. – Breach Inlet/Sullivan's Island or Midway Inlet/Pawleys Island), the normal shore-protection approach is to stabilize the downcoast side of the inlet by hard structures so that migration is halted. This approach typically leaves a hardened shoreline along the inlet, inhibiting a natural flow of sand and eliminating the public beach (e.g. – Fripp Inlet/Fripp Island).

Seabrook Island's beach management approach has shifted from hard solutions (1970s to early 1980s) to soft solutions (1980s to present). Hard structures remain in place along ~8,800 linear feet of shoreline. However, ~75 percent of these structures are fronted by a dry-sand beach in 2019. For brief periods between 1998 and 2005, over 95 percent of Seabrook Island's coast had dry-sand beach for the benefit of users as well as threatened species such as sea turtles.

Some key lessons learned from various soft-engineering solutions at Seabrook Island over the past 35 years include:

- Inlet relocation is a cost-effective and environmentally compatible method of managing an unstable migratory inlet (NRC 1994). It must be repeated at 15–20 year intervals so as to maintain adequate sand supplies to downcoast areas.

- Seabrook Island has a positive sand budget because of the ample supply from Kiawah Island. However, its sand supply is intercepted and interrupted by Captain Sams Inlet. Each relocation project frees sand trapped in the shoals of the inlet, allowing waves to transport it downcoast where it can naturally re-supply eroding areas.

- The southern half of Seabrook Island (south of Renken Point) is also under the influence of the northern channel and North Edisto River Inlet. When the upcoast sand supply declines, the south half of Seabrook Island erodes, exposing the seawalls. A steady supply of sand is needed to prevent

encroachment of these channels on the beach and to maintain a sand supply that feeds the shoreline along St. Christopher Camp. One realignment of the northern channel (1990) has been sufficient for the past 29 years. The northern channel position in 2019 remains favorable for Seabrook Island. Recent surveys (CSE 2018) indicate the centerline of the northern channel has shifted seaward over the past decade, lessening the tendency of the channel to undermine the beach.

- Deveaux Bank provides sheltering for the southern half of Seabrook Island. In 1978, only a small remnant of Deveaux Bank extended above the normal high waterline (Hayes et al 1979, Kana & Sexton 1982). With less protective shoals of Deveaux Bank, Hurricane David (September 1979) caused extensive damage to the seawall. Hayes et al (1980) recommended restoration of Deveaux Bank as one of three key soft-engineering solutions for Seabrook Island (inlet relocation and northern channel realignment were the other two). Of the three recommendations, the community implemented two and the third (Deveaux Bank restoration) occurred naturally. Today Deveaux Bank is broad and provides a one-mile-long barrier beach with well-established dunes that block waves from the south (Fig 5.2.3b).

- Beach growth following each inlet relocation has been greater along North Beach than south of Renken Point, creating a wide dune field fronting the seawall. Rapid beach widening—as much as 1,000 ft in five years along parts of Seabrook Island's North Beach—has produced extensive habitat without a concomitant development of high protective dunes. Highest dunes formed along North Beach after the 1996 inlet relocation project by removing some of the sand freed by the second relocation and transferring it downcoast. A single dune ridge grew in height and volume because the Property Owners Association helped maintain a dry beach in the same area (particularly around the Boardwalk #1).

- Periodic sand transfers from rapid accretion zones to erosional areas are an important strategy for Seabrook Island. Such activities have been performed at least ten times since the early 1980s for an average of ~85,000 cy moved during each event. These transfers have been accomplished during winter months to minimize environmental impacts. Without such transfers, Seabrook Island would now have less dry-sand beach and thus a greatly reduced turtle nesting habitat.

- Seabrook Island benefits from a long section of shoreline over which Captain Sams Inlet can migrate. The beach renourishment projects have established an inlet conservation zone nearly 6,000 ft long (~33 percent of Seabrook

Island's coastline) between the Kiawah/Seabrook Town line (across the Kiawah Spit) and Oyster Catcher beach access. This no-development area has also been designated as critical habitat for the piping plover by the US Fish & Wildlife Service (USFWS 2002). Such designation provides additional safeguards and ensures the Captain Sams Inlet corridor will not be developed.

- The piping plover, an endangered shorebird that roosts in South Carolina, favors newly formed, unvegetated sand spits and tend to avoid areas with stable vegetated dunes, shrubs, or marsh grasses. Such ephemeral habitats are created with each inlet relocation project and, to some degree, each sand-transfer project. Therefore, the Seabrook Island's approach to sand management is consistent with the USFWS goal of maintaining habitat for piping plover. If Captain Sams Inlet were stabilized on the downcoast side in the future, the updrift spit would become more stable with mature vegetation, and provide less habitat for the piping plover over time. The Kiawah Spit would develop stable vegetated dunes similar to the south end of Isle of Palms. Excess sand moving down the spit would "over extend" and build bars along the north end of Seabrook Island (similar to conditions at the north end of Sullivan's Island). Over time, the bars would break free and weld to the north end of the Island, widening the dune/beach system even more in the area where it is presently >1,000 ft wide.

- Existing shore-protection structures are for the most part buried (2019) and are not interrupting littoral processes. Groins built in the 1970s have settled well below the sand and low-water level, leaving no obstructions to longshore currents. The remaining shore-parallel structures serve the role of providing a last line of defense between the beach and development. In some areas, the seawall remains higher than the protective dunes in front of it. It is well established that high dunes/seawalls with wide beaches fronting them provide better storm protection and reduce upland property damages relative to low dunes and dense vegetation (FEMA 1988, CSE/SW/Dewberry 2010).

- Seabrook Island monitors its beach and closely tracks its sand supply, using this information to anticipate developing problems and plan remedial work. Seabrook Island has a 40-year continuous record of historical profiles that are objective measures of beach conditions.

- The gain of ~1.8 million cubic yards along Seabrook Island's 3-mile shoreline since 1983* has widened the beach by an average of ~175 ft. This has created a wider protective beach and dune buffer for the existing development. [*Inlet relocation in 1983 1996, and 2015 added ~1.5 million cubic yards, and beach nourishment in 1990 added ~685,000 cy.]

- Seabrook Island's experience with hard shore-protection structures and sand management confirms that maintenance of a sand cover over the seawall reduces damage to the seawall during storms, lessens the height of wave runup, and reduces the need for repairs or upgrades in the form of large armor stone. Prior to implementing soft solutions, such as inlet relocation, the seawall sustained frequent damage and required continued upgrades with larger armor stone.

Seabrook Island has considered a range of erosion-control measures with a goal of providing increasing shore protection to existing development and setting aside no-development conservation areas. Extensive accretion north of Renken Point following inlet relocations (1983 and 1996) has produced a wide dune field seaward of the seawall and the 1972 shoreline. Roughly 100 acres of dunes and wetlands that have formed since the initial development of the island are now protected as "Beach Trust" lands. The only structures allowed within this zone are three beach access boardwalks to provide beach access with the least impact to the dunes and wetlands. The seawall north of Renken Point is now set back from the dry beach an average of 765 ft. The majority of the seawall was underwater at high tide in 1980.

South of Renken Point, most segments of beach are significantly wider in 2019 relative to conditions in 1980 (Kana et al 2013, CSE 2018). There was no dry-sand beach between Renken Point and Pelican Watch Villas in 1980. By 2019, a dry beach existed over 75 percent of the shoreline, leaving a short segment (~2,400 ft long) around the Beach Club as the only area without a dry-sand beach.

As discussed in Section 2.3.1 "Beach Structural Inventory," thirty-eight structures are located seaward of the state-designated setback line. None of these structures were built seaward of the line; rather, the lines were revised in 2017 and moved landward. As a result, structures previously landward of the setback are now located seaward of the line.

Seabrook Island has a three-part strategy for improving the conditions of the beach–dune system and increasing the setback of existing structures from the ocean:

a) Maintaining an ~6,000-ft-long inlet conservation zone and beach trust lands seaward of the seawall where no development is allowed.
b) Relocating Captain Sams Inlet on a 15–20 year cycle to release trapped sand and maintain ephemeral habitat favored by the piping plover.
c) Transferring sand periodically from areas of rapid accretion to erosion hotspots so as to maintain an adequate supply of sand to downcoast areas.

The strategy requires all three elements, otherwise interruptions to the sand supply will re-expose segments of the seawall, diminish building setbacks, and degrade beach habitat.

Over a 35-year period, the community has spent approximately $8 million ($2019) on soft solutions and beach monitoring. This equates to (~)$225,000 per year. The value of oceanfront property in 2019 is in the range $180–$210 million (source: zillow.com). Cost of abandoning or setting back existing buildings along Seabrook Island would be comparable to this range. Given the relatively low cost and sustainability of past beach improvements, the community's management strategy continues to emphasize beach-building efforts.

5.3.1 Beach Renourishment

Seabrook Island has implemented one beach nourishment project (1990) since development began in the 1970s. The project had a dual purpose—realign the northern channel while restoring a viable beach and protecting the seawall. The project has functioned for 24 years with the primary maintenance consisting of sand transfers between 1996 and 2007 (detailed in Section 5.2.1) from North Beach to the project area. In 2018, the segments nourished in 1990 retain over twice the volume dredged into place (see Section 5.1.2). The northern channel has also shifted seaward of its initial position upon completion of the dredging.

Beach nourishment from a non-littoral (or non-beach connected) source has been evaluated by the Property Owners Association (CSE 2011). It would potentially build up the beach south of Renken Point and restore a dry beach along the Beach Club. This is not a favored alternative for the following reasons.

- Dredging and placement of sand along the Beach Club area would have a relatively short design life because of the short length of the critically eroded area. Project longevity increases with the square of the project length (Dean 2002).

- Placement of sand along the northern channel and confluence of the North Edisto River Inlet would constrict both channels and lead to increased flow velocities and scour. The 1990 project created a wider channel for purposes of reducing the scour rate along the seawall. Nourishment without concomitant channel realignment would not provide a lasting solution to erosion in the vicinity of the Beach Club.

- Seabrook Island has a positive sand budget because of the healthy supply of sand from Kiawah Island. Periodic inlet relocation renews the sand budget

with each event. There is no critical need for a supplemental supply of sand by way of nourishment.

- Funds for dredge mobilization would provide greater benefits if applied to sand transfers and periodic inlet relocation.

5.3.2 Other Measures Considered

Seabrook has evaluated other shore-protection measures and finds them less advantageous or cost effective as follows.

Stabilization of Captain Sams Inlet — This alternative would eliminate the need for periodic inlet relocation. However, it would impact the critical habitat area for the piping plover and eliminate the ephemeral washover habitat associated with each inlet relocation. Hard structures are discouraged under existing coastal zone management (CZM) rules under the Beach Management Act.

Installation of Groins — This alternative would help retain sand south of Renken Point and reduce the threat of channel encroachment against the seawall. The greatest benefit would be in the vicinity of the Beach Club where maintenance of a dry-sand beach has been problematic for over 35 years. The Property Owners Association has elected to continue a soft approach involving sand transfers as needed in lieu of groins.

Installation of Breakwaters — This alternative is not needed north of Renken Point and is not considered viable south of Renken Point because of the influence of deep channels and tidal currents in the northern channel and North Edisto River Inlet. Breakwaters are generally designed to reduce wave heights and retain sand along the lee shoreline. Deveaux Bank presently functions effectively as a natural breakwater. Its large scale suggests the likelihood that Deveaux Bank will persist for several decades, serving to function as a breakwater for the south end of Seabrook Island.

Dune Heightening — This alternative would provide improved storm-surge protection for the Island. However, to be effective and long lasting, dune enhancement should occur well landward of the present high watermark so as to accommodate the large-scale changes in the shoreline around the inlets. Under present state CZM rules, such dune enhancement over existing vegetated dunes is not allowed.

Seabrook Island recognizes that future sea-level rise (SLR) should be considered. Accordingly, it has tracked the rate of rise over the past several decades and will continue to monitor it using Charleston and Savannah tide records. The USACE (2013) reports the century trend for Edisto Island is 3.19 millimeters per year (mm/yr) (~1.05

ft per century). Kana et al (2013) reported SLR equaled 3.46 inches in Charleston for the period 1980 to 2010 (~2.93 mm/yr) based on records maintained by the Permanent Service for Mean Sea Level (Liverpool UK). Kana and Kaczkowski (2019) report sea level has risen 4.4 inches (~2.9 mm/yr) between 1980 and 2018 at Myrtle Beach, 100 miles to the north confirming a continuation of past SLR rates along the South Carolina coast.

Kana et al (2013), using Bruun (1962) and Hand (1981), demonstrated that a rise of this magnitude over 35 years would equate to ~8.5 ft (~0.28 ft/yr) of beach recession along the Seabrook Island oceanfront. A shoreline change of ~0.3 ft/yr is well below the magnitude of change documented along Seabrook Island (see Section 5.1). Until SLR rates outpace the horizontal shoreline displacements caused by erosion and accretion on the beach, it is unlikely SLR alone will contribute to significant oceanfront erosion. SLR will continue to be tracked along the oceanfront so that strategies may be implemented to keep pace with rising tides.

The Town recognizes that a combination of factors related to climate change are incrementally raising mean sea level each year (on average) and leading to higher frequencies and intensities of extreme storms as well as “nuisance” tides and flooding. Accordingly, the community is actively engaged in dune enhancement and protection measures via sand management and education. A wide beach and healthy dunes are the primary measures available to Seabrook Island for mitigation of oceanfront SLR. Dry-beach elevations will naturally keep pace with SLR as long as sufficient sand feeds the littoral system. If the dry beach is maintained, dunes will persist, thereby reducing the height of surges and waves in front of existing structures.

Of more immediate concern are potential increases in flooding along sheltered estuarine shorelines of Seabrook Island where the land is much closer to the elevation of mean high water. These lands do not receive influxes of littoral sands and do not have sufficient wave energy to build up a profile on pace with SLR. This so-called nuisance flooding already affects Charleston ~7 days a year according to a nationwide NOAA report. With an increasing SLR rate expected through the remainder of the 21st century and an increasing proportion of impactful tides*, the number of nuisance flood days is expected to increase exponentially each decade in low lying areas of Seabrook Island (NOAA, 2018).

Many communities are beginning to plan for mitigation strategies on sheltered shorelines, including elevation of infrastructure, installation of pumps to facilitate stormwater drainage, or adaptation and buffer zones. However, such lands are not the subject of the present Beachfront Management Plan and are not considered for analyses presented in this report.

**Impactful tides produce non-event flooding of lands that are very close to present mean higher high water levels. The majority of events presently occur during Fall months, when mean sea level off SC is ~0.5 ft higher than the remaining months of the year along the US East Coast. If sea level rise at Seabrook is 0.5 ft over the next decade or two, the island will experience nuisance tides every month at present fall frequencies, while the number of fall events will increase several fold. See Kriebel et al (2015), or NOAA (2019) for a more detailed discussion.*

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Section 6 Needs, Goals and Implementation Strategies

Section 6.1 Retreat Strategy

The Town of Seabrook Island's "retreat strategy" is to have a stable or accreting beachfront that is compatible with the State's retreat policy. The intent is for this to be accomplished while not requiring change to any of the structures behind the Baseline or employing or adding any structures like groins or other hard engineering solutions seaward of the Setback Line. The strategy includes three components:

1. Relocation of Captain Sams Inlet to support the continued migration of sand down the coast from Kiawah Island. This is a proven approach that was successfully implemented in 1983, 1996, and 2015. These events demonstrate the relocation provides a surplus of sand south of the inlet as long as that inlet migrates within a range of about 4,000 ft at the furthest up-coast end of the island. This inlet relocation strategy provides a long-term solution to beach erosion with repetition of the process every time the inlet migrates beyond the established limits. This is expected to result in a relocation action to be repeated about every 15 to 20 years.

2. Maintaining an intertidal "shelf" along the seawall to North Edisto River Inlet is essential for continued maintenance of the Edisto River shoreline of Seabrook Island and St. Christopher Camp. This shelf, that is at least a wet sand beach, provides a continuous bridge for sand to migrate along the coast, around the corner and up the riverfront to maintain the desired dry sand beach and to protect the property along the river. To maintain this shelf, the North Channel of the Edisto River needs to remain sufficiently offshore of the seawall to minimize encroachment and undermining of the beach (*i.e*. conditions of the late 1990s). Without the separation, there would be no beach along the north channel of the river and sand migrating alongshore south of Renken Point would tend to be lost into the Edisto River. Realignment of the channel to achieve the desired separation was implemented in 1990. The sand bars off the revetment/seawall were dredged to fill in the then existing channel and create a new channel further

seaward. The channel-revetment separation provided by the 1990 project proved an acceptable solution that is still effective today.

3. The above two processes have been supplemented by sand scraping from sections of excess accretion along the north shore of the island and moving that sand to the south beach area.

If the above strategy is not successfully implemented for any reason, the Town strategy is for the existing seawall/revetment to be used as the last line of protection and for that structure to be maintained in order to protect island infrastructure, private property and the local tax base. Thus, Seabrook Island is depending on a strategy of soft engineering (managing the sand supply) and hard engineering (seawall maintenance to protect property and expand the shoreline).

The Town building code and permitting process will prevent any new structures other than beach access walks and stairways from being built seaward of the Setback Line. Remodeling of existing homes within the setback area will remain subject to OCRM regulations and local building codes for property boundaries such that footprints are not expanded beyond authorized dimensions and buildings are elevated to or above current federal flood standards. The Town and SIPOA maintain strict architectural standards for construction on the island and will actively encourage private owners to set buildings as far landward as practicable on platted lots.

The initial implementation of the current beach replenishment strategy began over 30 years ago before the Town was incorporated. The Town Code is consistent with the replenishment and retreat strategies and there are no changes contemplated or required to support this Plan.

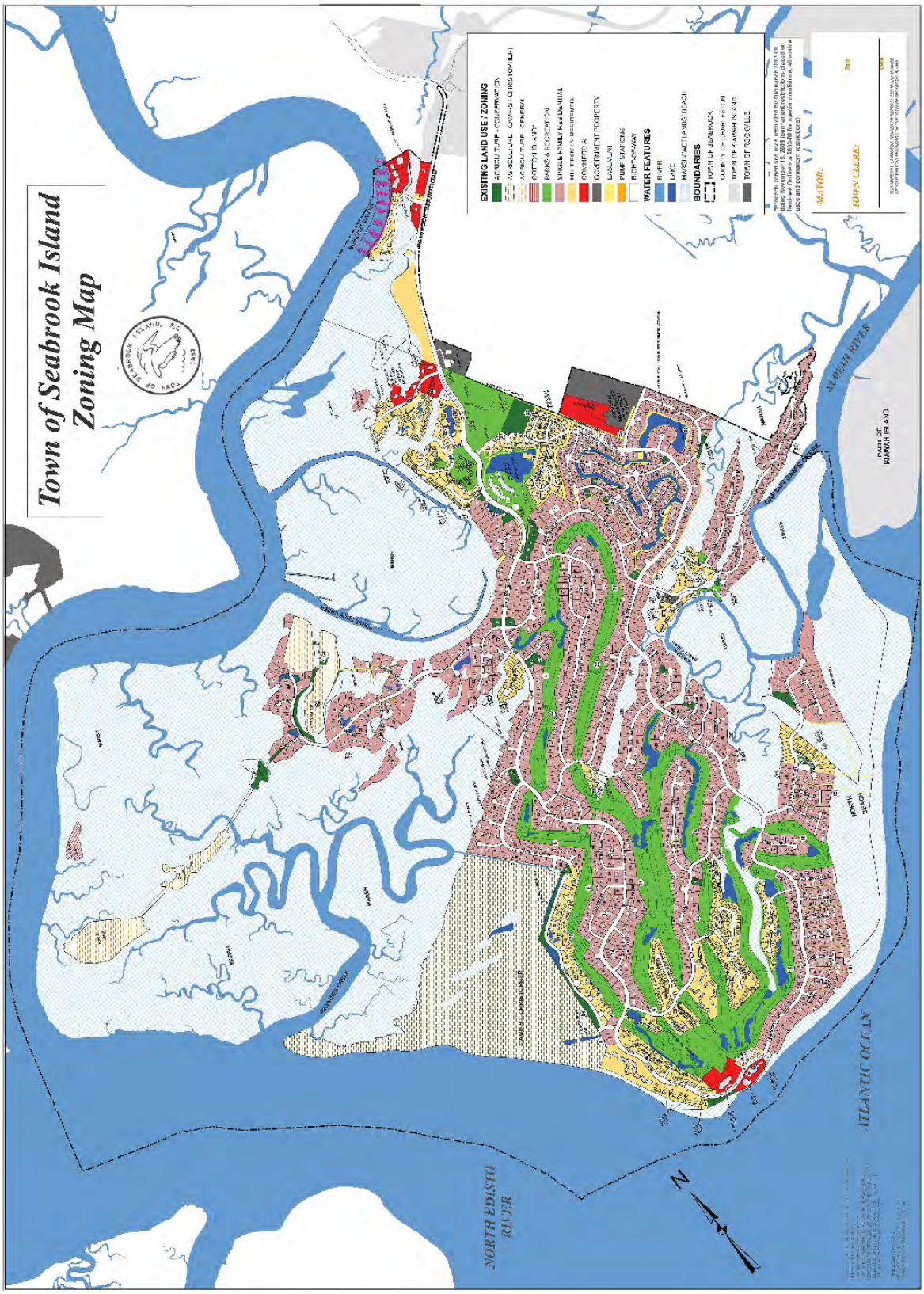
Section 6.2 Strategy for Preserving and Enhancing Public Beach Access

As described in Section 2.5 “Existing Public Access and Map” of this Plan, the original design of Seabrook Island included a full set of beach access points with boardwalks from the parking areas and bicycle racks onto the beach. Beach access parking areas were also a part of the island layout. Each of the access entry points includes adequate signage, trashcans and dispensers for dog waste bags. The Property Owners Association maintains the boardwalks and associated amenities. These beach access facilities are believed to be sufficient to meet the foreseeable needs of the Island’s residents and invited guests.

Section 7.0 Appendix

Section 7.1 Beach Management Overlays

Figure 7.1a on the page below is the current Zoning Map for the Town of Seabrook Island.


Town of Seabrook Island
Zoning Map
EXISTING LAND USE / ZONING
WATER FEATURES
BOUNDARIES
MAYOR:
TOWN CLERK:
Date
NORTH EDISTO RIVER
ATLANTIC OCEAN
N

Section 7.2 Structure Inventory Table

As discussed in Section 4.2.4 “Beachfront Development Regulations”, the Town of Seabrook Island strictly enforces restrictions on building of structures seaward of the Setback Line. Traditionally, the inventory of structures meeting these criteria is almost all beach access boardwalks and stairs over the revetment and on to the beach. However, in 2017 OCRM redrew the state setback lines and many moved landward. Thus, there are now thirty-eight structures located seaward of the setback line as listed in Section 2.3.1 “Beachfront Structural Inventory” of this Plan. Table 7.2 below provides the beach structure inventory information.

Table 7.2 Seabrook Island Beach Management Plan *Structures Inventory Table*						
Parcel Address	Property Description	Plat DB #	Parcel No.	Structure Inventory	Distance from OCRM 40- Yr Setback Line (ft)	Erosion Control Structure
2810 Seabrook Island Rd	St. Christopher Camp	H-133	1470000003	B-Pv	14	
2810 Seabrook Island Rd	St. Christopher Camp	H-133	1470000003	B-Pv	40	
2810 Seabrook Island Rd	St. Christopher Camp	H-133	1470000003	B-Pv	50	
2810 Seabrook Island Rd	St. Christopher Camp	H-133	1470000003	RA	180	
2810 Seabrook Island Rd	St. Christopher Camp	H-133	1470000003	B-Pv	42	
1301 Seabrook Island Rd	Pelican Watch Villas	AV-88	1470500091	B-Pv	96	
1301 Seabrook Island Rd	Pelican Watch Villas	AV-88	1470500091	B-Pv	135	
1301 Seabrook Island Rd	Pelican Watch Villas	AV-88	1470500091	TB	27	x
1301 Seabrook Island Rd	Pelican Watch Villas	AV-88	1470500091	CS-QS		x
1301 Seabrook Island Rd	Pelican Watch Villas	AV-88	1470500091	CS-QS	150	x
1301 Seabrook Island Rd	Pelican Watch Villas	AV-88	1470500091	B-Pb	180	
337 Beach Club Villas	SIPOA @ Beach Club Villas	EC-580	1470500183	CS-QS	140	x
338 Beach Club Villas	Beach Club Villas	W-56	1470500017	B-Pv	170	
332 Beach Club Villas	Beach Club Villas	W135	1470500001	B-Pv	24	
328 Beach Club Villas	Beach Club Villas	W135	1470500002	B-Pv	48	
3804 Seabrook Island Rd	Dolphin Point	DD-294	1470500187	B-Pv (2), CS-QS	48,68,50	
3810 Seabrook Island Rd	Vacant Lot	EC-580	1470500184	B-Pb, CS-QS	78,75	x
SIPOA	Property Owners Lot	Null	1470500189	CS-QS	78	x
3772 Seabrook Island Rd	The Club At Seabrook	BD-3	1470500085	A, CS-QS, QS-G	60, 100, 200	x
3772 Seabrook Island Rd	The Club At Seabrook	Null	1470500188	C, B-Pv	36, 62	

Table 7.2 Seabrook Island Beach Management Plan *Structures Inventory Table*						
Parcel Address	Property Description	Plat DB #	Parcel No.	Structure Inventory	Distance from OCRM 40- Yr Setback Line (ft)	Erosion Control Structure
3760 Seabrook Island Rd	Private	AD-78	1471300001	CS-QS	42	x
3765 Seabrook Island Rd	Private - Vacant Lot	AD-78	1471300002	CS-QS	42	x
3756 Seabrook Island Rd	Private	AD-78	1471300003	CS-QS	35	x
3752 Seabrook Island Rd	Private	AD-78	1471300004	CS-QS, B-Pv	25,32	x
3748 Seabrook Island Rd	Private	AD-78	1471300005	CS-QS, B-Pv	10, 20	x
3744 Seabrook Island Rd	Private - Vacant Lot	AD-78	1471300006	CS-QS	10	x
3740 Seabrook Island Rd	Private	AD-78	1471300007	CS-QS	10	x
3736 Seabrook Island Rd	Private	AD-78	1471300008	B-Pv	16	
3732 Seabrook Island Rd	Private	AD-78	1471300009	CS-QS, B-Pv	15, 30	x
3728 Seabrook Island Rd	Private	AD-78	1471300010	CS-QS	18	x
3724 Seabrook Island Rd	Private	AD-78	1471300011	CS-QS, B-Pv	12, 34	x
3755 Beach Ct	Private	AD-78	1471300013	CS-QS, B-Pv	40, 48	x
3759 Beach Ct	Private	AD-78	1471300014	CS-QS, B-Pv	30, 40	x
3758 Beach Ct	Private	AD-78	1471300015	CS-QS, B-Pv	26, 42	x
3756 Beach Ct	Private	AD-78	1471300016	CS-QS, B-Pv	25, 40	x
3756 Seabrook Island Rd	SIPOA Public Beach Access	AD-77	1470000001	CS-QS, B-Pb	32, 42	x
3739 Amberjack Ct	Private	AE-82	1471400004	CS-QS	44	x
3743 Amberjack Ct	Private - Vacant Lot	BB-88	1471400005	CS-QS	30	x
3747 Amberjack Ct	Private	AE-82	1471400006	CS-QS	40	x
3738 Amberjack Ct	Private	AE-82	1471400007	CS-QS, B-Pv	28, 35	x

Table 7.2 Seabrook Island Beach Management Plan *Structures Inventory Table*						
Parcel Address	Property Description	Plat DB #	Parcel No.	Structure Inventory	Distance from OCRM 40- Yr Setback Line (ft)	Erosion Control Structure
3738 Amberjack Ct	SIPOA Public Beach Access	AD-77	1471400008	CS-QS, B-Pb	25, 35	x
3715 Bonita Ct (Renken Pt)	Private	AE-82	1471400016	CS-QS, B-Pv	30, 42	x
3723 Bonita Ct	Private	AE-82	1471400017	QSR, B-Pv	35, 40	x
3722 Bonita Ct	Private - Vacant Lot	AE-82	1471400018	QSR	30	x
3718 Bonita Ct	Private - Vacant Lot	AE-82	1471400019	QSR	50	x
3718 Bonita Ct	SIPOA Public Beach Access	AD-77	1470000001	QSR, B-Pb	45, 65	x
3661 Cobia Ct	Private - Vacant Lot	AJ-4	1471400073	QSR	30	x
3654 Cobia Ct	Private	AJ-4	1471400075	QSR	35	x
3652 Cobia Ct	Private	AJ-4	1471400076	QSR	38	x
3652 Cobia Ct	SIPOA Public Beach Access	AD-77	1470000001	QSR, B-Pb	40, 310	x
3645 Pompano Ct	Private	AS-86	1471400083	QSR	45	x
3642 Pompano Ct	Private - Vacant Lot	AU-29	1471400085	QSR	45	x
3640 Pompano Ct	Private	AU-29	1471400086	QSR	45	x
3640 Pompano Ct	SIPOA Public Beach Access	AD-77	1470000001	QSR, B-Pb	40, 95	x
3627 Loggerhead Ct	Private	AS-86	1471400097	QSR, B-Pb	45, 95	x
3629 Loggerhead Ct	Private	AS-86	1471400098	QSR, B-Pv, B-Pb	45, 90, 520	x
3630 Loggerhead Ct	Private	AS-86	1471400099	QSR, B-Pv	45, 90	x
3632 Loggerhead Ct	Private	AS-86	1471400100	QSR, B-Pb	50, 90	x
3632 Loggerhead Ct	SIPOA Public Beach Access	AD-77	1470000001	QSR, B-Pb	40, 130	x
3611 Beachcomber Run	Private	W-77	1471400063	QSR, B-Pv	50, 130	x

Table 7.2
Seabrook Island Beach Management Plan
Structures Inventory Table

Parcel Address	Property Description	Plat DB #	Parcel No.	Structure Inventory	Distance from OCRM 40- Yr Setback Line (ft)	Erosion Control Structure
3612 Beachcomber Run	Private	W-77	1471400064	P, D, QSR, B-Pv	8, 22, 70, 145	x
3610 Beachcomber Run	Private	W-77	1471400065	P, D, QSR, B-Pv	15, 20, 75, 145	x
3565 Seaview Dr	Ocean Winds Golf Course	D178427	1470000027	SBR	25	x
2273 Seascape Ct	Private	S-97	1471600015	D	10	
Rolling Dune Rd	SIPOA Access Oyster Catcher	AD-77	1470000001	B-Pb	615	
Rolling Dune Rd	SIPOA Public Ocean Forest	EB-458	1491300001	B-Pb	380	
1121 Ocean Forest Lon	Private	EB-458	1491300003	RA	40	

Note: All distances are maximum distance seaward of the OCRM Setback Line within each parcel.
B-Pb = Boardwalk Public
B-Pv = Boardwalk Private
CS-QS = Concrete Sheetpile - Quarry Stone QSR = Quarry Stone Revetment
SBR = Sandbag Revetment
A = Habitable Structure >5,000 ft D = Deck
P = Pool
RA = Recreational Amenity
TB - Timber Bulkhead

Section 7.3 Access Inventory Table

The table below provides the details of the Seabrook Island beach access points. The structure inventory column coding is intended to mirror the State designation of Community Public Access Points, Neighborhood Public Access Points and Public Access Points as the Seabrook Island beach area is not publically accessible. A detail discussion of these access points is included in Section 2.5 "Existing Public Access and Map."

Street Address	Description	Plat DB #	Parcel No.	Structure Inventory
341 Seabrook Island Rd	Boardwalk #12		1470500025	AP
(west) 3772 Seabrook Island Rd	Boardwalk #9	EC-580	1470500184	CAP
(east) 3772 Seabrook Island Rd	Boardwalk #8	AD-77	1470000001	CAP
Amberjack Ct/Beach Ct	Boardwalk #7	AD-77	1470000001	AP
3738 Amberjack Ct	Boardwalk #6	AD-77	1470000001	AP
3718 Bonita Ct	Boardwalk #5	AD-77	1470000001	AP
3652 Cobia Ct	Boardwalk #4	AD-77	1470000001	AP
3640 Pompano Ct	Boardwalk #3B	AD-77	1470000001	AP
3622 Loggerhead Ct	Boardwalk #3A	AD-77	1470000001	AP
Rolling Dune Rd	Boardwalk #2	AD-77	1470000001	NAP
Rolling Dune Rd	Boardwalk #1	EB-458	1491300001	NAP
2055 Oyster Catcher Court	Boardwalk #1B	EB-458	1491300001	N/A

CAP = Community Access Point
NAP = Neighborhood Access Point
AP = Public Access Point

Section 7.4 Prior Studies

Since incorporation of the Town of Seabrook Island (in 1987), all of the studies relating to its beaches have been in relation to the important subject of beach erosion. A thorough list of all of those studies of the beach erosion dynamics is included in Section 5 "Erosion Control Management" of this Plan going back to well before Town incorporation. Without restating the details of these studies, the overall conclusion, consistently over time, has been that: (a) the periodic relocation of Captain Sams Inlet; (b) maintaining a separation of the North Edisto Inlet from the adjacent seawall; and, (c) occasional sand scraping to take from excess accretion areas and supplementing high erosion zones, have been an effective beach replenishment strategy. These three actions have been proven to be very successful over multiple implementations as evidenced by the annual studies to assess progress and status. The combined impact has been to advance the shoreline significantly and increase the setback of buildings and manmade structures from the active beach zone by an average of over 175 feet.

Studies relating to changes in the beach area have not been conducted because the island remains as the residential and resort community laid out by its developers in the 1970's with a consistent community overall strategy since that time.

There was one major review of island's amenities, the "Horizon Plan" initiative work in 2006, that resulted in major updating of the Seabrook Island Club and Property Owners facilities, only two of which directly related to the beach. Only the Horizon Plan replacement and/or refurbishment of the Seabrook Island Club facilities along the sea wall at the south corner of the island impacted the areas seaward of the Setback Line. The position of those structures and their relation to the Setback Line is discussed in Section 2.3.1 "Beachfront Structural Inventory" of this Plan.

Section 7.5 Laws and Ordinances/Rules and Regulations

The Town of Seabrook Island ordinances include the following provisions relating to beachfront management under Chapter 32, Water Ways and Beaches, of the Town Code, last amended 9-24-2019:

Town Code

Sec. 32-21. - Definitions.

For purposes of this article the term "beach" means (i) for that area bordering on the high- tide line of the Atlantic Ocean, that area lying between the high-tide line and the low-tide line, and (ii) for that area bordering on the high-water mark of the North Edisto River, that area between the high-water mark and the low-water mark.

For purposes of this article, the term "primary frontal sand dune" means a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes landward of the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal sand dune is at a point where there is a distinct change from a relatively steep shape to a relatively mild slope.

For the avoidance of doubt, (i) excluded from the definitions set forth in this section 32-21 is any property, privately owned, whose seaward boundary extends below the high-tide line or the high-water mark and (ii) the town's police jurisdiction extends one mile seaward of the low-tide line of the Atlantic Ocean.

(Code 2004, § 5.7.20; Ord. No. 1991-03, 7-11-1991; Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-41. - Beach and dune protection.

(a) No person shall alter, destroy or remove any portion of a primary frontal sand dune without first obtaining a permit from all applicable governmental authorities.

(b) Other than (1) emergency personnel, (2) service personnel, (3) Seabrook Island Property Owners Association (SIPOA) personnel and its authorized contractors, each in the performance of their responsibilities, (4) Seabrook Island beachfront property owners and their contractors (with respect to the beach trust property described in Section 31 of the Protective Covenants for Seabrook Island Development, with the prior approval of SIPOA), and (5) members of the Seabrook Island Turtle Patrol and the members of the Turtle Stranding Team in the performance of their South Carolina Department of Natural Resources (SCDNR) permitted activities, and all activities ancillary thereto, no person shall walk on any portion of the primary frontal sand dune other than at designated beach accesses owned and maintained by SIPOA or privately owned access points constructed in accordance with regulations promulgated by the South Carolina Department of Health and Environmental Control (SCDHEC). This section 32-41(b) shall not in any way impair/remove the necessity to comply with any applicable state and federal law.

(c) All sand fencing seaward of the primary frontal sand dunes shall comply with the SCDHEC, Office of Coastal Resource Management guidelines contained in the South Carolina Coastal Zone Management Act, and may not be installed until all applicable state, federal and town permits have been issued.

(d) No alterations shall be made to the natural shoreline, inlet location, dune system, or to existing natural beach elevation without the Town Council's approval and until all applicable state, federal or town permits have been issued.

For the avoidance of doubt, nothing in this section 32-41 shall limit (1) beachfront property owners and their invited guests and employees and guests of St. Christopher Camp and Conference Center from accessing the beach from their property or accessing their property from the beach in either case by means of private beach accesses constructed in accordance with regulations promulgated by SCDHEC or (2) the routine landscaping of the beach trust and beachfront private property.

(Ord. No. 2015-02, S 1, 7-28-2015)

Sec. 32-42. - Vehicle use.

(a) The driving or operation of any motor vehicle, of any kind or nature, on the beach is prohibited, except as provided in subsections (1) through (8) of this section:

(1) Emergency vehicles;

(2) Town and other government vehicles;

(3) Seabrook Island Property Owners Association (SIPOA) security or maintenance vehicles;

(4) Small open motorized vehicles designed to transport handicapped individuals operated by or for the benefit of individuals who have physical handicaps (A) which are recognized by state or federal law, and (B) which would otherwise preclude their use and enjoyment of the beach;

(5) Vehicles used by authorized members of the Seabrook Island Turtle Patrol;

(6) Seabrook Island Club maintenance vehicles;

(7) St. Christopher Camp and Conference Center vehicles used to transport watercraft and for maintenance purposes; and

(8) Other vehicles deemed essential by the town, operating pursuant to a duly granted permit from the town.

(b) Vehicles using the beach shall be operated in such a manner so as not to endanger beachgoers or wildlife. The maximum permissible speed limit on the beach shall be ten miles per hour. Vehicles shall be operated on the wet sand and not operated on dry sand or the upper beach other than to gain access to

the wet sand. Vehicles shall not travel onto or otherwise disturb nesting, designated critical habitat areas, wildlife or marine life.

(c) All authorized vehicles traveling through primary frontal dune areas to the beach shall be restricted to the SIPOA vehicular beach access. St. Christopher Camp and Conference Center has consented to the use of its private vehicular beach access by authorized personnel in emergency situations. A second vehicular beach access for use by authorized personnel in emergency situations is located at the north end of the Pelican Watch Villa property.

(Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-43. - Wildlife and marine life protection.

The beaches of Seabrook Island have been designated by the United States Fish and Wildlife Service as a critical habitat of the loggerhead turtle and the wintering population of the piping plover. Accordingly, no person shall physically harm, harass or otherwise disturb any loggerhead turtle or loggerhead turtle nest. Similarly, no person shall harm, harass or disturb any bird designated by any state or federal agency with applicable jurisdiction as an endangered or threatened species, including eggs and young, or its nest. Beached or stranded sea turtles, whales or dolphins shall be reported immediately to the town, SIPOA or county police department. Nothing herein contained shall preclude or otherwise limit the SCDNR permitted activities of the members of the Seabrook Island Turtle Patrol and the members of the Turtle Stranding Team and all activities ancillary thereto.

(Ord. No. 2015-02, § I, 7-28-2015)

Section 32-44. - Beach rules for Domestic Household Animals / Pets

(1) General requirements for domestic household animals / pets.

Domestic household animals / pets shall not be allowed on any beach within the municipal limits of the Town except as provided for herein.

(a) Restricted Area. A restricted area is hereby established beginning at a line extending from Boardwalk #1 to the Atlantic Ocean and continuing

in a northeasterly direction to Captain Sams Inlet. No person shall bring or otherwise allow any domestic household animal / pet into the restricted area at any time, whether on a leash or off of a leash.

(b) Limited Restriction Area. A limited restriction area is hereby established beginning approximately 300 yards northwest of a line extending from Boardwalk #9 (Pelican Watch Boardwalk) to the Edisto River and continuing in a northwesterly direction to Privateer Creek. No person shall bring or otherwise allow any domestic household animal / pet into the limited restriction area that is not on a leash at all times.

(c) General Beach Area. In all other areas of the beach other than the restricted area and the limited restriction area described above, the following requirements shall apply:

(i) Peak Season: From April 1 to September 30, no person shall bring or allow any domestic household animal / pet into the general beach area between the hours of 10:00 am to 5:00 pm that is not on leash at all times. No person shall bring or allow any domestic household animal / pet into the general beach area from 5:01 pm to 9:59 am that is not on a leash or, if not on a leash, is not effectively controlled while on the beach.

(ii) Non-peak season: From October 1 to March 31, no person shall bring any domestic household animal / pet on the beach that is not on a leash or, if not on a leash, is not effectively controlled while on the beach.

(d) Definitions

(i) For purposes of this ordinance the term “effectively controlled” shall mean t h a t the behavior of a domestic household animal / pet is restrained by a competent person from: entering any area on or adjacent to the beach in which a domestic household animal / pet is prohibited; (B) destroying or damaging any property; (C) attacking or threatening to attack any person or any other domestic

household animal / pet in any manner; or (D) being a nuisance to other beach goers.

(i) For purposes of this ordinance, the term “nuisance” shall mean causing annoyance,

(ii) inconvenience or discomfort to the public health, safety and welfare.

(iii) For purposes of this ordinance the term “competent person” shall mean a person of suitable age and discretion and physically capable of restraining and controlling the domestic animal / pet in his or her care in order to prevent harm to persons, property or to other animals.

(iv) For purposes of this ordinance, the term “on a leash” shall mean that the domestic household animal / pet is restrained by a competent person using a physical restraint made of cord, rope, strap, chain or other material effective for restraining the type and size of domestic household animal / pet, the physical restraint being no more than sixteen (16) feet in length, secured to the animal’s collar or harness and continually held by a competent person.

(v) For purposes of this ordinance, the term “off a leash” shall mean that the domestic household animal / pet is not on a leash as defined herein. Domestic household animals / pets under voice control or under control of remotely operated devices such as electronic collars shall be considered to be "off of a leash.

(e) No later than one year from the effective date of this ordinance, council shall review the terms of this ordinance, and determine whether it has worked effectively and achieved the objective of balancing the interests of all users of the beach. Following such review, council shall amend this ordinance, if and to the extent, it deems necessary.

(Ord. No. 2015-02, § I, 7-28-2015; Ord. No. 2018-07, § 1, 9-25-2018; Ord. No. 2019-09, § I, 9-24-2019)

Sec. 32-45. - Removal of horse waste.

Every horseback rider or sponsor of horseback rides on the beach shall remove or cleanup any excrement resulting from such horseback ride as promptly as is reasonably practical following the conclusion of each ride.

(Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-46. - Littering prohibited.

No person shall leave, or cause or permit to be left, any glass, bottle, glassware, can or pieces thereof, cigarette or cigar butts, or any garbage, waste, litter, trash, debris or refuse of any kind on the beach or within the waters adjacent to the beach.

(Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-47. - Negligent operation of vessels.

(a) Vessel defined. The term "vessel" means every description of watercraft on the water, used or capable of being used as a means of transportation on the water.

(b) Prohibited. No person may use any vessel or manipulate any water skis, aquaplane, surfboard, or similar device in a negligent manner so as to endanger the life, limb or property of any person.

(c) Use of alcohol, narcotic, etc., prohibited. No person shall use or retrieve a vessel, or use any water skis, aquaplane, surfboard or similar device while under the influence of alcohol, any narcotic drug, barbiturate, marijuana, or hallucinogen.

(Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-48. - Launching or retrieving vessel.

No person shall launch or retrieve a vessel, excluding sailboats, surfboards, rafts, inner tubes, kayaks or similar devices, anywhere on the beach seaward of the mean high-water mark, except in the case of emergency.

No person shall propel or cause to move any vessel, except sailboats, surfboards, rafts, inner tubes, kayaks or similar devices from the water onto the sand or anywhere on the beach above the mean low-water mark, except in the case of an emergency.

(Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-49. - Vessels on beach.

Vessels may not be left overnight on any part of the beach, except in the case of an emergency.

(Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-50. - Overnight storage of beach equipment prohibited.

Unless the town grants special permission in writing, tents, tent frames, chairs, umbrellas, clothing, coolers, toys or other beach equipment left unattended on the beach after sunset shall be deemed abandoned, and the town shall have the right to take possession and dispose of such items.

(Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-51. - Fires on the beach.

No person shall build, start, ignite or maintain a fire or open flame, or use any propane fired grill, cooker, or heating device heated by fire on the beach.

For the avoidance of doubt, nothing in this section 32-51 shall prohibit or otherwise limit anyone with permission from the Seabrook Island Property Owners Association from building, starting, igniting or maintaining a fire above the high water mark.

(Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-52. - Fireworks on the beach restricted.

No person shall use, fire, shoot, discharge or ignite fireworks on the beach, except as permitted by the town in writing.

(Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-53. - Glass containers prohibited.

All glass containers are prohibited on the beach, except those in coolers or other appropriate container. Glass containers may temporarily be removed briefly from coolers or container for the purpose of transferring the contents to a paper or plastic cup.

(Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-54. - Holes/structures on the beach.

Anyone digging a hole in or creating a structure on the beach must restore the sand surface to its natural condition before leaving the beach.

(Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-55. - Commercial activity.

No person shall sell or offer for sale any goods or merchandise, or solicit any trade or business on the beach.

(Ord. No. 2015-02, § I, 7-28-2015)

Sec. 32-56. - Chumming.

For purposes of this section, "chumming" means the depositing into water chopped or ground bait consisting of raw meat or fish parts including blood and oil thereof, but excluding poultry, in an attempt to catch fish.

No chumming shall be allowed on or within 600 feet of the beach.

Nothing in this section shall affect or prohibit the baiting of crab traps or the placement of natural bait upon a hook and line.

(Ord. No. 2015-08, § I, 8-25-2015)

Sec. 32-57. - Fishing on the beach.

Code enforcement officers shall have the authority to require persons engaged in fishing from the beach to cease fishing if, in their judgement, circumstances indicate that cessation of fishing is in the interest of public safety. In the event the code enforcement officer determines that fishing from the beach may be unsafe for other users of the beach, the code enforcement officer may order any person engaged in fishing from the beach to immediately cease fishing until such time as he or she indicates that it is safe to resume fishing. The code enforcement officer may indicate that fishing may occur at an alternative location on the beach during the time that the cease fishing order is effective. Failure to comply with an order of the code enforcement officer shall be deemed a violation of this section.

(Ord. No. 2018-08, § 1, 9-25-2018)

Seabrook Island Property Owners Association Rules and Regulations

In addition to the Ordinances of the Town of Seabrook Island, the Seabrook Island beaches are controlled or managed through the Seabrook Island Property Owners Association rules and regulations. Those pertaining to beach management are as follows:

Section 7. The Use of SIPOA Amenities.

The following Section 7 Use of the SIPOA Amenities complements the Town of Seabrook Island Code in controlling and managing the island beaches. There is a structure of fines and an active security organization to help in enforcing the Rules and Regulations. Here are those SIPOA rules and regulations:

Association Property Owners, their Family Members and Guests, and other Persons authorized by the SIPOA shall have access to, and use of, SIPOA amenities under terms and conditions established from time to time by the Board. Tenants and their guests are permitted access to, and use of, SIPOA amenities, except the SIPOA Oyster Catcher Community Center and pool area, under terms and conditions established from time to time by the Board. Access to SIPOA amenities by any other Persons is prohibited.

a. In the case of a Property that is owned by more than one natural person, Property Owners shall designate a Family Unit which shall be entitled to exercise the use of privileges afforded to a Property Owner at any one time (the "Designated Family Unit") and in the case of a Property that is owned by an Entity, the Property Owner shall likewise identify a Designated Family Unit. The names of the Designated Family Unit members shall be submitted to SIPOA in written form by all of the Property Owners or, in the case of an Entity Property Owner, by a duly authorized officer of the Entity, and may be changed from time to time in like manner. Persons other than the Designated Family Unit members who rely on such multiple-owned or Entity-owned Property for use of or access to SIPOA amenities will be considered and treated as Guests of the Designated Family Unit and will be subject to the policies and requirements related to usage by Guests. The Property Owner and all members of the Designated Family Unit shall be jointly and severally personally liable for all obligations of the Property Owner and their Guests, Family Members and Invitees.

b. All Persons authorized to use SIPOA amenities shall abide by the rules posted at SIPOA facilities. Those Persons authorized to use SIPOA pool facilities shall follow directions of authorized SIPOA employees. Persons who fail to do so may be excluded from the use of the pool for such period as the Board directs, and are subject to assessments in accordance with the Assessment Schedule.

c. The use of the boat ramp located between the SIPOA crab dock and the Creek Watch Villas is limited to Property Owners and their accompanied Guests. No trailers or boats may be left overnight in this area. Boats launched at the boat ramp may not exceed fourteen (14) feet in length and, if motorized, fifteen (15) horse power. Any boat (and trailers where applicable) launched from the boat ramp must have affixed a decal obtained from the Security office. The boat ramp may be used only between sunrise and sun set. Parking in this area is strictly limited to parking spaces specifically designated for this use. Use of Creek Watch Villa amenities by users of the boat ramp is strictly prohibited.

d. To preserve the personal safety of all beach users, anyone digging a hole in the beach sand must restore the surface to its natural condition before vacating the beach.

e. Only motorized vehicles owned by the SIPOA or the Town, and used for maintenance, Security or official business, and vehicles approved by the Director of Safety and Security for special purposes, are permitted on the beach.

f. Any Person making a fire on the beach must have prior approval from Security. Littering, the use of glass containers, and the playing of loud music is prohibited on the beach. Construction debris may not be used in beach fires.

g. All Persons are to stay off the dunes. Persons walking dogs off-leash in areas permitted by the Town must keep their dogs off of the dunes.

h. Personal property such as chairs, tents, umbrellas and E-Z up structures are not to remain unattended on the beach overnight. Security may remove such personal property that it finds unattended. Generators are prohibited from use on the beach, except for SIPOA authorized events.

i. Property Owners, Tenants and their Guests may use boats, rafts and other watercraft on SIPOA lakes, creeks or rivers. The use of such facilities by Property Owners, Tenants and their Guests shall be at their own risk. Such bodies of water may contain alligators and other wildlife. Only electric motors are permitted in lakes except Contractor or service personnel performing algae or weed control maintenance or other services. Boats may not exceed 14 feet in length and, if motorized, 15 hp, and when not in use, must be stored in a garage or Club storage facility.

j. From May through September non-motorized boats and watercraft may be temporarily left on the beach in a specially designated area located adjacent to the beach end of the Oyster Catcher boardwalk. Boats and watercraft may not be left overnight on any other areas of Seabrook Island’s beaches or creeks. Boats and watercraft must be kept off all sand dunes.

Section 7.6 Local and Comprehensive Beach Management Plan Requirements

The following is a section of the State of South Carolina Code Title 48 – "Environmental Protection and Conservation" that outlines the requirements for local government comprehensive beach management plans:

SECTION 48-39-350. Local comprehensive beach management plan.

(A) The local governments must prepare by July 1, 1991, in coordination with the department, a local comprehensive beach management plan which must be submitted for approval to the department. The local comprehensive beach management plan, at a minimum, must contain all of the following:

(1) an inventory of beach profile data and historic erosion rate data provided by the department for each standard erosion zone and inlet erosion zone under the local jurisdiction;

(2) an inventory of public beach access and attendant parking along with a plan for enhancing public access and parking;

(3) an inventory of all structures located in the area seaward of the setback line;

(4) an inventory of turtle nesting and important habitats of the beach/dune system and a protection and restoration plan if necessary;

(5) a conventional zoning and land use plan consistent with the purposes of this chapter for the area seaward of the setback line;

(6) an analysis of beach erosion control alternatives, including renourishment for the beach under the local government's jurisdiction;

(7) a drainage plan for the area seaward of the setback zone;

(8) a post disaster plan including plans for cleanup, maintaining essential services, protecting public health, emergency building ordinances, and the establishment of priorities, all of which must be consistent with this chapter;

(9) a detailed strategy for achieving the goals of this chapter by the end of the forty-year retreat period. Consideration must be given to relocating buildings, removal of erosion control structures, and relocation of utilities;

(10) a detailed strategy for achieving the goals of preservation of existing public access and the enhancement of public access to assure full enjoyment of the beach by all residents of this State. The plan must be updated at least every five years in coordination with the department following its approval. The local governments and the department must implement the plan by July 1, 1992.

(B) Notwithstanding the provisions of Section 48-39-340, if a local government fails to act in a timely manner to establish and enforce a local coastal beach management plan, the department must impose and implement the plan or the State Comprehensive Beach Management Plan for the local government. If a local government fails to establish and enforce a local coastal beach management plan, the government automatically loses its eligibility to receive available state-generated or shared revenues designated for beach/dune system protection, preservation, restoration, or enhancement, except as directly applied by the department in its administrative capacities.

HISTORY: 1988 Act No. 634, Section 3; 1990 Act No. 607, Section 3; 1993 Act No. 181, Section 1235.

Section 7.7 Definitions

The definitions included in this Section 7.9 are intended to assist the reader in understanding some of the terms used repeatedly throughout this Beach Management Plan.

Association means the Seabrook Island Property Owners Association.

Beach Club means the Seabrook Island Club facilities along the ocean fronting beach at its intersection with the Edisto River.

Beachfront Management Act means the South Carolina Code Ann. § 48-39-250 et seq that establishes a requirement that ocean beachfront counties and municipalities prepare local comprehensive beach management plans in coordination with DHEC-OCRM.

Beach Management Plan means the Town of Seabrook Island Comprehensive Beach Management Plan.

Club means the Seabrook Island Club.

Coastal Sciences Engineering means the engineering firm that has provided beach replenishment engineering support to the Town and Property Owners Association.

Comprehensive Beach Management Plan means the Town of Seabrook Island's Plan developed in accordance with Sections 48-39-320 and 350 of the South Carolina Coastal Zone Management Act as directed by the Department of Health and Environmental Control's Office of Ocean and Coastal Resource Management.

CSE means Coastal Sciences Engineering.

Department of Natural Resources means the State of South Carolina's department that is the principal advocate for and steward of the State's natural resources.

Department of Transportation means the State department responsible for planning, constructing and maintaining State roads and bridges, and provision of mass transit services.

DHEC OCRM means the State Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management.

DHEC means the Department of Health and Environmental Control.

DNR means the Department of Natural Resources.

DOT means the South Carolina Department of Transportation.

DTMs means digital terrain models of beach topography and channel bathymetry.

EMD means the State of South Carolina Emergency Management Division that provides major disaster preparation, response, and recovery assistance.

Emergency Management Division means the South Carolina organization providing major disaster preparation, response, and recovery assistance.

GPS means differential geographic positioning system.

Island means Seabrook Island.

National Marine Fisheries Service means the federal organization responsible for the management, conservation, and protection of living marine resources within about 200 miles of the U.S. coast.

National Oceanic and Atmospheric Administration means the federal agency responsible for protecting federal trust resources, provide mapping of navigation channels, monitoring and forecasting weather, monitoring coastal dynamics and conditions, and managing the nation's coast.

NAVD means North American Vertical Datum, the starting point for measuring vertical elevation used by surveyors to relate elevations to sea level.

NGVD means National Geodetic Vertical Datum, an earlier system used by surveyors as the starting point for measuring vertical elevations.

NMFS means the National Marine Fisheries Service.

NOAA means the National Oceanic and Atmospheric Administration.

North Beach means the beach area around the seaward end of Boardwalk #1.

OCRM means Office of Ocean and Coastal Resource Management.

Office of Ocean and Coastal Resource Management means the State's coastal management agency.

Plan means the Comprehensive Beach Management Plan.

Property Owners Association means the Seabrook Island Property Owners Association.

Renken Point means the area along the Seabrook Island beachfront between Boardwalk #5 and Boardwalk #6 where the beach turns down the coast to the Seabrook Island Club facilities on the Edisto River Inlet.

RPI means Research Planning Institute Inc, a science-technology consulting organization.

SCDNR means South Carolina Department of Natural Resources.

Seabrook Island Club means the member owned club on Seabrook Island.

Seabrook Island Property Owners Association means the jointly owned organization used by the property owners to manage and maintain their common property and supporting staff.

SIC means the Seabrook Island Club.

SIPOA means the Seabrook Island Property Owners Association.

SLR means sea level rise.

South Beach means the section of Seabrook Island's beach from Renken Point to the Edisto River.

South Carolina Department of Natural Resources means the State of South Carolina department that is the principal advocate for and steward of the State's natural resources.

State means the State of South Carolina.

St. Christopher Camp and Conference Center means the conference center located along the Edisto River front of Seabrook Island that provides a year-round conference facility and a summer camp.

St. Christopher Camp means St. Christopher Camp and Conference Center.

Town Council means the Town of Seabrook Island legislative body.

Town Hall means the Town's administrative office building at 2001 Seabrook Island Road.

Town means the Town of Seabrook Island.

Town of Seabrook Island means the town of that name located in Charleston County, South Carolina.

USACE means the US Army Corps of Engineers.

US Army Corps of Engineers means the US Federal agency responsible for providing engineering services to the United States.

US Fish and Wildlife Service means the federal agency responsible for the protection of federal fish and wildlife species and their habitats.

USFWS means US Fish and Wildlife Service.

Utility Commission means the Town of Seabrook Island's commission responsible for the Town's domestic water supply and the waste treatment plant.