



# STAFF REPORT

## Town of Nags Head

### Planning & Development Department

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To: Planning Board  
From: Kelly Wyatt, Planning Director  
Joe Costello, Deputy Planning Director  
Date: June 14, 2024  
Subject: Site Plan Amendment for Inn at Whalebone, 87-unit Hotel located at 6632 W. Pheasant Avenue (W. Lakeside Street).

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#### **BACKGROUND INFORMATION**

At their October 4, 2023, meeting, the Nags Head Board of Commissioners reviewed the Site Plan Application request to construct a 90-unit hotel, Inn at Whalebone at 6632 W. Pheasant Avenue (W. Lakeside Street). The Board of Commissioners voted unanimously to approve the site plan with the two conditions noted below:

1. The existing roadway is to be expanded to accommodate three (3) lanes of traffic, and the three (3) lanes should extend to the most westward entrance of the hotel off Lakeside Street.
2. An approved subdivision plat addressing the portions of lots 24, 29, 30 and 31 and a recombination plat addressing lots 32, 33, 34, 35, 36, 22, 23, 26 and 27 be approved and filed at the Dare County Register of Deeds prior to the issuance of any development permits for the proposed hotel project.

Shortly after the site plan approval, the applicant worked with Bissell Professional Group to prepare the necessary subdivision plat and have it recorded with the Dare County Register of Deeds. Condition # 2 has been satisfied.

At this time, the applicant is requesting that consideration be given to various Site Plan amendments as well as a request to eliminate in whole, or modify, the requirements imposed by Condition #1 as it relates to the widening of Lakeside Street.

#### **Site Plan Amendment Review**

Section 4.4 of the Unified Development Ordinance sets forth the criteria for what types of development may be reviewed and approved administratively by staff. In addition to listing what constitutes minor versus major site plan modifications, it states that the UDO Administrator has the authority to determine when projects shall require a Major Site Plan due to other project activities or unique circumstances. As the UDO Administrator, Planning Director Kelly Wyatt made the determination that the proposed modifications were major in nature as the project had notable concerns with traffic

circulation, access, and stormwater management from its original review in October of 2022.

The applicant has outlined the modifications from the most recent Board of Commissioners approval on October 4, 2023 in their attached Site Plan Amendment Project Narrative. It notes that many of the modifications were in response to achieving state stormwater and wastewater approvals. These modifications include:

- This project was originally approved as a 90-unit hotel; however, the revised plan seeks approval for an 87-unit hotel.
- The overall area of the proposed building has increased by 729 square feet.
- With the proposed reduction in hotel units, 87 parking spaces are now required. The revised parking is compliant with 90 proposed spaces.
- Building lot coverage has increased from 12.94% to 13.4%. With 35% allowed, this lot coverage remains compliant.
- Parking lot coverage has increased from 36.18% to 38.6%. With 45% allowed, this lot coverage remains compliant.
- The minimum required landscaped area of 20% remains at 28%.
- Numerous modifications have been made to the stormwater management design.

Town Engineer David Ryan has reviewed the revised plans and notes that the stormwater narrative on Sheet C-103 indicates a Seasonal High Water Table Elevation of 3.50' MSL. The typical infiltration basin detail indicates a SHWL of 4.8'. This discrepancy should be clarified. The stormwater management design information submitted appears to be in substantial compliance with the Town of Nags Head Unified Development Ordinance.

Staff reports from this project original review and approval on October 5, 2022, and subsequent review and approval on October 4, 2023, are attached for the Planning Board's consideration.

Based upon the staff's analysis, the proposed modifications remain compliant with the requirements of the Unified Development Ordinance.

#### Lakeside Street Widening Condition of Approval Review

The applicant has submitted a request that the Planning Board and Board of Commissioners consider amending or removing the condition placed upon their October 4, 2023 Site Plan Approval that Lakeside Street roadway be expanded to accommodate three (3) lanes of traffic, and the three (3) lanes should extend to the most westward entrance of the hotel off Lakeside Street.

MacConnell & Associates, P.C. has provided a Technical Memorandum outlining the impacts and challenges associated with this request. MacConnell & Associates, P.C. provided a Turn Lane Exhibit for town staff and Board consideration, it is attached for the Planning Board's review. Town Engineer, David Ryan has conducted a review of this proposed exhibit and has provided the following comments:

***“Lakeside Street Turn Lane Exhibit-*** A condition was placed on the previous site plan approval to widen the Lakeside St roadway extending from S. Croatan Hwy. to the westernmost boundary of the subject property. With the existing Lakeside St. right-of-way width at 40’ there are some impacts associated with a roadway widening of this length. These impacts include runoff onto adjoining properties and potential conflicts with above ground utilities. However, there is still an opportunity to provide roadway widening to meet the intent of the previous Board of Commissioners conditioned approval.

*The applicant has submitted an exhibit which shows a reduced widening plan from the eastern property boundary. This concept indicates an encroachment onto the adjoining undeveloped property to the south. Attached is an exhibit mark-up which describes a potential alternative roadway widening approach which may not result in improvements extending onto private property. The recommendation is for the applicant to modify the traffic improvements for Lakeside St. to reflect the approach as identified in the attached plan mark-up. This approval would be conditioned on the applicant acquiring detailed survey information for the development of a roadway widening and construction plan in accordance with Chapter 36-4 of the Town Code of Ordinances. It should be noted that a temporary construction easement may be required from the owner of the undeveloped property to the south for the purposes of construction in addition to a right-of-way encroachment through NCDOT.”*

### **STAFF RECOMMENDATION**

Based on staff’s review and analysis of the proposed site plan amendments, we find that the modifications comply with the Unified Development Ordinance (UDO) and recommend approval as presented.

Regarding the applicant's request to remove or modify the condition to widen Lakeside Street, this condition was included in the October 4, 2023, Board of Commissioners (BOC) approval to address traffic concerns raised by citizens and Board members. While fully meeting this condition could impact runoff onto adjacent properties and conflict with above-ground utilities, there is an opportunity to widen a portion of the roadway. This approach would fulfill the intent of the Board of Commissioners' conditioned approval without encroaching on adjoining properties. Staff recommends that the Planning Board recommend modifying the previous BOC approval to reflect the alternative roadway design proposed by the Town Engineer.



TOTAL PROPOSED SQUARE FOOTAGE \_\_\_\_\_ x .50 = \$ \_\_\_\_\_ +

(Optional) VESTED RIGHT  (no fee)

= TOTAL FEE DUE \_\_\_\_\_

**TOWN OF NAGS HEAD**

DATE RECEIVED \_\_\_\_\_

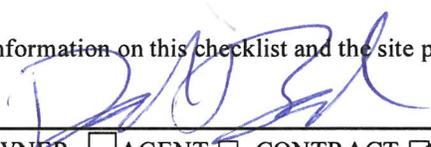
**SITE PLAN REVIEW APPLICATION & CHECKLIST**

**1. LOCATION AND ZONING INFORMATION**

- A. PROJECT TITLE The Inn At Whalebone
- B. STREET ADDRESS 6632 West Pheasant Ave.
- C. SUBDIVISION Roanoke Shores  
LOT(S) 32-36 BLOCK \_\_\_\_\_ SECTION \_\_\_\_\_
- D. PRESENT ZONING Village Hotel Overlay/SPD-C
- E. PRESENT USE Vacant Lots
- F. EXISTING NONCONFORMITIES \_\_\_\_\_
- G. ABUTTING PROPERTY ZONING SPDC-COS/R3/C2
- H. ABUTTING PROPERTY USE Golf Course / Gas Station / Residential

**2. CERTIFICATION AND STANDING**

- A. As applicant of standing of the above-named project, I certify that the information on this checklist and the site plan is complete and accurate.

  
 \_\_\_\_\_  
 OWNER  AGENT  CONTRACT   
 PURCHASER

- B. APPLICANT/DEVELOPER: NAME MacConnell and Associates, P.C.  
 ADDRESS 501 Cascade Pointe Lane, Suite 103, Cary, NC 27513  
 TELEPHONE (919) 467-1239
- C. CONTACTPERSON: NAME David Barcal, PE  
 ADDRESS 501 Cascade Pointe Lane, Suite 103, Cary, NC 27513  
 TELEPHONE (919) 467-1239

**3. ADJACENT OWNERSHIP INFORMATION (TO BE SHOWN ON SITE PLAN)**

- NAME/ADDRESS (N) SEE ATTACHED
- NAME/ADDRESS (S) \_\_\_\_\_
- NAME/ADDRESS (E) \_\_\_\_\_
- NAME/ADDRESS (W) \_\_\_\_\_

(If additional space is needed, please attach separate sheets.)

**4. SITE PLAN AND SITE PLAN ATTACHMENT DATA**

A. Site plan preparer MacConnell and Associates, P.C. Phone# (919) 467-1239  
 NC Registered  Engineer  Architect  Surveyor. License# C-1039

- B. The design for the attached Stormwater Management Plan includes:  
 1.5", 2-hour rainfall: retained on-site.  
 4.3", 2-hour rainfall: no important access or health-related impacts.  
 5.0", 2-hour rainfall: no unapproved impacts.

Drainage calculations have been prepared  YES  NO ATTACHED  YES  NO

**Note: Stormwater Management Plan MUST be approved by the Town Engineer prior to Planning Board review for all listed permitted uses in the zoning ordinance.**

- C. Sewage disposal approval is being submitted in the form of:  
 Attached tentative approval letter dated \_\_\_\_\_  
 Attached final permit dated July 25, 2023  
 State  County

- D. Project involves condominium ownership.  
 NO  YES, Three copies of condominium documents attached.

- E. Amount of land-disturbing activity proposed 99,233 square feet.  
 A Soil Erosion and Sedimentation Control Plan has been prepared.  
 NO  YES; (1) Copy attached,  
 (2) Copy submitted to Dare County Soil Conservation Service, Manteo NC 27954.

- F. Coastal Area Management Act (CAMA) permit.  YES  NO

**5. INFORMATION TO BE SHOWN ON SITE PLAN**

Twelve (12) copies for Planning Board review

A. Property and ownership	YES	COMMENTS
1. Present recorded owner and map book/cabinet reference of the site property.	✓	
2. Current PIN Number.	✓	
3. Site Address.	✓	
4. Owners' names, lot numbers or map book and page reference of all adjacent property owners.	✓	
5. Boundary of the entire parcel by course and distance.	✓	
6. Widths of the existing rights-of-way that abut the site.	✓	
7. Nature or purpose, location and size of existing easements.	N/A	
8. At all lot comers, points of tangents and any angle point along a given course of the site, iron pins minimum 3/8-inch diameter or 4x4-inch concrete monuments.	✓	
9. Plan to at least 1"=50' scale, showing north arrow and whether true or magnetic.	✓	
10. Signature and seal of preparer.	✓	
B. Existing features		
1. Streets, curbs, and sidewalks with type and width of pavement.	✓	
2. Topographic features of site and existing grades for any streets, storm drainage system including existing grades at four comers of all structures.	✓	

	YES ✓	COMMENT
3. Flood zone(s) as determined by latest FEMA Flood Insurance Rate Map, with notation, "flood zone subject to change by FEMA."	✓	
4. All underground utilities and facilities including gasoline tanks and existing septic facilities (including tanks and fields).	N/A	
5. If the lot is within an ocean hazard Area of Environmental Concern, the location of the first line of stable natural vegetation, the CAMA setback line, and contour lines at 2-foot intervals depicting any dunes located within an oceanfront AEC that are to be disturbed by construction.	N/A	
6. The location of any marsh areas or estuarine waters or US Army Corps of Engineers 404 wetlands within or abutting the lot.	N/A	
7. If the lot is within the small surface water supply watershed AEC (within 1,200 feet from the Fresh Water Pond), the distance between the pond and proposed septic or sewage treatment system.	N/A	
8. Percentage of site to be included in calculation for undisturbed vegetation preservation compliance in Article 10, Part I of the Unified Development Ordinance.	N/A	
<b>C. Site improvements</b> in accordance with regulations of state of North Carolina, Dare County, and Town of Nags Head		
1. Proposed building type (e.g., concrete or frame), number of floors and dimensions.	✓	Frame
2. Proposed building elevations of all sides of building labeled in accordance with proposed architectural design criteria of Article 10, Part VI of the UDO.	✓	
3. Total height and number of stories of proposed structure(s). If increased height is being proposed in conjunction with increased setbacks, show increase allowed in tabular form on plan. Note definition of height in Appendix A of the Unified Development Ordinance.	✓	
4. Existing and proposed ground elevations at the corners of proposed structure(s).	✓	
5. Sanitary sewer facilities with connection to sewer system or septic tank.	✓	
6. Approximate locations of proposed underground utilities and any necessary easements.	✓	
7. Screened dumpster pad(s) accessible to left-side loaders and sized in accordance with the Town Code of Ordinances.	✓	
8. Proposed fire hydrants and extensions of water distribution lines.	✓	
9. Location and height of proposed free-standing signs. See requirements of Article 10, Part III of the Unified Development Ordinance.	✓	
10. Location of all sidewalks, curbs, drives, and parking within the site and proposed finished elevations.	✓	
11. Handicapped parking spaces, walks, ramps, and entrances in accordance with the NC State Building Code. Handicapped parking spaces to be 13 feet wide, marked with a free-standing handicapped sign.	✓	
12. The Vegetative Buffer Yard areas have been identified and the proper buffer yard provision(s) have been identified as outlined in the Unified Development Ordinance.	✓	
13. Layout of numbered stalls/loading zones in accordance with Article 10, Part II of the Unified Development Ordinance.	✓	

Commercial <input type="checkbox"/> Residential <input type="checkbox"/>	Parking Spaces Required	Parking Spaces Shown	Loading Spaces
<b>4</b> _____ STORIES BUILDING SQUARE FOOTAGE: PRINCIPAL <u>13,405</u> ACCESSORY _____ TOTAL <u>13,405</u>	<b>89</b>	<b>90</b>	<b>1</b>
# EMPLOYEES <u>6</u>			
#DWELLING/LODGING UNITS <u>87</u>			

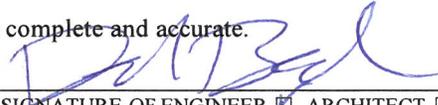
**D. EXPLANATORY NOTES**

1. Vicinity map. ✓
2. Total square feet of land area to undergo land-disturbing activity. ✓
3. The total required parking spaces versus the total parking spaces provided. Parking spaces to be numbered. ✓
4. Cross-section details of all streets, roads, ditches, and parking lot improvements. ✓
5. The number of dwelling/commercial units. If more than one use is proposed (e.g., large hotel with shops, etc.), show breakdown of units or square footage by building. ✓
6. If additional height above 35 feet is being proposed, the additional height and increased setbacks shall be laid out in tabular form. ✓
7. Total site coverage calculations. (Refer to UDO to calculate lot coverage for lots abutting ocean or sound). ✓
8. Components of the lighting plan (pole location, pole height, type of fixture, wattage, source of illumination, etc.). See Article 10, Part IV of the Unified Development Ordinance. ✓
9. A completed architectural points worksheet for commercial structures subject to residential design criteria. ✓

**6. PLAN AND ATTACHMENT PREPARER CERTIFICATION**

A. I certify that all information for which I am responsible is complete and accurate.

4/14/24  
DATE

  
SIGNATURE OF ENGINEER  ARCHITECT  SURVEYOR

B. The following individuals have contributed information or attachments to the plan:

Name	Phone#	Information Provided
Nitin Kulkarni	1-804-200-4085	Architectural

## Site Specific Development Plan Option - Vested Right for Site Plans

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Please be advised that as the owner, or agent for the owner, you have the opportunity to apply for and receive a Site-Specific Development Plan that will establish a Vested Right for this project for a period of time not to exceed two (2) years from the date the Board of Commissioners approves the plan. You must secure a building permit for this project within two (2) years of the approval date, or your Site-Specific Development Plan will expire. If you elect not to apply for a Site-Specific Development Plan, you must secure a building permit within six (6) months or else your site plan will expire.

If you choose the Site-Specific Development Plan option, please keep in mind the following concerns:

1. Although your project may be classified as a permitted use, by requesting a Site-Specific Development Plan your project will be processed as a Special Use for which a public hearing will be held, and an additional fee of \$200.00 will be charged to process your application.
2. Once your Site-Specific Development Plan has been approved with vested rights status no modifications can be made to the plan.

**If you wish to take advantage of the Vested Right process, please check off the Vested Right box on page one. If you do not, then leave the box blank.**

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Morrisville, NC 27560



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Suite 103

Cary, NC 27513

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**MacCONNELL & Associates, P.C.**

www.macconnellandassoc.com

"Engineering Today For Tomorrow's Future"

## **Technical Memorandum**

To: Board of Commissioners  
Client: Inn at Whalebone, LLC  
Subject: The Inn at Whalebone  
Project No.:C06001.00

Date: May 17, 2024  
From: Gary S. MacConnell, P.E.  
and Cricket Corwin, E.I.

### **Introduction**

This is a request to amend/remove the road widening aspect of the original submittal due to the challenges of this task. This technical memorandum will also discuss two different road widening options and their impacts.

### **Option 1 – Complete Road Widening Impacts**

- Road widening to the North
  - Significant impacts to the entrance and driveway of the service station that would result in the turn radius' not being met to the service station.
  - The customer staging area for gas pumps would be reduced at the service station.
  - Road widening would interfere with existing power poles.
  - Existing drainage ways would be covered up.
  - This would also eliminate the existing vegetative buffer.
- Road widening to the South
  - Completely cover up existing water line and service connections which would impact the accessibility of the water line making it difficult to maintain the line adequately. During construction, there could potentially be impacts to the operation of the water distribution system depending on the depth and material of the water line. This will impact future maintenance because the road would have to be shut down entirely, and pavement would have to be removed and replaced.
  - Would impact the frontage of the lots encroaching on existing driveways, power poles, mailboxes, fire hydrants, etc.
  - There would also be significant impact to the stormwater drainage and collection of the dwellings along the road by not only increasing the amount of impervious area but also covering up the existing drainage ditches with the proposed road.
  - Existing lot frontage would be reduced.
- Please also note that the North Carolina Department of Transportation does not have jurisdiction over this road.

- Because there is no existing stormwater infrastructure besides ditches, there would be no other way to convey stormwater from this road.
- With the road widening, there would be no shoulder on either side of the road.
- As shown in the attachment, 10' lanes are the minimum dimensions required to accommodate a single ingress lane and egress lane with a dedicated left turn lane and through with right turn lane. These dimensions severely impact the entirety of the road as described above.
- See attached street view images (3) of existing conditions looking toward S. Old Road near proposed Inn at Whalebone.

## **Option 2 – Road Widening only Lakeside Street/S Croatan Highway (Turn Lane) Impacts**

- Additional land would need to be acquired near the S Croatan Highway in order to add the turn lane.
- There would be a need to modify existing water lines and existing electrical and other utilities in the area.
- The curb return on the south side would need to be modified.
- See attached street view images (1 & 2) of existing conditions looking toward S. Croatan Highway from Lakeside Street.



Image 1



Image 2



Image 3

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**NOTES**

1. SEE C-101 FOR ALL GENERAL NOTES.

**LEGEND**

- 110 --- INDEX CONTOUR
- 108 --- INTERMEDIATE CONTOUR
- PROPERTY LINE
- ADJOINING PROPERTIES
- x- FENCE
- RIGHT-OF-WAY
- CREEK
- SS --- EX. SANITARY SEWER
- W --- EX. WATER LINE
- SS --- NEW SANITARY SEWER
- --- NEW WATER LINE

REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT MANAGER: GSM	PROJECT ENGINEER: DCB
DRAWN BY: JDH	CHECKED BY: GSM

DATE: JUNE 6, 2024

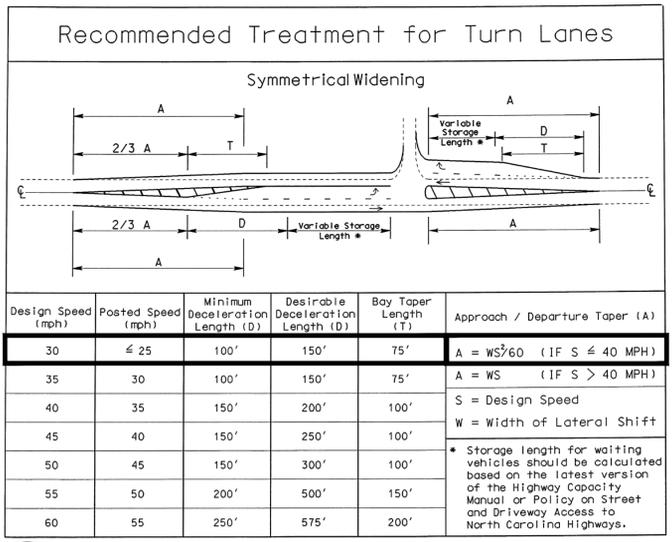
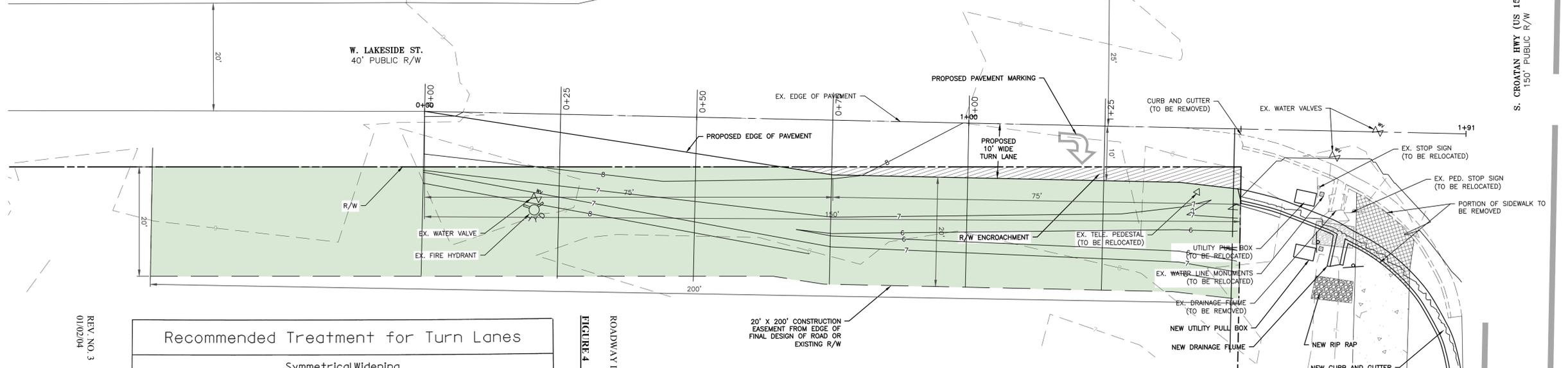
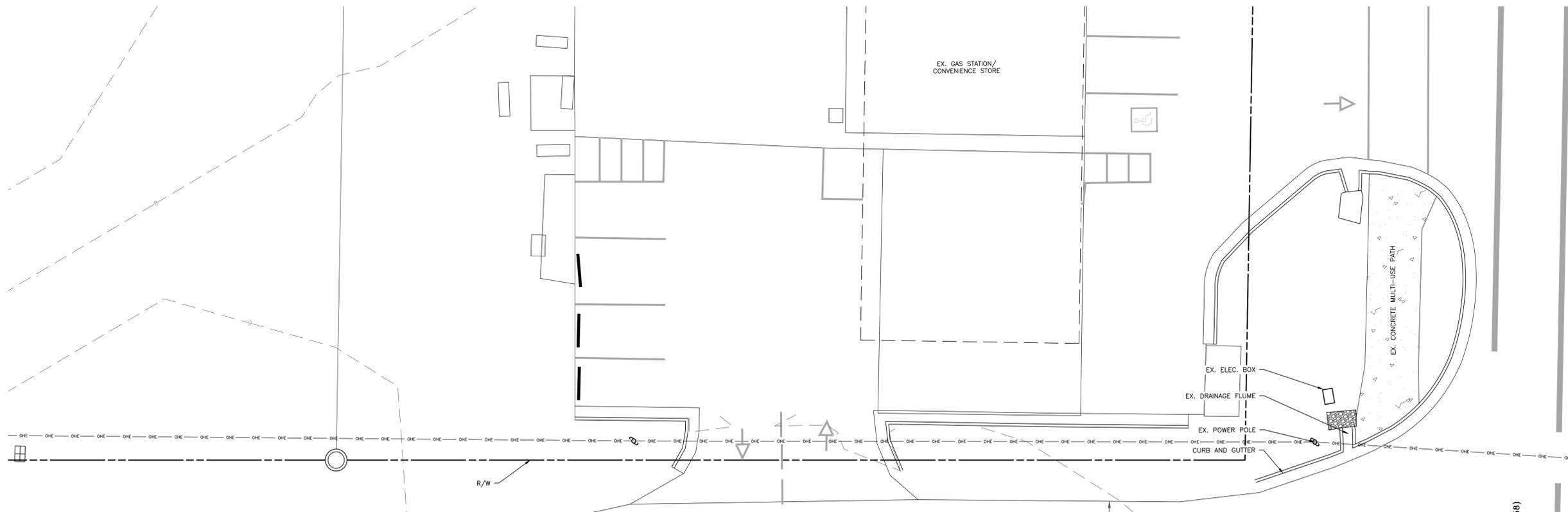


**MacCONNELL & Associates, P. C.**  
 501 CASCADE POINTE LANE, SUITE 103  
 CARY, NORTH CAROLINA 27513  
 P.O. BOX 129  
 MORRISVILLE, NORTH CAROLINA 27560  
 LICENSE No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

**THE INN AT WHALEBONE, LLC**  
**TRAFFIC IMPROVEMENTS FOR W. LAKESIDE ST.**  
**DARE COUNTY, NC**

**TURN LANE EXHIBIT**

PROJECT NUMBER <b>C06001.00</b>	DRAWING NUMBER <b>C-101</b>
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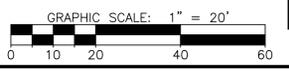


**FIGURE 4**  
 ROADWAY DESIGN MANUAL  
 PART I  
 9-1  
 F-4A

W = 10'  
 S = 30 MPH  
 A = WS<sup>2</sup>/60 = 150'  
 D = 100'  
 T = 75'  
 STORAGE = 50'

**1**  
**C-101**  
**PROPOSED TURN LANE DETAIL / CALCULATIONS**  
 NTS

**FOR REVIEW ONLY**  
 NOT RELEASED FOR CONSTRUCTION



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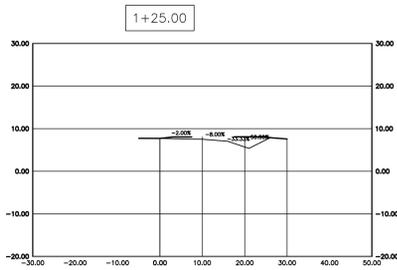
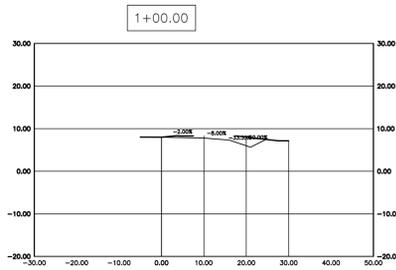
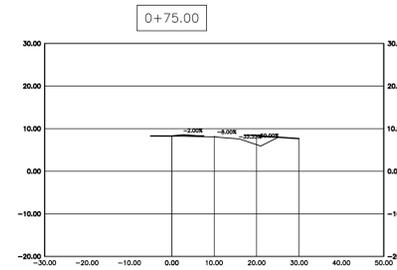
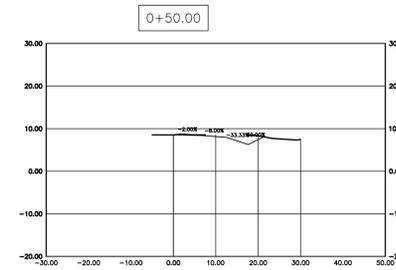
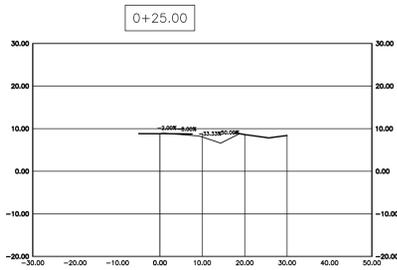
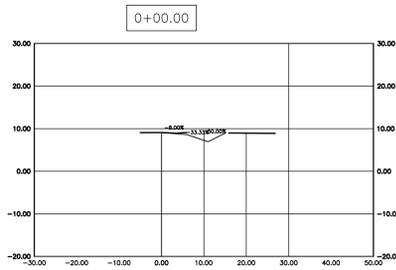
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### NOTES

- SEE C-101 FOR ALL GENERAL NOTES.

### LEGEND

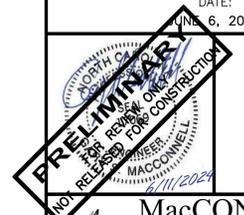
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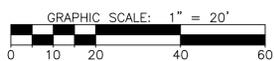
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**THE INN AT WHALEBONE, LLC**  
**TRAFFIC IMPROVEMENTS FOR W. LAKESIDE ST.**  
**DARE COUNTY, NC**

### CROSS SECTIONS

PROJECT NUMBER <b>C06001.00</b>	DRAWING NUMBER <b>C-102</b>
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**FOR REVIEW ONLY**  
 NOT RELEASED FOR CONSTRUCTION

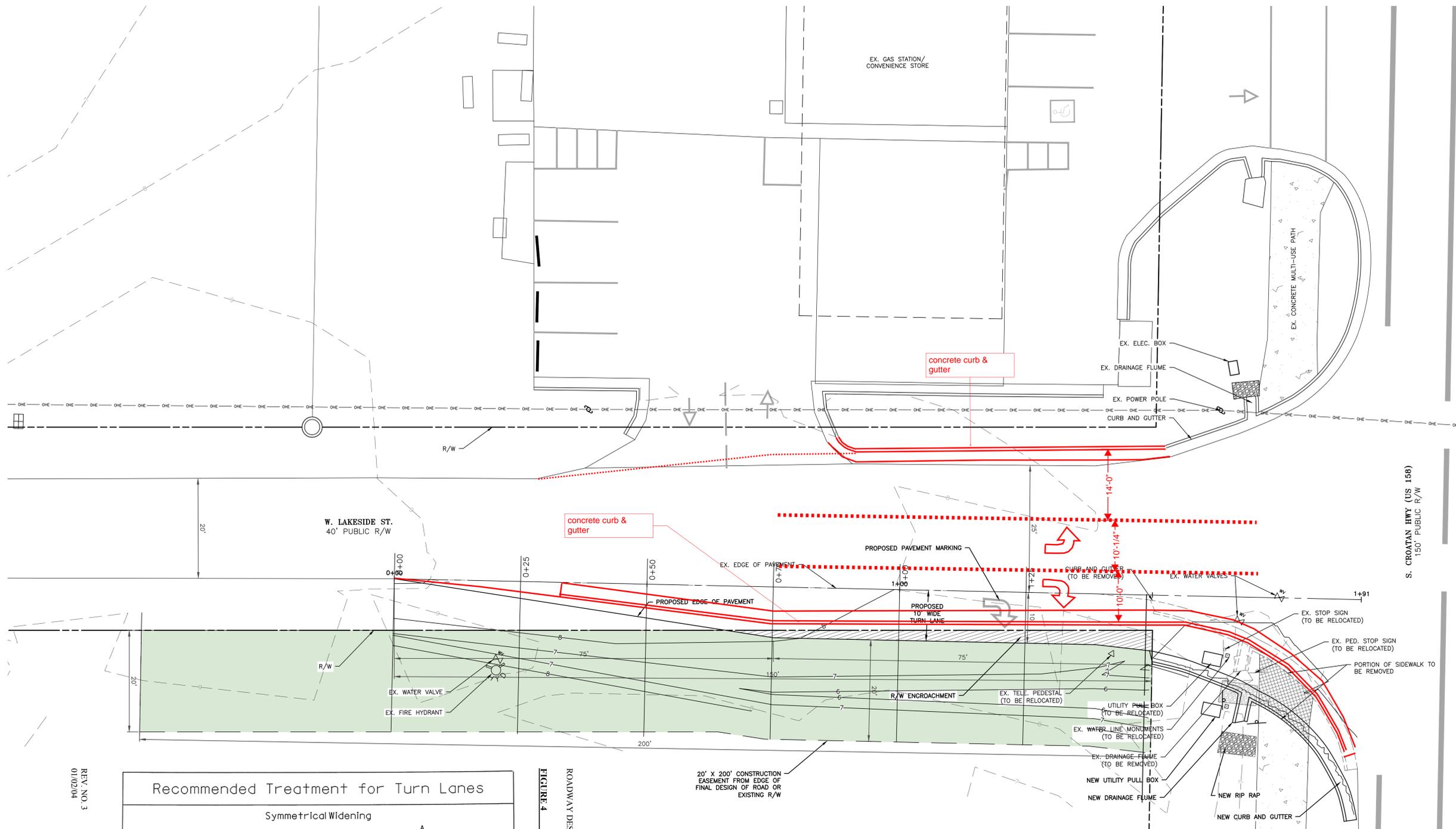


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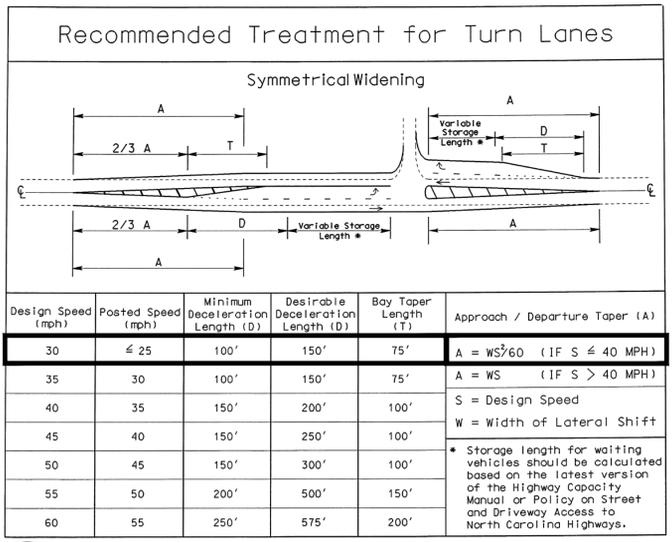


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**THE INN AT WHALEBONE, LLC**  
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**DARE COUNTY, NC**

**TURN LANE EXHIBIT**

PROJECT NUMBER: **C06001.00**  
DRAWING NUMBER: **C-101**



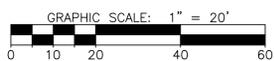
**1 C-101 PROPOSED TURN LANE DETAIL / CALCULATIONS**  
NTS

**FIGURE 4**  
ROADWAY DESIGN MANUAL  
PART I  
9-1  
F-4A

W = 10'  
S = 30 MPH  
A = WS<sup>2</sup>/60 = 150'  
D = 100'  
T = 75'  
STORAGE = 50'

The items in red indicate a proposed roadway widening alternative utilizing curb & gutter. This information is provided as conceptual and not intended to represent an actual design plan.

**FOR REVIEW ONLY**  
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## Site Plan Amendment Project Narrative

To: Board of Commissioners  
Client: Inn at Whalebone, LLC  
Subject: The Inn at Whalebone  
Project No.:C06001.00

Date: May 16, 2024  
From: Gary S. MacConnell, P.E.  
and Cricket Corwin, E.I.

### Introduction

The modifications that were made to the original site plan were necessary to achieve site approval for the stormwater permits and to accommodate for the wastewater design. Additionally, these adjustments were made to meet specific requirements outlined by Marriott, particularly regarding the downsizing of rooms to accommodate their preference for 12% suite rooms, as well as additional space for common areas such as the gym and breakfast lobby. Please see below for a list of other changes that were considered in the site plan revision.

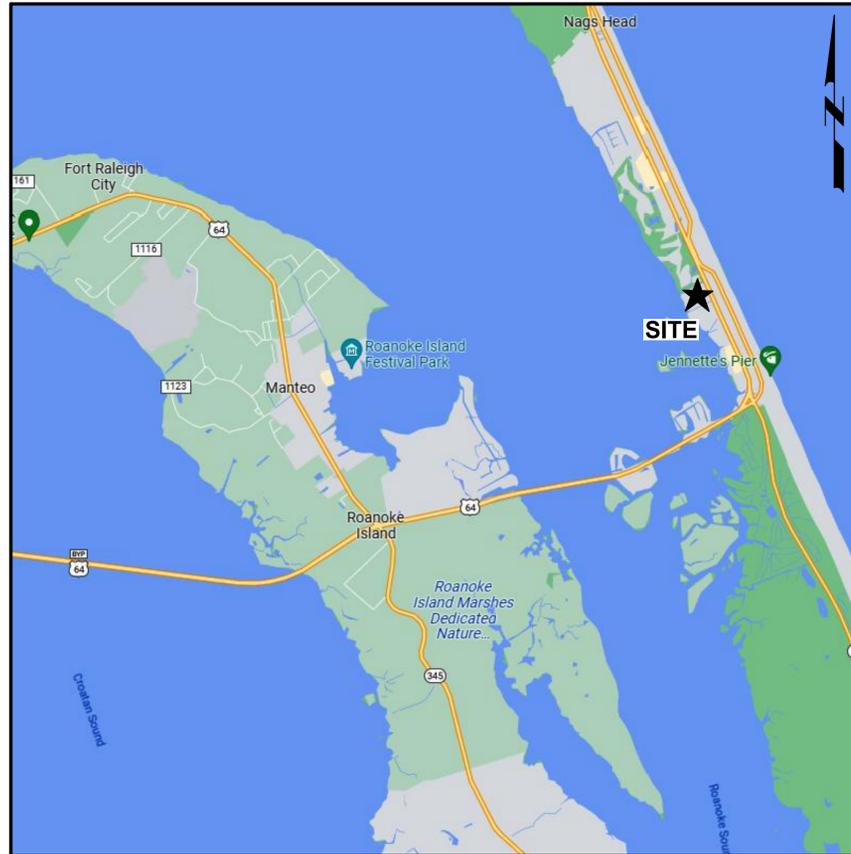
- The hotel was previously proposed and approved as a 90-unit establishment, but the revised plan seeks approval for an 87-unit hotel. Please see specifications below:
  - Previous Building Area: 11,214 square feet
  - New Building Area: 11,943 square feet
  - Building Area Difference: 729 square feet, 6.5% increase.
- There were originally 93 parking spots proposed and approved. However, due to the reduction in units, only 87 parking spots were required. 90 parking spots were proposed as part of the site plan revision. Some parking spaces were eliminated to facilitate the creation of a walkway near the pool area and to also help with additional stormwater handling.
- Lot coverage has increased due to the added walkways and change in pool size.
  - Previous Lot Coverage: 56,428 square feet
  - New Lot Coverage: 55,531 square feet
  - Lot Coverage Difference: 897 square feet, 1.6% decrease.
- Revisions were made to stormwater management measures to accommodate the relocation of the pool, meet required stormwater storage capacities, adhere to setbacks from the onsite and offsite septic systems, and address feedback from the North Carolina Department of Environmental Quality (NCDEQ). These revisions also helped with detention time and treatment.
- Underground storage structures were integrated into the design to fulfill stormwater storage requirements while also maintaining necessary setbacks from the proposed onsite and offsite septic systems and to accommodate for the vegetative buffers.
- Some of the stormwater basins along the perimeter of the property were removed to adhere to setbacks from the adjacent property septic system and the onsite septic system.

# INN AT WHALEBONE, LLC

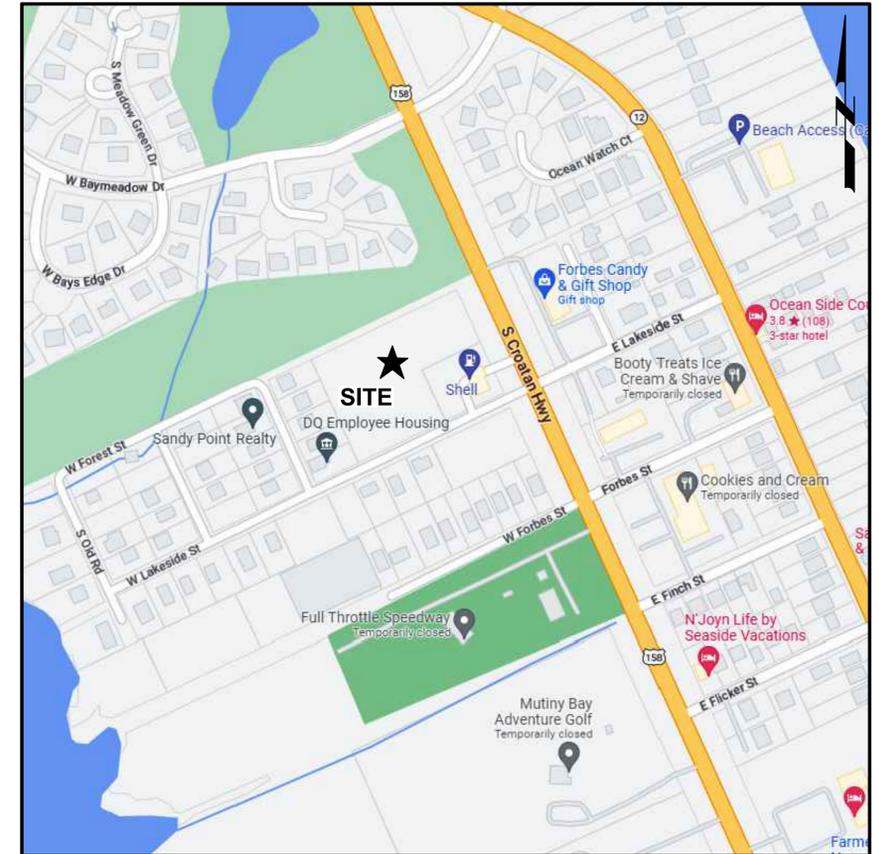
## CONSTRUCTION DRAWINGS

DARE COUNTY, NC  
PROJECT No. C06001.00

6632 W. PHEASANT AVE.  
NAGS HEAD, NC 27959



VICINITY MAP



LOCATION MAP

### SCHEDULE OF DRAWINGS:

- |       |                           |
|-------|---------------------------|
|       | COVER SHEET               |
| C-101 | EXISTING CONDITIONS       |
| C-102 | SITE AND UTILITY PLAN     |
| C-103 | GRADING AND DRAINAGE PLAN |
| C-104 | LANDSCAPE PLAN            |
| C-105 | LIGHTING PLAN             |
| D-101 | R TANK DETAILS - 1 & 2    |
| D-102 | R TANK DETAILS - 3 & 4    |
| D-103 | R TANK DETAILS - 5        |
| D-104 | EROSION CONTROL DETAILS 1 |
| D-105 | EROSION CONTROL DETAILS 2 |



PROJECT MANAGEMENT

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**MacCONNELL  
& Associates, P. C.**

501 CASCADE POINTE LANE, SUITE 103  
CARY, NORTH CAROLINA 27513  
P. O. BOX 129

LICENSE MORRISVILLE, NORTH CAROLINA 27560  
No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

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CONSTRUCTION

MARCH 15, 2024

REVISIONS			
NO.	DATE	DESCRIPTION	SHEET

CLUBCORP GOLF OF NORTH CAROLINA LLC  
D.B. 1255, PG. 540

**Forrest Street**  
Right-of-Way

N62° 23' 27"E

**Lakeside Street**  
40' Right-of-Way

**Croatan Highway**  
**US 158 Bypass**  
**150' Right-of-Way**

LOT 37  
ROANOKE SHORE  
M.B. 1, PG. 081

LOT 38  
ROANOKE SHORE  
M.B. 1, PG. 081

LOT 39  
ROANOKE SHORE  
M.B. 1, PG. 081

LOT 40  
ROANOKE SHORE  
M.B. 1, PG. 081

LOT 41  
ROANOKE SHORE  
M.B. 1, PG. 081

EXISTING CONCRETE

EXISTING CONCRETE

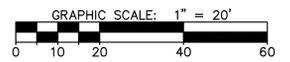
EXISTING SERVICE STATION

Harrell Acquisitions, Llc

UTILITY POLE

OVERHEAD UTILITIES

BOUNDARY AND TOPOGRAPHIC INFORMATION PREPARED BY  
BISSELL PROFESSIONAL GROUP  
MAP ENTITLED: BOUNDARY AND TOPOGRAPHIC SURVEY DATED: 04-07-22



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NOT RELEASED FOR  
CONSTRUCTION

PROJECT MANAGER: GSM	PROJECT ENGINEER: HDB
DRAWN BY: HDB	CHECKED BY: TAP

DATE:  
March 15, 2024  
**MacCONNELL & Associates, P. C.**  
501 CASCADE POINTE LANE, SUITE 103  
CARY, NORTH CAROLINA 27513  
P.O. BOX 129  
MORRISVILLE, NORTH CAROLINA 27560  
LICENSE No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

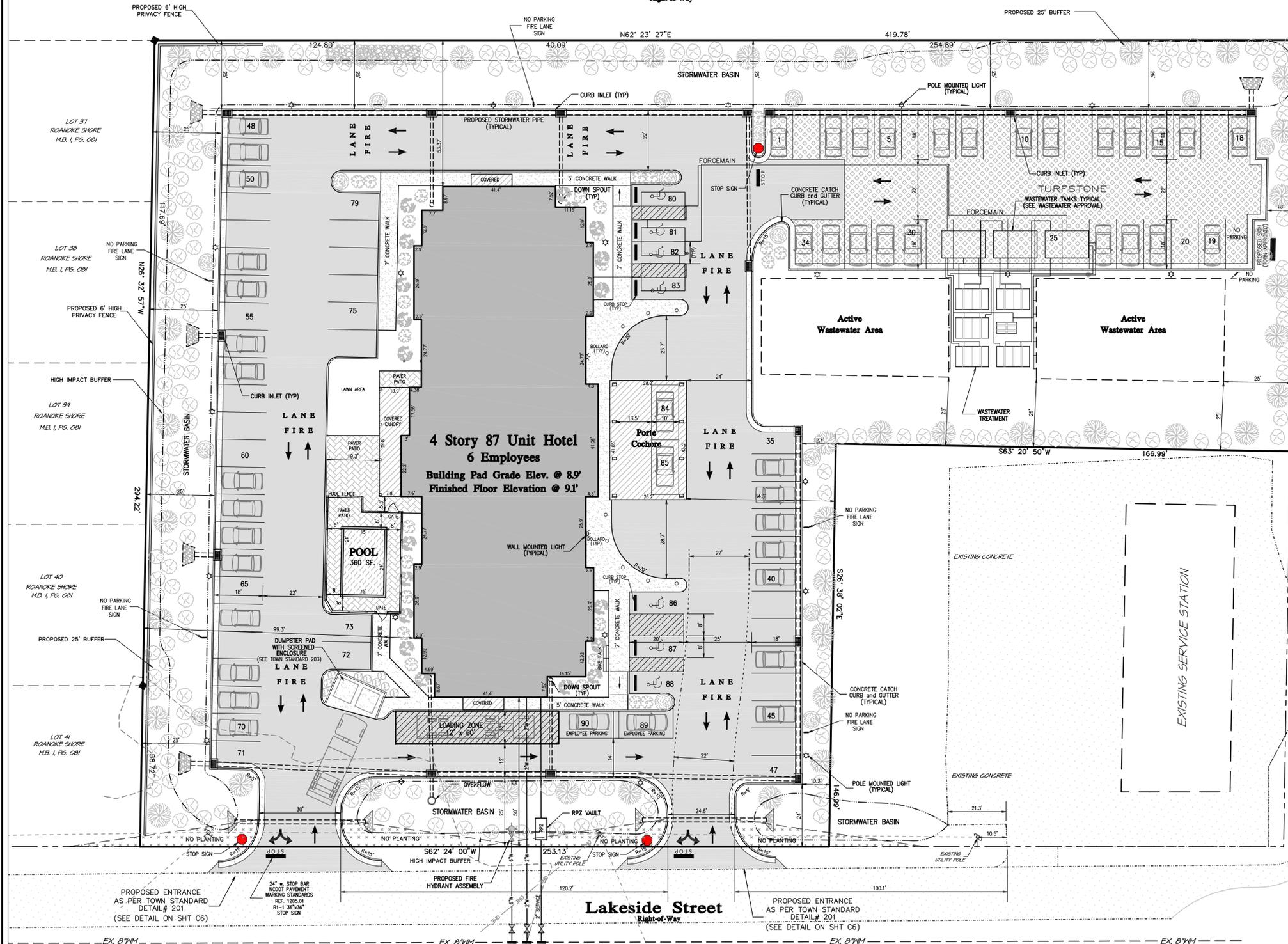
**THE INN AT WHALEBONE, LLC**  
**CONSTRUCTION DRAWINGS**  
**DARE COUNTY, NC**

**Existing Conditions**  
Location:  
6632 West Pheasant Avenue  
Parcel in Nags Head  
Nags Head Dare County North Carolina

PROJECT NUMBER <b>C06001.00</b>	DRAWING NUMBER <b>C-101</b>
------------------------------------	--------------------------------

CLUECORP GOLF OF NORTH CAROLINA LLC  
D.B. 1255, P.S. 540

**Forrest Street**  
Right-of-Way



**4 Story 87 Unit Hotel**  
6 Employees  
Building Pad Grade Elev. @ 8.9'  
Finished Floor Elevation @ 9.1'

**POOL**  
360 SF

**Lakeside Street**  
Right-of-Way

**Croatan Highway**  
**US 158 Bypass**

**GENERAL NOTES:**

- SUBJECT PROPERTY: Lot: 32-36 & Pheasant Ave Nags Head, NC 27959
- STREET ADDRESS: 6632 W Pheasant Ave Nags Head, NC 27959
- PARCEL ID NUMBER: 006891000
- GLOBAL PIN: 080006472501
- RECORDED REFERENCE: DB. 1515 PG. 0048
- TOTAL PARCEL AREA: 99,233 S.F. (2.28 AC.)
- BOUNDARY INFORMATION TAKEN FROM BISSELL PROFESSIONAL GROUP
- LOT COVERAGE:
  - BUILDING and COVERED DECKS - 13,405 SQ. FT.
  - CONCRETE VEHICULAR - 28,794 SQ. FT.
  - CONCRETE WALK/CURB - 6,224 SQ. FT.
  - POOL SURFACE AREA - 360 SQ. FT.
  - TURFSTONE GRID PAVERS - 8,823 S.F. x 0.67 = 5,911 SQ. FT.
  - POOL PAVERS - 1,250 S.F. x 0.67 = 837 SQ. FT.
  - TOTAL IMPERVIOUS COVERAGE = 55,531 SQ. FT.
  - PERCENT LOT COVERAGE = 55.96%
  - BUILDING @ 13,405
  - PARKING @ 38,66%
  - LANDSCAPED @ 28.2%
  - TOTAL PARKING AREA = 38,360 x 20% = 7,672 SQ. FT. (IMPERVIOUS)
  - TOTAL IMPERVIOUS PROVIDED = 8,823 SQ. FT.
- PARKING DATA:
  - 87 UNITS @ 1 SPACE PER UNIT = 87 SPACES
  - 6 EMPLOYEES @ 1 SPACE PER 3 EMPLOYEES = 2 SPACES
  - TOTAL SPACES REQUIRED = 89 SPACES
  - TOTAL SPACES PROVIDED = 90 SPACES

**LEGEND:**

- PROPOSED VEHICLE CIRCULATION AREA
- PROPOSED TURFSTONE
- PROPOSED BUILDING AREA
- PROPOSED DECKS
- PROPOSED CONCRETE SURFACE
- PROPOSED PAVERS
- PROPOSED VEHICLE PARKING AREA
- PROPOSED CURB INLET / CATCH BASIN
- PROPOSED STORMWATER PIPE

PROJECT MANAGER: GSM	PROJECT ENGINEER: HDB
DRAWN BY: HDB	CHECKED BY: TAP

DATE:  
March 15, 2024  
**MacCONNELL & Associates, P. C.**  
501 CASCADE POINTE LANE, SUITE 103  
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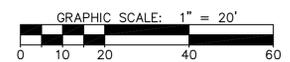
**THE INN AT WHALEBONE, LLC**  
**CONSTRUCTION DRAWINGS**  
DARE COUNTY, NC

**Site and Utility Plan**  
Location:  
6632 West Pheasant Avenue  
Parcel in Nags Head  
Nags Head Dare County North Carolina  
PROJECT NUMBER: C06001.00  
DRAWING NUMBER: C-102

**BEFORE YOU DIG!**



**NOTE:**  
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CLUBCORP GOLF OF NORTH CAROLINA LLC  
D.B. 1255, P.G. 540

**Forrest Street**  
Right-of-Way

**Lakeside Street**  
Right-of-Way

**Croatan Highway**  
**US 158 Bypass**

**GENERAL NOTES:**

- SUBJECT PROPERTY: Lot: 32-36 & Pheasant Ave Nags Head, NC 27959
- STREET ADDRESS: 6632 W Pheasant Ave Nags Head, NC 27959
- PARCEL ID NUMBER: 006891000
- GLOBAL PIN: 080006472501
- RECORDED REFERENCE: DB. 1515 PG. 0048
- TOTAL PARCEL AREA: 99,233 S.F. (2.28 AC.)
- LOT COVERAGE: BUILDING and COVERED DECKS = 13,405 SQ. FT.  
CONCRETE VEHICULAR = 28,794 SQ. FT.  
CONCRETE WALK/CURB = 6,204 SQ. FT.  
POOL SURFACE AREA = 450 SQ. FT.  
TURFSTONE GRID PAVERS = 8,823 S.F. x 0.67 = 5,911 SQ. FT.  
POOL PAVERS = 1,140 S.F. x 0.67 = 764 SQ. FT.  
TOTAL IMPERVIOUS COVERAGE = 55,528 SQ. FT.  
PERCENT LOT COVERAGE = 55.95%

**LEGEND:**

- PROPOSED VEHICLE CIRCULATION AREA
- PROPOSED TURFSTONE
- PROPOSED BUILDING AREA
- PROPOSED DECKS
- PROPOSED CONCRETE SURFACE
- PROPOSED VEHICLE PARKING AREA
- PROPOSED CURB INLET / CATCH BASIN
- PROPOSED STORMWATER PIPE
- PROPOSED RUNOFF DIRECTIONAL ARROW
- PROPOSED FINISHED GRADE CONTOUR
- PROPOSED FINISHED SPOT GRADE
- EXISTING GRADE CONTOUR
- EXISTING SPOT GRADE

**BASIN "A"**

**BASIN "D"**  
Active Wastewater Area

**BASIN "C"**

**BASIN "B"**

**4 Story 87 Unit Hotel**  
**6 Employees**  
Building Pad Grade Elev. @ 8.9'  
Finished Floor Elevation @ 9.1'

**POOL**

**Porte Cochere**

**STORMWATER MANAGEMENT NARRATIVE**

**STORMWATER MANAGEMENT NARRATIVE**  
THE STORMWATER MANAGEMENT PLAN SHOWN HEREON HAS BEEN PREPARED TO ADDRESS STORMWATER MANAGEMENT ON THE SUBJECT PROPERTY.  
THE STORMWATER RUNOFF WILL BE MANAGED THROUGH PROPOSED ON SITE SHALLOW INFILTRATION SWALES AND OPEN LAWN AREAS.  
THE CALCULATIONS WILL SHOW THAT THE HIGHLY PERVIOUS SOILS, COUPLED WITH THE SHALLOW INFILTRATION SWALES ARE ADEQUATE TO RETAIN AND INFILTRATE THE STORMWATER GENERATED FROM THE DESIGN RAINFALL EVENT.  
PROJECT DESIGN SHALL UTILIZE LOW-IMPACT DEVELOPMENT PRINCIPLES AND BEST MANAGEMENT PRACTICES AS THE PRIMARY METHOD FOR THE TREATMENT OF STORMWATER.  
**DESIGN STORM EVENT:**  
4.3 INCHES OF RAINFALL OVER A STORM EVENT  
**TOTAL RUNOFF TO BE MANAGED FROM DESIGN STORM:**  
IMPERVIOUS SURFACES:  
TOTAL IMPERVIOUS PROJECT COVERAGE = 55,531 SQ. FT.  
TOTAL IMPERVIOUS OFFSITE PROJECT COVERAGE = 16,800 SQ. FT.  
TOTAL IMPERVIOUS = 72,331 SQ. FT.  
RATIONAL RUNOFF COEFFICIENT = C  
CONCRETE COEFFICIENT = 0.95  
ROOF INCLINED COEFFICIENT = 1.0  
UNIMPROVED AREA COEFFICIENT = 0.35  
USE: C = 1.00 AS COMPOSITE RUNOFF FACTOR  
TOTAL RUNOFF: 72,331 SQ. FT. x 4.3"/12 x 1.00 = 25,919 CU. FT.  
**EXISTING SOIL DATA:**  
SOURCE: USDA, NATURAL RESOURCES CONSERVATION SERVICE, SOIL SURVEY  
SOIL TYPE: COROLLA - FINE SAND SINGLE GRAIN 2 TO 30 PERCENT SLOPES  
DRAINAGE CLASS: MODERATELY WELL  
SEASONAL HIGH WATER TABLE ELEVATION = BELOW 3.50' +/- MSL  
**CALCULATE HOLDING CAPACITY FOR INFILTRATION BASINS:**  
ASSUME SOIL INFILTRATION RATE = GREATER THAN 20 INCHES PER HOUR  
SOIL VOID RATIO = 20%  
ALL SIDE SLOPES 3:1 OR FLATTER  
**STORMWATER MANAGEMENT BASIN "A"**  
BASIN DATA  
TOP ELEVATION = 8.0'  
TOP AREA = 11,033 SQ. FT.  
BOTTOM ELEVATION = 5.5'  
BOTTOM AREA = 795 SQ. FT.  
CALCULATE OPEN VOLUME IN BASIN  
V1 = OPEN VOLUME = ((TOP AREA + BOTTOM AREA) X DEPTH OF BASIN) / 2  
V1 = OPEN VOLUME = (11,033 + 795) X 2.5 = 15,945 CU. FT.  
V1 = OPEN VOLUME = 15,945 CU. FT.  
**STORMWATER MANAGEMENT BASIN "B"**  
BASIN DATA  
TOP ELEVATION = 8.0'  
TOP AREA = 1,856 SQ. FT.  
BOTTOM ELEVATION = 5.5'  
BOTTOM AREA = 226 SQ. FT.  
CALCULATE OPEN VOLUME IN BASIN  
V2 = OPEN VOLUME = ((TOP AREA + BOTTOM AREA) X DEPTH OF BASIN) / 2  
V2 = OPEN VOLUME = (1,856 + 226) X 2.5 = 2,602 CU. FT.  
V2 = OPEN VOLUME = 2,602 CU. FT.  
**STORMWATER MANAGEMENT BASIN "C"**  
BASIN DATA  
TOP ELEVATION = 8.0'  
TOP AREA = 1,968 SQ. FT.  
BOTTOM ELEVATION = 7.0'  
BOTTOM AREA = 482 SQ. FT.  
CALCULATE OPEN VOLUME IN BASIN  
V2 = OPEN VOLUME = ((TOP AREA + BOTTOM AREA) X DEPTH OF BASIN) / 2  
V2 = OPEN VOLUME = (1,968 + 482) X 1.0 = 725 CU. FT.  
V2 = OPEN VOLUME = 725 CU. FT.

**STORMWATER MANAGEMENT TURFSTONE BASIN "D"**  
BASIN DATA  
TOP AREA = 7,686 SQ. FT.  
BOTTOM AREA = 7,686 SQ. FT.  
6" GRAVEL BASE (40% VOIDS)  
CALCULATE OPEN VOLUME IN BASIN  
V4 = OPEN VOLUME = ((TOP AREA + BOTTOM AREA) X DEPTH OF BASIN) / 2  
V4 = OPEN VOLUME = (7,686 + 7,686) X 0.67 x 40% VOIDS = 3,090 CU. FT.  
V4 = OPEN VOLUME = 3,090 CU. FT.  
CALCULATE INTERSTITIAL TURFSTONE UNDERLYING STORAGE  
V5 = INTERSTITIAL STORAGE = (TOP AREA X SOIL DEPTH) - V1) X 0.2  
SOIL DEPTH BELOW BOTTOM OF BASIN = 2.0 FEET  
V5 = INTERSTITIAL STORAGE = (7,680 X 2.0 - 3,090) X 0.2 = 2,454 CU. FT.  
V5 = OPEN VOLUME = 2,454 CU. FT.  
CALCULATE PIPE STORAGE  
V6 = STORAGE IN 18" STORMWATER PIPE CALCULATION @ 13 G PER FOOT  
V6 = 13 G. x 721 L.F. = 9,373 G. / 7.48 = 1,253 CU. FT.  
TOTAL STORAGE IN SWALE AND UNDERLYING SOILS  
TOTAL STORAGE PROVIDED = 15,945 + 2,602 + 725 + 3,090 + 2,454 + 1,253 = 26,069 CU. FT.  
TOTAL STORAGE REQUIRED = 25,919 CU. FT.  
**CALCULATION SUMMARY:**  
ADDITIONAL STORMWATER STORAGE IS AVAILABLE IN DRY GRASS INFILTRATION SWALES. A DESIGN VOLUME REDUCTION FOR DRY GRASS SWALE WITH LESS THAN 1.5% SLOPE THIS STORAGE IS NOT INCLUDED IN THE ABOVE CALCULATIONS AND WILL RESULT IN ADDITIONAL STORMWATER MANAGEMENT BUFFERING.  
SWALES REMOVE POLLUTANTS FROM STORMWATER BY BIOFILTRATION, SETTLING, AND INFILTRATION. GRASS SWALES FILTER POLLUTANTS AS STORMWATER RUNOFF MOVES THROUGH THE GRASS. BY REDUCING FLOW VELOCITIES AND INCREASING A SITE'S TIME OF CONCENTRATION, GRASS SWALES CONTRIBUTE TO REDUCING RUNOFF PEAKS. GRASS SWALES THAT ARE DESIGNED WITH INCORPORATE DEPRESSION STORAGE PROMOTE INFILTRATION AND CAN HELP CONTRIBUTE TO SATISFYING A SITE RUNOFF CAPTURE/STORAGE REQUIREMENT.

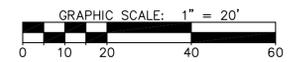
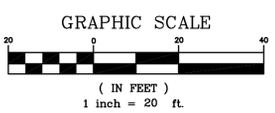
PROJECT MANAGER: GSM	PROJECT ENGINEER: HDB
DRAWN BY: HDB	CHECKED BY: TAP
DATE: March 15, 2024	
 <b>MacCONNELL &amp; Associates, P.C.</b> 501 CASCADE POINTE LANE, SUITE 103 CARY, NORTH CAROLINA 27513 P.O. BOX 129 MORRISVILLE, NORTH CAROLINA 27560 No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510	

**THE INN AT WHALEBONE, LLC**  
**CONSTRUCTION DRAWINGS**  
**DARE COUNTY, NC**

<b>Grading and Drainage</b>	
Location: 6632 West Pheasant Avenue Parcel in Nags Head	
Nags Head Dare County North Carolina	
PROJECT NUMBER <b>C06001.00</b>	DRAWING NUMBER <b>C-103</b>

**BEFORE YOU DIG!**  
**North Carolina 811**  
WWW.nc811.ORG

**NOTE:**  
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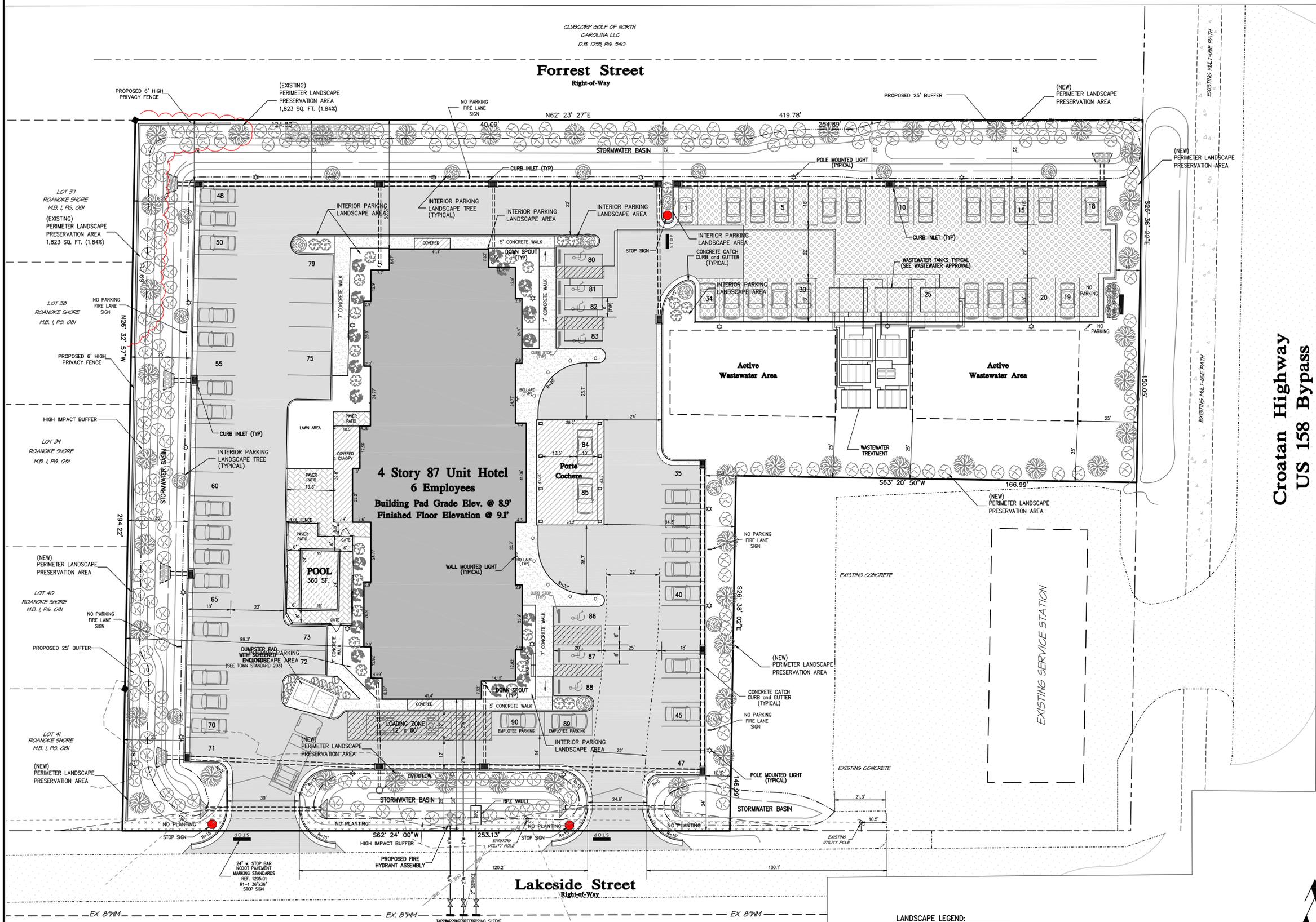


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CLUBCORP GOLF OF NORTH CAROLINA LLC  
D.B. 1255, PG. 540

**Forrest Street**  
Right-of-Way

**Lakeside Street**  
Right-of-Way



**GENERAL NOTES:**

- SUBJECT PROPERTY: Lot: 32-36 & Pheasant Ave Nags Head, NC 27959
- STREET ADDRESS: 6632 W Pheasant Ave Nags Head, NC 27959
- PARCEL ID NUMBER: 006891000
- GLOBAL PIN: 080006472501

**LEGEND:**

- PROPOSED VEHICLE CIRCULATION AREA
- PROPOSED TURFSTONE
- PROPOSED BUILDING AREA
- PROPOSED DECKS
- PROPOSED CONCRETE SURFACE
- PROPOSED VEHICLE PARKING AREA
- PROPOSED CURB INLET / CATCH BASIN
- PROPOSED STORMWATER PIPE

Croatan Highway US 158 Bypass

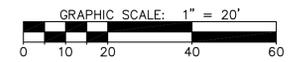
**4 Story 87 Unit Hotel**  
6 Employees  
Building Pad Grade Elev. @ 8.9'  
Finished Floor Elevation @ 9.1'

**POOL**  
360 SF

**Porto Cochera**

**LANDSCAPE LEGEND:**

COMMON NAME Botanical Name	HEIGHT	SPREAD	SCIENTIFIC NAME	QUANTITY	SYMBOL
FLOWERING DOGWOODS	10' - 25'	20' - 30'	Cornus florida	21	
CRAPE MYRTLE	10' - 30'	6' - 15'	Lagerstroemia indica	45	
JAPANESE PRIVET	6' - 12'	3' - 8'	Ligustrum japonicum	202	
BUTTERFLY WEED	1' - 3'	2' - 4'	Asclepias tuberosa	23	
Dustymiller	1' - 4'	1' - 2'	Artemisia stelleriana	17	



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**BEFORE YOU DIG!**

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- PARKING LOT INTERIOR LANDSCAPE: PARKING SPACE AREA = 16,340 SQ. FT. x 10% = 1,634 SQ. FT. (1,937 SQ. FT. PROVIDED)
- LANDSCAPE AREA TOWARD PRESERVATION: EXISTING PRESERVED TREES AND SHRUBS AREA 1,823 SQ. FT.  
TREES: 45 + 21 = 66 (T) x 100 (S.F.) 6,600 SQ. FT.  
SHRUBS: 202 + 23 + 17 = 242 (S) x 50 (S.F.) 12,100 SQ. FT.  
TOTAL LANDSCAPING = 18,700 SQ. FT. / 99,233 SQ. FT. = 18.84%

PROJECT MANAGER: GSM	PROJECT ENGINEER: HDB
DRAWN BY: HDB	CHECKED BY: TAP

DATE:  
March 15, 2024

**MacCONNELL & Associates, P.C.**  
501 CASCADE PONTE LANE, SUITE 103  
CARY, NORTH CAROLINA 27513  
P.O. BOX 129  
MORRISVILLE, NORTH CAROLINA 27560  
LICENSE No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

**THE INN AT WHALEBONE, LLC**

**CONSTRUCTION DRAWINGS**

**DARE COUNTY, NC**

**Landscape Plan**

Location:  
**6632 West Pheasant Avenue**  
Parcel in Nags Head  
Nags Head Dare County North Carolina

PROJECT NUMBER  
**C06001.00**

DRAWING NUMBER  
**C-104**

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**GENERAL NOTES:**

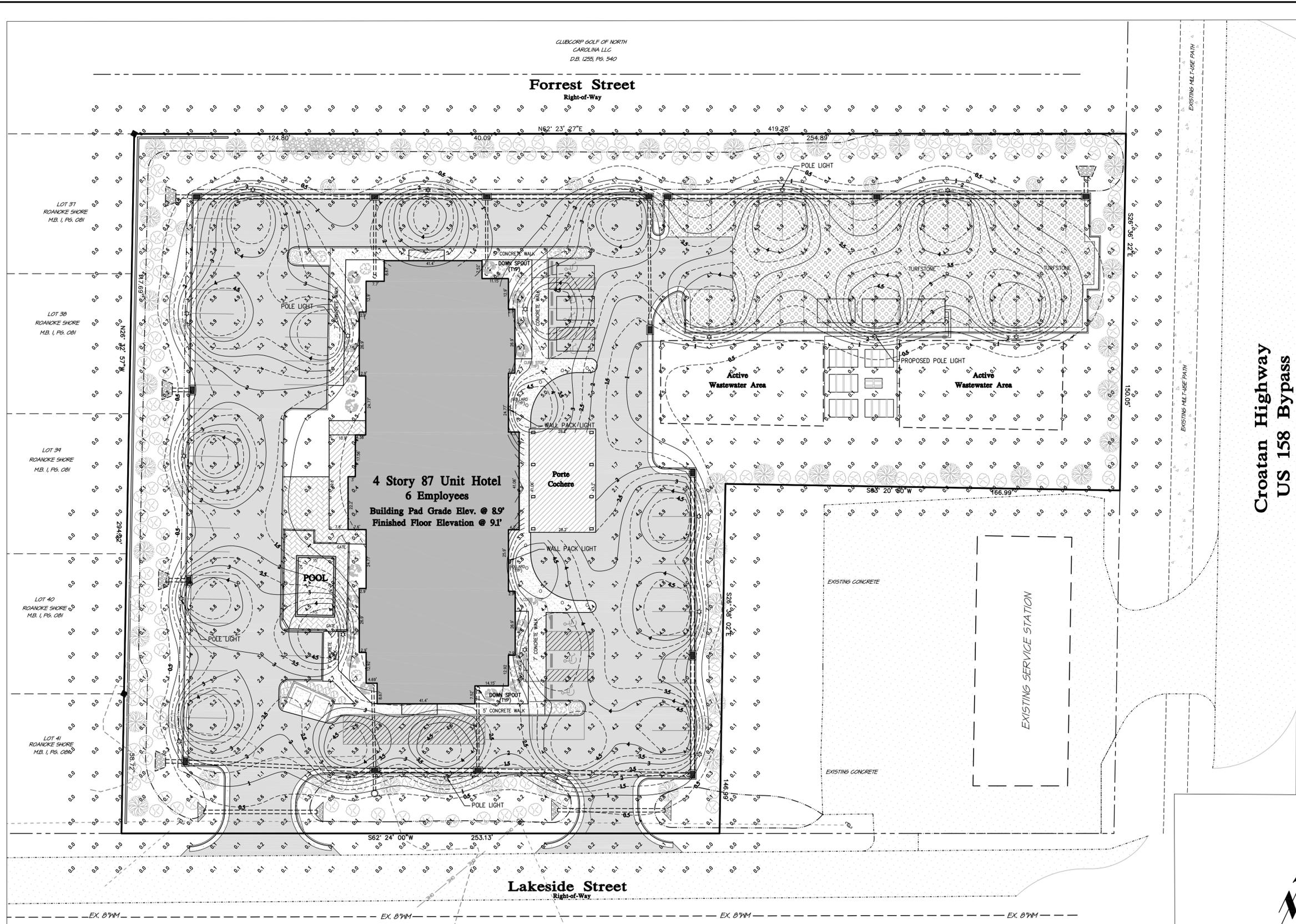
- \* SUBJECT PROPERTY: Lot: 32-36 & Pheasant Ave Nags Head, NC 27959
- \* STREET ADDRESS: 6632 W Pheasant Ave Nags Head, NC 27959
- \* PARCEL ID NUMBER: 006891000
- \* GLOBAL PIN: 080006472501
- \* RECORDED REFERENCE: DB: 1515 PG. 0048
- \* TOTAL PARCEL AREA: 99,233 S.F. (2.28 AC.)
- \* BOUNDARY INFORMATION TAKEN FROM BISSELL PROFESSIONAL GROUP

**LIGHTING LEGEND**

- PROPOSED POLE LIGHT  
RAB LIGHTING (MODEL: ALEDFC104)  
RAB STEEL POLE (MODEL: P54-07-25D2)  
(OR APPROVED EQUAL)  
MOUNTING HEIGHT @ 21'
- PROPOSED WALL PACK LIGHT  
RAB LIGHTING (MODEL: ALEDFC52)  
(OR APPROVED EQUAL)  
MOUNTING HEIGHT @ 21'
- PHOTOMETRIC ILLUMINATION SPOT NUMBER
- PHOTOMETRIC ILLUMINATION CONTOURS  
APPROVED BY TOWN OF NAGS HEAD
- APPROVED EQUAL: WALL MOUNTED AND POLE MOUNTED LIGHTS  
TO BE PROVIDED BY DOMINION ENERGY'S OUTDOOR SERVICES

**LEGEND:**

- PROPOSED VEHICLE CIRCULATION AREA
- PROPOSED TURFSTONE
- PROPOSED BUILDING AREA
- PROPOSED DECKS
- PROPOSED CONCRETE SURFACE
- PROPOSED VEHICLE PARKING AREA
- PROPOSED CURB INLET / CATCH BASIN
- PROPOSED STORMWATER PIPE



Croatan Highway  
US 158 Bypass

PROJECT MANAGER: GSM	PROJECT ENGINEER: HDB
DRAWN BY: HDB	CHECKED BY: TAP

DATE:  
March 15, 2024

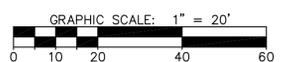
**MacCONNELL & Associates, P. C.**  
501 CASCADE POINTE LANE, SUITE 103  
CARY, NORTH CAROLINA 27513  
P.O. BOX 129  
MORRISVILLE, NORTH CAROLINA 27560  
LICENSE No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

**THE INN AT WHALEBONE, LLC**

**CONSTRUCTION DRAWINGS**

**DARE COUNTY, NC**

<b>Lighting Plan</b>	
Location: 6632 West Pheasant Avenue Parcel in Nags Head	
Nags Head Dare County North Carolina	
PROJECT NUMBER <b>C06001.00</b>	DRAWING NUMBER <b>C-105</b>



**FOR REVIEW ONLY**  
NOT RELEASED FOR  
CONSTRUCTION

CLUBCORP GOLF OF NORTH  
CAROLINA LLC  
D.B. 1255, PG. 540

**Forrest Street**  
Right-of-Way

**Lakeside Street**  
Right-of-Way

**4 Story 87 Unit Hotel**  
**6 Employees**  
Building Pad Grade Elev. @ 8.9'  
Finished Floor Elevation @ 9.1'

**POOL**

**Porto Cochere**

**Active Wastewater Area**

**Active Wastewater Area**

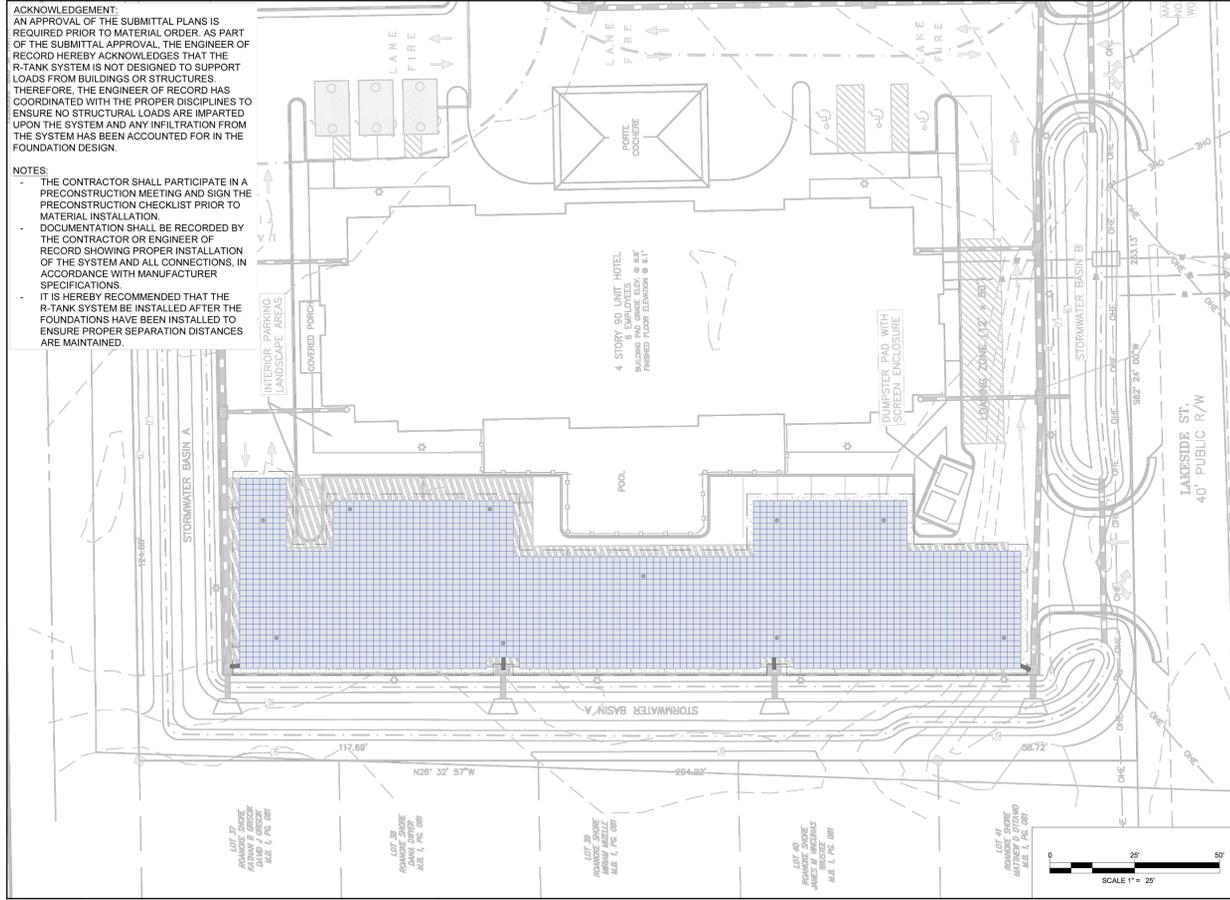
**BEFORE YOU DIG!**



**NOTE:**  
THE DATA GIVEN ON THESE PLANS IS BELIEVED TO BE ACCURATE, BUT THE ACCURACY IS NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL LEVELS, LOCATIONS, TYPES, AND DIMENSIONS OF THE EXISTING UTILITIES PRIOR TO CONSTRUCTION. IF A DISCREPANCY IS FOUND, WORK SHALL CEASE AND THE ENGINEER NOTIFIED. WORK MAY CONTINUE UPON ENGINEERS NOTICE TO PROCEED.

**ACKNOWLEDGEMENT:**  
AN APPROVAL OF THE SUBMITTAL PLANS IS REQUIRED PRIOR TO MATERIAL ORDER. AS PART OF THE SUBMITTAL APPROVAL, THE ENGINEER OF RECORD HEREBY ACKNOWLEDGES THAT THE R-TANK SYSTEM IS NOT DESIGNED TO SUPPORT LOADS FROM BUILDINGS OR STRUCTURES. THEREFORE, THE ENGINEER OF RECORD HAS COORDINATED WITH THE PROPER DISCIPLINES TO ENSURE NO STRUCTURAL LOADS ARE IMPARTED UPON THE SYSTEM AND ANY INFILTRATION FROM THE SYSTEM HAS BEEN ACCOUNTED FOR IN THE FOUNDATION DESIGN.

- NOTES:**
- THE CONTRACTOR SHALL PARTICIPATE IN A PRECONSTRUCTION MEETING AND SIGN THE PRECONSTRUCTION CHECKLIST PRIOR TO MATERIAL INSTALLATION.
  - DOCUMENTATION SHALL BE RECORDED BY THE CONTRACTOR OR ENGINEER OF RECORD SHOWING PROPER INSTALLATION OF THE SYSTEM AND ALL CONNECTIONS, IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
  - IT IS HEREBY RECOMMENDED THAT THE R-TANK SYSTEM BE INSTALLED AFTER THE FOUNDATIONS HAVE BEEN INSTALLED TO ENSURE PROPER SEPARATION DISTANCES ARE MAINTAINED.

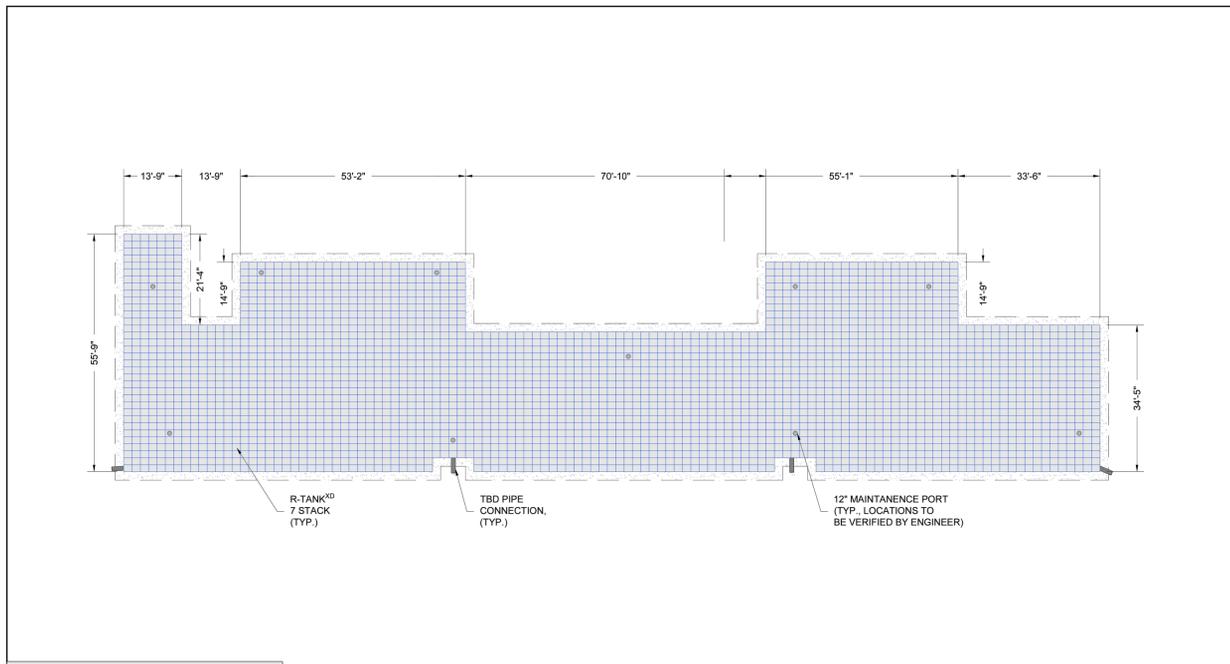


**R-TANK<sup>®</sup> SYSTEM OVERLAY**  
THE INN AT WHALEBONE, LLC  
DARE COUNTY, NC

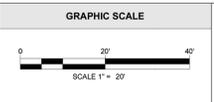
**FERGUSON WATERWORKS**  
FOR ADDITIONAL INFORMATION PLEASE CONTACT:  
1-800-448-3838, www.ferguson.com

**R-TANK<sup>®</sup>**  
ENGINEER OF RECORD IN STATE OF NORTH CAROLINA AND ENDORSE FINAL LIT. SPECIFIC DESIGN.

SCALE: 1" = 25'  
DRAWN BY: JEC  
DATE: 08/24/2023  
SHEET NO.: 1 of 6

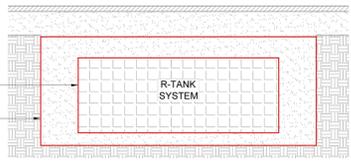


R-TANK QUANTITIES	
R-TANK <sup>®</sup> PANEL STACK HEIGHT	7 PANELS HIGH
TRAFFIC LOAD	H8-25
# OF 7 STACK R-TANK <sup>®</sup> MODULES	242
TOTAL # OF R-TANK <sup>®</sup> PANELS	2094
TOTAL SYSTEM STORAGE	14,020 CF
R-TANK STORAGE VOLUME	9,815 CF
STONE STORAGE VOLUME (60% VOID RATIO)	4,205 CF
STONE BED FOOTPRINT	10,808 SF
STONE QUANTITY	390 CY
N800 NON-WOVEN GEOTEXTILE TANK WRAP	2,522 SY
N800 NON-WOVEN GEOTEXTILE EXCAVATION WRAP	2,930 SY
12" MAINTENANCE PORTS	10
PIPE BOOT(S) (8"   12"   18"   24")	TBD
STORMING CP(S) (8"   12"   18"   24")	TBD
NOTE: STONE QUANTITY INCLUDES 7" OF COVER AND 3" OF BASE	GEGRID
NOTE: GEOTEXTILE / LINER QUANTITIES INCLUDE A 15% WASTE FACTOR	MIN. ALLOW. FINAL GRADE
SEE SHEETS 3 - 6 FOR DETAILS AND ADDITIONAL INFORMATION	MAX. ALLOW. FINAL GRADE



R-TANK ELEVATIONS		
DESCRIPTION		ELEVATION
TANK INV.		5.55
TANK INV.		5.50
TOP OF TANK		6.55
GEGRID		7.53
MIN. ALLOW. FINAL GRADE		7.45
MAX. ALLOW. FINAL GRADE		22.95

R-TANK<sup>®</sup> UNITS WRAPPED WITH N800 NON-WOVEN GEOTEXTILE (OR EQUAL)  
EXCAVATION WRAPPED WITH N800 NON-WOVEN GEOTEXTILE (OR EQUAL)



R-TANK<sup>®</sup> TANK WRAP & EXCAVATION ENVELOPE DETAIL

**R-TANK<sup>®</sup> SYSTEM LAYOUT**  
THE INN AT WHALEBONE, LLC  
DARE COUNTY, NC

**FERGUSON WATERWORKS**  
FOR ADDITIONAL INFORMATION PLEASE CONTACT:  
1-800-448-3838, www.ferguson.com

**R-TANK<sup>®</sup>**  
ENGINEER OF RECORD IN STATE OF NORTH CAROLINA AND ENDORSE FINAL LIT. SPECIFIC DESIGN.

SCALE: 1" = 20'  
DRAWN BY: JEC  
DATE: 08/24/2023  
SHEET NO.: 2 of 6

**NOTES**

**LEGEND**

- 110 — INDEX CONTOUR
- 198 — INTERMEDIATE CONTOUR
- — — — — PROPERTY LINE
- — — — — ADJOINING PROPERTIES
- x — FENCE
- — — — — RIGHT-OF-WAY
- — — — — EX. EDGE OF PAVEMENT
- — — — — CREEK
- SS — EX. SANITARY SEWER
- — — — — NEW SANITARY SEWER
- W — EX. WATER LINE
- — — — — NEW WATER LINE
- FM — NEW FORCE MAIN
- ▣ CATCH BASIN
- — — — — NEW STORM PIPE
- ⊙ POLE-MOUNTED LIGHT

REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT MANAGER: GSM	PROJECT ENGINEER: HDB
DRAWN BY: HDB	CHECKED BY: TAP

DATE:  
MARCH 15, 2024



**MacCONNELL & Associates, P. C.**  
501 CASCADE POINTE LANE, SUITE 103  
CARY, NORTH CAROLINA 27513  
P.O. BOX 129  
MORRISVILLE, NORTH CAROLINA 27560  
LICENSE No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

**THE INN AT WHALEBONE, LLC**

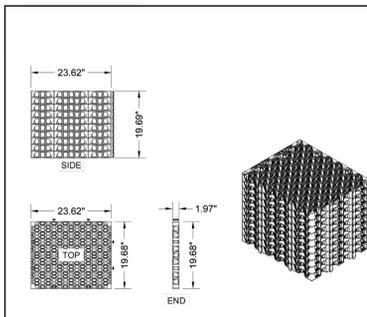
**CONSTRUCTION DRAWINGS**

**DARE COUNTY, NC**

**R-TANK DETAILS 1 & 2**

PROJECT NUMBER <b>C06001.00</b>	DRAWING NUMBER <b>D-101</b>
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NOT RELEASED FOR CONSTRUCTION



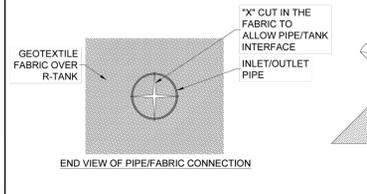
**MODULE DATA**

<b>GEOMETRY:</b>	<b>LOAD RATING:</b>
LENGTH = 23.62 IN. (600 MM)	240.2 PSI, (MODULE ONLY)
WIDTH = 19.69 IN. (500 MM)	HS20-25, (WITH ACF COVER SYSTEM)
HEIGHT = 1.97 IN. (50 MM)	<b>MATERIAL:</b>
TANK VOLUME = 3.71 CF	100% RECYCLED POLYPROPYLENE
STORAGE VOLUME = 3.34 CF	
VOID INTERNAL VOLUME: 90%	
VOID SURFACE AREA: 90%	

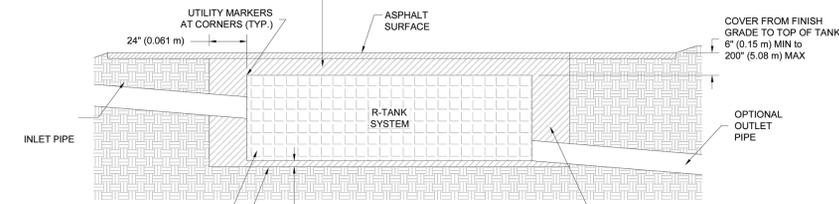
**R-TANK<sup>HD</sup> - MODULE DETAIL**

- NOTE:**
- PIPE BOOTS ARE AVAILABLE IN THE FOLLOWING STANDARD SIZES: 8" 1 1/2" 1 1/8" 1 1/4" 1 3/8" 1 1/2" 2"
  - LARGER SPECIAL ORDER, CUSTOM SIZES ARE AVAILABLE.

CUT AN "X" IN THE FABRIC ENVELOPE THAT IS SLIGHTLY LARGER THAN THE PIPE. PULL THE FABRIC FLAPS AROUND THE PIPE, AND SEAL WITH A STAINLESS STEEL BAND.

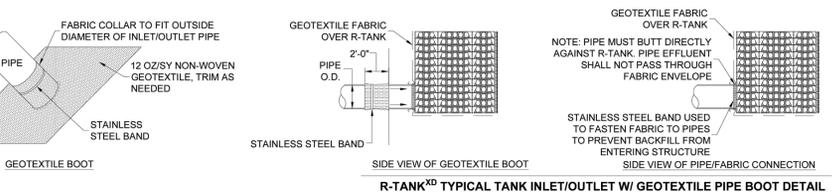
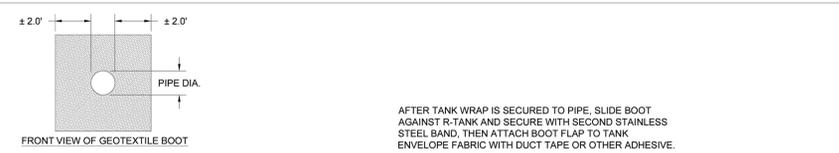


TOTAL COVER: 6" MINIMUM AND 200" MAXIMUM INITIAL COVER UP TO 12" MUST BE FREE DRAINING BACKFILL (SPEC SECTION 2.03B) STONE <1.5" OR SOIL (USCS CLASS GW, GP, SW OR SP). ADDITIONAL FILL MAY BE STRUCTURAL FILL (SPEC SECTION 2.03C) STONE OR SOIL (USCS CLASS SM, SP, SW, GM, GP OR GW) WITH MAX CLAY CONTENT <10%, MAX 25% PASSING NO. 200 SIEVE, AND MAX PLASTICITY INDEX OF 4. CONTACT ACF ENVIRONMENTAL IF MORE THAN 200" OR LESS THAN 6" OF TOP BACKFILL IS REQUIRED (FROM TOP OF TANK TO TOP OF PAVEMENT).



**R-TANK<sup>HD</sup> HS20-25 LOADS - SECTION VIEW**

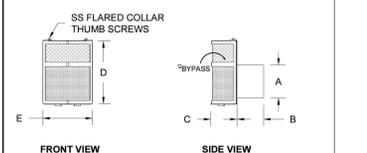
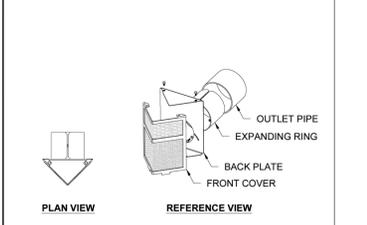
BASE: 3" MIN. FREE DRAINING BACKFILL (SPEC SECTION 2.03B) COMPACTED TO 95% STANDARD PROCTOR DENSITY IS REQUIRED TO PROVIDE A LEVEL BASE SURFACE. MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK<sup>HD</sup> FOOTPRINT. A BEARING CAPACITY OF 2,000 PSF MUST BE ACHIEVED PRIOR TO INSTALLING R-TANK<sup>HD</sup>. NATIVE SOILS MAY BE ACCEPTABLE IF DETERMINED TO BE STABLE BY OWNER'S ENGINEER.



**R-TANK<sup>HD</sup> TYPICAL TANK INLET/OUTLET W/ GEOTEXTILE PIPE BOOT DETAIL**

**R-TANK<sup>HD</sup> SYSTEM DETAILS**  
THE INN AT WHALEBONE, LLC  
DARE COUNTY, NC

SCALE: NTS  
DRAWN BY: JEC  
DATE: 08/24/2023  
SHEET NO. 3 of 6

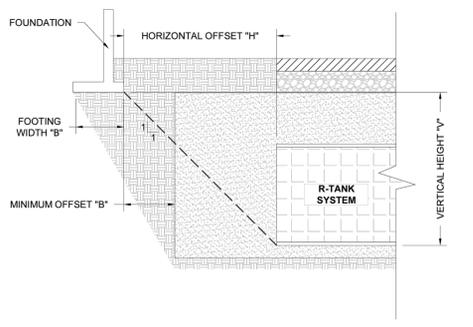


**STORMING CPS PRETREATMENT DETAIL**

PIPE DIA. (A)	STUB LENGTH (B)	CPS DEPTH (C)	CPS HEIGHT (D)	CPS WIDTH (E)
6"	4.00"	8.50"	10.00"	10.00"
8"	6.00"	11.00"	12.25"	11.50"
10"	8.00"	16.00"	13.50"	13.50"
12"	8.00"	16.00"	15.50"	15.50"
16"	8.00"	16.00"	21.50"	18.50"
18"	8.00"	16.00"	28.00"	21.50"
24"	10.00"	18.00"	40.00"	28.00"

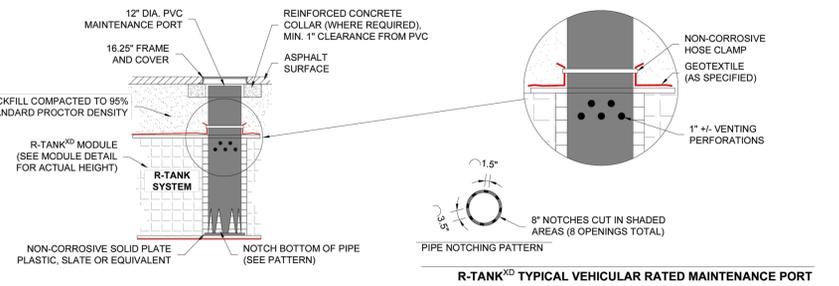
**STORMING CPS PRETREATMENT DETAIL**

- NOTES**
- THIS PORT IS USED TO PUMP WATER INTO THE SYSTEM AND RE-SUSPEND ACCUMULATED SEDIMENT SO THAT IT MAY BE PUMPED OUT.
  - MINIMUM REQUIRED MAINTENANCE INCLUDES A QUARTERLY INSPECTION DURING THE FIRST YEAR OF OPERATION AND A YEARLY INSPECTION THEREAFTER. FLUSH AS NEEDED.
  - R-TANK<sup>HD</sup>, R-TANK<sup>HD</sup>, R-TANK<sup>HD</sup> AND R-TANK<sup>HD</sup> MAY BE USED IN TRAFFIC APPLICATIONS.
  - SEE TRAFFIC LOADING DETAIL FOR MINIMUM & MAXIMUM COVER REQUIREMENTS.
  - IF MAINTENANCE PORT IS LOCATED IN A NON-TRAFFIC AREA, A PLASTIC CAP CAN BE USED IN LIEU OF A FRAME AND COVER WITH CONCRETE COLLAR.



- R-TANK IS NOT DESIGNED TO SUPPORT STRUCTURAL LOADS ASSOCIATED WITH BUILDINGS, RETAINING WALLS OR OTHER STRUCTURES.
- FOUNDATIONS OF WIDTH "B" SHALL BE OFFSET A MINIMUM "B" FEET FROM THE STONE BACKFILL.
  - THE CIVIL ENGINEER AND STRUCTURAL ENGINEER SHALL REVIEW ALL DOCUMENTATION AND DESIGNS TO ENSURE NO STRUCTURAL LOADS ARE APPLIED BY THE STRUCTURE ON THE R-TANK UNITS. IT IS RECOMMENDED THAT ALL R-TANK UNITS BE INSTALLED ABOVE THE ELEVATION OF ANY SUBSURFACE STRUCTURAL ELEMENTS SUCH AS FOOTERS. IF THIS CANNOT BE ACHIEVED, IT IS RECOMMENDED THAT A MINIMUM 1:1 ZONE OF INFLUENCE, SITE SPECIFIC SOILS MAY REQUIRE GREATER SEPARATION DISTANCE, BE MAINTAINED BETWEEN THE STRUCTURAL ELEMENT AND THE UNITS.
  - THE STRUCTURAL ENGINEER AND GEOTECHNICAL ENGINEER SHALL REVIEW ALL DOCUMENTATION AND DESIGNS TO ENSURE PROPER STABILITY OF STRUCTURAL ELEMENTS DURING SATURATED SOIL CONDITIONS POTENTIALLY CAUSED BY THE PROXIMITY OF INFILTRATION FACILITIES TO THE STRUCTURAL ELEMENTS.

**R-TANK - MINIMUM OFFSET DETAIL**



**R-TANK<sup>HD</sup> TYPICAL VEHICULAR RATED MAINTENANCE PORT**

**R-TANK<sup>HD</sup> SYSTEM DETAILS**  
THE INN AT WHALEBONE, LLC  
DARE COUNTY, NC

SCALE: NTS  
DRAWN BY: JEC  
DATE: 08/24/2023  
SHEET NO. 4 of 6

**NOTES**

**LEGEND**

---	INDEX CONTOUR
---	INTERMEDIATE CONTOUR
---	PROPERTY LINE
---	ADJOINING PROPERTIES
---	FENCE
---	RIGHT-OF-WAY
---	EX. EDGE OF PAVEMENT
---	CREEK
---	EX. SANITARY SEWER
---	NEW SANITARY SEWER
---	EX. WATER LINE
---	NEW WATER LINE
---	NEW FORCE MAIN
---	CATCH BASIN
---	NEW STORM PIPE
---	POLE-MOUNTED LIGHT

**REVISIONS**

NO.	DATE	DESCRIPTION

PROJECT MANAGER: GSM	PROJECT ENGINEER: HDB
DRAWN BY: HDB	CHECKED BY: TAP

DATE:  
MARCH 15, 2024

**MacCONNELL & Associates, P. C.**  
501 CASCADE POINTE LANE, SUITE 103  
CARY, NORTH CAROLINA 27513  
P.O. BOX 129  
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LICENSE No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

**THE INN AT WHALEBONE, LLC**

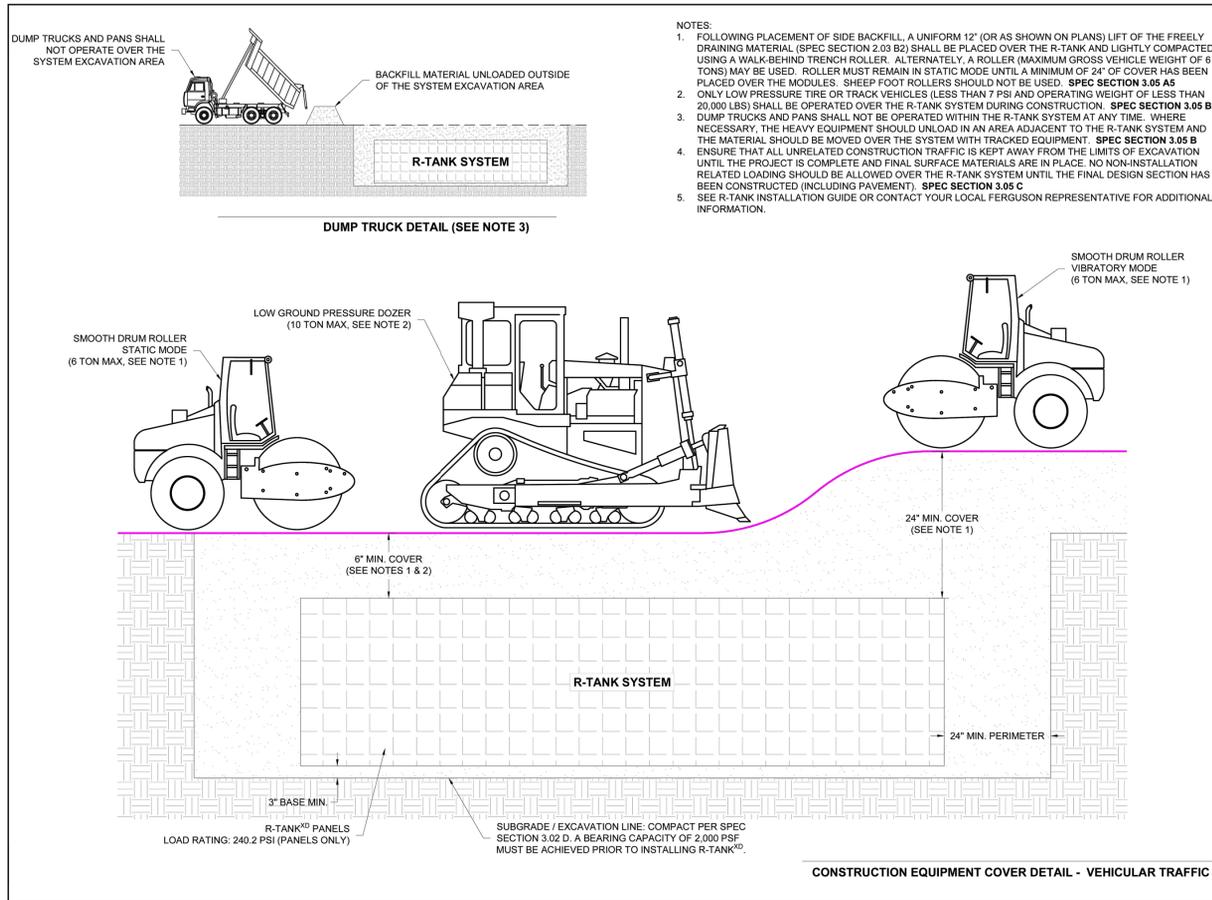
**CONSTRUCTION DRAWINGS**

**DARE COUNTY, NC**

**R-TANK DETAILS 3 & 4**

PROJECT NUMBER <b>C06001.00</b>	DRAWING NUMBER <b>D-102</b>
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**FOR REVIEW ONLY**  
NOT RELEASED FOR CONSTRUCTION



**NOTES:**

- FOLLOWING PLACEMENT OF SIDE BACKFILL, A UNIFORM 12" (OR AS SHOWN ON PLANS) LIFT OF THE FREELY DRAINING MATERIAL (SPEC SECTION 2.03 B2) SHALL BE PLACED OVER THE R-TANK AND LIGHTLY COMPACTED USING A WALK-BEHIND TRENCH ROLLER. ALTERNATELY, A ROLLER (MAXIMUM GROSS VEHICLE WEIGHT OF 6 TONS) MAY BE USED. ROLLER MUST REMAIN IN STATIC MODE UNTIL A MINIMUM OF 24" OF COVER HAS BEEN PLACED OVER THE MODULES. SHEEP FOOT ROLLERS SHOULD NOT BE USED. SPEC SECTION 3.05 A5
- ONLY LOW PRESSURE TIRE OR TRACK VEHICLES (LESS THAN 7 PSI AND OPERATING WEIGHT OF LESS THAN 20,000 LBS) SHALL BE OPERATED OVER THE R-TANK SYSTEM DURING CONSTRUCTION. SPEC SECTION 3.05 B
- DUMP TRUCKS AND PANS SHALL NOT BE OPERATED WITHIN THE R-TANK SYSTEM AT ANY TIME. WHERE NECESSARY, THE HEAVY EQUIPMENT SHOULD UNLOAD IN AN AREA ADJACENT TO THE R-TANK SYSTEM AND THE MATERIAL SHOULD BE MOVED OVER THE SYSTEM WITH TRACKED EQUIPMENT. SPEC SECTION 3.05 B
- ENSURE THAT ALL UNRELATED CONSTRUCTION TRAFFIC IS KEPT AWAY FROM THE LIMITS OF EXCAVATION UNTIL THE PROJECT IS COMPLETE AND FINAL SURFACE MATERIALS ARE IN PLACE. NO NON-INSTALLATION RELATED LOADING SHOULD BE ALLOWED OVER THE R-TANK SYSTEM UNTIL THE FINAL DESIGN SECTION HAS BEEN CONSTRUCTED (INCLUDING PAVEMENT). SPEC SECTION 3.05 C
- SEE R-TANK INSTALLATION GUIDE OR CONTACT YOUR LOCAL FERGUSON REPRESENTATIVE FOR ADDITIONAL INFORMATION.

**FERGUSON WATERWORKS**  
FOR ADDITIONAL INFORMATION PLEASE CONTACT:  
1-888-FERGUSON (377-6276) OR WWW.FERGUSON.COM

**R-TANK<sup>XD</sup> CONSTRUCTION EQUIPMENT COVER DETAIL**  
THE INN AT WHALEBONE, LLC  
DARE COUNTY, NC

SCALE: NTS  
DRAWN BY: JEC  
DATE: 08/24/2023  
SHEET NO: 5 of 6

### R-TANK<sup>XD</sup> SPECIFICATION

**PART 1 - GENERAL**

1.01 Related Documents

A. Drawings, technical specification and general provisions of the Contract as modified herein apply to this section.

1.02 Description of Work Included

A. Provide excavation and base preparation per geotechnical engineer's recommendations and/or as shown on the design drawings, to provide adequate support for project design loads and safety from excavation related collapse. Excavations shall be in accordance with the owner's and OSHA requirements.

B. Provide and install R-Tank<sup>XD</sup> system (hereafter called R-Tank) and all related products including fit materials, geotextiles, geogrids, inlet and outlet pipe with connections per the manufacturer's installation guidelines provided in this section.

C. Provide and construct the cover of the R-Tank system including: stone backfill, structural fit cover, and pavement section as specified.

D. Protect R-Tank system from construction traffic after installation until completion of all construction activity in the installation area.

1.03 Quality Control

A. All materials shall be manufactured in ISO certified facilities.

B. Installation Contractor shall demonstrate the following experience:

- A minimum of three R-Tank or equivalent projects completed within 3 years, and
- A minimum of 25,000 cubic feet of storage volume completed within 2 years.

C. Contractor experience requirement may be waived if the manufacturer's representative provides on-site training and review during construction.

D. Installation Personnel: Perform only by skilled workers with satisfactory record of performance on tank waterworks pipe, chamber, or product construction projects of comparable size and quality.

E. Contractor must have manufacturer's representative available for site review as requested by Owner.

1.04 Submittals

A. Submit proposed R-Tank layout drawings. Drawings shall include typical section details as well as the required base elevation of stone and berms, minimum cover requirements and tank configuration.

B. Submit manufacturer's product data, including composition strength and unit weight.

C. Submit manufacturer's installation instructions.

D. Submit R-Tank samples for review. Reviewed and accepted samples will be returned to the Contractor.

E. Submit material certificates for geotextile, geogrid, base course and backfill materials.

F. Submit required experience and personnel requirements as specified in Section 1.03.

G. Any proposed alternative product substitution to this specification must be submitted for review and approved prior to bid opening. Review package should include third party reviewed performance data that meets or exceeds criteria in Table 2.01 B.

1.05 Delivery, Storage, and Handling

A. Protect R-Tank and other materials from damage during delivery, and store UV sensitive materials under tarp to protect from sunlight when time from delivery to installation exceeds two weeks. Storage of materials should be on smooth surfaces, free from dirt, mud and debris.

B. Handling to be performed with equipment appropriate to the materials and site conditions, and may include hand, handcart, forklifts, extension lifts, etc.

C. Cold weather

- Care must be taken when handling plastics when an temperature is 40 degrees or below to plastic becomes brittle.
- Do not use frozen expedite or materials stored or coated with ice frost.
- Do not touch on frozen ground or wet, saturated or muddy surfaces.

1.06 Preinstallation Conference

A. Prior to the start of the installation, a preinstallation conference shall occur with the representatives from the design team, the general contractor, the excavation contractor, the R-Tank installation contractor, and the manufacturer's representative.

1.07 Project Conditions

A. Coordinate installation for the R-Tank system with other on-site activities to eliminate all non-relevant related construction traffic over the completed R-Tank system. No loads heavier than the design loads shall be allowed over the system, and no one shall walk higher than a standard ADA/ISO/OSHA to HDS, depending on design criteria, shall be allowed on the system at any time.

B. Protect adjacent work from damage during R-Tank system installation.

C. All pre installation system internal details and heavy sediments must be in place and functional prior to operation of the R-Tank system. Additional pretreatment measures may be needed if unit is operational during construction due to increased sediment loads.

D. Contractor is responsible for any damage to the system during construction.

**PART 2 - PRODUCTS**

2.01 R-Tank Units

A. R-Tank<sup>XD</sup> - Injection molded plastic cells stacked to form a 90% void modular structure of pre-designed height (custom for each project).

B. R-Tank<sup>XD</sup> units shall meet the following Physical & Chemical Characteristics:

Property	Requirement	Manufacturer's Specification
Color	Black	Black
Material	High density polyethylene (HDPE) or equivalent	HDPE
Minimum Thickness	1/2" (12.7mm)	1/2" (12.7mm)
Minimum Length	48" (1219mm)	48" (1219mm)
Minimum Width	48" (1219mm)	48" (1219mm)
Minimum Height	48" (1219mm)	48" (1219mm)
Minimum Weight	15 lbs (6.8kg)	15 lbs (6.8kg)
Minimum Volume	0.5 cu ft (14.2 L)	0.5 cu ft (14.2 L)
Minimum Density	150 lb/cu ft (2400 kg/m <sup>3</sup> )	150 lb/cu ft (2400 kg/m <sup>3</sup> )
Minimum Specific Gravity	0.95	0.95

C. Supplier: Ferguson Waterworks 2831 Carlew Road Richmond, VA 23234 (703) 448-3036 / (813) 854-7379 www.ferguson.com

2.02 Geotextiles

A. Geotextile: A geotextile membrane is required to prevent backfill material from entering the R-Tank modules.

- Standard Applications:** The standard geotextile shall be a minimum of 8 oz per square yard (nonwoven geotextile (ACF 900 or equivalent).
- Alternative Applications:** When water will infiltrate/backflow through the geotextile as a function of the system design, a woven nonwoven (ACF 900 or equivalent) shall be used.
- Change:** When required by project plans, install geogrid (ACF 8012 or equivalent) to reinforce backfill above the R-Tank system.

2.03 Backfill & Cover Materials

A. **Bedding Materials:** Stone (angular and smaller than 1.5" in diameter) or soil (GVF, GP, SW, or SP as classified by the Unified Soil Classification System) shall be used below the R-Tank system (3" minimum). Material must be free from lumps, debris, and any sharp objects that could cut the geotextile. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D998 at the time of installation. For stabilization applications bedding material shall be free draining.

B. **Side and Top Backfill**

- Deep Applications (4" or more cover):** Free draining stone (angular and smaller than 1.5" in diameter) or soil (GVF, GP, SW, or SP as classified by the Unified Soil Classification System) shall be used adjacent to (12" minimum) and above (for the first 12") the R-Tank system. Material must be free from lumps, debris and any sharp objects that could cut the geotextile. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D998 at the time of installation.
- Shallow Applications (1" to 4" cover):** Material shall be free from lumps, debris and any sharp objects that could cut the geotextile. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D998 at the time of installation.

C. **Additional Cover Materials:** Structural F3 shall consist of granular materials meeting the gradation requirements of SMA, SP, SW, GM, GP or GY as classified by the Unified Soil Classification System. Structural fit shall have a maximum of 25 percent passing the No. 200 sieve, shall have a maximum clay content of 4. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D998 at the time of installation.

2.04 Other Materials

Utility Marker: Install metallic tape at corners of R-Tank system to mark the area for future utility detection.

**PART 3 - EXECUTION**

3.01 Assembly of R-Tank Units

A. R-Tank<sup>XD</sup> modules do not require on-site assembly prior to installation. See Section 3.04 below for details on installation.

3.02 Layout and Excavation

A. Installer shall stake out, excavate, and prepare the subgrade area to the required plan grades and dimensions, ensuring that the excavation is at least 2 feet greater than R-Tank dimensions in each direction along the installation of geotextile fabric fabric, R-Tank modules, and free draining bedding materials.

B. All excavations must be prepared with OSHA approved shoring, bracing, trench shields, and sufficient working space.

C. Protect existing completed installation against damage from other construction traffic by installing a perimeter with high visibility construction tape, fencing, berms, or other means until construction is complete.

D. Base of the excavation shall be uniform level and free of lumps or debris and left or yielding subgrade areas. A minimum 2,000 pounds per square foot bearing capacity is required.

- Standard Applications:** Compact subgrade to a minimum of 95% Standard Proctor (ASTM D998) density or as required by the Owner's engineer.
- Alternative Applications:** Subgrade shall be prepared in accordance with the contract documents. Comparison of subgrade should not be performed in installation applications.

E. **Unusable Soils or Conditions:** All questions about the base of the excavation shall be directed to the owner's engineer, who will approve the subgrade conditions prior to placement of stone. The owner's engineer shall determine the required bearing capacity of the R-Tank subgrade, however in no case shall a bearing capacity of less than 2,000 pounds per square foot be provided.

- Unusable soils are encountered on the subgrade or the subgrade is pumping or seeping excessively wet, seal the base in accordance with contract documents and/or as directed by the owner's engineer.
- Indications of the water table are observed during excavation, the engineer shall be contacted to provide recommendations.
- Do not start installation of the R-Tank system until satisfactory subgrade conditions are corrected and the subgrade conditions are accepted by the owner's engineer.

3.03 Preparation of Base

A. Place a 12" layer (12" unless otherwise specified) of bedding material (Section 2.03 A), over the subgrade to establish a level working platform for the R-Tank modules. Level to within 1/2" (+/- 1/2") or as shown on the plans. Native subgrade soils or other materials may be used if determined to meet the requirements of 2.03 A and are accepted by the owner's engineer.

- Standard Applications:** Stone, not of otherwise compact bedding material, until the first five feet of bedding.
- Alternative Applications:** Bedding material shall be prepared in accordance with the contract documents.

B. Outline the footprint of the R-Tank system on the excavation floor using spray paint or chalk line to ensure a 12" perimeter is available around the R-Tank system for proper installation and compaction of backfill.

3.04 Installation of the R-Tank

A. Where a geotextile was specified on the stone base, cut strips to length and install in excavation, removing wrinkles and material top flat. Overlay geotextile a minimum 12" as recommended by manufacturer.

B. Where an impervious liner (or containment) is specified, install the liner per manufacturer's recommendations and the contract documents. The R-Tank units shall be separated from impervious liner by a non-woven geotextile fabric installed in accordance with Section 2.03 A.

C. Install R-Tank<sup>XD</sup> Units in layers in accordance with the design drawings. R-Tank<sup>XD</sup> pieces on each layer should be connected to all other pieces on that layer. Layers should stack on top of each preceding layer evenly. No vertical connection between layers is required if it is available to use a string line to form square corners and straight edges along the perimeter of the R-Tank system. The panels are to be oriented as per the design drawings (180° or 270°) with required depth as shown on plans.

D. Wrap the R-Tank top and sides in specified geotextile. Cut strips of geotextile so that it will cover the sides and top, encapsulating the entire system to prevent backfill entry into the system. Overlap geotextile 12" or as recommended by manufacturer. Take care not to add damage to geotextile (and if specified, impervious liner) during placement.

E. Identify locations of inlet, outlet and any other penetrations of the geotextile (and optional liner). These connections should be installed flush (butted up to the R-Tank) and the geotextile fabric shall be cut to create hydraulic continuity between the connections and the R-Tank units. These connections shall be secured using pipe clamps with stainless steel pipe clamps. Support pipe in trenches during backfill operations to prevent pipe from settling and damaging the geotextile, impervious liner (if specified) or pipe. Connecting pipes at 90 degree angles requires construction, unless otherwise specified. Ensure end of pipe is installed using straight R-Tank system.

F. Install inspection and Maintenance Ports in locations noted on plans. At a minimum one maintenance port shall be installed within 10' of each inlet & outlet connection, and with a maximum spacing of one maintenance port for every 2,500 square feet. Install all ports as noted in the R-Tank Installation Guide.

G. If required, install ventilation pipes and vents as specified to provide ventilation for proper hydraulic performance. The number of vents and ports will depend on the size of the system. Vents are often installed using a 90 degree elbow with PVC pipe into a landscaped area with UV sand or venting lattice to inhibit the ingress of debris. A ground level concrete or steel cover can be used.

3.05 Backfilling of the R-Tank Units

A. Backfill and fill with recommended materials as follows:

- Place heavy draining backfill material (Section 2.03 B) around the perimeter in lifts with a maximum thickness of 12". Each lift shall be placed around the entire perimeter such that each lift is no more than 24" higher than the side backfill along any other location on the perimeter of the R-Tank system. No lift shall be placed over top of tanks until the side backfill has been completed.
- Each lift shall be compacted at the specified moisture content to a minimum of 95% of the Standard Proctor Density or until no further densification is observed (if self-compacting stone materials). The side lift shall be compacted with walk-behind compaction equipment. Even when "self-compacting" backfill materials are selected, a walk-behind vibratory compactor must be used.
- Take care to ensure that the compaction process does not allow the machinery to come into contact with the modules due to the potential for damage to the geotextile and R-Tank units.
- No construction equipment is permitted to operate directly on the R-Tank modules.

B. **Shallow Applications (1" to 4" total cover):** Install a 12" (or as shown on plans) lift of heavy draining material (Section 2.03 B1) over the R-Tank<sup>XD</sup> units, maintaining 12" between equipment tracks and R-Tank system. Lightly compact using a walk-behind roller. Alternately, a roller (maximum gross vehicle weight of 6 tons) may be used. Roller must remain on static mode until a minimum of 24" of cover has been placed over the modules. Sheep foot rollers should not be used.

C. **Deep Applications (4" or more cover):** Install a 12" (or as shown on plans) lift of heavy draining material (Section 2.03 B1) over the R-Tank<sup>XD</sup> units, maintaining 12" between equipment tracks and R-Tank system. Lightly compact using a walk-behind roller. Alternately, a roller (maximum gross vehicle weight of 6 tons) may be used. Roller must remain on static mode until a minimum of 24" of cover has been placed over the modules. Sheep foot rollers should not be used.

D. **Inspection Applications:** Inspect the entire perimeter of the R-Tank system and determine if the R-Tank system is acceptable for use. The R-Tank system shall be inspected prior to, or as directed by the regulatory agency and by the manufacturer (or proprietary system). Material is needed using acceptable practices or following manufacturer's guidelines (or proprietary system).

E. **Inspection Application:** Material in the R-Tank system will need to be inspected for accumulation of materials at least quarterly through the first year of operation and at least yearly thereafter. This is done by removing the top of the port and using a measuring device long enough to reach the bottom of the R-Tank system and stiff enough to push through the loose sediment, allowing a depth measurement.

F. If it has been determined that the level noted in the R-Tank Maintenance Guide is beyond a level acceptable to the Owner's engineer, the R-Tank system should be treated.

G. A floating vent or pump-out vent, on the Maintenance Port and/or adjacent structure, allowing the liquid level above through the R-Tank system to be measured the the sediments, if multiple Maintenance Ports are installed, water should be pumped into one port to maximize floating structure. Sediment water level can be tested through a Orinette or approved equivalent if permitted by the locality.

**PART 4 - USING THE SYSTEM**

4.01 Maintenance Requirements

A. A routine maintenance effort is required to ensure proper performance of the R-Tank system. The Maintenance program should be focused on pretreatment systems. Ensuring these structures are clean and functioning properly will reduce the risk of clogging of the R-Tank system and otherwise released from the site. The treatment systems shall be inspected weekly, or as directed by the regulatory agency and by the manufacturer (or proprietary system). Material is needed using acceptable practices or following manufacturer's guidelines (or proprietary system).

B. Inspection Application: Material in the R-Tank system will need to be inspected for accumulation of materials at least quarterly through the first year of operation and at least yearly thereafter. This is done by removing the top of the port and using a measuring device long enough to reach the bottom of the R-Tank system and stiff enough to push through the loose sediment, allowing a depth measurement.

C. If it has been determined that the level noted in the R-Tank Maintenance Guide is beyond a level acceptable to the Owner's engineer, the R-Tank system should be treated.

D. A floating vent or pump-out vent, on the Maintenance Port and/or adjacent structure, allowing the liquid level above through the R-Tank system to be measured the the sediments, if multiple Maintenance Ports are installed, water should be pumped into one port to maximize floating structure. Sediment water level can be tested through a Orinette or approved equivalent if permitted by the locality.

**FERGUSON WATERWORKS**  
FOR ADDITIONAL INFORMATION PLEASE CONTACT:  
1-888-FERGUSON (377-6276) OR WWW.FERGUSON.COM

**R-TANK<sup>XD</sup> SPECIFICATION**  
THE INN AT WHALEBONE, LLC  
DARE COUNTY, NC

SCALE: NTS  
DRAWN BY: JEC  
DATE: 08/24/2023  
SHEET NO: 6 of 6

**NOTES**

**LEGEND**

- 110 --- INDEX CONTOUR
- 198 --- INTERMEDIATE CONTOUR
- --- PROPERTY LINE
- --- ADJOINING PROPERTIES
- - - - - FENCE
- - - - - RIGHT-OF-WAY
- - - - - EX. EDGE OF PAVEMENT
- --- CREEK
- SS --- EX. SANITARY SEWER
- --- NEW SANITARY SEWER
- W --- EX. WATER LINE
- --- NEW WATER LINE
- FM --- NEW FORCE MAIN
- --- CATCH BASIN
- --- NEW STORM PIPE
- ⊙ --- POLE-MOUNTED LIGHT

REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT MANAGER: GSM PROJECT ENGINEER: HDB  
DRAWN BY: HDB CHECKED BY: TAP

DATE: MARCH 15, 2024

**MacCONNELL & Associates, P. C.**  
501 CASCADE POINTE LANE, SUITE 103  
CARY, NORTH CAROLINA 27513  
P.O. BOX 129  
MORRISVILLE, NORTH CAROLINA 27660  
LICENSE No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

**THE INN AT WHALEBONE, LLC**  
**CONSTRUCTION DRAWINGS**  
**DARE COUNTY, NC**

**R-TANK DETAILS 5 & 6**

PROJECT NUMBER <b>C06001.00</b>	DRAWING NUMBER <b>D-103</b>
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**FOR REVIEW ONLY**  
NOT RELEASED FOR CONSTRUCTION

**SEEDING SPECIFICATIONS**

- PERMANENT SEEDING: PERMANENT SEEDING IS REQUIRED FOR ALL AREAS DISTURBED BY CONSTRUCTION EXCEPT FOR AREAS COVERED BY STRUCTURES, PAVEMENTS, ETC.
- TEMPORARY SEEDING: TEMPORARY SEEDING IS REQUIRED FOR THOSE AREAS DISTURBED BY CONSTRUCTION AND LEFT EXPOSED FOR PERIODS OF 7-14 DAYS (SEE NCG01 GROUND STABILIZATION TABLE) OR MORE BEFORE BEING BROUGHT TO FINAL GRADE AND PERMANENTLY SEED. THE FORCE MAIN SHALL BE SEED AT THE END OF EACH WORKING DAY TO MINIMIZE CONSTRUCTION DISTURBANCE ACTIVITIES.

**\*PRODUCTS:**

**MATERIALS:**

- FERTILIZER:
  - TEMPORARY SEEDING: PROVIDE 10-10-10 COMMERCIAL FERTILIZER CONFORMING TO STATUTORY REQUIREMENTS AND ALL RULES AND REGULATIONS ADOPTED BY THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE.
  - PERMANENT SEEDING: PROVIDE 870 POUNDS OF 10-20-20 OR 1,740 POUNDS OF 5-10-10 PER ACRE COMMERCIAL FERTILIZER CONFORMING TO STATUTORY REQUIREMENTS AND ALL RULES AND REGULATIONS ADOPTED BY THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE. IN SANDY SOILS, TYPICAL TO COASTAL PLAIN AND SANDHILLS, FERTILIZER RATES SHOULD BE INCREASED BY 20 PERCENT.
- LIMESTONE: PROVIDE LIMESTONE CONFORMING TO ALL STATUTORY REQUIREMENTS AND ALL RULES AND REGULATIONS ADOPTED BY THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE.
- SEEDING: PROVIDE SEED CONFORMING TO ALL STATUTORY REQUIREMENTS AND ALL RULES AND REGULATIONS ADOPTED BY THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE. PROVIDE SEED MIXTURES AS TABULATED BELOW. DELIVER SEED TO THE SITE IN ORIGINAL CONTAINERS BEARING THE APPROPRIATE GUARANTEED MIXTURES. SEED SHALL SHOW A PURITY OF NOT LESS THAN 90 PERCENT AND GERMINATION QUALITY OF NOT LESS THAN 85 PERCENT.
- TEMPORARY MIXTURE:
  - LATE WINTER AND EARLY SPRING (COASTAL PLAIN: DECEMBER 1 - APRIL 15; PIEDMONT: JANUARY 1 - MAY 1; MOUNTAINS >2,500 FEET: FEBRUARY 15 - MAY 15; MOUNTAINS <2,500 FEET: FEBRUARY 1 - MAY 1): THE TEMPORARY SEED MIXTURE FOR GENERAL AREAS SHALL CONSIST OF 120 POUNDS PER ACRE OF RYE (GRAIN) AND 50 POUNDS PER ACRE OF ANNUAL LESPEDEZA (KOBE IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS).
  - SUMMER (COASTAL PLAIN: APRIL 15 - AUGUST 15; PIEDMONT: MAY 1 - AUGUST 15; MOUNTAINS: MAY 15 - AUGUST 15): THE TEMPORARY SEED MIXTURE FOR GENERAL AREAS SHALL CONSIST OF 40 POUNDS PER ACRE OF GERMAN MILLET, IN THE PIEDMONT AND MOUNTAINS A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 POUNDS PER ACRE.
  - FALL (COASTAL PLAIN AND PIEDMONT: AUGUST 15 - DECEMBER 30; MOUNTAINS: AUGUST 15 - DECEMBER 15): THE TEMPORARY SEED MIXTURE FOR GENERAL AREAS SHALL CONSIST OF 120 POUNDS PER ACRE OF RYE (GRAIN).
- PERMANENT MIXTURE:
  - THE PERMANENT SEED MIXTURE FOR GENERAL AREAS SHALL CONSIST OF MINIMUM RATE OF 50 lbs./ac. PENSACOLA BAHIAGRASS, 30 lbs./ac. SERICEA LESPEDEZA, 10 lbs./ac. COMMON BERMUDA GRASS, AND 10 lbs./ac. GERMAN MILLET. THE BEST SEEDING DATES FOR THIS MIXTURE ARE FROM APRIL 1st TO JULY 15th.
  - OTHER MIXTURES: OTHER MIXTURES, AS APPROVED OR RECOMMENDED BY THE SOIL CONSERVATION SERVICE OR THE NORTH CAROLINA AGRICULTURAL EXTENSION OFFICE MAY BE USED.
- MULCH: MULCH ALL SEEDED AREAS, EXCEPT WHERE JUTE MESH IS REQUIRED AND DURING PERMANENT SEEDING. USE UNDAMAGED, AIR-DRYED, THRESHED SMALL GRAIN STRAW FREE OF UNDESIRABLE WEED SEED. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, BY ROVING, OR THROUGH USE OF A MULCH ANCHORING TOOL.

**\*EXECUTION**

- FOLLOW PROCEDURES SET FORTH IN THE PUBLICATION "GUIDE FOR SEDIMENT CONTROL ON CONSTRUCTION SITES IN NORTH CAROLINA" BY THE SOIL CONSERVATION SERVICE OF THE UNITED STATES DEPARTMENT OF AGRICULTURE, AND AS SPECIFIED HEREIN.
- SPREAD A MINIMUM OF FOUR (4) INCHES OF TOP SOIL OVER ALL DISTURBED AREAS TO THE FINISHED GRADE.
- REMOVE ALL GRASS AND WEEDS AND SHAPE THE OVERALL AREA TO EVEN OUT HIGH AND LOW SPOTS.
- SCARIFY SOIL TO A DEPTH OF THREE (3) INCHES AND WORK INTO A SATISFACTORY SEED BED BY DISKING OR THROUGH THE USE OF CULTIPACKERS, HARROWS, DRAGS, OR OTHER APPROVED MEANS.
- THE PREPARATION OUTLINED ABOVE SHALL NOT BE DONE WHEN THE SOIL IS FROZEN, WET, OR OTHERWISE IN AN UNFAVORABLE CONDITION.
- BEGIN AND COMPLETE SEEDING OPERATIONS, AS OUTLINED BELOW, AS SOON AS POSSIBLE AFTER FINAL OR INTERMEDIATE GRADING IS COMPLETED.
- DISTRIBUTE LIME AND FERTILIZER, AS REQUIRED, UNIFORMLY OVER THE SEED BED. HARROW RAKE OR OTHERWISE WORK THESE ADDITIONS INTO THE SEED BED.
- DISTRIBUTE SEED UNIFORMLY OVER THE ESTABLISHED SEED BED. LIGHTLY RAKE THE SURFACE OF THE SEED BED IN ORDER TO COVER SEED TO A MAXIMUM DEPTH OF 0.25 INCH.
- COMPACT THE SEED BED WITH AN APPROVED ROLL OR DRAG AFTER COVERING THE SEED.
- NO LIME, FERTILIZER, OR SEED SHALL BE APPLIED DURING A STRONG WIND, WHEN THE SOIL IS WET, OR WHEN THE SOIL IS OTHERWISE UNWORKABLE. SHOULD RAIN FOLLOW SEEDING BEFORE ROLLING IS INITIATED, THE SEED BED SHALL NOT BE ROLLED.
- NO RIP-RAP IS TO BE PLACED ALONG THE BANKS OF NEW FILL. MAINTAIN THE AREA AND REPAIR ANY EROSION DAMAGE UNTIL A PERMANENT GROUND COVER IS ESTABLISHED. USE MULCH OR MESH AS REQUIRED.

**\*APPLICATION**

**TEMPORARY SEEDING: LATE WINTER - SUMMER:**

- APPLY LIME ACCORDING TO THE SOIL TESTS OR AT A RATE OF 2000 lbs./ac. BEFORE SEEDING.
- APPLY FERTILIZER ACCORDING TO THE SOIL TESTS OR AT A RATE OF 750 lbs./ac.
- SEED THE SEED BED WITH THE SPECIFIED SEED MIXTURE AT THE SPECIFIED RATE FOR THE RECOMMENDED PLANTING SEASON.
- APPLY GRAIN STRAW AT A RATE OF 4000 lbs./ac. OR PROVIDE EQUIVALENT COVER OF ANOTHER SUITABLE COVER. MULCH SHALL BE SUITABLY ANCHORED. WHERE JUTE MESH IS REQUIRED, APPLY THE PRODUCT ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND ANCHOR WITH STEEL HAIRPIN-SHAPED WIRE STAPLES.
- REFERTILIZE SEED BED IF GROWTH IS NOT FULLY ADEQUATE, AS DETERMINED BY THE ENGINEER. RE-SEED, FERTILIZE, AND MULCH ALL DAMAGED, BARE, AND ERODED AREAS IMMEDIATELY AND UNTIL A SUITABLE COVER IS ESTABLISHED.

**TEMPORARY SEEDING: FALL:**

- APPLY LIME ACCORDING TO THE SOIL TESTS OR AT A RATE OF 2000 lbs./ac. BEFORE SEEDING.
- APPLY FERTILIZER ACCORDING TO THE SOIL TESTS OR AT A RATE OF 1000 lbs./ac.
- SEED THE SEED BED WITH THE SPECIFIED SEED MIXTURE AT THE SPECIFIED RATE FOR THE RECOMMENDED PLANTING SEASON.
- APPLY GRAIN STRAW AT A RATE OF 4000 lbs./ac. OR PROVIDE EQUIVALENT COVER OF ANOTHER SUITABLE COVER. MULCH SHALL BE SUITABLY ANCHORED. WHERE JUTE MESH IS REQUIRED, APPLY THE PRODUCT ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND ANCHOR WITH STEEL HAIRPIN-SHAPED WIRE STAPLES.
- REFERTILIZE SEED BED IF GROWTH IS NOT FULLY ADEQUATE, AS DETERMINED BY THE ENGINEER. RE-SEED, FERTILIZE, AND MULCH ALL DAMAGED, BARE, AND ERODED AREAS IMMEDIATELY AND UNTIL A SUITABLE COVER IS ESTABLISHED.

**PERMANENT SEEDING: APPLICATION OF LIME, FERTILIZER, SEED, AND MULCH:**

- WHERE A NEAT APPEARANCE IS DESIRED, OMIT SERICEA.
- USE COMMON BERMUDAGRASS ONLY ON ISOLATED SITES WHERE IT CANNOT BECOME A PEST. BERMUDAGRASS MAY BE REPLACED WITH 5 LBS./AC. CENTIPEDEGRASS.
- SOIL AMENDMENTS: APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 3200 LBS./AC. GROUND AGRICULTURAL LIMESTONE AND 870 POUNDS OF 10-20-20 OR 1,740 POUNDS OF 5-10-10 PER ACRE. FOR SANDY SOILS, TYPICAL TO COASTAL PLAIN AND SANDHILLS OF NORTH CAROLINA, FERTILIZER RATES SHOULD BE INCREASED BY 20 PERCENT.
- SEED THE SEED BED WITH THE SPECIFIED SEED MIXTURE AT THE SPECIFIED RATE DURING RECOMMENDED PLANTING SEASONS. IF GRADING IS COMPLETED AT TIMES OTHER THAN THE RECOMMENDED SEASON, PROVIDE TEMPORARY SEEDING OR OTHER EROSION AND SEDIMENTATION PROTECTION APPROVED BY THE ENGINEER UNTIL THE APPROPRIATE PLANTING SEASON BEGINS.
- MULCH: APPLY 4000 LBS./AC. GRAIN STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR BY TACKING ASPHALT, ROVING, OR NETTING OR BY CRIMPING WITH A MULCH ANCHORING TOOL. A DISC WITH BLADES SET NEARLY STRAIGHT MAY BE USED AS A MULCH ANCHORING TOOL.
- MAINTENANCE: REFERTILIZE THE FOLLOWING APRIL WITH 50 LBS./AC. NITROGEN. REPEAT AS GROWTH REQUIRES. MOW ONLY ONCE PER YEAR. WHERE A NEAT APPEARANCE IS DESIRED, OMIT SERICEA AND MOW

**CONSTRUCTION SCHEDULE**

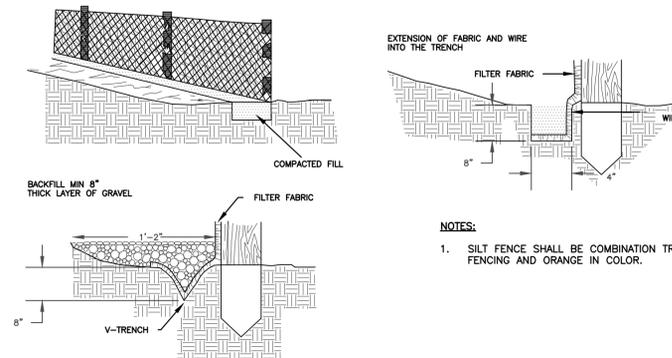
THE CONTRACTOR MUST COMPLY WITH THE REQUIREMENTS HEREIN:

- CONDUCT A PRECONSTRUCTION MEETING BEFORE ANY LAND DISTURBING ACTIVITY STARTS. THOSE REQUIRED FOR ATTENDANCE SHALL BE THE GENERAL CONTRACTOR, ORANGE COUNTY EROSION CONTROL ADMINISTRATOR, GRADING AND EROSION CONTROL SUB-CONTRACTORS (IF ANY), AND A REPRESENTATIVE OF THE FINANCIALLY RESPONSIBLE PARTY.
- INSTALL EROSION CONTROL MEASURES AS REQUIRED, SUCH AS THE CONSTRUCTION ENTRANCE, SILT FENCE, AND SILT FENCE OUTLETS. ONLY DISTURB AREAS REQUIRED TO INSTALL THESE DEVICES. DISTURBANCE FOR PERIMETER SILT FENCE MUST BE LIMITED TO A MAXIMUM 12" MACHINE WIDTH. AFTER INSTALLATION OF SILT FENCE AND OUTLETS, CONTACT ORANGE COUNTY EROSION CONTROL OFFICER CHASE ELLIS, 919-245-2587, TO SCHEDULE A SILT FENCE INSPECTION. NO ADDITIONAL WORK CAN BE COMPLETED UNTIL THE SILT FENCE INSPECTION HAS BEEN CONDUCTED AND PASSED.
- CLEAR AREA FOR SKIMMER SEDIMENT BASIN FOOTPRINT. ONCE BASIN HAS BEEN INSTALLED, CONTACT ORANGE COUNTY EROSION CONTROL OFFICER CHASE ELLIS, 919-245-2587, TO SCHEDULE A BASIN INSPECTION.
- CLEAR AREAS FOR FOOTPRINT OF DIVERSION DITCH INSTALLATION. ONCE INSTALLED, CONTACT ORANGE COUNTY EROSION CONTROL OFFICER CHASE ELLIS, 919-245-2587, TO SCHEDULE A DIVERSION DITCH INSPECTION.
- CLEAR AND GRUB ANY WOODED AREAS TO BE DEVELOPED WITHIN LIMITS OF DISTURBANCE. STOCKPILE TOPSOIL AND SUITABLE FILL MATERIAL IN AREAS DESIGNATED AS STOCKPILES.
- BEGIN GRADING ACTIVITIES AFTER ALL REQUIRED EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND CONSTRUCTED. SALVAGE ANY TOPSOIL THAT MAY BE USED AFTER CONSTRUCTION.
- NO LAND DISTURBANCE BEYOND THE LIMITS OF DISTURBANCE IS ALLOWED.
- INSTALL DRIVEWAY CULVERT. PLACE INLET AND OUTLET PROTECTION IMMEDIATELY AFTER PIPE INSTALLATION.
- SEED TEMPORARY AREAS THAT HAVE BEEN LEFT DORMANT IN ACCORDANCE WITH THE NCG01 STABILIZATION CHART. THE MAXIMUM ALLOWED TIME TO STABILIZE IS 14 DAYS.
- ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH HEAVY RUNOFF PRODUCING RAINFALL. NEEDED REPAIRS SHALL BE MADE IMMEDIATELY.
- PERIMETER MEASURES MUST BE LEFT IN PLACE UNTIL ALL UPLAND AREAS ARE PERMANENTLY STABILIZED AND PERMISSION HAS BEEN GRANTED FROM THE ORANGE COUNTY EROSION CONTROL DEPARTMENT. AFTER SITE IS PERMANENTLY STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND PROVIDE PERMANENT SEEDING WHERE TEMPORARY MEASURES HAVE BEEN REMOVED AND GROUND COVER IS NOT ADEQUATE.
- AFTER CONSTRUCTION REMOVE ALL TEMPORARY STRUCTURES AND ENSURE ALL SEEDING IS COMPLETED FOR AREAS DISTURBED.
- WHEN THE PROJECT IS COMPLETE, THE PERMITTEE SHALL CONTACT ORANGE COUNTY TO CLOSE OUT THE EROSION CONTROL PLAN.

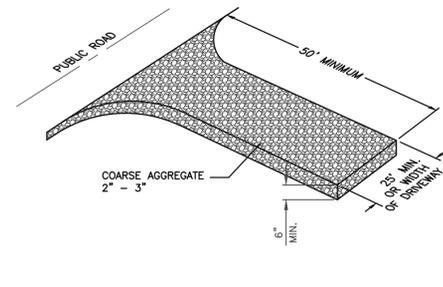
**GENERAL MAINTENANCE PLAN**

- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH HEAVY STORMWATER-PRODUCING RAINFALL. ALL NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO PREVENT FURTHER DAMAGE AND EROSION. STRUCTURES THAT WILL BE MAINTAINED WILL INCLUDE:
  - CONSTRUCTION ENTRANCE/EXIT: INSPECT CONSTRUCTION ROAD SURFACE REGULARLY, MAINTAIN IN A CONDITION TO PREVENT SEDIMENT FROM LEAVING THE SITE, AND TOP-DRESS WHEN NEEDED. SEDIMENT TRANSPORTED TO PUBLIC ROADS SHALL BE REMOVED DAILY.
  - SEEDING, FERTILIZING, AND MULCHING: SEEDED AREAS SHALL BE INSPECTED FOR FAILURE AND NECESSARY REPAIRS SHALL BE MADE WITHIN THE SAME SEASON, IF POSSIBLE.
  - SILT FENCE/SILT FENCE OUTLETS: REMOVE SEDIMENT AFTER 6 INCHES OF ACCUMULATION AT FENCE.
- THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 21 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY GROUND COVER, DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PERMANENT GROUND COVER SHALL BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR NO MORE THAN 90 CALENDAR DAYS.

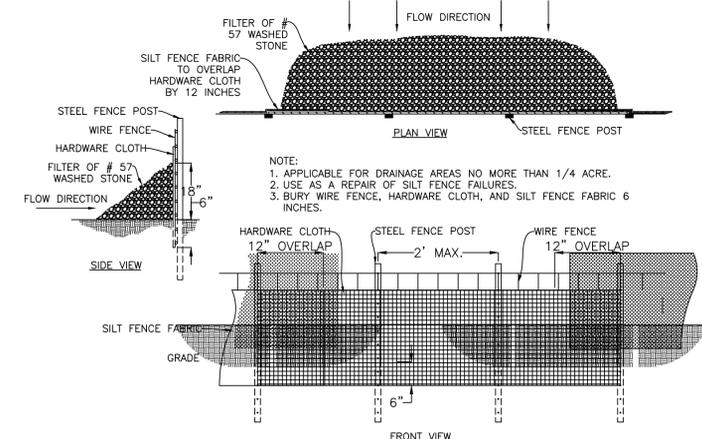
TOTAL DISTURBED AREA: ±2.33 AC.



**1 SILT FENCE DETAIL**  
D-104 NTS



**2 TEMPORARY CONSTRUCTION ENTRANCE**  
D-104 NTS



**3 TEMPORARY SILT FENCE OUTLET**  
D-104 NTS

**NOTES**

**LEGEND**

- INDEX CONTOUR
- INTERMEDIATE CONTOUR
- PROPERTY LINE
- ADJOINING PROPERTIES
- FENCE
- RIGHT-OF-WAY
- EX. EDGE OF PAVEMENT
- CREEK
- EX. SANITARY SEWER
- NEW SANITARY SEWER
- EX. WATER LINE
- NEW WATER LINE
- NEW FORCE MAIN
- CATCH BASIN
- NEW STORM PIPE
- POLE-MOUNTED LIGHT

**NOTES:**

- SILT FENCE SHALL BE COMBINATION TREE PROTECTION FENCING AND ORANGE IN COLOR.

**NOTES:**

- GRAVEL PAD TO BE 25'-0" x 50'-0" AND 6" THICK MINIMUM
- TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGE TRUCKS IS TO BE PROVIDED.
- ENTRANCE(S) SHOULD BE LOCATED TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES.
- MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOP DRESSING WITH STONE SHALL BE NECESSARY.
- ANY MATERIAL DEPOSITED ONTO THE ROAD MUST BE CLEANED UP IMMEDIATELY.
- APPLICABLE AT ALL POINTS OF INGRESS AND EGRESS UNTIL SITE IS STABILIZED. FREQUENT CHECKS AND TIMELY MAINTENANCE OF THIS DEVICE MUST BE PROVIDED.
- MAINTENANCE: CONSTRUCTION ENTRANCE/EXIT: INSPECT CONSTRUCTION ROAD SURFACE REGULARLY, MAINTAIN IN A CONDITION TO PREVENT SEDIMENT FROM LEAVING THE SITE, AND TOP-DRESS WHEN NEEDED. SEDIMENT TRANSPORTED TO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY.

**REVISIONS**

NO.	DATE	DESCRIPTION

PROJECT MANAGER: GSM	PROJECT ENGINEER: HDB
DRAWN BY: HDB	CHECKED BY: TAP

DATE:  
MARCH 15, 2024

3/15/2024

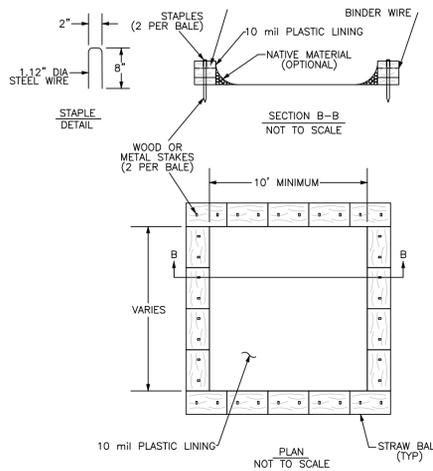
**MacCONNELL & Associates, P. C.**  
501 CASCADE POINTE LANE, SUITE 103  
CARY, NORTH CAROLINA 27513  
P.O. BOX 129  
MORRISVILLE, NORTH CAROLINA 27560  
No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

**THE INN AT WHALEBONE, LLC**  
**CONSTRUCTION DRAWINGS**  
**DARE COUNTY, NC**

**EROSION CONTROL DETAILS 1**

PROJECT NUMBER <b>C06001.00</b>	DRAWING NUMBER <b>D-104</b>
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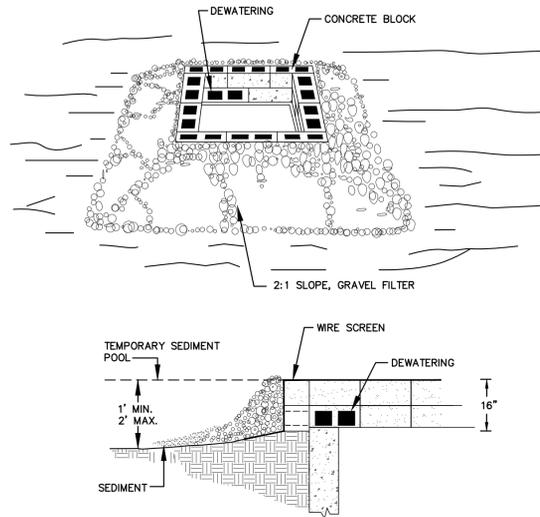
**FOR REVIEW ONLY**  
NOT RELEASED FOR CONSTRUCTION



**NOTES:**

1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
4. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.
5. MUST BE LOCATED >50 FEET AWAY FROM INLETS/WATERWAYS UNLESS THERE IS NO OTHER PRACTICAL ALTERNATIVE.

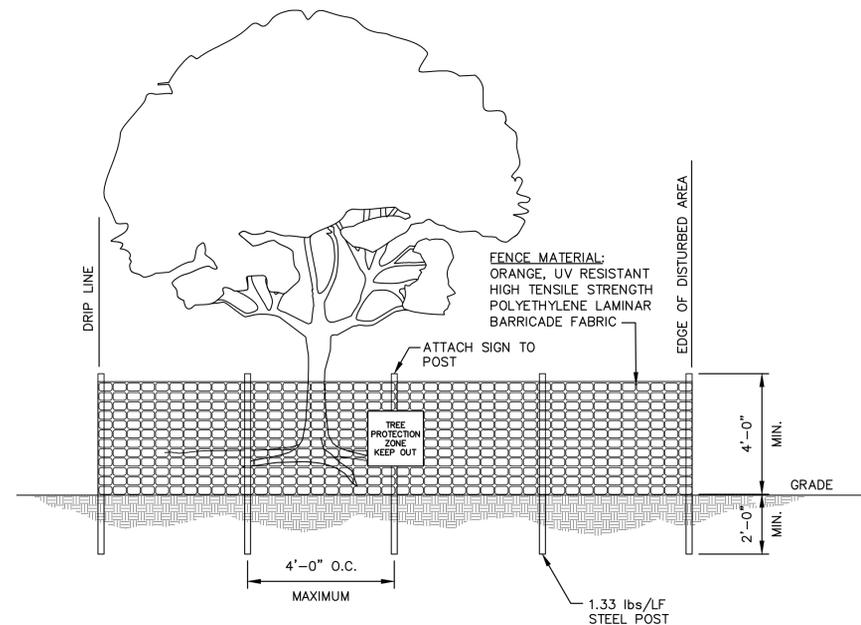
**1 CONCRETE WASHOUT**  
D-105 NTS



**NOTES:**

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2 X 4 WOOD STUDS THROUGH BLOCK OPENINGS.
2. CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.
3. USE CLEAN GRAVEL, 3/4- TO 1/2-INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.

**2 BLOCK AND GRAVEL DROP INLET EROSION CONTROL**  
D-105 NTS



**NOTES:**

1. ALL PLANTS DESIGNATED TO BE SAVED SHALL BE PROTECTED BY FENCING, AS ILLUSTRATED.
2. INSTALL TREE PROTECTION FENCE AT TREE DRIP LINE OR AT EDGE OF DISTURBED AREA, AS SHOWN ON PLANS, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. SPACE TREE PROTECTION ZONE SIGNS A MINIMUM OF ONE EVERY 300 FEET. THE SIZE OF EACH SIGN MUST BE A MINIMUM OF 2' x 2' AND BE VISIBLE FROM BOTH SIDES OF THE FENCE. THE SIGN MUST CONTAIN THE FOLLOWING LANGUAGE IN BOTH ENGLISH & SPANISH: "TREE PROTECTION ZONE, KEEP OUT".
4. THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE BOUNDARIES OF THE TREE PROTECTION FENCING.
5. TREE PROTECTION FENCING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

**3 TREE PROTECTION FENCE**  
D-105 NTS

**NOTES**

**LEGEND**

- 110 --- INDEX CONTOUR
- 100 --- INTERMEDIATE CONTOUR
- --- PROPERTY LINE
- --- ADJOINING PROPERTIES
- x --- FENCE
- --- RIGHT-OF-WAY
- --- EX. EDGE OF PAVEMENT
- --- CREEK
- ss --- EX. SANITARY SEWER
- --- NEW SANITARY SEWER
- w --- EX. WATER LINE
- --- NEW WATER LINE
- pm --- NEW FORCE MAIN
- --- CATCH BASIN
- --- NEW STORM PIPE
- ⊙ --- POLE-MOUNTED LIGHT

**REVISIONS**

NO.	DATE	DESCRIPTION

PROJECT MANAGER: GSM	PROJECT ENGINEER: HDB
DRAWN BY: HDB	CHECKED BY: TAP

DATE:  
MARCH 15, 2024



**MacCONNELL & Associates, P. C.**  
501 CASCADE POINTE LANE, SUITE 103  
CARY, NORTH CAROLINA 27513  
P.O. BOX 129  
LICENSE MORRISVILLE, NORTH CAROLINA 27560  
No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

**THE INN AT WHALEBONE, LLC**  
  
**CONSTRUCTION DRAWINGS**  
  
**DARE COUNTY, NC**

**EROSION CONTROL DETAILS 2**

PROJECT NUMBER <b>C06001.00</b>	DRAWING NUMBER <b>D-105</b>
------------------------------------	--------------------------------

**FOR REVIEW ONLY**  
NOT RELEASED FOR  
CONSTRUCTION



FRONT VIEW FROM NORTH-EAST CORNER

ARCHITECT



**NITIN KULKARNI**  
AIA NCARB

GLEN ALLEN, VA 23059  
(804) 200-4085

A DEVELOPMENT BY

**INN AT WHALEBONE**

**Fairfield**  
BY MARRIOTT

6632 WEST PHEASANT AVE.  
NAGS HEAD NC

MARRIOTT PROJECT NUMBER: 65890

Date: APRIL 04, 2024

REVISIONS		
NO.	DATE	COMMENTS
1	OCT 03, 2023	PRELIMINARY FLOOR PLANS
2	OCT 31, 2023	FRANCHISE 15% APPROVAL SET
3	APR 04, 2024	75% ARCH TO DESIGN TEAM

Sheet

**A-100A**

**BUILDING EXTERIOR**



FRONT VIEW FROM SOUTH-EAST CORNER

ARCHITECT



**NITIN KULKARNI**  
AIA NCARB

GLEN ALLEN, VA 23059  
(804) 200-4085

A DEVELOPMENT BY

**INN AT WHALEBONE**

**Fairfield**  
BY MARRIOTT

6632 WEST PHEASANT AVE.  
NAGS HEAD NC

MARRIOTT PROJECT NUMBER: 65890

Date: APRIL 04, 2024

REVISIONS		
NO.	DATE	COMMENTS
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3	APR 04, 2024	75% ARCH TO DESIGN TEAM

Sheet

**A-100B**

**BUILDING EXTERIOR**



VIEW FROM NORTH-WEST CORNER



ARCHITECT  
**NITIN KULKARNI**  
 AIA NCARB  
 GLEN ALLEN, VA 23059  
 ☎ (804) 200-4085

A DEVELOPMENT BY  
**INN AT WHALEBONE**

**Fairfield**  
 BY MARRIOTT

6632 WEST PHEASANT AVE.  
 NAGS HEAD NC

MARRIOTT PROJECT NUMBER: 65890

Date: APRIL 04, 2024

REVISIONS		
NO.	DATE	COMMENTS
1	OCT 03, 2023	PRELIMINARY FLOOR PLANS
2	OCT 31, 2023	FRANCHISE 15% APPROVAL SET
3	APR 04, 2024	75% ARCH TO DESIGN TEAM

Sheet  
**A-100C**

**BUILDING EXTERIOR**



VIEW OF POOL AND REAR PATIO

ARCHITECT



**NITIN KULKARNI**  
AIA NCARB

GLEN ALLEN, VA 23059  
(804) 200-4085

A DEVELOPMENT BY

**INN AT WHALEBONE**

**Fairfield**  
BY MARRIOTT

6632 WEST PHEASANT AVE.  
NAGS HEAD NC

MARRIOTT PROJECT NUMBER: 65890

Date: APRIL 04, 2024

REVISIONS		
NO.	DATE	COMMENTS
1	OCT 03, 2023	PRELIMINARY FLOOR PLANS
2	OCT 31, 2023	FRANCHISE 15% APPROVAL SET
3	APR 04, 2024	75% ARCH TO DESIGN TEAM

Sheet		<b>A-100E</b>
		<b>BUILDING EXTERIOR</b>



**1 FIRST FLOOR PLAN**  
A401 SCALE: 1/8"=1'-0"

ROOM TYPE	NAME	ROOM TYPE	1ST FLOOR	2ND FLOOR	3RD FLOOR	4TH FLOOR	TOTAL	
TYPE-A	KING ROOM		1	5	5	5	16	TOTAL KING 18 (20.5%)
TYPE-A1	ADA KING ROOM (ROLL-IN)		1	1	-	-	2	
TYPE-C	Q/Q ROOM		5	7	7	7	26	TOTAL Q/Q 58 (67%)
TYPE-C1	Q/Q ROOM LONG		-	3	3	3	09	
TYPE-C2	Q/Q ROOM LONG		4	5	6	6	21	
TYPE-C3	ADA Q/Q ROOM (TUB)		-	-	1	1	02	
TYPE-B	KING SUITE		-	1	1	1	03	TOTAL SUITES 11 (12.5%)
TYPE-B1	KING SUITE		1	2	2	2	07	
TYPE-B2	ADA KING SUITE (ROLL-IN)		-	1	-	-	01	

TOTAL ROOMS PER FLOOR	12	25	25	25	87 TOTAL ROOMS
TOTAL AREA	11,659.0	11,591.0	11,591.0	11,591.0	46,432.00 SQ.FT.

PORTE COCHERE : 1,047.00 SQ.FT.  
 REAR+SIDE PORCH : 522.00 SQ.FT.  
 ADA UNITS REQUIRED = 4+1 (ROLL-IN) = 5, PROVIDED 2+3 (ROLL-IN) = 5  
 HEARING IMPAIRED UNITS REQUIRED = 9, PROVIDED = 1 H/C +8 = 9

HEARING IMPAIRED ROOMS STATEMENT						
NAME	ROOM TYPE	1ST FLOOR	2ND FLOOR	3RD FLOOR	TOTAL	TOTAL 9 ROOMS
ADA+ HEARING IMPAIRED ROOM			219		1	
HEARING IMPAIRED ROOMS		107, 123, 124,	216, 218,	316, 319, 320	8	

ARCHITECT  
  
**NITIN KULKARNI**  
 AIA NCARB  
 GLEN ALLEN, VA 23059  
 (804) 200-4085

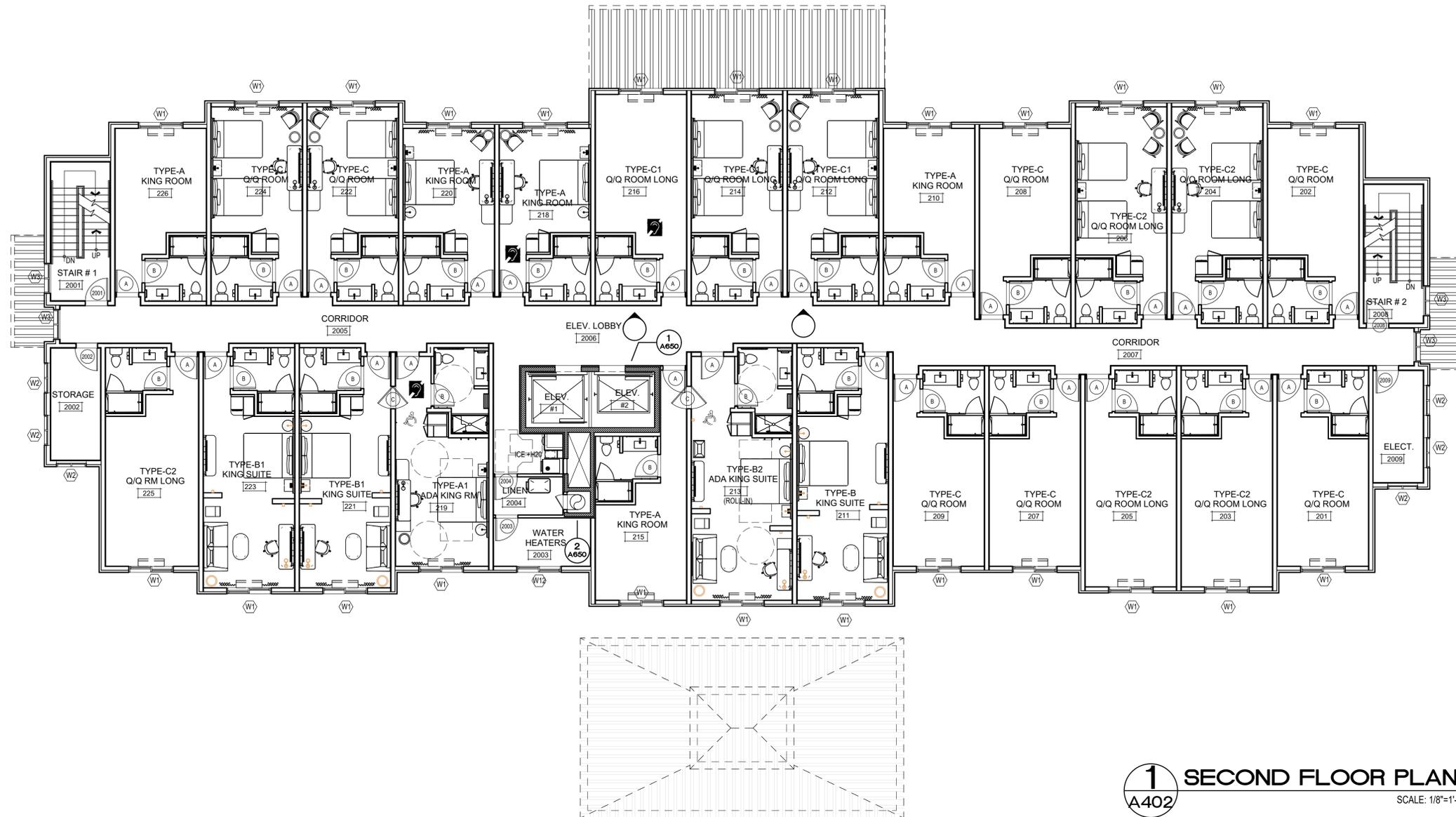
A DEVELOPMENT BY  
**INN AT WHALEBONE**

**Fairfield**  
 BY MARRIOTT  
 6632 WEST PHEASANT AVE.  
 NAGS HEAD NC  
 MARRIOTT PROJECT NUMBER: 65890

Date: APRIL 04, 2024

REVISIONS		
NO.	DATE	COMMENTS
1	OCT 03, 2023	PRELIMINARY FLOOR PLANS
2	OCT 31, 2023	FRANCHISE 15% APPROVAL SET
3	APR 04, 2024	75% ARCH TO DESIGN TEAM

Sheet  
**A-401**  
**FIRST FLOOR PLAN**



**1 SECOND FLOOR PLAN**  
 A402 SCALE: 1/8"=1'-0"

ARCHITECT  
  
**NITIN KULKARNI**  
 AIA NCARB  
 GLEN ALLEN, VA 23059  
 (804) 200-4085

A DEVELOPMENT BY  
**INN AT WHALEBONE**

**Fairfield**  
 BY MARRIOTT  
 6632 WEST PHEASANT AVE.  
 NAGS HEAD NC  
 MARRIOTT PROJECT NUMBER: 65890

Date: APRIL 04, 2024

REVISIONS		
NO.	DATE	COMMENTS
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2	OCT 31, 2023	FRANCHISE 15% APPROVAL SET
3	APR 04, 2024	75% ARCH TO DESIGN TEAM

Sheet  
**A-402**  
**SECOND FLOOR PLAN**



**1** THIRD FLOOR PLAN  
 A403 SCALE: 1/8"=1'-0"

ARCHITECT  
  
**NITIN KULKARNI**  
 AIA NCARB  
 GLEN ALLEN, VA 23059  
 (804) 200-4085

A DEVELOPMENT BY  
**INN AT WHALEBONE**

**Fairfield**  
 BY MARRIOTT  
 6632 WEST PHEASANT AVE.  
 NAGS HEAD NC  
 MARRIOTT PROJECT NUMBER: 65890

Date: APRIL 04, 2024

REVISIONS		
NO.	DATE	COMMENTS
1	OCT 03, 2023	PRELIMINARY FLOOR PLANS
2	OCT 31, 2023	FRANCHISE 15% APPROVAL SET
3	APR 04, 2024	75% ARCH TO DESIGN TEAM

Sheet  
**A-403**  
**THIRD FLOOR PLAN**



**1** FOURTH FLOOR PLAN  
 A404 SCALE: 1/8"=1'-0"

ARCHITECT  
  
**NITIN KULKARNI**  
 AIA NCARB  
 GLEN ALLEN, VA 23059  
 (804) 200-4085

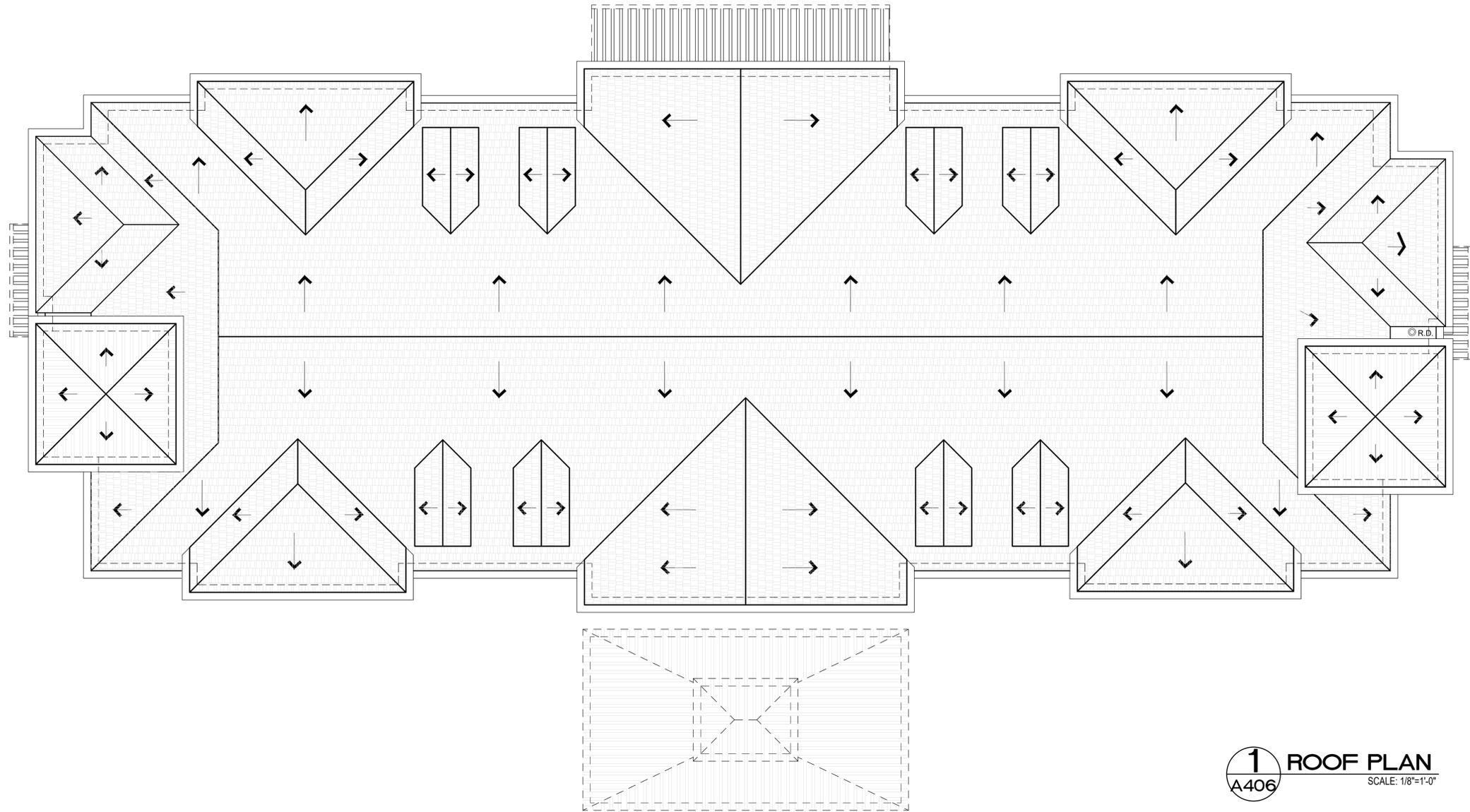
A DEVELOPMENT BY  
**INN AT WHALEBONE**

**Fairfield**  
 BY MARRIOTT  
 6632 WEST PHEASANT AVE.  
 NAGS HEAD NC  
 MARRIOTT PROJECT NUMBER: 65890

Date: APRIL 04, 2024

REVISIONS		
NO.	DATE	COMMENTS
1	OCT 03, 2023	PRELIMINARY FLOOR PLANS
2	OCT 31, 2023	FRANCHISE 15% APPROVAL SET
3	APR 04, 2024	75% ARCH TO DESIGN TEAM

Sheet  
**A-404**  
**FOURTH FLOOR PLAN**



**1** ROOF PLAN  
 A406 SCALE: 1/8"=1'-0"

ARCHITECT  
**NITIN KULKARNI**  
 AIA NCARB  
 GLEN ALLEN, VA 23059  
 (804) 200-4085

A DEVELOPMENT BY  
**INN AT WHALEBONE**

**Fairfield**  
 BY MARRIOTT  
 6632 WEST PHEASANT AVE.  
 NAGS HEAD NC  
 MARRIOTT PROJECT NUMBER: 65890

Date: APRIL 04, 2024

REVISIONS		
NO.	DATE	COMMENTS
1	OCT 03, 2023	PRELIMINARY FLOOR PLANS
2	OCT 31, 2023	FRANCHISE 15% APPROVAL SET
3	APR 04, 2024	75% ARCH TO DESIGN TEAM

Sheet  
**A-405**  
**ROOF PLAN**



**2** RIGHT SIDE ELEVATION  
SCALE: 1/8"=1'-0"



**1** FRONT ELEVATION  
SCALE: 1/8"=1'-0"



ARCHITECT

**NITIN KULKARNI**  
AIA NCARB

GLEN ALLEN, VA 23059  
(804) 200-4085

A DEVELOPMENT BY  
**INN AT WHALEBONE**

**Fairfield**  
**BY MARRIOTT**  
6632 WEST PHEASANT AVE.  
NAGS HEAD NC

MARRIOTT PROJECT NUMBER: 65890

Date: MAY 14, 2024

NO.	REVISIONS	
	DATE	COMMENTS
1	OCT 03, 2023	PRELIMINARY FLOOR PLANS
2	OCT 31, 2023	FRANCHISE 15% APPROVAL SET
3	APR 04, 2024	75% ARCH TO DESIGN TEAM
4	MAY 14, 2024	90% COORDINATION SET

Sheet

**A-501**

**BUILDING ELEVATIONS**



**2** LEFT SIDE ELEVATION  
SCALE: 1/8"=1'-0"



**1** REAR ELEVATION  
SCALE: 1/8"=1'-0"



ARCHITECT

**NITIN KULKARNI**  
AIA NCARB

GLEN ALLEN, VA 23059  
(804) 200-4085

A DEVELOPMENT BY  
**INN AT WHALEBONE**

**Fairfield**  
**BY MARRIOTT**  
6632 WEST PHEASANT AVE.  
NAGS HEAD NC

MARRIOTT PROJECT NUMBER: 65890

Date: MAY 14, 2024

REVISIONS		
NO.	DATE	COMMENTS
1	OCT 03, 2023	PRELIMINARY FLOOR PLANS
2	OCT 31, 2023	FRANCHISE 15% APPROVAL SET
3	APR 04, 2024	75% ARCH TO DESIGN TEAM
4	MAY 14, 2024	90% COORDINATION SET

Sheet

**A-502**

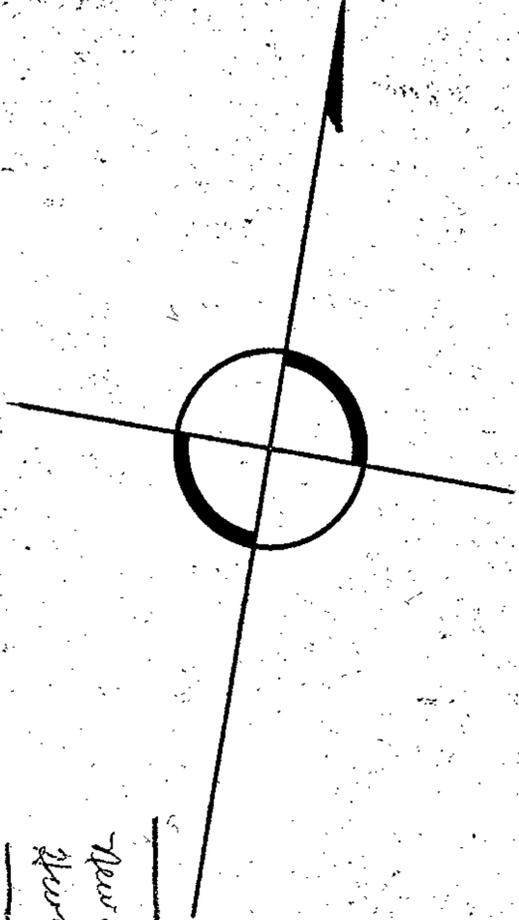
**BUILDING ELEVATIONS**

# ROANOKE SHORE

NAGS HEAD, NC.

UNOFFICIAL Document

JAN 9, 1951  
SCALE 1" = 200'  
CARLYLE C. WEBB C.E.

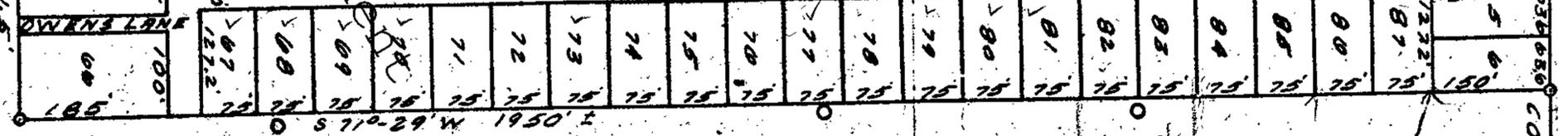
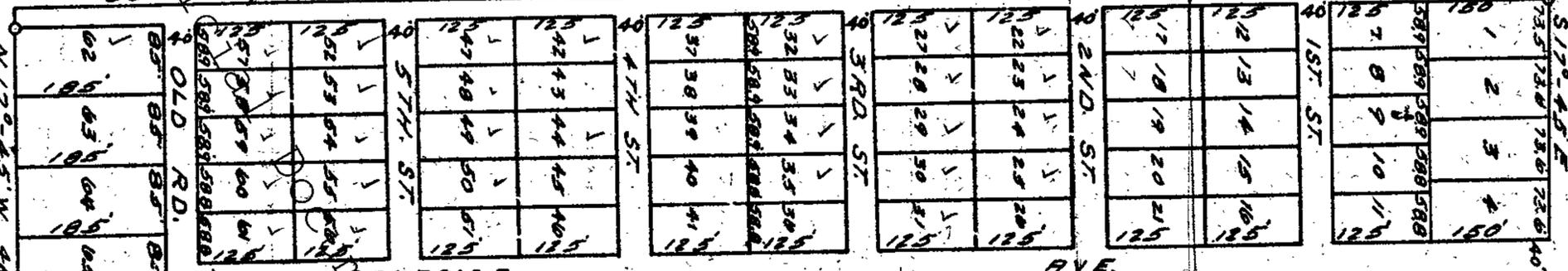


FLORENCE EPSTIEN

20' R.W.Y. SOUND TO OCEAN

N 71° 29' E 1950'

N 71° 29' E 424.6



CHARLES R. EVANS

ROANOKE SOUND

HIGH WATER

ATLANTIC OCEAN

UNOFFICIAL

UNOFFICIAL

BI

BK 383 PG 0432

FILED

'84 OCT 18 PM 3 38

WWP/jwb

STATE OF NORTH CAROLINA

COUNTY OF DARE

DORRIS A. FRY  
REGISTER OF DEEDS  
DARE COUNTY, N.C.

THIS NEGATIVE EASEMENT, made this the \_\_\_\_\_ day of October, 1984, by and between Spruill Oil Company, Inc., a corporation organized under the laws of the State of North Carolina, with one of its offices in Windsor, North Carolina, party of the first part, and Town of Nags Head, a municipal corporation organized under the laws of the State of North Carolina, party of the second part:

WITNESSETH: That for and in consideration of the approval of a site plan for the construction of a gas and convenience store on Lots 25, 26 and portions of Lots 24, 29, 30 and 31 of Roanoke Shores by the party of the second part, the said party of the first part agrees and by these presents does agree to grant and convey unto the said party of the second part and its successors and assigns, a negative easement prohibiting the construction of new buildings or accessory buildings on Lots 22, 23, 27, 28 and parts of Lots 24 and 29 until such time as the drainage from the gas and convenience store as shown in the party of the first part site plan is diverted into either a ditch constructed by the North Carolina Department of Transportation along the right of way for U. S. Highway 158 Bypass, or a ditch constructed by the party of the first part to an existing drainage ditch that is approximately 400 feet North of the Northeastern corner of Lot Number 22 of Roanoke Shores as shown in Map Book 1, page 81 of the Dare County Registry, or with the permission of the party of the second part.

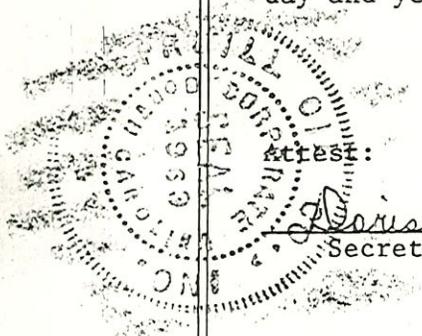
The lots described shall be subject to the proceeding Declaration of Covenants, Conditions, Limitations, Restrictions and Easements, which said declarations shall constitute covenants to run with Lots 22, 23, 27, 28 and the parts of Lots 24 and 29 not used for the construction of the gas and convenience store and shall be binding upon the party of the first part herein and all other persons and parties claiming through the party of the first part herein and for the benefit of and limitation upon all future owners of said land and premises, this declaration of negative easement being designed for the purposes of assuring the availability of adequate drainage for the gas and convenient store being constructed by the party of the first part as described in its site plan prepared August 1, 1984.

IN WITNESS WHEREOF, the said party of the first part has caused these presents to be executed in its name by its president, attested by its secretary and its corporate seal hereto affixed, all by due authority of its Board of Directors heretofore duly given, this the day and year first above written.

SPRUILL OIL COMPANY, INC.

By: CT. Spruill  
President

Attest: Doris Hughes  
Secretary



STATE OF NORTH CAROLINA

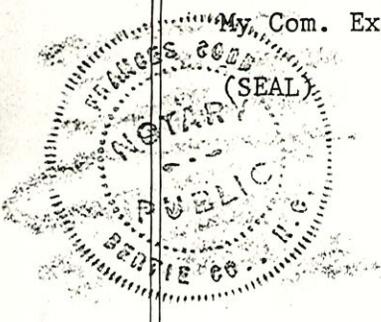
COUNTY OF BERTIE

I, Francis Cobb, Notary Public, for said county and state, certify that DORIS HUGHES ~~Hunter W. Spruill~~ personally came before me and acknowledged she is secretary of Spruill Oil Company, Inc., a corporation, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its president, sealed with its corporate seal, and attested by himself as its secretary.

Witness my hand and official seal, this the 15th day of October, 1984.

Francis Cobb  
Notary Public

My Com. Expires: June 14, 1989.



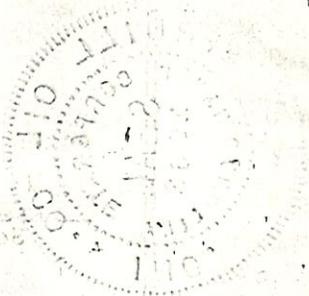
NORTH CAROLINA DARE COUNTY

The foregoing Certificate(s) of Francis Cobb - a Notary Public  
of Bertie Co N.C.

is/are certified to be correct. This instrument and this certificate are duly registered at the date and time and in the Book and Page shown on the first page hereof.

Doris A. Fry Register of Deeds For Dare County  
By Barbara M. Gray Deputy/Assistant-Register of Deeds RECORDED: OCT 22 1984

IN WITNESS WHEREOF, the said party... caused these presents to be executed... attested by its secretary and its corporate seal... due authority of the Board of Directors... day and year first above written.



STATE OF NORTH CAROLINA  
COUNTY OF DARE

OCT. 22 1984

Recorded

*J. Davis O. Fry*  
Register of Deeds, Dare County, N. C.

By *VM*

*Ordnance Glass Co.  
PO Box 1579  
Manteo, NC*

October, 1984

My Comm. Expires: *10/14/1989*





NORTH CAROLINA  
Environmental Quality

ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

WILLIAM E. TOBY VINSON, JR.

Interim Director

September 14, 2023

Inn at Whalebone, LLC  
Attn: Vikram Virk – Member Agent  
3631 Union St.  
Elizabeth City, NC 27909

**Subject: State Stormwater Management Permit No. SW7230901  
The Inn at Whalebone  
High Density Project  
Dare County**

Dear Vikram Virk:

The Washington Regional Office received a complete State Stormwater Management Permit Application for the subject project on September 11, 2023. Staff review of the plans and specifications has determined that the project, as proposed, complies with the Stormwater Regulations set forth in Title 15A NCAC 02H.1000 amended on January 1, 2017 (2017 Rules). We are hereby forwarding Permit No. SW7230901 dated September 14, 2023, for the construction of the built-upon areas (BUA) and stormwater control measures (SCMs) associated with the subject project.

This permit shall be effective from the date of issuance until September 13, 2031 and the project shall be subject to the conditions and limitations as specified therein and does not supersede any other agency permit that may be required. Failure to comply with these requirements will result in future compliance problems. Please note that this permit is not transferable except after notice to and approval by the Division.

This cover letter, attachments, and all documents on file with DEMLR shall be considered part of this permit and is herein incorporated by reference.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing by filing a written petition with the Office of Administrative Hearings (OAH). The written petition must conform to Chapter 150B of the North Carolina General Statutes and must be filed with the OAH within thirty (30) days of receipt of this permit. You should contact the OAH with all questions regarding the filing fee (if a filing fee is required) and/or the details of the filing process at 6714 Mail Service Center, Raleigh, NC 27699-6714, or via telephone at 919-431-3000, or visit their website at [www.NCOAH.com](http://www.NCOAH.com). Unless such demands are made this permit shall be final and binding.

If you have any questions concerning this permit, please contact Carl Dunn in the Washington Regional Office, at 2552-948-3959 or [carl.dunn@ncdenr.gov](mailto:carl.dunn@ncdenr.gov).

Sincerely,

William Carl Dunn, PE  
Division of Energy, Mineral and Land Resources

Enclosures: Attachment A – Designer's Certification Form  
Application Documents

cc: Thomas Perdue, PE – MacConnell & Associates ([Thomas.perdue@macconnellandassoc.com](mailto:Thomas.perdue@macconnellandassoc.com))  
Nags Head Permitting – Kim Thompson ([kim.thompson@nagsheadnc.gov](mailto:kim.thompson@nagsheadnc.gov))  
Washington Regional Office Stormwater File



North Carolina Department of Environmental Quality | Division of Energy, Mineral and Land Resources  
Washington Regional Office | 943 Washington Square Mall | Washington, North Carolina 27889  
252.946.6481

**STATE OF NORTH CAROLINA**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**DIVISION OF ENERGY, MINERAL AND LAND RESOURCES**

**STATE STORMWATER MANAGEMENT PERMIT**

**HIGH DENSITY DEVELOPMENT**

In compliance with the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules, and Regulations promulgated and adopted by the North Carolina Environmental Management Commission, including 15A NCAC 02H. amended on January 1, 2017 (2017 Rules) (the "stormwater rules"),

PERMISSION IS HEREBY GRANTED TO

*Inn at Whalebone, LLC*

*The Inn at Whalebone*

*6632 W. Pheasant Ave, Nags Head, Dare County*

FOR THE

construction, management, operation and maintenance of built-upon area (BUA) draining to three connected (3) infiltration basins and one (1) underground storage tank system draining to SA;HQW waters as outlined in the application, approved stormwater management plans, supplement, calculations, operation and maintenance agreement, recorded documents, specifications, and other supporting data (the "approved plans and specifications") as attached and/or on file with and approved by the Division of Energy, Mineral and Land Resources (the "Division" or "DEMLR"). The project shall be constructed, operated and maintained in accordance with these approved plans and specifications. The approved plans and specifications are incorporated by reference and are an enforceable part of this permit.

This permit shall be effective from the date of issuance until September 13, 2031 and shall be subject to the following specified conditions and limitations. The permit issued shall continue in force and effect until the permittee files a request with the Division for a permit modification, transfer, renewal, or rescission; however, these actions do not stay any condition. The issuance of this permit does not prohibit the Director from reopening and modifying the permit, revoking and reissuing the permit, or terminating the permit for cause as allowed by the laws, rules, and regulations contained in Title 15A NCAC 2H.1000 and NCGS 143-215.1 et.al.

1. **BUA REQUIREMENTS.** The maximum amount of BUA allowed for the entire project is 71,519 square feet. The runoff from all BUA within the permitted drainage areas of this project must be directed into the permitted SCMs. The BUA requirements and allocations for this project are as follows:
  - a. **SCM BUA LIMITS.** The SCM labeled DA1 has been designed to handle the runoff from 71,519 square feet of BUA of which 55,316 square feet is on site and 16,203 square feet is off site. This permit does not include an allotment of BUA for future development.
2. **PERVIOUS AREA IMPROVEMENTS.** At this time, none of the pervious area improvements listed in G.S. 143-214.7(b2) or the Stormwater Design Manual have been proposed for this project. Pervious area improvements will be allowed in this project if documentation is provided demonstrating those improvements meet the requirements of the stormwater rule.
3. **SCM REQUIREMENTS.** The SCM requirements for this project are as follows:
  - a. **SCM DESIGN.** The SCM's are permitted based on the design criteria presented in the sealed, signed and dated supplements and as shown in the approved plans and specifications. These SCM's must be provided and maintained at the design condition.
  - b. **SCM DESIGN FOR SA WATER.** The SCM's provide runoff treatment without discharging in excess of the pre-development conditions during the one-year, 24-hour storm event. The excess runoff is released at a non-erosive velocity at the edge of the vegetated setback or to an existing stormwater drainage system.
  - c. **PLANTING PLAN.** The SCM landscape planting plan shown in the approved plans shall be followed in its entirety during construction. After the plants are established, the operation and maintenance agreement must be followed.
4. **STORMWATER OUTLETS.** This project has demonstrated that the on-site stormwater system will not discharge from the 10-year storm event and therefore will not have the opportunity to cause erosion during the 10-year storm event.
5. **VEGETATED SETBACKS.** A 50-foot wide vegetative setback must be provided and maintained in grass or other vegetation adjacent to all surface waters as shown on the approved plans. The setback is measured horizontally from the normal pool elevation of impounded structures, from the top of bank of each side of streams or rivers, and from the mean high waterline of tidal waters, perpendicular to the shoreline.
6. **RECORDED DOCUMENT REQUIREMENTS.** The stormwater rules require the following documents to be recorded with the Office of the Register of Deeds:
  - a. **ACCESS AND/OR EASEMENTS.** The entire stormwater conveyance system, including any SCMs, and maintenance accesses must be located in public rights-of-way, dedicated common areas that extend to the nearest public right-of-way, and/or permanent recorded easements that extend to the nearest public right-of-way for the purpose of inspection, operation, maintenance, and repair.
  - b. **OPERATION AND MAINTENANCE AGREEMENT.** The operation and maintenance agreement must be recorded with the Office of the Register of Deeds.
  - c. **FINAL PLATS.** The final recorded plats must reference the operation and maintenance agreement and must also show all public rights-of-way, dedicated common areas, and/or permanent drainage easements, in accordance with the approved plans.

- d. DEEDS. The permittee shall record deed restrictions and protective covenants prior to the issuance of a certificate of occupancy to ensure the permit conditions and the approved plans and specifications are maintained in perpetuity.
7. CONSTRUCTION. During construction, erosion shall be kept to a minimum and any eroded areas of the on-site stormwater system will be repaired immediately.
    - a. PROJECT CONSTRUCTION, OPERATION AND MAINTENANCE. During construction, all operation and maintenance for the project shall follow the Erosion Control Plan requirements until the Sediment-Erosion Control devices are converted to SCMs or no longer needed. Once the device is converted to a SCM, the permittee shall provide and perform the operation and maintenance as outlined in the applicable section below.
    - b. SCM RESTORATION. If one or more of the SCMs are used as an Erosion Control device and/or removed or destroyed during construction, it must be restored to the approved state stormwater design condition prior to close-out of the erosion control plan and/or project completion and/or transfer of the state stormwater permit. Upon restoration, a new or updated certification will be required for the SCM(s) and a copy must be submitted to the appropriate DEQ regional office.
  8. MODIFICATIONS. No person or entity, including the permittee, shall alter any component shown in the approved plans and specifications. Prior to the construction of any modification to the approved plans, the permittee shall submit to the Director, and shall have received approval for modified plans, specifications, and calculations including, but not limited to, those listed below. For changes to the project or SCM that impact the certifications, a new or updated certification(s), as applicable, will be required and a copy must be submitted to the appropriate DEQ regional office upon completion of the modification.
    - a. Any modification to the approved plans and specifications, regardless of size including the SCM(s), BUA, details, etc.
    - b. Redesign or addition to the approved amount of BUA or to the drainage area.
    - c. Further development, subdivision, acquisition, lease or sale of any, all or part of the project and/or property area as reported in the approved plans and specifications.
    - d. Altering, modifying, removing, relocating, redirecting, regrading, or resizing of any component of the approved SCM(s), stormwater collection system and/or vegetative conveyance shown on the approved plan.
    - e. The construction of any allocated future BUA.
    - f. The construction of any permeable pavement, #57 stone area, public trails, or landscaping material to be considered a permeable surface that were not included in the approved plans and specifications.
    - g. Other modifications as determined by the Director.
  9. DESIGNER'S CERTIFICATION. Upon completion of the project, the permittee shall determine if the project is in compliance with the approved plans and take the necessary following actions:

- a. If the permittee determines that the project is in compliance with the approved plans, then within 45 days of completion, the permittee shall submit to the Division one hard copy and one electronic copy of the following:
    - i. The completed and signed Designer's Certification provided in Attachment A noting any deviations from the approved plans and specifications. Deviations may require approval from the Division;
    - ii. A copy of the recorded operation and maintenance agreement;
    - iii. Unless already provided, a copy of the recorded deed restrictions and protective covenants; and
    - iv. A copy of the recorded plat delineating the public rights-of-way, dedicated common areas and/or permanent recorded easements, when applicable.
  - b. If the permittee determines that the project is not in compliance with the approved plans, the permittee shall submit an application to modify the permit within 30 days of completion of the project or provide a plan of action, with a timeline, to bring the site into compliance.
10. OPERATION AND MAINTENANCE. The permittee shall provide and perform the operation and maintenance necessary, as listed in the signed operation and maintenance agreement, to assure that all components of the permitted on-site stormwater system are maintained at the approved design condition. The approved operation and maintenance agreement must be followed in its entirety and maintenance must occur at the scheduled intervals.
- a. CORRECTIVE ACTIONS REQUIRED. If the facilities fail to perform satisfactorily, the permittee shall take immediate corrective actions. This includes actions required by the Division and the stormwater rules such as the construction of additional or replacement on-site stormwater systems. These additional or replacement measures shall receive a permit from the Division prior to construction.
  - b. MAINTENANCE RECORDS. Records of maintenance activities must be kept and made available upon request to authorized personnel of the Division. The records will indicate the date, activity, name of person performing the work and what actions were taken.
11. PERMIT RENEWAL. A permit renewal request must be submitted at least 180 days prior to the expiration date of this permit. The renewal request must include the appropriate application, documentation and the processing fee as outlined in 15A NCAC 02H.1045(3).
12. CURRENT PERMITTEE NAME OR ADDRESS CHANGES. The permittee shall submit a completed Permit Information Update Application Form to the Division within 30 days to making any one or more of the following changes:
- a. A name change of the current permittee;
  - b. A name change of the project;
  - c. A mailing address change of the permittee.

13. **TRANSFER.** This permit is not transferable to any person or entity except after notice to and approval by the Director. Neither the sale of the project and/or property, in whole or in part, nor the conveyance of common area to a third party constitutes an approved transfer of the permit.
  - a. **TRANSFER REQUEST.** The transfer request must include the appropriate application, documentation and the processing fee as outlined in 15A NCAC 02H.1045(2) and must be submitted upon occurrence of any one or more of the following events:
    - i. A natural person who is deceased;
    - ii. A partnership, limited liability corporation, corporation, or any other business association that has been dissolved;
    - iii. A person or entity who has been lawfully and finally divested of title to the property on which the permitted activity is occurring or will occur through foreclosure, bankruptcy, or other legal proceeding;
    - iv. A person or entity who has sold the property, in whole or in part, on which the permitted activity is occurring or will occur;
    - v. The assignment of declarant rights to another individual or entity;
    - vi. The sale or conveyance of the common areas to a Homeowner's or Property Owner's Association, subject to the requirements of NCGS 143-214.7(c2).
  - b. **TRANSFER INSPECTION.** Prior to transfer of the permit, a file review and site inspection will be conducted by Division personnel to ensure the permit conditions have been met and that the project and the on-site stormwater system complies with the permit conditions. Records of maintenance activities performed to date may be requested. Projects not in compliance with the permit will not be transferred until all permit and/or general statute conditions are met.
14. **COMPLIANCE.** The permittee is responsible for complying with the terms and conditions of this permit and the approved plans and specifications until the Division approves the transfer request.
  - a. **REVIEWING AND MONITORING FOR COMPLIANCE.** The permittee is responsible for verifying that the proposed BUA within each drainage area and for the entire project does not exceed the maximum amount allowed by this permit. The permittee shall review and routinely monitor the project to ensure continued compliance with the conditions of the permit, the approved plans and specifications.
  - b. **APPROVED PLANS AND SPECIFICATIONS.** A copy of this permit, approved plans, application, supplement, operation and maintenance agreement, all applicable recorded documents, and specifications shall be maintained on file by the permittee at all times.
  - c. **MAINTENANCE ACCESS.** SCMs, stormwater collection systems, and vegetated conveyances must be accessible for inspection, operation, maintenance and repair as shown on the approved plans.
  - d. **DIVISION ACCESS.** The permittee grants Division Staff permission to enter the property during normal business hours to inspect all components of the permitted project.
  - e. **ENFORCEMENT.** Any individual or entity found to be in noncompliance with the provisions of a stormwater management permit or the requirements of the stormwater rules is subject to enforcement procedures as set forth in NCGS 143 Article 21.

- f. ANNUAL CERTIFICATION. The permittee shall electronically submit to the Division an annual certification completed by either the permittee or their designee confirming the projects conformance with permit conditions.
- g. OBTAINING COMPLIANCE. The Director may notify the permittee when the permitted site does not meet one or more of the minimum requirements of the permit. Within the time frame specified in the notice, the permittee shall submit a written time schedule to the Director for modifying the site to meet minimum requirements. The permittee shall provide copies of modified plans and certification in writing to the Director that the changes have been made.
- h. OTHER PERMITS. The issuance of this permit does not preclude the permittee from obtaining and complying with any and all other permits or approvals that are required for this development to take place, as required by any statutes, rules, regulations, or ordinances, which are imposed by any other Local, State or Federal government agency having jurisdiction. Any activities undertaken at this site that cause a water quality violation or undertaken prior to receipt of the necessary permits or approvals to do so are considered violations of NCGS 143-215.1, and subject to enforcement procedures pursuant to NCGS 143-215.6.

Permit issued this the 14th day of September 2023.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION



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For Toby Vinson, Interim Director  
Division of Energy, Mineral and Land Resources  
By Authority of the Environmental Management Commission

**Permit Number SW7230901**

## **Attachment A**

### Certification Forms

The following blank Designer Certification forms are included and specific for this project:

- As-Built Permittee Certification
- As-Built Designer's Certification General MDC
- As-Built Designer's Certification for Infiltration Project

*A separate certification is required for each SCM. These blank certification forms may be copied and used, as needed, for each SCM and/or as a partial certification to address a section or phase of the project.*

**AS-BUILT PERMITTEE CERTIFICATION**

I hereby state that I am the current permittee for the project named above, and I certify by my signature below, that the project meets the below listed Final Submittal Requirements found in NCAC 02H.1042(4) and the terms, conditions and provisions listed in the permit documents, plans and specifications on file with or provided to the Division.

- Check here if this is a partial certification. Section/phase/SCM #? \_\_\_\_\_
- Check here if this is part of a Fast Track As-built Package Submittal.

Printed Name \_\_\_\_\_ Signature \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public in the State of \_\_\_\_\_

County of \_\_\_\_\_, do hereby certify that \_\_\_\_\_

personally appeared before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

and acknowledge the due execution of this as-built certification. (SEAL)

Witness my hand and official seal

\_\_\_\_\_

My commission expires \_\_\_\_\_

Permittee's Certification NCAC .1042(4)	Completed / Provided	N/A
<b>A. DEED RESTRICTIONS / BUA RECORDS</b>		
1. The deed restrictions and protective covenants have been recorded and contain the necessary language to ensure that the project is maintained consistent with the stormwater regulations and with the permit conditions.	Y or N	
2. A copy of the recorded deed restrictions and protective covenants has been provided to the Division.	Y or N	
3. Records which track the BUA on each lot are being kept. (See Note 1)	Y or N	
<b>B. MAINTENANCE ACCESS</b>		
1. The SCMs are accessible for inspection, maintenance and repair.	Y or N	
2. The access is a minimum of 10 feet wide.	Y or N	
3. The access extends to the nearest public right-of-way.	Y or N	
<b>C. EASEMENTS</b>		
1. The SCMs and the components of the runoff collection / conveyance system are located in recorded drainage easements.	Y or N	
2. A copy of the recorded plat(s) is provided.	Y or N	
<b>D. SINGLE FAMILY RESIDENTIAL LOTS - Plats for residential lots that have an SCM include the following:</b>	Y or N	
1. The specific location of the SCM on the lot.	Y or N	
2. A typical detail for the SCM.	Y or N	

3. A note that the SCM is required to meet stormwater regulations and that the lot owner is subject to enforcement action as set forth in NCGS 143 Article 21 if the SCM is removed, relocated or altered without prior approval.	Y or N	
<b>E. OPERATION AND MAINTENANCE AGREEMENT</b>	Y or N	
1. The O&M Agreement is referenced on the final recorded plat.	Y or N	
2. The O&M Agreement is recorded with the Register of Deeds and appears in the chain of title.	Y or N	
<b>F. OPERATION AND MAINTENANCE PLAN</b> – maintenance records are being kept in a known set location for each SCM and are available for review.	Y or N	
<b>G. DESIGNER'S CERTIFICATION FORM</b> – has been provided to the Division.	Y or N	

Note 1- Acceptable records include ARC approvals, as-built surveys, and county tax records.

Provide an explanation for every requirement that was not met, and for every "N/A" below. Attach additional sheets as needed.

**AS-BUILT DESIGNER'S CERTIFICATION FOR INFILTRATION PROJECT**

I hereby state that I am a licensed professional and I certify by my signature and seal below, that I have observed the construction of the project named above to the best of my abilities with all due care and diligence, and that the project meets all of the MDC found in NCAC 02H.1051 in accordance with the permit documents, plans and specifications on file with or provided to the Division, except as noted on the "AS-BUILT" drawings, such that the intent of the stormwater rules and the general statutes has been preserved.

- Check here if this is a partial certification. Section/phase/SCM #? \_\_\_\_\_
- Check here if this is a part of a Fast-Track As-Built Package Submittal per .1044(4).
- Check here if the Designer did not observe the construction, but is certifying the project.
- Check here if pictures of the SCM are provided.

Printed Name \_\_\_\_\_ Signature \_\_\_\_\_

NC Registration Number \_\_\_\_\_ Date \_\_\_\_\_

SEAL:

Consultant's Mailing Address:

\_\_\_\_\_

City/State/ZIP \_\_\_\_\_

Phone Number \_\_\_\_\_

Consultant's Email address:

\_\_\_\_\_

- ① Circle N if the as-built value differs from the Plan. If N is circled, provide an explanation on Page 2.
- ② N/E = not evaluated (provide explanation on page 2) ③ N/A = not applicable to this project or SCM

This Certification must be completed in conjunction with the General MDC certification under NCAC 02H.1050

Consultant's Certification (MDC .1051)	①As-built	②N/E	③N/A
<b>A. Inlets / Pretreatment / Design Depths / Elevations</b>			
1. Inlets are located per the approved plans.	Y or N		
2. Pretreatment measures are provided? (Rooftop runoff does not require pre-treatment.)	Y or N		
3. BASIN only - the area and depth of the basin is consistent with the approved plans			
4. TRENCH only- the provided width, length and height of the trench are consistent with the approved plan.			
5. TRENCH only- the provided length and size of the perforated pipe is consistent with the approved plan.			
6. The bottom elevation of the basin / trench is consistent with the approved plans.			
7. The bypass elevation is consistent with the approved plan.			

8. The overflow elevation is consistent with the approved plan.			
<b>B. Soils / SHWT / Subgrade</b>			
1. The hydraulic properties of the insitu soils are in accordance with the soils report.	Y or N		
2. The lowest point of the infiltration system is a minimum of 2 feet above the SHWT.	Y or N		
3. If separation to the SHWT is less than 1 foot, the water table draws down to its pre-storm level within 72 hours.	Y or N		
4. The slope of the soil subgrade is $\leq 2\%$ .	Y or N		
<b>C. Drawdown Time</b>			
1. The system dewateres within 72 hours?	Y or N		
2. The Insitu soils were removed and replaced with suitable infiltration media to achieve the 72 hour drawdown.	Y or N		
	①As-built	②N/E	③N/A
<b>D. Observation Port</b> – for underground systems, a minimum of one inspection port has been provided.	Y or N		

Provide an explanation for every MDC that was not met, and for every item marked "N/A" or "N/E", below. Attach additional pages as needed:

**AS-BUILT DESIGNER'S CERTIFICATION GENERAL MDC**

I hereby state that I am a licensed professional and I certify by my signature and seal below, that I have observed the construction of the project named above to the best of my abilities with all due care and diligence, and that the project meets the below listed General MDC found in NCAC 02H.1050 in accordance with the permit documents, plans and specifications on file with or provided to the Division, except as noted on the "AS-BUILT" drawings, such that the intent of the stormwater rules and statutes has been preserved.

- Check here if this is a partial certification. Section/phase/SCM #? \_\_\_\_\_
- Check here if this is a part of a Fast-Track As-Built Package Submittal per .1044(3).
- Check here if the designer did not observe the construction, but is certifying the project.
- Check here if pictures of the SCM are provided.

Printed Name \_\_\_\_\_ Signature \_\_\_\_\_

NC Registration Number \_\_\_\_\_ Date \_\_\_\_\_

SEAL:

Consultant's Mailing Address:  
 \_\_\_\_\_  
 City/State/ZIP \_\_\_\_\_  
 Phone Number \_\_\_\_\_  
 Consultant's Email address:  
 \_\_\_\_\_

- ① Circle N if the as-built value differs from the Plan. If N is circled, provide an explanation on Page 2.  
 ② N/E = not evaluated (provide explanation on page 2) ③ N/A = not applicable to this SCM or project.

Consultant's Certification NCAC .1003((3) & General MDC .1050	①As-built	②N/E	③N/A
<b>A. TREATMENT REQUIREMENTS</b>			
1. The SCM achieves runoff treatment.	Y or N		
2. The SCM achieves runoff volume match.	Y or N		
3. Runoff from offsite areas and/or existing BUA is bypassed.	Y or N		
4. Runoff from offsite areas and/or existing BUA is directed into the permitted SCM and is accounted for at the full build-out potential.	Y or N		
5. The project controls runoff through an offsite permitted SCM that meets the requirements of the MDC.	Y or N		
6. The net area of new BUA increase for an existing project has been accounted for at the appropriate design storm level.	Y or N		
7. The SCM(s) meets all the specific minimum design criteria.	Y or N		

<b>B. VEGETATED SETBACKS / BUA</b>			
1. The width of the vegetated setback has been measured from the normal pool of impounded waters, the MHW line of tidal waters, or the top of bank of each side of rivers or streams.	Y or N		
2. The vegetated setback is maintained in grass or other vegetation.	Y or N		
3. BUA that meets the requirements of NCGS 143-214.7 (b2)(2) is located in the setback.	Y or N		
4. BUA that does not meet the requirements of NCGS 143-214.7 (b2)(2) is located within the setback and is limited to: a. Publicly funded linear projects (road, greenway sidewalk) b. Water-dependent structures c. Minimal footprint uses (utility poles, signs, security lighting and appurtenances)	Y or N		
5. Stormwater that is not treated in an SCM is released at the edge of the setback and allowed to flow through the setback as dispersed flow.	Y or N		
	①As-built	②N/E	③N/A
<b>C. STORMWATER OUTLETS</b> - the outlet handles the peak flow from the 10 year storm with no downslope erosion.	Y or N		
<b>D. VARIATIONS</b>			
1. A variation (alternative) from the stormwater rule provisions has been implemented.	Y or N		
2. The variation provides equal or better stormwater control and equal or better protection of surface waters.	Y or N		
<b>E. COMPLIANCE WITH OTHER REGULATORY PROGRAMS</b> has been met.	Y or N		
<b>F. SIZING</b> -the volume of the SCM takes the runoff from all surfaces into account and is sufficient to handle the required storm depth.	Y or N		
<b>G. CONTAMINATED SOILS</b> - infiltrating SCM's are not located in or on areas with contaminated soils.	Y or N		
<b>H. SIDE SLOPES</b>			
1. Vegetated side slopes are no steeper than 3H:1V.	Y or N		
2. Side slopes include retaining walls, gabion walls, or other surfaces that are steeper than 3H:1V.	Y or N		
3. Vegetated side slopes are steeper than 3H:1V (provide supporting documents for soils and vegetation).	Y or N		
<b>I. EROSION PROTECTION</b>			
1. The inlets do not cause erosion in the SCM.	Y or N		
2. The outlet does not cause erosion downslope of the discharge point during the peak flow from the 10 year storm.	Y or N		
<b>J. EXCESS FLOWS</b> - An overflow / bypass has been provided.	Y or N		
<b>K. DEWATERING</b> - A method to drawdown standing water has been provided to facilitate maintenance and inspection.	Y or N		

<b>L. CLEANOUT AFTER CONSTRUCTION</b> - the SCM has been cleaned out and converted to its approved design state.	Y or N		
<b>M. MAINTENANCE ACCESS</b>			
1. The SCM is accessible for maintenance and repair.	Y or N		
2. The access does not include lateral or incline slopes >3:1.	Y or N		
<b>N. DESIGNER QUALIFICATIONS (FAST-TRACK PERMIT)</b> - The designer is licensed under Chapters 89A, 89C, 89E, or 89F of the General Statutes.	Y or N		

Provide an explanation for every MDC that was not met, and for every item marked "N/A" or "N/E", below. Attach additional pages as needed:



# STAFF REPORT

## Town of Nags Head

### Planning & Development Department

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To: Board of Commissioners  
From: Kelly Wyatt, Planning Director  
Date: September 22, 2023  
Subject: Site Plan Review for Inn at Whalebone, 90-unit Hotel located at 6632 W. Pheasant Avenue (W. Lakeside Street).

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### **BACKGROUND INFORMATION**

The Site Plan for Inn at Whalebone was reviewed and approved by the Nags Head Board of Commissioners on October 5<sup>th</sup>, 2022. This was a Site Plan approval (and not a Vested Right approval), as such the site plan approval expires one (1) year from the date of approval, meaning the site plan approval for Inn at Whalebone will expire on October 5<sup>th</sup>, 2023. Planning staff were recently contacted by the applicant to discuss the upcoming expiration and what steps could be taken to extend the approval. It was at that time that staff notified the applicant of the requirements of Section 4.15, Time Limits for Site Plan, Zoning Permits, & Building Permits, of the Unified Development Ordinance, included below.

#### ***Section 4.15 - Time Limitations for Site Plans, Zoning Permits, & Building Permits.***

*The following provisions pertaining to time limitations to obtain building permits, and to commence, continue and complete construction, shall apply in all cases in which a site plan approval or development permit is required unless otherwise provided for in [Section 3.6](#), Establishment of Vested Rights.*

##### ***4.15.1. Time Limitation to Obtain Building Permit.***

*Final approval of a site plan by the Board of Commissioners or approval of a zoning permit by the UDO Administrator shall be valid for twelve (12) months from date of approval. The Building Inspector may issue a building permit within twelve (12) months from the date of such approval, provided that all other requirements are met. If a building permit is not issued within twelve (12) months from the date of final approval of the site plan or zoning permit, the site plan or zoning permit shall expire and the applicant must submit a new site plan conforming to the then current provisions of this Ordinance for review by the Planning Board and Board of Commissioners or a new zoning permit application for review by the UDO Administrator and pay the applicable fees. Upon the issuance of a building permit, the approval of the underlying site plan or zoning permit shall remain valid as long as the corresponding building permit remains valid as provided for in this section.*

Note that following site plan approval by the Board of Commissioners a **building permit** must be issued within twelve (12) months from the date of approval, or the site plan approval expires, and the applicant must then submit a new site plan review conforming with the current provisions of the Unified Development Ordinance. In speaking with the applicant, they are unable to submit a complete development permit application in anticipation of having the building permit issued in advance of October 5<sup>th</sup>, 2023. As such, they have resubmitted their previously reviewed and approved Site Plan Review application for the Planning Board and Board of Commissioners consideration. The staff report from the Board of Commissioners October 5<sup>th</sup>, 2022, meeting has been provided below.

The Planning, Fire, Police, and Public Services Department have all reviewed the new submittal and find it to be consistent with the previously approved October 5<sup>th</sup>, 2022, submittal. Town Engineer has reviewed the stormwater design, which has been slightly modified. They have removed the underground storage chamber system from the eastern parking lot and placed it along the western portion of the parking area with an underground storage chamber system. The change in location results in a greater subsurface storage area and an overall greater volume of stormwater storage for the site. This additional storage is concentrated on the western side of the site, which will mitigate any potential for stormwater impacts on the adjoining properties to the west. From an overall stormwater management volume requirement, 20,220 cubic feet is required, 25,932 cubic feet of storage has been provided. Mark up of revised stormwater plan has been included in the packet.

Note that the finalized Traffic Impact Analysis was received and reviewed by NCDOT in advance of the October 5<sup>th</sup>, 2022, Board of Commissioners meeting with no comments provided. Town Engineer David Ryan reached out to Jason Davidson, Division Traffic Engineer with NCDOT upon the new submittal to see if anything over the past year would result in them providing comments or necessitating additional review. Mr. Davidson confirmed that they did not have anything new or additional affecting this site moving forward.

### **Staff Recommendation**

Staff recommends approval of the Site Plan Review application as presented with the following condition carrying over from the previous review:

1. An approved subdivision plat addressing the portions of lots 24, 29, 30 and 31 and a recombination plat addressing lots 32, 33, 34, 35, 36, 22, 23, 26 and 27 be approved and filed at the Dare County Register of Deeds prior to the issuance of any development permits for the proposed hotel project.

### **Planning Board Recommendation**

At their September 19, 2023, meeting the Planning Board voted 4-1 to recommend approval of the Site Plan as proposed to include the previous condition as it pertains to the necessary subdivision and recombination plats as well as a new condition that a traffic impact analysis be conducted after one full year of operation to determine if any additional measures are warranted. This study should occur during the peak summer season.

## **STAFF REPORT FROM OCTOBER 5<sup>TH</sup>, 2022 BOARD OF COMMISSIONERS MTG**

### **GENERAL INFORMATION**

Applicant: House Engineering, P.C.

Application Type: Site Plan Review.

Purpose/Request: Construction of a four-story, 90-unit Hotel along with all necessary site improvements.

Property Location: 6632 W. Pheasant Avenue, Nags Head.

Existing Land Use: Vacant.

Zoning Classification of Property: SPD-C, Village at Nags Head Hotel District, and the Hotel Overlay District.

Zoning Classification of Surrounding Properties: Property to the north is zoned SPD-C, Village Recreation (Golf Course). Property to directly to the south and across Lakeside Street is zoned C-2, General Commercial and developed commercially (Duck Thru Gas Station) and residentially. Property to the west is zoned R-3, High Density Residential and is developed residentially (Roanoke Shores Subdivision). Property to the east and across US Highway 158 is zoned C-2, General Commercial and developed commercially (gas station and Forbes Retail).

Flood Hazard Zone of Property: Property is located in an X Flood Zone, per the Town of Nags Head local ordinance, the property is subject to an RFPE/LES of 9 ft. The proposed first floor elevation of the hotel is proposed to be at an elevation of 9.1' and is therefore compliant.

Land Use Plan Map/Policies: The 2017 Comprehensive Plan Future Land Use Map classifies this property as General Commercial. This proposal is consistent with this land use classification and stated Land Use Policies.

### **SPECIFIC INFORMATION**

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#### Applicable Zoning Regulations:

- Use Regulations: Section 9.36, Table of Uses and Activities for the SPD-C District lists "Hotel" as a Permitted Use within the Village Hotel District, with supplemental regulations set forth in Section 9.37.1. This section requires that Hotels be permitted in accordance with Section 9.36 provided that hotel suites comprise no more than thirty-three (33) percent of the total units in the building.

Section 9.24.5, Development Standards within the Hotel District states that in cases where the standards of this section conflict with standards contained in Article 10, Part VI, Commercial Design Standards, the more restrictive standard shall apply.

- Lot Coverage: Section 9.24.5.1 of the UDO, Coverage for Hotels states that for buildings with a height between 49 – 60 feet, the maximum building coverage shall not exceed 35%, maximum parking coverage shall not exceed 45% and must have a minimum landscaped area of 20%. Proposed building coverage is 12.94%, proposed parking coverage is 36.18% and there is a proposed landscaped area of 28.2%. Proposed coverage is compliant.
- Height: Section 9.24.5.5 of the UDO states that the maximum height for hotel developments is 60 feet. The proposed hotel has a height of 59.10 feet therefore height is compliant. If constructed, a height certification will be required prior to any final zoning inspections.
- Architecture Design Standards: Section 10.82 of the UDO, Applicability, states that Commercial Design Standards shall apply to all building construction or remodeling projects requiring a conditional use permit or site plan review. This project must adhere to the Commercial Design Standards set forth within Part VI of the UDO, Division II – Building Design. Staff has reviewed the submittal and finds the proposal to be compliant with the standards required in Building Design, Building Size/Dimensions, Building Height, Architectural Design/Elements, Site Design and Building Footprint Orientation. The following are a few examples lending to the compliance of the proposed structure: incorporation of dormers and other roof articulations, covered porch area, screened typical rooftop installations such as mechanical equipment, exhaust vents, residential style double-hung windows, use of gable brackets, workable shutters, and column trim.
- Parking: Pursuant to Article 10, Table 10-2, Required Parking by Use, Hotels shall provide parking at one parking space for each hotel unit without kitchen facilities. There are additional parking standards if hotel units have kitchens or there or conference, assembly, restaurant, or retail uses associated with the hotel. The proposed hotel units will not have kitchen facilities and there are no other uses proposed. With 90 hotel units proposed, 90 parking spaces are required. A total of 93 parking spaces have been proposed therefore parking is compliant.

In addition, Section 10.92.14.4 of the UDO, Surface Materials, requires that a minimum of twenty (20) percent of the surface area of the parking area and drive aisles shall be constructed of permeable surface materials. Approximately 22.9% has been proposed in permeable surface materials therefore the proposal is compliant.

- Buffering/Landscaping: Several sections of the Unified Development Ordinance speak to Buffering and Landscaping as it applies throughout this proposed site:
  - Section 10.92.6.2 of the UDO, Parking and Drive Aisle Setbacks, requires that where off-street parking is provided between the building and the street right-of-way line, a parking lot buffer of at least ten (10) feet in width shall be provided between the parking lot and the street

right-of-way. A compliant buffer has been proposed along Forrest Street, Lakeside Street and US 158 rights-of-way.

- Section 10.93.3.2 of the UDO, Commercial Transitional Protective Yards, requires increased landscaping to be provided and maintained when non-residential land uses are adjacent to a residential use or residential zoning district. Specifically, Section 10.93.3.2.2 states that where a high impact use abuts a residential district, a buffer strip of at least twenty-five (25) feet in width along the entire length of the lot shall be provided. The buffer yard shall consist of three rows of plant material. Hotel is a listed High Impact Use. The western property boundary abuts residential subdivision, Roanoke Shores and a compliant 25-foot-wide commercial transitional protective yard has been proposed along the entirety of the western property boundary.
- Section 9.24.5.3.2.3 of the UDO, Building Setback Requirements for Hotels over three stories in height states that for hotels west of NC 12, a minimum 25-foot natural or landscaped buffer shall be provided along the northern and southern boundaries. This is a Village Hotel standard that is more stringent than the Hotel Overlay standard. As noted in Section 9.24.5, the more stringent standard applies. The applicant has shown a compliant 25-foot-wide landscape buffer along both the northern and southern property boundaries and therefore the proposal is compliant.
- Section 10.93.3.7 of the UDO, Interior Parking Lot Landscaping, requires parking lot landscaping be provided at a minimum rate equal to ten percent of the total area of the parking spaces. The minimum area necessary for compliance is 1,643 square feet of vegetation. The applicant has proposed 1,937 square feet of vegetation (approx. 12%) therefore interior parking lot landscaping is compliant.
- Section 10.93.3.8 of the UDO, Vegetation Preservation/Planting Requirements, requires that new development projects either preserve a minimum of ten (10) percent of the lot's total area with existing natural vegetation and/or dune elevations or plant new vegetation in lieu of preservation. When existing vegetation cannot be preserved, the planting of a minimum of fifteen (15) percent of the lot's total area shall be required. The applicant has provided the required calculations and notation on the landscape plan demonstrating that the vegetation planting requirements will be met. While the applicant is proposing to preserve a small percentage of existing, mature vegetation in the northwest corner of the site, they have also proposed to provide approximately 18.8% of the site area in newly planted trees, shrubs and herbaceous plants and ornamental grasses therefore, this requirement has been met.
- Lighting: A lighting plan compliant with the requirements of Article 10, Part IV of the Unified Development Ordinance will be required prior to the issuance of any

development permits. In addition, a light audit will be required prior to issuance of occupancy permits.

- Signage: No additional signage is being proposed at this time.

Water and Sewage Disposal: The applicants' proposal includes the management of on-site wastewater through an advanced treatment system in combination with four (4) separate low-pressure disposal fields. The average daily design flow of 11,000 gallons per day will require approval through the NC Department of Health and Human Services, Environmental Health Section, On-Site Water Protection Branch. We request that copies of the permit approvals be submitted to the Town. Note, no development permits will be issued prior to receipt of the state permit approvals.

Traffic Circulation: Traffic circulation has been reviewed by the Town Engineer with the following comments:

- Two points of ingress and egress are depicted along Lakeside Street. Section 10.92.2.2.7.4 of the UDO indicates curb cuts in excess of one, on streets other than US 158, NC12/US64/264 or SR1243, are allowed if the Board of Commissioners determines that more than one curb cut is necessary or desirable to facilitate traffic flow. Staff feels two separate access points from Lakeside St. is appropriate to facilitate traffic flow in conjunction with emergency vehicle access and sanitation truck access.
- A loading zone has been provided in compliance with UDO Section 10.17.2.
- A draft copy of a Traffic Impact Analysis as prepared by VHB, a traffic consultant for the applicant, has been submitted for staff review and NCDOT review. Existing traffic data was collected in early September 2022 to review existing intersection turning movements along East & West Lakeside St from both S. Croatan Hwy. and S. Virginia Dare Trail. The collected data was analyzed based on the current roadway geometrics and traffic counts with no proposed improvements recommended at full project buildout. The traffic consultant will be available to present the findings of the report at the Board of Commissioners meeting. Comments of the NCDOT review have not been received at this time.

Stormwater Management: Stormwater management has been reviewed and approved by the Town Engineer with the following comments:

- This proposal is being reviewed under Section 11.4 General Standards for Commercial, Mixed Use, and All Non-Single Family or Non-Duplex Residential Development, Including Multi-Family Development which requires development of a property to provide stormwater control measures to retain runoff from a 4.3-inch design storm.
- Questions have arisen as to how this application should be reviewed regarding stormwater management and whether this proposal would be considered as part of the Village at Nags Head stormwater master plan approval. NC Department of Environmental Quality, Division of Energy, Mineral and Land Resources staff was contacted to discuss the matter. First and foremost, this application would NOT

be viewed as a common plan of development. A common plan of development means a site where multiple and distinct development activities may be taking place at different times on different schedules but governed by a single development plan. Since this Village at Nags Head stormwater plan did not account for the subject property, it should not be considered as part of the system, and it is appropriate to review under the current state and local stormwater regulations.

- During the review process a negative easement was discovered to be applied to the subject property. The negative easement was applied in conjunction with the 1984 approval of the gas station immediately to the east of the subject property. The verbiage of the negative easement is designed for the purpose of assuring the availability of adequate drainage for the gas station property. The proposed stormwater management design for the hotel proposal accounts for rainfall runoff from the proposed improvements in addition to the gas station property. In total, stormwater management improvements for both on-site runoff and off-site runoff are designed to manage runoff volume for an approximate 5 -inch rainfall event, which is in excess of the Town design storm event of 4.3 inches.
- Review of published data, to include the National Wetland Inventory Map and on-site soil investigation do not indicate the presence of hydric soils or wetlands.
- A NCDEQ High-Density stormwater permit shall be acquired, and copies shall be submitted to the Town in advance of the issuance of a building permit. Copies of the executed operation and maintenance agreement of the stormwater control measures shall be submitted in conjunction with the approved state permit.
- An engineer's certification shall be submitted to the Town in association with construction record drawings prior to the issuance of a certificate of occupancy.

Erosion & Sediment Control: Proposed Erosion and Sediment Control has been reviewed and approved by the Town Engineer with the following comments:

- The building permit submission for land disturbing activities shall include the ground stabilization and material handling and inspection, recordkeeping and reporting detail sheets as required by the NCG01 NPDES Construction Program.
- The applicant shall apply for a Certificate of Coverage through the NPDES Construction Program and prior to land disturbing activities occurring.
- A pre-construction conference shall be coordinated by the applicant to include the design engineer, contractor, and Town representatives prior to land disturbing activities.

Fire: The project will be required to comply with all applicable NC Fire Prevention Code requirements as part of building permit application review and issuance.

Public Works: The Public Works Director has reviewed and approved the proposed site plan as presented.

## **ANALYSIS**

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Staff finds that the proposal is consistent with the applicable use and development standards as well as relevant land use policies. In addition, staff finds that the proposed stormwater management plan satisfies the requirements of the negative easement via an approved alternative drainage plan which accommodates the 4.3-inch storm event for both the proposed hotel development as well as the existing improvements on the gas station property.

Article 4 Section 4 of the Unified Development Ordinance sets forth the procedures for subdivision approvals. Records reflect that the current property owner for this hotel site owns lots 32, 33, 34, 35, 36, 22, 23, 26, and 27 in their entirety and a portion of lots 24, 29, 30, and 31. The remaining portions of lots 24, 29, 30 and 31 are owned by Harrell Acquisitions, LLC. Until 1999 all these parcels were in common ownership. To date, although boundaries are referenced in transferring deeds, there has not been a formal subdivision approved pursuant to the Unified Development Ordinance for these parcels. As such, an approved subdivision or recombination plat addressing lots 24, 29, 30 and 31 must be approved and recorded prior to the issuance of any development permits for this project.

## **STAFF RECOMMENDATION**

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With the following condition, Staff recommends approval of the Site Plan Review application as presented:

2. An approved subdivision plat addressing the portions of lots 24, 29, 30 and 31 and a recombination plat addressing lots 32, 33, 34, 35, 36, 22, 23, 26 and 27 be approved and filed at the Dare County Register of Deeds prior to the issuance of any development permits for the proposed hotel project.

## **PLANNING BOARD RECOMMENDATION – AUGUST 16, 2022**

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At their August 16, 2022 meeting the Planning Board voted 4 – 2 to recommend approval of the Site Plan as proposed. Following the August 16<sup>th</sup> meeting of the Planning Board, the applicant has revised their stormwater management plan to manage additional runoff and has had consultant, VHB Engineering NC, P.C. conduct a Traffic Impact Analysis.

**Attachments:** *Site Plan Application & Checklist, Civil Drawings, Architectural Elevations & Renderings, Grading and Drainage, Supplemental data.*