



AGENDA

**TOWN OF NAGS HEAD BOARD OF COMMISSIONERS
NAGS HEAD MUNICIPAL COMPLEX - BOARD ROOM
WEDNESDAY, NOVEMBER 6, 2024 9:00 A.M.**

A. CALL TO ORDER / MOMENT OF SILENCE / PLEDGE OF ALLEGIANCE

B. ADOPTION OF AGENDA

C. RECOGNITION

1. Recognition

NEW EMPLOYEE - Police Officer Kyle Kuhar - October 1, 2024

FIVE YEARS - Public Services Office Assistant Sue Cummings - October 28, 2019

TWENTY YEARS - Accounts Payable Specialist Vicky Wright - October 4, 2004

PRESENTATION - Earl Murray Jr Employee of the Year

- Nominees presented by Dept Heads

- Closed Session for Board consideration of nominees pursuant to GS 143-318.11(a)
(2)

- Designation of Earl Murray Jr Employee of the Year for 2024

PRESENTATION - Nags Head Woods Annual Report - Aaron McCall, Northeast Land
Steward

Documents:

[11 C RECOGNITION SUMMARY.PDF](#)

[11 C NH WOODS ANNUAL REPORT.PDF](#)

D. PUBLIC COMMENT

E. CONSENT AGENDA

1. Consideration Of Budget Amendment #5 To FY 24/25 Budget

Documents:

[11 E1 BUDGET AMEND SUMMARY.PDF](#)

[11 E1 BUDGET AMEND TO FY 24-25 5.1-5.2.PDF](#)

[11 E1 BUDGET AMEND TO FY 24-25 5.3 FITNESS FACILITY.PDF](#)

2. Consideration Of Tax Adjustment Report

Documents:

[11 E2 TAX ADJ SUMMARY.PDF](#)
[11 E2 TAX ADJ MSD REPORT.PDF](#)
[11 E2 TAX ADJ REPORT.PDF](#)

3. Approval Of Minutes

Documents:

[11 E3 MINUTES SUMMARY.PDF](#)
[11 E3 OCT 2 2024 BOC MINS.PDF](#)

4. Consideration Of Amendment To Town Code Sec 44-35 Re: Water Cut-Offs

Documents:

[11 E4 WATER CUT OFF SUMMARY.PDF](#)
[11 E4 WATER CUT OFF SEC 44-35 ORD.PDF](#)

5. Consideration Of Fee Waiver For Training Burn

Documents:

[11 E5 FEE WAIVER TRAINING BURN SUMMARY.PDF](#)

6. Consideration Of Policy For Streaming/Recording Board Meetings

Documents:

[11 E6 LIVESTREAMING PROCESS SUMMARY.PDF](#)
[11 E6 LIVESTREAMING PROCESS POLICY.PDF](#)

7. Consideration Of Reimbursement Resolution In Support Of Property Purchase

Documents:

[11 E7 REIMB 4222 S CRO HWY SUMMARY.PDF](#)
[11 E7 REIMB 4222 S CRO HWY RES.PDF](#)

8. Consideration Of Design Scope Of Services For Replacement Fitness Center

Documents:

[11 E8 FITNESS CENTER REPLACEMENT SUMMARY.PDF](#)
[11 E8 FITNESS CENTER REPLACEMENT OCA MEMO.PDF](#)

9. Request For Public Hearing To Consider Amendments To UDO Re: Hotel Parking Standards

Documents:

[11 E9 RPH UDO HOTEL PARKING SUMMARY.PDF](#)

F. PUBLIC HEARINGS

1. Public Hearing To Consider A Special Use/Site Plan Review For The Construction Of A

2- Story, 8- Bedroom Dormitory

Documents:

[11 F1 PH DORMITORY AT CCC SUMMARY.PDF](#)
[11 F1 PH DORMITORY AT CCC SITE PLAN.PDF](#)
[11 F1 PH DORMITORY AT CCC PN.PDF](#)

2. Public Hearing To Consider Various Amendments To The UDO Within SPD-C, Village At Nags Head Commercial-1 Zoning District To Accommodate A New Use, EMS Station

Documents:

[11 F2 PH UDO EMS STATION SUMMARY.PDF](#)
[11 F2 PH UDO EMS STATION ORD.PDF](#)
[11 F2 PH UDO EMS STATION STATEMENT OF CONSISTENCY.PDF](#)
[11 F2 PH UDO EMS STATION PN.PDF](#)

G. REPORTS AND RECOMMENDATIONS FROM THE PLANNING BOARD AND THE PLANNING AND DEVELOPMENT DIRECTOR

1. Update From Planning Director

Documents:

[11 G1 PLANNING REPORT SUMMARY.PDF](#)
[11 G1 PLANNING MONTHLY REPORT.PDF](#)

H. NEW BUSINESS

1. Committee Reports

Documents:

[11 H1 COMMITTEE REPORTS SUMMARY.PDF](#)

2. Consideration Of Amendment To Traffic Control Map Re: S. Linda Lane

Documents:

[11 H2 TCM NP-TAZ LINDA LANE SUMMARY.PDF](#)
[11 H2 TCM NP-TAZ LINDA LANE ORD.PDF](#)

3. Discussion Of Scope For Design/Engineering Of 2026/2027 Beach Nourishment Project - Consideration of amendment to Beach Nourishment Maintenance Capital Project Ordinance with associated budget amendment

Documents:

[11 H3 BN 2026-2027 ENGINEERING AND PERMITTING SCOPE SUMMARY.PDF](#)
[11 H3 BN 2026-2027 ENGINEERING AND PERMITTING SCOPE.PDF](#)
[11 H3 BN CAP PROJ AMEND 13 ORD.PDF](#)

I. ITEMS REFERRED TO AND PRESENTATIONS FROM TOWN ATTORNEY

J. ITEMS REFERRED TO AND PRESENTATIONS FROM TOWN MANAGER

1. Presentation – Moffat & Nichol - Time Specific 11 Am
 - Consideration of update to the Town's Beach Maintenance and Monitoring Plan
 - Discussion of Beach Nourishment triggers

Documents:

[11 J1 UPDATED BN MONITORING AND MAINTENANCE SUMMARY.PDF](#)
[11 J1 UPDATED BN MONITORING AND MAINTENANCE PLAN.PDF](#)

2. Update On Construction Of The Public Services Facility

Documents:

[11 J2 UPDATE ON PUBLIC SERVICES CONSTRUCTION SUMMARY.PDF](#)

3. Consideration Of Acceptance Of A North Carolina Land & Water Fund Grant To Place Conservation Easements on Town-Owned Properties (parcels 026404001, 006114000, and 005946000) Surrounding the Fresh Pond and in Nags Head Woods

Documents:

[11 J3 LWF GRANT SUMMARY.PDF](#)
[11 J3 LWF GRANT AWARD LETTER .PDF](#)
[11 J3 CONSERVATION EASEMENT MAP.PDF](#)
[11 J3 NH WOODS PROTECTION MAP.PDF](#)

K. BOARD OF COMMISSIONERS AGENDA

L. MAYOR'S AGENDA

1. Discussion Of Appointment Process To Fill Vacant Board Of Commissioners Seat

Documents:

[11 L1 MAYOR REQ FOR BOC CANDIDATES SUMMARY.PDF](#)
[11 L1 DRAFT APPLICATION BOC APPOINTMENT.PDF](#)

M. CLOSED SESSIONS

1. Request For Closed Session To Consider The Unsealing Of Various Closed Session Minutes Pursuant To GS 143-318.11(A)(1)

Documents:

[11 M1 CS SUMMARY.PDF](#)

N. OTHER BUSINESS

O. ADJOURNMENT



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners
REGULAR SESSION: November 6, 2024

AGENDA ITEM C.1.

NEW EMPLOYEE – Police Officer Kyle Kuhar – October 1, 2024

FIVE YEARS – Public Services Office Assistant Sue Cummings – October 28, 2019

TWENTY YEARS – Accounts Payable Specialist Vicky Wright – October 4, 2004

PRESENTATION – Earl Murray Jr Employee of the Year

- Nominees presented by Dept Heads
- Closed Session for Board consideration of nominees pursuant to GS 143-318.11(a)(2)
- Designation of Earl Murray Jr Employee of the Year for 2024

PRESENTATION - Nags Head Woods Annual Report - Aaron McCall, Northeast Land Steward

Prepared by

Brittany Phillips, Deputy Town Clerk

Reviewed by

Brittany Phillips
Carolyn Morris
Andy Garman

Staff Comments/Recommendation

Specific Action Requested

Summary

Attachments

1. 11 C NH Woods Annual Report



2023-2024 Annual Report

TOWN OF NAGS HEAD

OCTOBER 2024



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1.0 VISITOR SERVICES

Visitor services, especially through the summer months, continue to be an important component of Nags Head Woods Preserve (Preserve) management.

This year our new signage improved traffic flow by highlighting our outdoor informational kiosk which provides visitors with maps, Preserve rules, and other literature.

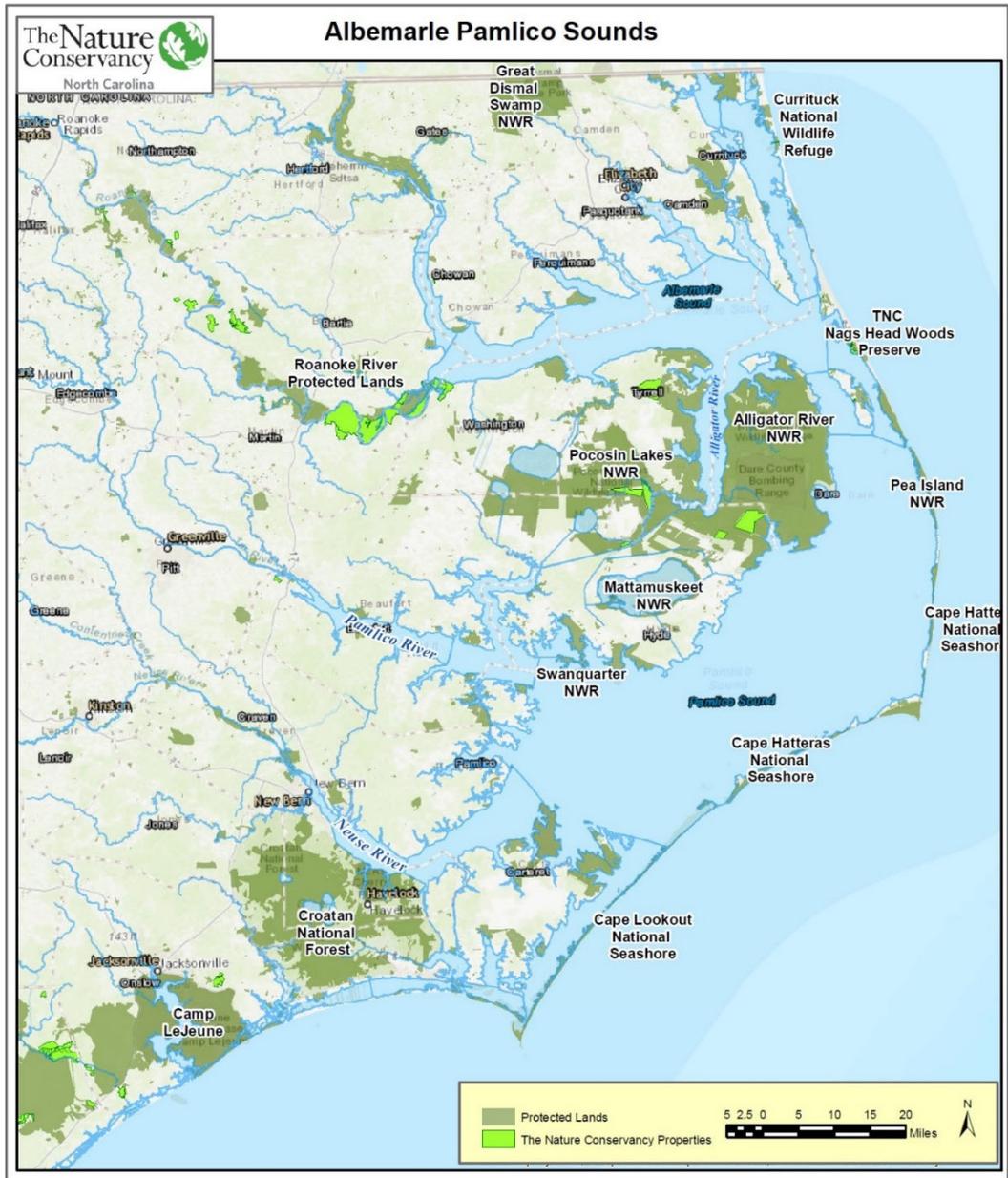
Indoor visitor reception is generally available most weekdays during normal business hours. Restrooms, drinking fountain and water bottle refill services, air conditioning, a few comfortable chairs and opportunity to interact with staff are often appreciated by hikers during the hot months.

1.1 Office

Our offices have been more routinely open during the regular work week. But some days during the regular work week, you may not see us due to a reduced staff who are still working flexible, hybrid work schedules and juggling field work. We strive to have both the Nags Head Woods Preserve administrative office and indoor visitor facilities open for visitors during the regular work week, Monday – Friday 9 am to 5 pm, especially during the summer months when visitor numbers are high.

1.2 Staff

Nags Head Wood Preserve is home base for The Nature Conservancy's Albemarle-Pamlico Sounds Office. We have three staff based here who live on the Outer Banks and one new hire based out of a home office in Edenton. Their work stretches from the Preserve to the lands and waters around the Albemarle-Pamlico Sounds which includes the five river basins – Pasquotank, Chowan, Roanoke, Tar-Pamlico, and Neuse – and six major sounds – Albemarle, Pamlico, Core, Croatan, Currituck, and Roanoke - spanning northeastern North Carolina and southern Virginia. See map 1 for region and protected lands.



Map 1. Protected lands in the Albemarle-Pamlico Sounds region

Aaron McCall is our Northeast Land Steward. Aaron’s work goes beyond his management of Nags Head Woods to the over 75 other large tracts of land owned or managed by The Conservancy in this region. He also oversees the planning, design, and implementation of ecological restoration projects such as building of shoreline oyster reefs or reconnection of floodplain and creek habitat along the Roanoke River.

Lora Eddy is our Conservation Coordinator and Resilience Specialist. She supports stewardship activities and office management at Nags Head Woods Preserve this extends from maintaining our two

pollinator gardens to support of our broader restoration and protection work across the A-P region. Her resilience work is focused on providing technical assistance to communities to facilitate their use of natural and nature-based strategies to manage their risk to coastal hazards and the impacts of climate change.

Eric Soderholm, who is our Coastal Wetlands Restoration Lead, coordinates the restoration of peatlands and forested wetlands on both public and private lands in the Coastal Plain of North Carolina to improve their biodiversity, ecosystem function, resiliency, and climate mitigation potential of these incredible natural systems.



Photo 1 - Dr. Aaron Bunch, image credit: Lora Eddy

We recently hired a new Coastal Applied Scientist to lead our planning and coastal conservation work. Dr. Aaron Bunch joined TNC in September 2024. Bunch is from northeastern North Carolina and completed his undergrad at NCSU, his master's at University of Florida studying fisheries and aquatic sciences, and his received his Ph.D. from Clemson. He spent 11 years at state agencies including NC Wildlife Resources Commission and game agencies in Arizona and Virginia. He will guide planning and science that will advance the conservation and restoration of our important coastal habitats in NC.

In June 2024, we welcomed 2 temporary staff in partnership with Conservation Corps North Carolina (<https://corpsnc.org/>).

Devon Bolt joined us for 8-weeks as a Coastal Habitat intern. She reviewed what indicators we should monitor to track changes due to climate in our maritime forest habitats, owned by The Nature Conservancy and our partners at the NC Coastal Reserve sites: Buxton Woods and Kitty Hawk Woods Reserves. She started a water monitoring project to help with assessing potential salinity change in the waters around these forests systems.

Hannah Keiper spent 12-weeks as our Preserve Assistant to help with our seasonal influx of visitors. Hannah primarily focused on stewardship activities



Photo 2 - Intern Devon Bolt, image credit: Lora Eddy

Photo 3 - Intern Hannah Keiper, image credit: Lora Eddy



on the trails and office as well as providing services to our visitor. Additionally, she assisted with butterfly monitoring in the woods. The

1.3 Preserve Visitation – Trail Counters

We continue to monitor the six infrared trail counters which were installed in Nags Head Woods Preserve in January 2021. This data helps us understand the use of the woods for both trail and road traffic.

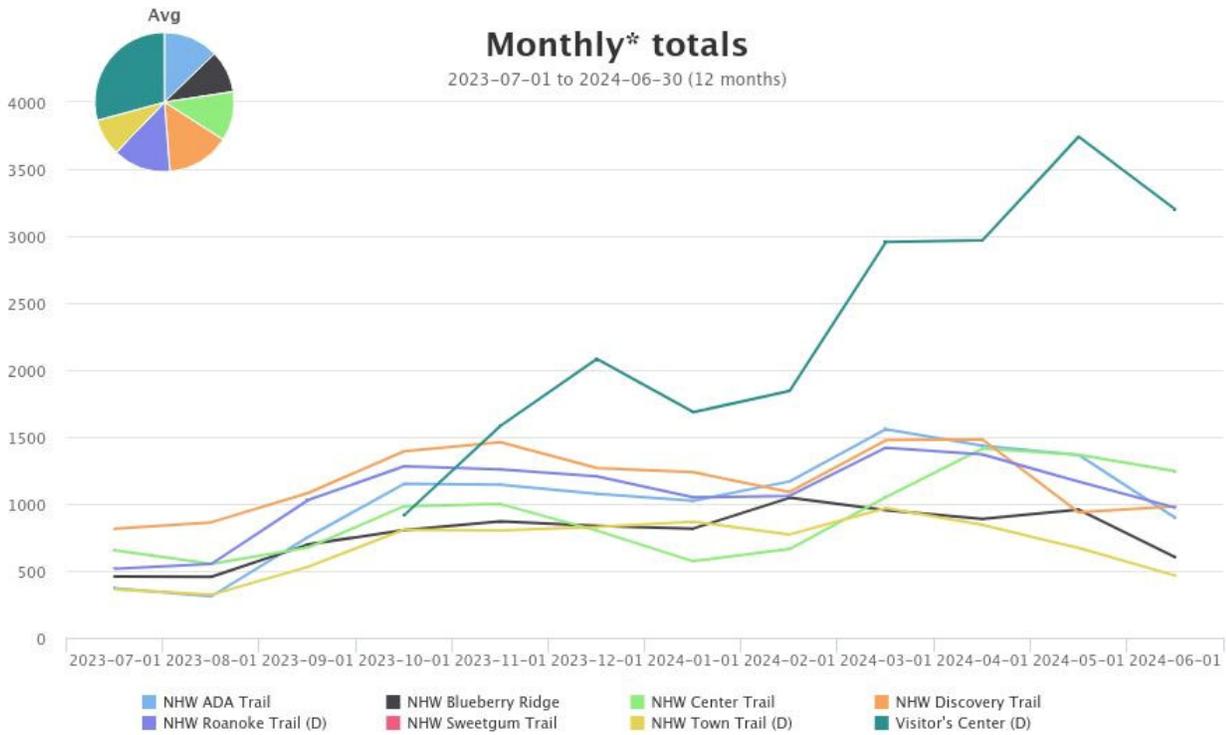
This reporting period we relocated one of our trail counters from Sweetgum Swamp to the visitor center so that we can capture a count for the number of visitors that park, use our facilities, or maybe grab a brochure.

29,050 visitors have been counted here since installation October 16, 2023 to June 30, 2024. This averages to 79 per day, but at this time our count trends here are incomplete as the station has only been established for 231 days.

The counters are reporting 22 – 40 hikers per day or between 700 – 1,200 hikers per month on each of the trails. Our most popular trails are the Discovery, Roanoke, ADA, and Center trails.



Photo 4 - Trail counter

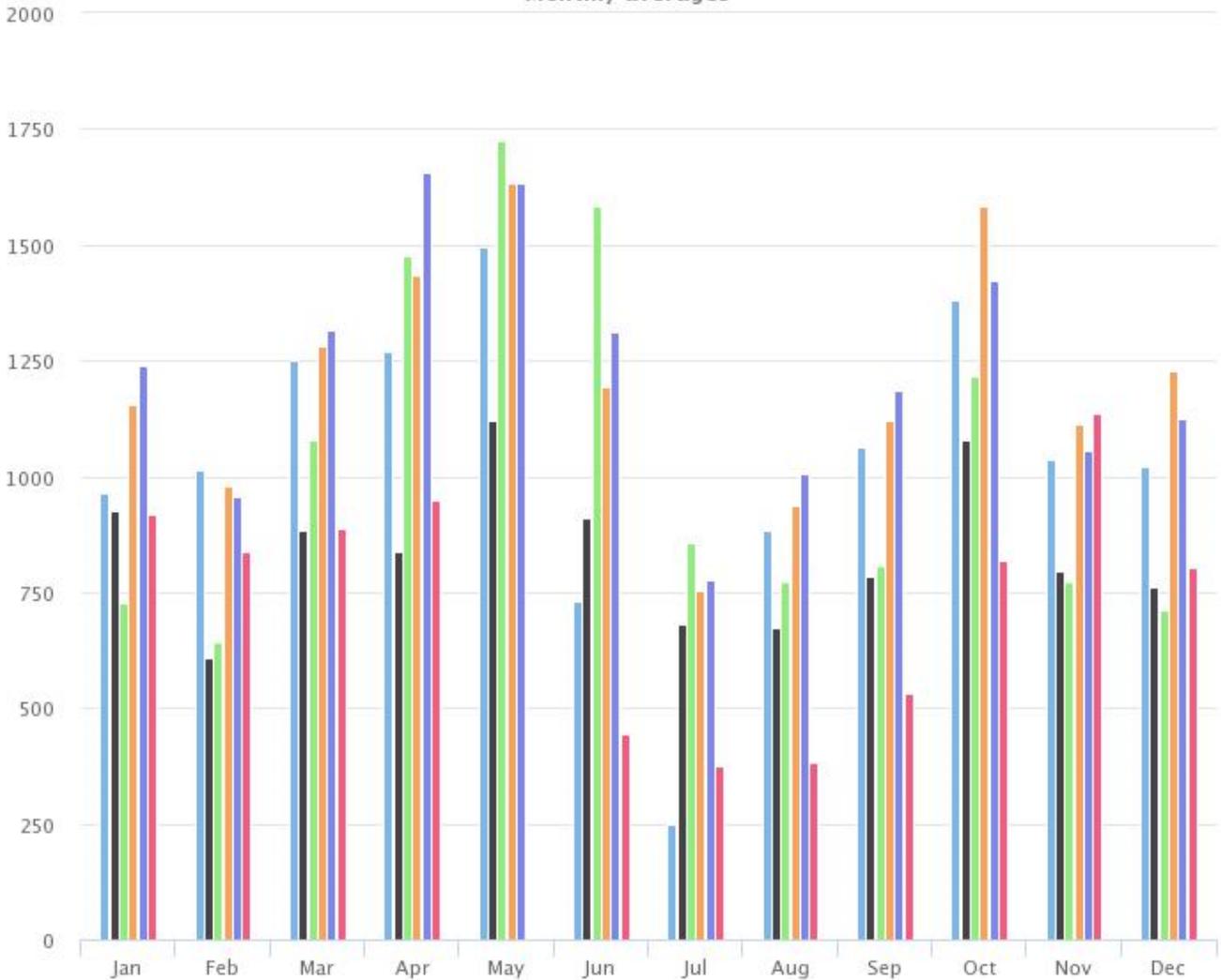


Graph 1. All Trail Counters by Month Line Graph

Months of the year

2022-07-01 to 2023-07-01

Monthly averages

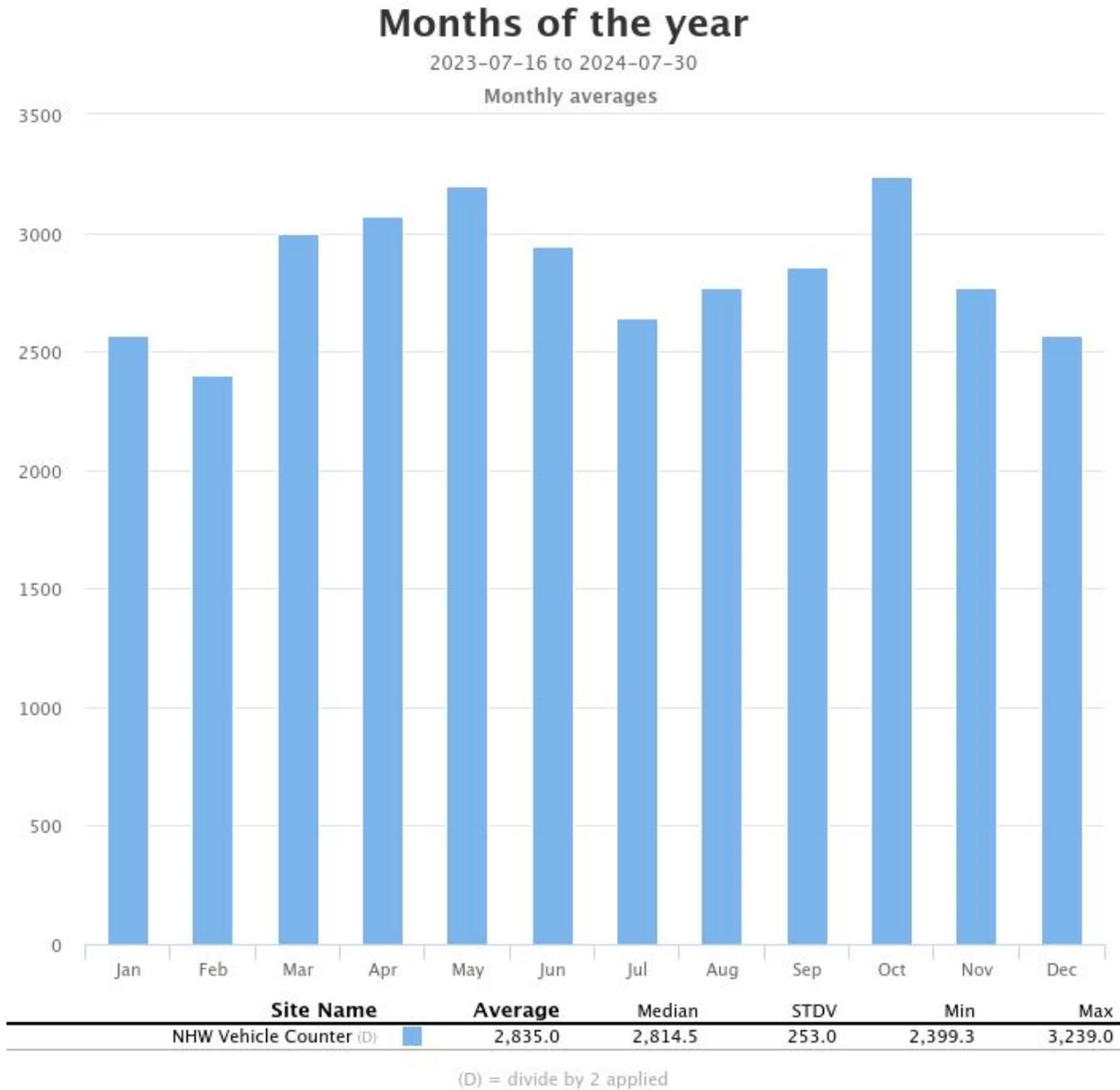


Site Name	Average	Median	STDV	Min	Max
NHW ADA Trail	1,029.4	1,028.5	312.8	248.0	1,495.0
NHW Blueberry Ridge	838.0	815.5	149.7	608.0	1,122.0
NHW Center Trail	1,030.4	831.2	362.8	641.0	1,723.0
NHW Discovery Trail	1,200.8	1,174.0	247.2	752.7	1,634.0
NHW Roanoke Trail (D)	1,223.2	1,212.0	252.7	776.9	1,654.0
NHW Town Trail (D)	734.6	818.0	245.8	373.9	1,134.0

(D) = divide by 2 applied

Graph 2. All Trail Counters by Month Bar Graph

We also have a roadside vehicle counter, and with 12 months' worth of data for this reporting period, we are seeing just an average of 2,835 vehicles per month on Ocean Acres and Old Nags Head Wood Road.



Graph 3. Ocean Acres Vehicle Counter by Month

1.4 Signage

Since we are mostly a self-guided facility, signage is a critical part of our visitor services.



Photo 5 - New parking directional signage, image credit: Lora Eddy

In 2021 The Nature Conservancy’s Nags Head Woods staff worked with Destination by Design, a NC firm to design a signage master plan for accessibility and visibility that offered clear message and direction to all visitors. The resulting recommendation was to create larger more durable wayfinding and navigation signage to guide our visitors to the trails.

The big new this year was the addition of new directional signs, larger trail head signs for trails 4 and 5 as well as our ADA trail, and two new entrance signs. This completes Phase 1 and 2 of our signage projects. We have begun planning efforts on Phase 3 of our signage which will improve signage for the Town/Barnes Street Park and YMCA Trails.

These projects were funded by the Town annual

contributions as well as a generous grant from the Outer Banks Community Foundation.

We are also in the process of redesigning the Nags Head Woods trail map to aid to these wayfinding projects and improve visitor experience.

These projects help ensure a safe and educational visit for all kinds of visitors.



Photo 6 - New entrance signage on Ocean Acres Drive, image credit: Lora Eddy

1.5 Audio Tour

Since its debut in the summer of 2019, our audio tour has been well received. Summer camp programs and visitors can call in for access to a guided hike about the 18th century community that was present in the Woods. The tour is based upon audio interviews for the book “Everyone Helped His Neighbor: Memories of Nags Head Woods”.

The audio tour has a cumulative number of 2,040 calls.

In 2019 in partnership with Manteo Elementary School Dual Language Immersion teacher, Alejandra Oropeza we added a Spanish translation of the audio tour which was highlighted on our Facebook and Instagram social media posts during Hispanic Heritage month.

1.6 Facilities and Trails

Maintaining our over 8 miles of trails, 5 wooden bridges, 7 wooden benches, and 1,000 linear feet of wooden boardwalk on the ADA trail is a big part of the work at Nags Head Woods Preserve.

Again, thanks to assistance from App State we replaced another 100 feet of wood decking on our ADA trail. Staff and volunteers continue to work on replacing sections of this wooden boardwalk.

App State also conducted much needed general maintenance and improvements around the parking area such as an improved oyster bin area and screen around the portable toilet.

We are still working towards addressing sections of our wooden boardwalk along the Discovery Trail as well as addressing some much-needed bridge repairs on the Center Trail.

We continue to seek funding for our Pavilion refresh project which will make improvements to the exhibits and displays in our Pavilion. Our Pavilion currently serves as an open meeting space for TNC and community. These improvements will enhance our meeting space as well as provide additional



Photo 7 - ADA Trail boardwalk repairs



Photo 8 - New Oyster Recycling bin area

Photo Credits: Lora Eddy/TNC

opportunity for self-guided educational displays and information for visitors, community and local partners. Stay tuned as we continue to work on improvements to our Pavilion space and trails.

2.0 Partnerships, Volunteers, Community

In addition to everyday interactions with preserve visitors, NHW participates and partners with others for successful outreach events.

2.1 Interns and Volunteers

In the fall of 2023, we hosted 2 student volunteers from East Carolina University’s Coastal Studies Institute Outer Banks Field Site Program. They helped with stewardship tasks around the Preserve such as trail maintenance and invasive species removal. As well as working with Currituck County to update their Open Space Preservation inventory in support of their continued enrollment in the National Flood Insurance’s Community Rating System program.

In March 2024, we hosted ten students from Appalachian State University at Nags Head Woods during their alternative spring break. With their assistance we replaced approximately 100 feet of wood decking on our ADA trail, conducted much needed general trail maintenance, and constructed a 100-foot loose shell oyster reef behind Pea Island National Wildlife Refuge in partnership with the refuge and NCCF oyster shell recycling program.

We want to recognize our dedicated volunteer Chip Walton who for the past almost 3 years has been instrumental in improvements at the Preserve from signage to repairs to our boardwalks.

In total for our 2024 report period, we had over 958 Volunteer Hours logged at Nags Head Woods Preserve.



Photo 9 - 2024 App State Alternative Spring Break Group image credit: Haley Radogna

2.2 Education through Partnerships

April 2023 in partnership with the NC Aquarium, we hosted First Flight Elementary School and Nags Head Elementary's 5th grade classes at the Preserve for the Sea2Sound (S2S) event. A total of 135 students were a part of this program, which is a full day, hands-on science field trip that starts at the Atlantic Ocean and traverses the width of OBX, mostly on the Town Trail in Nags Head.

Additionally for the past 3 years Rhana Paris, NC Aquarium Outreach Coordinator, has given a "Maritime Forest Ecosystem" virtual program at Nags Head Woods.

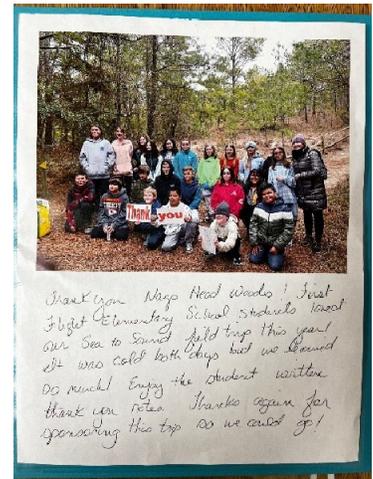


Photo 11 - TNC Intern Hannah leads NC Aquarium camp on guided hike image credit NC Aquarium

This year there were fifty-four 5th graders from Sherwood ES in Gaston County and 3 teachers who participated.

Photo 10 - Sea2Sound Thank you note

This summer our interns held weekly guided hikes and open house events in June and July. In partnership with the North Carolina Aquarium, Coastal Studies Institute, and Dare County Parks and Recreation we also hosted guided hikes for summer camp programs.

In total all these educational efforts reached over 292 visitors and students.

3.0 Conservation, Management, Biology

3.1 Invasive Species

This year we contracted with a local licensed trapper to control the nutria that had made a home in our ponds. Nutria are large rodents that are native to South America and were introduced in the 1800s for fur trade. Nutria have destroyed tens of thousands of acres of marsh and wetlands on the Gulf and Atlantic coasts. They will eat just about any plant and eat all the way through its roots – destroying plants. The trapper caught 11 individuals over 6 weeks.

We continue to manage invasive plants within Nags Head Woods. This is hard work and a constant effort during the warmer months. The ecology of Nags Head Woods would be critically impacted without continued management and control of these invasive plants.

For the second year in a row, we have added a new invasive plant to our list.

Thank you for doing your part in encouraging residents to not plant these species as many are commonly sold at smaller local and large landscaping stores. A good resource to check is the Invasive Plant Atlas of the United States: <https://www.invasiveplantatlas.org/>

See table below for detailed management and control practices:

Invasive	Management & Source
<p data-bbox="154 726 690 762">Asiatic (common) dayflower - commelina</p>  <p data-bbox="170 1388 646 1415">This Photo by Stefan.Iefnaer is licensed under CC</p>	<ul data-bbox="808 730 1372 976" style="list-style-type: none">• MANAGEMENT: Controlled by hand pulling• SOURCE: It comes in with the gravel for the roadways. It can spread aggressively and is resistant to herbicides. Seen along the roadway with blue/purple flowers and stems that are erect.

Invasive	Management & Source
<p>Bush Clover – lespedeza</p>  <p>This Photo by Katja Schulz is licensed under CC</p>	<ul style="list-style-type: none"> • MANAGEMENT: Controlled by hand cutting and herbicide • SOURCE: It comes in with the gravel for the roadways therefore very difficult to manage. It can form massive strips along the roadway with knee high long stems and small pea-like white flowers and seeds/spreads quickly.
<p>Russian Olive</p>  <p>This Photo by Unknown Author is licensed under CC</p>	<ul style="list-style-type: none"> • MANAGEMENT: Controlled by hand cutting and herbicide • SOURCE: Russian Olive is a popular ornamental sold extensively at local stores. Its seeds are brought in by birds, unknowing hikers, and vehicles.
<p>Oriental Bittersweet</p>  <p>Image via UGA Bugwood Center for Invasives</p>	<ul style="list-style-type: none"> • MANAGEMENT: controlled by hand cutting and herbicide • SOURCE: Once a popular ornamental and brought in by birds. It can form massive swaths of heavy cover in trees quickly.

Invasive	Management & Source
<p>Japanese Stilt Grass</p>  <p>UGA2308019 Image via UGA Bugwood Center for Invasives</p>	<ul style="list-style-type: none"> • MANAGEMENT: controlled by herbicide • SOURCE: It comes in with the gravel for the roadways therefore very difficult to manage. It can form massive swaths of ground cover vegetation quickly.
<p>English Ivy</p>  <p>Image via Flickr by James St. John</p>	<ul style="list-style-type: none"> • MANAGEMENT: controlled by hand cutting and herbicide • SOURCE: English Ivy also a popular ornamental for ground cover. brought in by birds, hikers and vehicles. Some English Ivy may have been planted by members of the Nags Head Woods community in the 18th and 19th century and by the company that had planned to develop the Woods in the 1970's.

3.2 Deer Management

Since 1995 we have coordinated with the North Carolina Wildlife Resources Commission to manage the Nags Head Woods deer population through a registered bow hunt. The bow hunt helps manage the deer population to alleviate nutritional stress and lessen the probability of further declines in herd health.

The bow hunt offers affordable, important heritage and consumptive recreation for local citizens who hunt. Many hunters provide important feedback about the Preserve.

The regular bow hunt season ran from September 9, 2023, to January 1, 2024, with an extended Urban Archery season which closed February 18, 2024. A total of 37 hunters registered for the 2023-2024 season, with a total of 9 deer harvested.

Hunter's requirements:

- A current North Carolina hunt permit,
- Attend an orientation session at Nags Head Woods,
- Complete registration forms including vehicle information,
- Pay a \$50 fee,
- Display a registration card in their vehicle while hunting, and
- Complete a year-end survey.



We are very grateful for the Town of Nags Head's support both this year and in past years!



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM E.1.

Consideration of Budget Amendment #5 to FY 24/25 Budget

Prepared by

Amy Miller, Deputy Town Manager/Finance Officer

Reviewed by

Amy Miller
Carolyn Morris
Andy Garman

Staff Comments/Recommendation

Specific Action Requested

This item is provided for Board review and approval.

Summary

Attached please find Budget Amendment #5 to the FY 24/25 Budget which is provided for Board review and approval at the November 6, 2024 Board of Commissioners meeting. Budget Amendment #5 is in accordance with the FY 24/25 Budget Ordinance, adopted at the June 5, 2024 meeting.

Attachments

1. 11 E1 Budget Amend to FY 24-25 5.1-5.2
2. 11 E1 Budget Amend to FY 24-25 5.3 Fitness Facility



**BUDGET AMENDMENT REQUEST
FY 2024-2025**

BUDGET AMENDMENT NO. 5
Amendment 5.1
USE OF FUNDS

SOURCE OF FUNDS

CODE	ACCOUNT	AMOUNT		CODE	ACCOUNT	AMOUNT
610-510200	General Fund Police Expenditures Salaries	10,240.00		610-543900	General Fund Police Expenditures Uniforms	10,240.00
TOTAL CHARGES		\$ 10,240.00		TOTAL CREDITS		\$ 10,240.00

JUSTIFICATION

Use salary money to purchase ERT ballistic vests, shields, gas masks, and riot helmets.
These items have currently reached their expiration dates and are not recommended for use.

ADMINISTRATIVE SERVICES 10/30/2024
RECOMMENDED BY _____ DATE

APPROVED BY BOC: _____ DATE

POSTED TO GENERAL LEDGER:

INITIALS _____



**BUDGET AMENDMENT REQUEST
FY 2024-2025**

**BUDGET AMENDMENT NO. 5
Amendment 5.2**
USE OF FUNDS

SOURCE OF FUNDS

CODE	ACCOUNT	AMOUNT		CODE	ACCOUNT	AMOUNT
10-473011	General Fund Revenues Contributions Fire/Rescue	1,500.00		730-544000	General Fund Fire Expenditures Professional Fees	1,500.00
TOTAL CHARGES		\$ 1,500.00		TOTAL CREDITS		\$ 1,500.00

JUSTIFICATION

Donation will be used to implement new cancer screening initiative.

ADMINISTRATIVE SERVICES 10/30/2024
RECOMMENDED BY _____ DATE

APPROVED BY BOC: _____ DATE

POSTED TO GENERAL LEDGER:

INITIALS _____



**BUDGET AMENDMENT REQUEST
FY 2024-2025**

BUDGET AMENDMENT NO. 5
Amendment 5.3
USE OF FUNDS

SOURCE OF FUNDS

CODE	ACCOUNT	AMOUNT		CODE	ACCOUNT	AMOUNT
10-491000	General Fund Revenues Proceeds from installment financing	93,825.00		420-577200	General Fund Town Manager Expenditures Capital outlay buildings	93,825.00
TOTAL CHARGES		\$ 93,825.00		TOTAL CREDITS		\$ 93,825.00

JUSTIFICATION

Design services for the replacement fitness center per OCA scope dated Nov. 1.
This project is in the CIP and the cost is within the budgeted amount allocated toward design services.
The debt service on this project has been budgeted and the project costs will be offset by financing revenue.

ADMINISTRATIVE SERVICES 11/1/2024
RECOMMENDED BY _____ DATE

APPROVED BY BOC: _____ DATE

POSTED TO GENERAL LEDGER:

INITIALS _____



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM E.2.

Consideration of Tax Adjustment Report

Prepared by

Linda Bittner, Tax Collector

Reviewed by

Linda Bittner
Carolyn Morris
Andy Garman

Staff Comments/Recommendation

Specific Action Requested

This item is provided for Board review and approval.

Summary

Attached please find the list of adjustments to the 2024 Tax Levy (per information received from Dare County) for the monthly Property and MSD valuations.

These reports are submitted for your approval at the November 6, 2024 Board of Commissioners meeting.

Attachments

1. 11 E2 Tax Adj Report
2. 11 E2 Tax Adj MSD Report

Town of Nags Head, North Carolina
ANALYSIS OF CURRENT 2023-2024 MSD TAX LEVY
2024 Tax Levy As of October 29, 2024 for November 6, 2024 BOC Meeting

BEACH NOURISHMENT DISTRICT			MSD Excluding Registered Motor Vehicles	Registered Motor Vehicles
MSD Valuation	Rate	Total Levy		
Original MSD Levy:				
MSD Beach Nourishment at Current 2024 Dist 1 Rate	581,289,973	0.00143	831,244.89	831,244.89
MSD Beach Nourishment at current 2024 Dist 2 Rate	475,161,197	0.00143	679,480.79	679,480.79
MSD Beach Nourishment at Current 2024 Dist 3 Rate	1,059,343,513	0.00005	52,968.57	52,968.57
MSD Beach Nourishment at Current 2024 Dist 4 Rate	667,823,999	0.00010	66,782.28	66,782.28
MSD Beach Nourishment at Current 2024 Dist 6 Rate	376,372,688	0.00005	18,819.49	18,819.49
Registered Motor Vehicles at Current 2024 Dist 1 Rate	223,406	0.00143	319.47	319.47
Registered Motor Vehicles at Current 2024 Dist 2 Rate	365,301	0.00143	522.38	522.38
Registered Motor Vehicles at Current 2024 Dist 3 Rate	892,800	0.00005	44.64	44.64
Registered Motor Vehicles at Current 2024 Dist 4 Rate	634,900	0.00010	63.49	63.49
Registered Motor Vehicles at Current 2024 Dist 5 Rate	0	0.00000	0.00	0.00
Registered Motor Vehicles at Current 2024 Dist 6 Rate	255,000	0.00005	12.75	12.75
Registered Motor Vehicles at 2023 Dist 1 Rate	252,291	0.00143	360.78	360.78
Registered Motor Vehicles at 2023 Dist 2 Rate	501,772	0.00143	717.56	717.56
Registered Motor Vehicles at 2023 Dist 3 Rate	1,416,526	0.00005	70.82	70.82
Registered Motor Vehicles at 2023 Dist 4 Rate	1,083,828	0.00010	108.43	108.43
Registered Motor Vehicles at 2023 Dist 6 Rate	899,196	0.00005	45.08	45.08
Registered Motor Vehicles at 2022 Dist 3 Rate	22,400	0.00005	1.12	1.12
Penalties			0.00	
Total	3,166,538,789		1,651,562.54	1,649,296.02
Discoveries & Adjustments:				
Current year discoveries & adjustments	56,763		2.84	2.84
			0.00	0.00
Total	0		2.84	2.84
Releases & Adjustments:				
DMV Current year valuation adjustments	0		0.00	0.00
DMV Current year tax releases	0		0.00	0.00
Real/Personal Current year releases & adjustments	31,118		(6.04)	(6.04)
Total	31,118		(6.04)	0.00
Write-offs (under \$1.00) or Adjustments:			0.00	0.00
Total MSD Valuation	3,166,569,907			
Net levy		1,651,559.34	1,649,292.82	2,266.52
TOTAL UNCOLLECTED MSD AS OF 10/29/24:		(911,382.85)	(911,382.85)	0.00
CURRENT YEAR MSD COLLECTED:		740,176.49	737,909.97	2,266.52
CURRENT MSD COLLECTION PERCENTAGE:		44.817%	44.741%	0.000%

Town of Nags Head, North Carolina
ANALYSIS OF CURRENT 2023-2024 TOWN WIDE TAX LEVY
2024 Tax Levy As of October 29, 2024 for November 6, 2024 BOC Meeting

	Town-Wide Tax			Total Levy	
	Property Valuation	Rate	Total Levy	Property Excluding Registered Motor Vehicles	Registered Motor Vehicles
Original levy:					
Property taxed at current 2024 rate	3,071,851,717	0.003300	10,137,252.77	10,137,252.77	
Registered Motor Vehicles at current 2024 rate	5,509,768	0.003300	17,956.27		17,956.27
Registered Motor Vehicles at 2023 year's rate	12,093,306	0.003300	39,907.91		39,907.91
Registered Motor Vehicles at 2022 year's rate	1,398	0.002875	4.02		4.02
Penalties			8,387.61	8,387.61	
Total	3,089,456,189		10,203,508.58	10,145,640.38	57,868.20
Discoveries & Adjustments:					
Current year discoveries & adjustments tax	56,763		173.13	173.13	
Town wide beach nourishment tax			14.19	14.19	
Corporate Utilities discoveries & tax	15,551,166		47,431.06	47,431.06	
Corporate Utilities beach nourishment tax			3,887.80	3,887.80	
Penalty Discoveries			0.00	0.00	
Total	15,607,929.00		51,506.18	51,506.18	
Releases & Adjustments:					
Current year releases & adjustments	(181,820)		(1,001.66)	(554.53)	(447.13)
Town wide beach nourishment			(45.44)	(45.44)	
Penalty Releases			(21.49)	(21.49)	
Total	(181,820)		(1,068.59)	(621.46)	(447.13)
Write-offs (under \$1.00) or Adjustments:			0.00	0.00	
Total Property Valuation	3,104,882,298				
Net levy		10,253,946.17		10,196,525.10	57,421.07
Uncollected Taxes & Penalties		(5,429,093.34)		(5,429,093.34)	0.00
Uncollected Town Wide Beach Nourishment		(444,741.66)		(444,741.66)	0.00
TOTAL UNCOLLECTED TAXES AS OF 10/29/24:		(5,873,835.00)		(5,873,835.00)	0.00
CURRENT YEAR TAXES COLLECTED:		4,380,111.17		4,322,690.10	57,421.07
CURRENT LEVY COLLECTION PERCENTAGE:		42.716%		42.394%	0.000%



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM E.3.

Approval of Minutes

Prepared by

Carolyn Morris, Town Clerk

Reviewed by

Carolyn Morris

Andy Garman

Staff Comments/Recommendation

Specific Action Requested

This item is provided for Board review and approval.

Summary

Attached for Board review and approval are the following DRAFT Board of Commissioners meeting minutes:
- October 2nd Regular meeting

Attachments

1. 11 E3 Oct 2 2024 BOC mins



***DRAFT* MINUTES**
TOWN OF NAGS HEAD
BOARD OF COMMISSIONERS
REGULAR MEETING
WEDNESDAY, OCTOBER 2, 2024

The Nags Head Board of Commissioners met at the Board Room located at 5401 S Croatan Highway, Nags Head, North Carolina on Wednesday, October 2, 2024 at 9:00 a.m. for a Regular Meeting.

Board members Present: Mayor Ben Cahoon; Mayor Pro Tem Michael Siers; Comr. Kevin Brinkley (resigned at 9:15 a.m.); Comr. Bob Sanders; and Comr. Megan Lambert

Board members Absent: None

Others present: Town Manager Andy Garman; Attorney John Leidy; Amy Miller; Kelly Wyatt; David Ryan; Perry Hale; Randy Wells; Shane Hite; Nancy Carawan; Joe Costello; Roberta Thuman; John Stewart; Steve Farrow; Beth Sciaudone; Ayse Karanci; Donna Creef; Megan Vaughan; John Kenny; Jennifer Wells; Gwen Davis; Molly Harrison; David Elder; Amanda Kornegay; Chris Shrader; Kelly Green; Brittany Phillips; and Town Clerk Carolyn F. Morris

CALL TO ORDER

Mayor Cahoon called the meeting to order at 9 a.m. Mayor Cahoon asked for a moment of silence to think of our fellow North Carolinians that are in crisis mode [after Hurricane Helene] and to send them good thoughts and support, as able. A moment of silence was followed by the Pledge of Allegiance.

ADOPTION OF AGENDA

MOTION: Comr. Sanders made a motion to approve the October 2nd agenda as presented. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

RECOGNITION

Public Services Director Nancy Carawan introduced Facilities Maintenance Technician John Stewart who was welcomed by the Board to Town employment.

Public Services Director Nancy Carawan introduced Sanitation Equipment Operator Steve Farrow who was welcomed by the Board to Town employment.

Town Manager Andy Garman introduced Fire Chief Randy Wells who was recognized by the Board for five years of service.

PROCLAMATION – Fire Prevention Week – Oct 6 – 12, 2024

Dep Fire Chief Shane Hite reported on the upcoming Fire Prevention Week, scheduled for October 6 – 12, 2024. He noted that - *Smoke Alarms: Make Them Work For You* – is this year’s theme. He invited everyone to attend the Fire Prevention Open House scheduled for Thursday, October 10th starting at 5 pm at the Douglas Remaley Fire Station #16. Mayor Cahoon read the proclamation as follows:

‘WHEREAS, the Town of Nags Head is committed to ensuring the safety and security of all those living in and visiting our town; AND

‘WHEREAS, fire is a serious public safety concern both locally and nationally, and homes are the locations where people are at greatest risk from fire; AND

‘WHEREAS, in 2022 in the United States home fires killed more than 2,700 people and fire departments responded to 360,000 home fires; AND

‘WHEREAS, roughly three out of five fire deaths happen in homes with either no smoke alarms or with no working smoke alarms; AND

‘WHEREAS, working smoke alarms cut the risk of dying in reported home fires almost in half; AND

‘WHEREAS, smoke alarms detect smoke well before you can, alerting you to danger in the event of fire in which you may have as little as two minutes to escape safely; AND

‘WHEREAS, Nags Head residents should install smoke alarms in every sleeping room, outside each separate sleeping area, and on every level of the home; AND

‘WHEREAS, Nags Head residents should make sure their smoke alarms meet the needs of all their family members, including those with sensory or physical disabilities; AND

‘WHEREAS, Nags Head residents should test smoke alarms at least once a month; AND

‘WHEREAS, residents who have planned and practiced a home fire escape plan are more prepared and will therefore be more likely to survive a fire; AND

‘WHEREAS, Nags Head first responders are dedicated to reducing the occurrence of home fires and home fire injuries through prevention and protection education; and

‘WHEREAS, Nags Head residents are responsive to public education measures and are able to take personal steps to increase their safety from fire, especially in their homes; and

‘WHEREAS, the 2024 Fire Prevention Week theme, “Smoke alarms: Make them work for you” serves to remind us of the importance of having working smoke alarms in the home.

‘NOW, THEREFORE, BE IT RESOLVED that I, Ben Cahoon, Mayor of the Town of Nags Head, do hereby proclaim October 6 – 12, 2024, as Fire Prevention Week, and I urge all the people of the Town of Nags Head to make sure their homes have working smoke alarms and to support the many public safety activities and efforts of Nags Head Fire & Rescue. All Town residents and visitors are invited to attend the annual Nags Head Fire &

Rescue Open House, held at the Douglas A Remaley Fire Station 16 on Thursday, October 10, 2024 from 5:00 to 7:30 pm.”

MOTION: Comr. Sanders made a motion to approve the proclamation identifying October 6 – 12, 2024 as Fire Prevention Week as presented. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

Comr. Brinkley – Submits Resignation as Commissioner

Comr. Brinkley explained that his home in Nags Head was sold in September 2024. Attorney Leidy summarized his previous conversation with Comr. Brinkley concerning his upcoming move out of Town. He explained that specific things must take place to show that a new residence has been established and until completed, Comr. Brinkley was able to continue serving as a Board member. These specific things include an abandoned domicile with no intent to return, establishment of another domicile, and the intent to make the new domicile a permanent home. He noted that Comr. Brinkley had moved to a temporary residence in Manteo. Comr. Leidy stated that additional information was subsequently received from the State Board of Elections – when an elected official moves to another municipality or election district with the intention of remaining, that person shall be considered to have lost their place of residence in the prior municipality. He stated that he then reported this updated information to Comr. Brinkley.

Comr. Brinkley said that resigning today was not how he saw his term playing out but that this move was taking advantage of an opportunity that was the best decision to make for his family. He then asked Mayor Cahoon to accept his resignation

Mayor Cahoon – Accepts Comr. Brinkley's Resignation

Mayor Cahoon said that with great sadness he will accept Comr. Brinkley's resignation and said that he will be missed as he has served the Town of Nags Head for over 30 years – as an employee and as a Commissioner.

Board members thanked Comr. Brinkley for his service, both as a Town employee and as a Board member and expressed their appreciation for all he has done for the Town.

Mayor Cahoon called for a brief recess; audience members expressed their appreciation and thanks to former Comr. Brinkley as he left the meeting. The time was 9:15 a.m.

PUBLIC COMMENT

PUBLIC COMMENT – DAVID ELDER

David Elder, Nags Head resident and Planning Board member; he spoke concerning the multi-family ordinance stating that the process was difficult to follow; he found that it moved along in fits and starts and it was difficult for him to let people in the area know how it was moving forward as it wasn't clearly moving and information wasn't accessible; he doesn't feel that there is any reason to not split the ordinance and have the Small Multi-family ordinance portion move forward and the Large Multi-family to be considered at a later time; he emphasized that the decision made today is being made for everyone.

There being no one else present who wished to speak, Attorney Leidy concluded Public Comment at 9:30 a.m.

CONSENT AGENDA

The Consent Agenda consisted of the following items:

Consideration of Budget Amendment #4 to FY 24/25 Budget

Consideration of Tax Adjustment Report

Approval of minutes

Consideration of seventh amendment to Verizon lease of Town Hall monopole

Consideration of Great Trails State Program Grant application for multi-use path engineering

Consideration of resolution authorizing execution of NC-DEQ grant contract for the June St Beach Access

Consideration of Capital Project Fund ordinance amendments:

- Amendment #5 to Capital Project Fund (General) for Public Services Complex
- Amendment #3 to Capital Project Fund (Water) for AMI and Public Services Complex

Consideration of modification to Rules of Procedure re: time allotted for speakers

Consideration of resolution accepting NC-DEQ Local Assistance for Stormwater Infrastructure Investments (LASII) funding offer; Authorization for Town Manager to execute contract with McAdams

Request for Public Hearing to consider a Special Use/Site Plan Review for the construction of a 2-story, 8-bedroom dormitory

Request for Public Hearing to consider various amendments to the UDO within SPD-C, Village at Nags Head Commercial-1 Zoning District to accommodate a new use, EMS Station

MOTION: Comr. Sanders made a motion to approve the Consent Agenda as presented. The motion was seconded by Comr. Lambert which passed unanimously.

Budget Amendment #4, as approved, is attached to and made a part of these minutes as shown in Addendum "A".

The Tax Adjustment Report, as approved, is attached to and made a part of these minutes as shown in Addendum "B".

Minutes - The Board of Commissioners minutes for the September 4th and 18th, 2024 meetings, as approved, are on file in the Town Clerk's Office.

The summary sheet for the seventh amendment to the Verizon lease of the Town Hall monopole, as approved, read in part as follows:

"At the October 2nd Board of Commissioners meeting, Board members will consider the attached seventh amendment to the Ground and Water Tank Agreement between the Town and Cellco Partnership D/B/A Verizon Wireless. This amendment is being requested to reflect changes to the current Verizon Tower equipment.

'Attached please find the Seventh Amendment agreement including an updated Exhibit D-7 – Description of Tower Equipment for Board approval. An updated Structural Analysis Report is provided for information.

“TEP structural engineering has sealed the structural analysis. A building permit will be issued upon Board approval. TEP will conduct a post-construction inspection.”

The summary sheet for the Great Trails State Program grant application, as approved, read in part as follows:

“Please find attached an application for the Great Trails State Program grant. The grant would be used for the design/engineering of the multi-use path extension on South Croatan Highway. Specific areas to be connected are between Carolista Drive and W Soundside Road; S Seachase Drive and W Baymeadow Drive; and Gull Street to Gray Eagle Street. These extensions would connect these areas to the existing multi-use path. As noted in the application, these connections were top ranked by the Town’s Pedestrian Project Advisory Committee.

“Strong community support for the project is reflected in the attached correspondence from the Superintendent of and the Friends of Jockey’s Ridge State Park, Outer Banks Visitors Bureau, as well as the Pedestrian Project Advisory Committee.”

The resolution authorizing execution of the NC-DEQ grant contract for the June Street Beach Access, as adopted, read in part as follows:

“WHEREAS, The Town of Nags Head (the “Town”) has been awarded a public access grant for the June Street Public Beach Access improvements; and

“WHEREAS, The Town is advised that a proposed contract between the Town and the North Carolina Department of Environmental Quality (DEQ) for Public Beach and Coastal Waterfront Access grant funds is being presented for the project known as June Street Beach Access, and discussed; and

“WHEREAS, That, under the terms of the said contract, the total project cost is \$277,259; and

“WHEREAS, The Town will pay a total local cash contribution of \$60,790 and local in-kind contribution of \$8,800 as its local share of the total project costs; and

“WHEREAS, The total grant assistance requested is \$207,669.

“BE IT THEREFORE RESOLVED as follows:

1. That a contract between the Town of Nags Head and the North Carolina Department of Environmental Quality be and the same is hereby approved.
2. That the Manager is hereby authorized to sign and execute the said contract for and on behalf of the Town of Nags Head and forward the same to the North Carolina Department of Environmental Quality.
3. That upon final execution, a copy of said contract be filed with the minutes.”

The summary sheet re: the Capital Project Fund ordinance amendments: Amendment #5 and Amendment #3, as approved, read in part as follows:

“At the October 2nd Board of Commissioners meeting, staff is requesting Board consideration of the following Capital Project Ordinances:

- Consideration of Capital Project Ordinance amendment #5 for the Public Services Complex Project. This amendment increases interest income and building capital outlay by \$62,150 each.
- Consideration of Water Capital Project Ordinance amendment #3 for the Public Services Complex Project and Advanced Metering Infrastructure Projects. This amendment increases interest income and building capital outlay for the Public Services Complex by \$16,203 each."

The Capital Project ordinance amendment #3 for Water CIP Projects, as adopted, is attached to and made a part of these minutes as shown in Addendum "C". The Capital Project ordinance amendment #5 for the Public Works Complex, as adopted, is attached to and made a part of these minutes as shown in Addendum "D".

The summary sheet for the Modification to the Rules of Procedure, as approved, read in part as follows:

"Attached please find modifications to two Rules of the Town's Rules of Procedure:

- Rule #5 *Public Address to the Board of Commissioners*
- Rule #27 *Public Hearings*

'As mentioned during a recent Board of Commissioners meeting, the modifications would provide for consistency in allotting the amount of time when the Board of Commissioners receives public comment during a Board meeting and during public hearings."

The modifications to the Rules of Procedure, as approved, read in part as follows:

"Rule 5: Public Address to the Board of Commissioners *

The Board of Commissioners shall provide a time at each meeting for anyone to address them. The Mayor may set and enforce appropriate time limits for such comments but under these rules that limit may not be ~~less than 5 minutes nor~~ more than ~~10~~ 5 minutes. Other boards shall provide access for the public as is appropriate to their charge and determined by each board.

'Rule 27: Public Hearings

Public hearings required by law or deemed advisable by the Board of Commissioners shall be organized by a special order, adopted by a majority vote, that sets forth the subject, date, place, and time of the hearing as well as any rules regarding the length of time for each speaker, and other pertinent matters except that staff may schedule public hearings on matters required by statute or ordinance without a vote of the board provided the hearing is scheduled for the first meeting of the board as allowed by notice requirements. The rules may include, but are not limited to, rules fixing the maximum time allotted to each speaker ~~which shall be no more than 5 minutes~~; (ii) providing for the designation of spokespersons for groups of persons supporting or opposing the same positions; (iii) providing for the selection of delegates from groups of persons supporting or opposing the same positions when the number of persons wishing to attend the hearing exceeds the capacity of the hall (so long as arrangements are made, in the case of hearings subject to the Open Meetings Law, for those excluded from the hall to listen to the hearing); and (iv) providing for the maintenance of order and decorum in the conduct of the hearing.

'All notice and other requirements of the Open Meetings Law applicable to Board of Commissioners meetings shall also apply to public hearings at which a majority of the Board of Commissioners is present. A public hearing for which any required notices have been given may be continued to a time and place certain without further advertisement. The requirements of Rule 2(c) shall be followed in continuing a hearing at which a majority of the Board of Commissioners is present.

'At the time appointed for the hearing, the mayor or his or her designee shall call the hearing to order and then preside over it. When the allotted time expires or when no one wishes to speak who has not done so, the presiding officer shall declare the hearing ended.'

The resolution accepting NC-DEQ Local Assistance for Stormwater Infrastructure investments (LASII), as adopted, read in part as follows:

'WHEREAS, the State of North Carolina established Local Assistance for Stormwater Infrastructure Investments (LASII) to assist eligible units of local government with meeting their stormwater infrastructure needs; and

'WHEREAS, the North Carolina Department of Environmental Quality, Division of Water Infrastructure, has offered the Town of Nags Head LASII funding in the amount of \$2,356,910 to perform the work detailed in the submitted application; and

'WHEREAS, the Town of Nags Head intends to perform said project in accordance with the agreed scope of work.

'NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TOWN OF NAGS HEAD:

1. That the Town of Nags Head does hereby accept the LASII funding offer of \$2,356,910;
2. That the Town of Nags Head does hereby give assurance to the North Carolina Department of Environmental Quality that any Conditions or Assurances contained in the Funding Offer and Acceptance (award offer) will be adhered to; has substantially complied, or will substantially comply, with all federal, State of North Carolina (State), and local laws, rules, regulations, and ordinances applicable to the project; and to federal and/or State grants and loans pertaining thereto; and
3. That Andy Garman, Town Manager, and successors so titled, is hereby authorized and directed to furnish such information as the appropriate State agency may request in connection with this project; to make the assurances as contained above; and to execute such other documents as may be required by the North Carolina Department of Environmental Quality, Division of Water Infrastructure.'

The Request for Public Hearing for a special use permit/site plan review for construction of a 3,460 square foot, two story, eight-bedroom dormitory (duplex) and all associated site improvements, as approved, read in part as follows:

'Special Use Permit/Site Plan Review submitted by Quible & Associates, P.C. and Beacon Architecture and Design, PLLC on behalf of the Town of Nags Head for the construction of a 3,460 square foot, two story, eight-bedroom dormitory (duplex) and all associated site improvements. This dormitory is for use by Town of Nags Head workforce, specifically Ocean Rescue and others as approved by the Town Manager. The property is zoned SED-80, Special Environmental District and is located at 425 W. Health Center Drive.

'Applying the parking standard for dormitory use would only require four spaces. However, since the structure will house up to 16 seasonal lifeguards as part of the Town of Nags Head's workforce, it's clear that actual parking needs will exceed this minimum. Currently, there are 37 spaces onsite, 25 of which are allocated to the Community Care Clinic, leaving 12 available for dormitory use. Ideally, 16 spaces—one per occupant—would be designated for the dormitory. Section 10.15.2.2 of the UDO provides a mechanism, through the Special Use Permit process, to consider shared parking when multiple uses on a site have staggered hours or differing peak parking demands. Staff are requesting that this shared parking provision be applied to account for the additional four spaces needed to meet the target of 16 dormitory spaces. The Community Care Clinic operates from 9 a.m. to 4 p.m., Monday through Friday, and is closed on weekends. In contrast, the Town's Ocean Rescue staff

generally works from 9 a.m. to 6 p.m., with some early morning training sessions. Given these staggered schedules, the overlap in parking demand between the clinic and Ocean Rescue staff should be minimal.

Staff Recommendation/Planning Board Recommendation

Planning staff finds that the proposal is consistent with the applicable use and development standards, as well as relevant land use policies. Additionally, staff finds that the requirements necessary to offer a reduction in parking pursuant to Section 10.15.2.2. of the UDO, Shared Parking Associated with a Special use Plan, has been met given that it will not result in increased traffic congestion or negatively impact existing traffic flow or pedestrian and vehicular safety, will not create parking impacts for adjacent properties or within Town rights-of-way, will not be contrary to the objectives specified in the Comprehensive Plan, is necessary to permit the reasonable use of the subject property, and will not adversely impact adjacent property or the surrounding area. At their September 17, 2024 meeting the Planning Board voted unanimously to recommend approval of the Special Use Permit/Site Plan Review as presented, to include shared parking arrangements based upon the Community Care Clinic and the Town's Ocean Rescue personnel having staggered parking demands."

The Request for Public Hearing for text amendments to the Unified Development Ordinance (UDO) related to the proposed County EMS Station, as approved, read in part as follows:

"Dare County has been working with Oakley Collier Architects on a proposed design for the county's emergency services project within the town. After reviewing the preliminary site development renderings and analyzing the existing SPD-C, Village at Nags Head, Commercial-1 district standards, three text amendments to the Unified Development Ordinance (UDO) would be necessary:

- Amend Section 9.36, Table of Uses and Activities to list "County EMS Station" as a permitted use within the district.
- Amend Section 9.21.8.2, Table of Development Standards to reduce the front yard setback requirement from 75 feet to 45 feet.
- Amend Section 10.16, Required Parking by Use, to establish a parking standard for the new use category of "County EMS Station".

Planning Staff and Planning Board Recommendation

Planning staff finds the proposed text amendments to be consistent with the 2022 Comprehensive Land Use Plan and recommends adoption of the amendment as presented.

"At their September 17, 2024, meeting the Planning Board voted unanimously to recommend adoption of the text amendment as presented"

PUBLIC HEARINGS

Public Hearing to consider a map amendment request submitted by Chris Greening of Coastal Bluewater Capital, LLC, as authorized by property owner Mazzi, LLC to rezone the property located at 0 W. Satterfield Landing Road, Lot 2a-1r of the Charles Sineath Subdivision, (Parcel # 005618002) from C-3, Commercial Services to C-2, General Commercial. This is the vacant property west of TW's Bait and Tackle.

Mayor Pro Tem Siers asked to be recused from this agenda item as he has a conflict of interest as a property owner.

MOTION: Mayor Cahoon made a motion to recuse Mayor Pro Tem Siers from this Public Hearing for a zoning map amendment due to a conflict of interest. The motion was seconded by Comr. Lambert which passed unanimously.

Attorney Leidy introduced the Public Hearing to consider a map amendment request to rezone the property located at 0. W Satterfield Landing Road, Lot 2a-1r of the Charles Sineath Subdivision from C-3 Commercial Services to C-2 General Commercial. The time was 9:25 a.m.

Notice of the Public Hearing was published in the *Coastland Times* on Wednesday, September 18, 2024 and on Wednesday, September 26, 2024, as required by law.

Planning Director Kelly Wyatt summarized her report which read in part as follows:

"Chris Greening of Coastal Bluewater Capital, LLC, has submitted the attached zoning map amendment request with authorization from current property owner, Mazzi, LLC. If adopted, this map amendment would rezone the property located at 0 W. Satterfield Landing Road (Parcel # 005618002) from C-3, Commercial Services District to C-2, General Commercial District.

'Recent History of Property

In late 2017, the property owner at the time, TLG Greenwater Investments, submitted a request to rezone the easternmost 50 feet of this lot from C-3, Commercial Services, to C-2, General Commercial Services. This rezoning was part of a planned transfer and recombination of the affected portion with Lot 1a-1 (TW's Bait and Tackle). After the map amendment was adopted, TW's Bait and Tackle constructed the accessory storage structure currently on the property.

'In November 2022, the Board of Commissioners approved a Special Use Permit/Site Plan Review, submitted by Mazzi LLC, for the construction of an 11,200 square foot building that includes 8 units operating a "Trade Center", with parking and all associated improvements. When the November 2022 approval expired, the Board of Commissioners re-approved the same requested scope of work at their February 7, 2024, meeting. This new approval is valid until February 7, 2025. However, it is important to note that if the requested rezoning is approved, changing the property's zoning designation to C-2, General Commercial, the Trade Center use would no longer be permitted in this zoning district.

'Analysis

When considering a possible re-zoning it is helpful to review the intent of both the giving and receiving zoning classification in conjunction with potential outcomes.

Section 6.2.4.3 of the UDO, Zoning Districts, notes that the intent of the C-3, Commercial Services District is to provide for higher intensity land uses that are not compatible with other areas of the Town. The C-3 District accommodates utilities, light industrial uses, warehousing, bulk storage, municipal facilities, etc. The 2017 Comprehensive Land Use Plan states that the C-3 standards are to regulate and buffer uses so that their location or activities will not be detrimental to adjacent uses, the environment, and the sources of potable water. The Commercial Services District must be at least 10 acres in size and must have direct access to a US highway or collector street improved to town standards. If adopted, the requested rezoning would reduce the overall acreage of C-3 by 0.8 acres, leaving approximately 36 acres of C-3 Commercial Services Remaining.

'The intent of the C-2, General Commercial District, is to provide for the proper grouping and development of commercial facilities to serve the entire community. The C-2 District allows the broadest range of commercial uses. All C-2 districts shall be at least 5 acres in area and proposed zoning map amendment would result in an increase in the total acre of C-2 designation.

'As information, the table of uses and activities allowed within the existing C-3, Commercial Services Zoning District and the C-2, Commercial Services Zoning District can be found in Section 6.6 of the Unified Development Ordinance and [HERE](#).

'2022 Comprehensive Land Use Plan Consideration

Pg. 3-20 (LU-10) Discourage high intensity land uses that produce significant noise, light, heavy vehicle traffic, noxious fumes or poor air quality, are unsightly, encourage unsafe behavior, or require large amounts of land for heavy industrial uses, processing, or storage of materials or equipment.

'Pg. 3-20 (LU-10b) Maintain the current boundaries of the C-3 District and do not expand these uses to other parts of the Town.

'Pg. 3-117 (EC-1) Develop and promote a sustainable economy that supports high quality of life for residents and visitors without compromising the integrity of the natural and cultural resources and sense of place.

'Pg. 3-122 (EC-5) Direct new commercial growth into neighborhood commercial nodes, activity centers, or areas currently zoned for commercial development with emphasis on reuse of existing structures.

'The property in question is located within the Northern Commercial Character Area and is currently zoned C-3, Commercial Services. It is bordered by C-2, General Commercial to the east (TW's Bait and Tackle) and north (OBX Bowling Center), R-2, Medium Density Residential to the south (vacant property), and C-3, Commercial Services to the west (Village Real Estate Rental Management). If the rezoning is approved, it would extend the C-2 zoning designation from the north and east.

'Staff Recommendation

Based upon the evaluation of the intent of each district and the goals listed in the 2022 Comprehensive Land Use Plan, staff recommends adoption of the proposed zoning map amendment as presented. Note that any future development of this property would require Site Plan Review and approval from both the Planning Board and Board of Commissioners.

'Planning Board Recommendation

At their August 20, 2024, meeting, the Planning Board voted unanimously to recommend approval of the proposed map amendment as requested."

Mayor Cahoon noted that the property to be rezoned is surrounded by the C-2 District which is what it is being rezoned to.

There being no one present who wished to speak, Attorney Leidy concluded the Public Hearing at 9:40 a.m. Attorney Leidy pointed out that this is a legislative decision to make and staff has provided a proposed ordinance which includes various findings and a consistency statement.

MOTION: Comr. Sanders made a motion to adopt the ordinance amending the zoning map for Lot 2a-1r of the Charles Sineath Subdivision from C-3 Commercial Services to C-2 General Commercial as presented. The motion was seconded by Comr. Lambert which passed unanimously.

The ordinance, as adopted, is attached to and made a part of these minutes as shown in Addendum "E".

REPORTS AND RECOMMENDATIONS FROM THE PLANNING BOARD AND THE PLANNING AND DEVELOPMENT DIRECTOR

Update from Planning Director

Planning Director Kelly Wyatt summarized her report which read in part as follows:

"This memo provides an overview of selected Planning and Development Department activities, projects, and initiatives. If requested, Staff will be prepared to discuss any of this information in detail at the Board of Commissioners meeting on October 2nd, 2024.

'Monthly Activity Report

Attached for the Board's review is the *Planning and Development Monthly Report for August 2024*. In addition to permitting, inspections, code enforcement, and Todd D. Krafft Septic Health Initiative activities, Staff was involved in the following meetings or activities of note during the month of September:

- Tuesday, September 3rd - Technical Review Committee Meeting
- Wednesday, September 4th - Board of Commissioners Meeting
- Thursday, September 11th – Committee for Art and Culture Meeting
- Thursday, September 12th – Board of Adjustment Meeting (no hearings scheduled)
- Thursday, September 12th – CRS Users Group Meeting
- Tuesday, September 17th – Planning Board Meeting
- Wednesday, September 18th – Board of Commissioners mid-month meeting
- Dowdy Park Movie Night, Friday, September 6th at 8pm – TWISTER

'Planning Board - Pending Applications and Discussions

The Planning Board's most recent meeting was held on Tuesday, September 17, 2024. The following items were heard:

- Consideration of a Special Use/Site Plan Review submitted by Quible & Associates, P.C. and Beacon Architecture, PLLC on behalf of the Town of Nags Head, for the construction of a 2- story, 8-bedroom dormitory (duplex). The property is zoned SED-80, Special Environmental District and is located at 425 W. Health Center Drive. The Planning Board voted unanimously to recommend approval of the SUP/Site Plan Review as presented. This item is on the Board of Commissioners October 2nd Consent Agenda requesting Public Hearing to be held on November 6th, 2024.
- Consideration of text amendments within the SPD-C, Village at Nags Head Commercial-1 Zoning designation to accommodate future construction of a Dare County EMS Station. The Planning Board voted unanimously to recommend adoption of the proposed amendments as presented. This item is on the Board of Commissioners October 2nd Consent Agenda requesting Public Hearing to be held on November 6th, 2024.
- Continued discussion of minimum required parking standards for hotel uses and restaurant uses. Based upon discussion staff will present a draft ordinance to the Planning Board at their October 15th meeting outlining a hotel parking standard of 1.2 parking spaces for each unit to be rented or one (1) parking space per bed, whichever is greater, plus one (1) parking space for every two employees on the largest shift. Staff will continue to discuss minimum required parking standards for restaurant uses with the Planning Board in the coming months.

➤ The Planning Board held two public input sessions, one at their regularly scheduled meeting on Tuesday, September 17th at 9am, the second on Wednesday, September 18th at 6pm. Between these two community engagement sessions the Planning Board received comments from approximately 16 individuals. The majority of attendees were generally supportive of ADU's if items such as parking, noise, and sanitation were properly addressed. Many felt as though attached ADU's (within the existing footprint of the home), were more acceptable than detached ADU's, especially with concerns of increased lot coverage, stormwater runoff, and density. There was support expressed for allowing both long-term and short-term rental of ADU's should they be permitted. Some individuals expressed a concern with having any type of ADU, attached or detached, on the west side of US 158.

'The Planning Board's next meeting is scheduled for Tuesday, October 15th, 2024. Currently, the agenda is expected to include consideration of a Site Plan Review submitted by SRE Mustang, LLC and Timmons Group, on behalf of Outlets Nags Head for construction of a 2,400 square foot restaurant, consideration of Sketch Plan Review for construction of a 6,760 square foot EMS Station located at 105 W. Seachase Drive, continued discussion of parking standards for hotel and restaurant uses, and continued discussion related Accessory Dwelling Units (ADU's).

'Board of Adjustment – Recent and Pending Applications

There were no items for the Board of Adjustments consideration in September 2024.

'Additional Updates

- DWMP/Septic Health Advisory Committee – The Septic Health Advisory Committee is scheduled to meet on Monday, October 21st, 2024. The Planning Department is hosting an intern, Ella Trainor, a rising Junior at UNC-Chapel Hill through the Outer Banks Field Site at CSI, over the next few weeks. Ella's project while here is working along side Environmental Planner, Conner Twiddy and Deputy Planning Director, Joe Costello to geolocate existing conventional septic systems and drain fields and uploading data to create an interactive map of the towns septic infrastructure. We anticipate having Ella attend the upcoming SHAC meeting.

- Estuarine Shoreline Management Plan – The Town was awarded a grant of \$500,000 under the N.C. Resilient Coastal Communities Program to assist in completing the engineering and design work for the Villa Dunes and Soundside Road estuarine marsh restoration and marsh stabilization projects. The town has received an initial scope from Biohabitats in anticipation of the receiving and executing the grant contract. It will be November before we know about the NC Land and Water Fund Grant that was applied for to assist with the Harvey Site/OBVB Site.

'Additionally, staff are researching using a combination of Community Conservation Assistance Program (CCAP) funds and Coastal Federation cost share funds for a shoreline stabilization project along the causeway.

- Electric Vehicle Action Plan – The two Level II EV Chargers have been installed and are available for use. We have submitted the reimbursement package and will be scheduling the final inspection from DEQ.

- Sand Relocation and Dune Management Cost Share Program – Staff are preparing for the upcoming Sand Relocation season which will begin on November 15th, 2024. We will begin accepting applications for sand relocation on November 1st for review purposes only. An educational presentation and Q&A session will be provided on Tuesday, October 15th for all equipment operators, property owners, and other interested parties wishing to participate in the sand relocation and dune management cost share program this year.

- Public Beach and Coastal Waterfront Access Grant Program – The town was awarded \$207,669 through

the NC Public Beach and Waterfront Access Program for improvements to the June Street Beach Access. Once the contract has been fully executed, we will put out a Request for Qualifications (RFQ). (Attachment E-6, Consent Agenda)

- Dowdy Park Events/Farmers Market/Holiday Markets/Art & Culture – The following events are coming up in October:
 - Free yoga sessions will continue through October, every Tuesday at 7:30am at Dowdy Park.
 - Friday Night Movie on October 4th, beginning around 6:45pm. This movie is being shown in partnership with Outer Banks Health – *The Goonies*.
 - Holiday Market application will be available online Wednesday, October 16th from 8am – 10am. After 10am the application will no longer be accessible. Market Rules have been updated regarding the required percentage of handmade or handcrafted items and the radius for vendors producing handcrafts, original artwork and perishables. You will also need to provide your NC sales tax number as part of the application process. For more information, please visit the Dowdy Park Events Facebook page.
 - Event Coordinator, Paige Griffin is collaborating with Nags Head Elementary School to host a Young Entrepreneur Market in conjunction with the Great Pumpkin Fair, held on Friday October 18th, 4pm – 7pm.

Upcoming Meetings and Other Dates

- Tuesday, October 1st - Technical Review Committee Meeting
- Wednesday, October 2nd - Board of Commissioners Meeting
- Wednesday, October 9th – Committee for Art and Culture Meeting
- Thursday, October 10th – Board of Adjustment Meeting (no hearings scheduled)
- Tuesday, October 15th – Planning Board Meeting
- Tuesday, October 15th – Sand Relocation and Dune Management Contractor Meeting
- Wednesday, October 16th – Board of Commissioners mid-month meeting
- Monday, October 21st – Septic Health Advisory Committee Meeting
- Dowdy Park Movie Night, Friday, October 4th at 6:45 pm – *The Goonies*

In response to Mayor Cahoon, Ms. Wyatt explained the new vendor rules for holiday markets – to match the summer markets. Holiday markets open for vendors to apply on October 16th from 8 am to 10 am. She noted that priority is given to those that can attend all four markets.

OLD BUSINESS/ITEMS TABLED FROM PREVIOUS MEETINGS

From Sep 4th Board meeting – Consideration of Multi-Family Dwelling Ordinance
- Workshop held on Sep 18th

Town Manager Andy Garman summarized the agenda summary sheet which read in part as follows:

“The Board of Commissioners conducted a public hearing on a draft multi-family ordinance at its September 4th meeting. Based on extensive public comments received at the public hearing, the Board of Commissioners scheduled a workshop which was held on September 18th. The purpose of the workshop was to provide the public with additional time to review and comment on the ordinance. The minutes from this workshop are included in the Board’s packet.

'During the Board's September 4th discussion, the Board suggested a modified version of the ordinance that represents a combination of draft ordinances developed by the Working Group and the Planning Board. This was presented at the September 18th workshop along with the original Working Group and Planning Board proposals. Attached is the packet from the workshop. This includes an explanation of the process used to develop the ordinance and a summary of the different versions of the ordinance.

'Since the Public Hearing has already been held, the Board may deliberate and/or vote on the ordinance at the upcoming meeting.'

Mayor Cahoon thanked all who have been involved in the multi-family process – to include staff, Planning Board, Working Group, as well as members of the public who have attended meetings and those who have sent emailed comments to the Board. [Emails received are attached to and made a part of these minutes as shown in Addendum "F".] Mayor Cahoon pointed out that there are fewer sites available for multi-family development with the new proposal as this ordinance is more restrictive than the old ordinance.

In response to an inquiry from Comr. Lambert re: density, Attorney Leidy stated that the Board could impose a density limitation in addition to or in place of a cap such as specifying a number of units being allowed within a particular amount of space. This is something which could be added in the future if interested. She echoed the Mayor's comments re: public input received. Comr. Lambert also expressed concerns about stormwater, septic, traffic and a vegetative buffer and appreciated Town Manager Garman's information on these issues.

Mayor Pro Tem Siers echoed Comr. Lambert's comments re: appreciation for the public input received concerning this issue.

Comr. Sanders said that he feels the community survey's comments are included with the proposed ordinance including the requirement for a special use permit.

Comr. Lambert asked about adding a density limitation today to the ordinance. Mayor Cahoon pointed out that each application will be reviewed on a regular basis and that item can be added.

Town Manager Garman stated that the intent of the Working Group was to return at a later time to address other concerns to include the density issue mentioned by Comr. Lambert.

MOTION: Comr. Sanders made a motion to adopt the multi-family ordinance - to include the required findings - as presented. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

The ordinance, as adopted, is attached to and made a part of these minutes as shown in Addendum "G".

NEW BUSINESS

Committee Reports

Mayor Cahoon – Town Manager Garman and Mayor Cahoon attended a NCLM legislative business session in Rocky Mount – Mayor Cahoon is hopeful that some of the issues brought forward, such as getting houses off the beach, will be included for possible legislation consideration.

Mayor Pro Tem Siers – Dare County Housing Task Force – some great sessions have taken place; He anticipates a public announcement will soon be made by the Housing Task Force Chair, Donna Creef.

Comr. Lambert – Government Access Channel Committee – the Public Information Officer Roberta Thuman attended the recent meeting with her; more updates to follow in the coming months re: the film festival; she reported on the Board of Education Forum recently held and the upcoming Dare County Board Forum sponsored by the League of Women Voters.

Mayor Cahoon noted that Comr. Brinkley represented the Town on the Septic Health Advisory Committee and the Jennette’s Pier Advisory Committee. He stated that Comr. Lambert had shown interest in the Septic Health Advisory Committee.

MOTION: Mayor Pro Tem Siers made a motion to appoint Comr. Lambert to replace Comr. Brinkley as Board representative on the Town’s Septic Health Advisory Committee. The motion was seconded by Comr. Sanders which passed unanimously.

Consideration of Board/Committee appointments/reappointments

Personnel Grievance Panel

MOTION: Comr. Lambert made a motion to reappoint Tina Adderholdt to another 3-year term on the Personnel Grievance Panel, pending her acceptance. The motion was seconded by Comr. Sanders which passed unanimously.

Board of Adjustment

MOTION: Mayor Pro Tem Siers made a motion to reappoint Alice Coffey to another 3-year term on the Board of Adjustment, pending her acceptance. The motion was seconded by Comr. Lambert which passed unanimously.

Estuarine Shoreline Management Project Areas 1 and 2 Engineering and Design

- Consideration of resolution authorizing the Town Manager to enter into a contract with NCDEQ
- Request authorization for the Town Manager to enter into a contract with McAdams
- Consideration of associated budget amendment

Dep Town Manager/Finance Officer Amy Miller summarized the agenda summary sheet which read in part as follows:

“Nags Head was awarded a \$500,000 grant under the N.C. Resilient Coastal Communities Program. This award is to assist the Town in completing the engineering and design work to assess, analyze, and design two estuarine marsh restoration and shoreline stabilization sites, identified in the Town’s Estuarine Shoreline Management Plan (ESMP), to reduce erosion and increase shoreline stability. The McAdams scope includes Moffatt & Nichol and Biohabitats partnering on the project. These firms developed the Town’s ESMP. The scope is on a one-year timeline with a possible extension. The project deliverable of 60% set of plans ready for permitting includes community engagement. These designs will allow the project to be close to shovel-ready to apply for permits. These approval requests are necessary requirements to meet grant contract requirements and milestones. This is a pipeline project directly resulting from the Town’s ESMP.

‘Authorization for Town Manager to enter into a Living Shoreline Design and Engineering contract with McAdams for Estuarine Shoreline Management Project Areas 1 and 2 located at Nags Head Woods Preserve & Villa Dunes Drive and West Soundside Road (the “Project”); Request for authorization for Town Manager to execute a

contract between the Town of Nags Head and the NC Department of Environmental Quality for the Project; and approval of associated budget amendment.

‘The \$40,000 local portion of the grant is included in the Fiscal Year 24/25 adopted budget. The budget amendment is for the grant portion.’

MOTION: Mayor Pro Tem Siers made a motion to adopt the resolution authorizing Town Manager Garman to execute the contract with NC-DEQ for the Estuarine Shoreline Management Project grant as presented. The motion was seconded by Comr. Sanders which passed unanimously.

The resolution, as adopted, read in part as follows:

‘WHEREAS: The Town of Nags Head (the “Town”) has been awarded a coastal resiliency grant in completing the engineering and design work to assess, analyze, and design two estuarine marsh restoration and shoreline stabilization sites (Nags Head Woods Preserve & Villa Dunes Drive and West Soundside Road) to reduce erosion and increase shoreline stability; and

‘WHEREAS: The Town is advised that a proposed contract between the Town and the North Carolina Department of Environmental Quality (DEQ) for Resilient Coastal Communities Program grant funds is being presented for the project known as Designing Innovative Living Shorelines to Restore and Protect Coastal Community Infrastructure and discussed; and

‘WHEREAS: That, under the terms of the said contract, the total project cost is \$540,000.00; and

‘WHEREAS: The Town will pay a total local cash contribution of \$40,000 as its local share of the total project costs; and

‘WHEREAS: The total grant assistance requested is \$500,000.00;

‘BE IT THEREFORE RESOLVED, as follows:

‘That a contract between the Town of Nags Head and the North Carolina Department of Environmental Quality be and the same is hereby approved.

‘That the Manager is hereby authorized to sign and execute the said contract for and on behalf of the Town of Nags Head and forward the same to the North Carolina Department of Environmental Quality.

‘That upon final execution, a copy of said contract be filed with the minutes.’

MOTION: Comr. Sanders made a motion to authorize the Town Manager to enter into a contract with McAdams for ESMP areas 1 and 2 at the Nags Head Woods Preserve & Villa Dunes Drive and W Soundside Road, as presented. The motion was seconded by Comr. Lambert which passed unanimously.

MOTION: Comr. Sanders made a motion to approve the budget amendment for the \$40,000 local portion of the DEQ grant as presented. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

Consideration of Fire Truck purchase contract

Fire Chief Randy Wells summarized the agenda summary sheet which read in part as follows:

"The Fire Department is requesting that the Board authorize the Town Manager to enter into a contract with Atlantic Emergency Services for the procurement of a new fire pumper. This proactive approach to replacing the fire truck is crucial for ensuring timely delivery, following our established replacement schedule. While we are signing the contract now, no funds will be expended until the pumper is delivered.

'Given the current manufacturing delays, the lead time for delivery of fire trucks can extend to several years from the date of order. By initiating the replacement process now, we aim to secure the vehicle as planned, which would be in calendar year 2028.

'Once delivered, the new pumper will replace the existing 2007 fire pumper at Fire Station 21. The 2019 fire pumper will be used as the backup fire pumper. Back-up apparatus are used when front-line vehicles are down for repair or for responses staffed by volunteers or off-duty career staff. The current backup pumper will be sold. We anticipate the new pumper to be delivered after July 1, 2028, aligning with the Town of Nags Head's vehicle replacement schedule, which allocates 10 years for front-line service vehicles followed by an additional 10 years for backup service vehicles.

'Summary of vehicles at each station:
Fire Station 16 – 2013 Quint and 2002 Pumper
Fire Station 21 – 2019 Pumper and 2007 Pumper

'Attached is a memo describing the process to procure bids for the replacement of this vehicle."

MOTION: Comr. Lambert made a motion to authorize the Town Manager to enter into a contract with Atlantic Emergency Solutions for the Pierce Custom Pumper fire truck purchase as presented. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

Consideration of resolution authorizing application to NC-DEQ Division of Water Infrastructure for Septic Health Project Grant; Consideration of revised Septic Health Loan Policy

Town Manager Garman summarized the agenda summary sheet which read in part as follows:

"Recently, staff spoke with the North Carolina DEQ, Division of Water Infrastructure to discuss a pilot program they have initiated related to supporting on-site wastewater infrastructure. The Division of Water Infrastructure has a loan program to allow for the replacement of failing and/or malfunctioning septic systems. This would also include principal forgiveness for loans where the applicant meets certain income criteria. Their loan would be 0% interest whereas the Town's current septic replacement loan is the prime rate minus 2.5%. This places our current interest rate at 5.5%. Staff would like to apply for this grant to enhance the program we already have in place. We discussed soliciting interest from property owners in targeted areas where aging systems and low-lying conditions create additional risk for ground and surface water contamination. However, this would be made available to anyone in the Town who has a malfunctioning or failing system. Coupled with this grant we would also like to increase the timeframe for repayment of septic loans under our program to enhance the affordability of the loan.

'At the October 2nd Board of Commissioners meeting, staff requests Board consideration of attached resolution authorizing a grant application to the NC-DEQ Division of Water Infrastructure for the Town's Septic Health Initiative project. This is for authorization for funds to be used in accordance with the Town's Septic Health Initiative policy.

'The Septic Health Initiative Policy is also attached for your review and approval. This red-lined version updates the policy by authorizing loans to be repaid via automatic bank draft at least monthly and for up to five (5) years instead of the current three (3) years.'

Comr. Lambert spoke highly of the septic pumping program and feels there may be more participation with the loan extension to five years.

MOTION: Mayor Pro Tem Siers made a motion to adopt the resolution authorizing application to NC-DEQ for the Septic Health Project grant as presented. The motion was seconded by Comr. Sanders which passed unanimously.

The resolution, as adopted, read in part as follows:

'WHEREAS, The Town of Nags Head has need for and intends to apply for Clean Water State Revolving Funds (CWSRF) for wastewater, specifically decentralized wastewater:

- The Town has identified failing and/or malfunctioning decentralized septic systems;
- The Town would like to provide Nags Head homeowners low-interest, no-interest, and/or principal forgiveness loans to replace their failing/malfunctioning septic systems; and

'WHEREAS, The Town of Nags Head intends to request State loan and/or grant assistance for the projects; and

'NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TOWN OF NAGS HEAD:

- '1. That the Town of Nags Head, the Applicant, will arrange financing for all remaining costs of the project, if approved for a State loan and/or grant award.
- '2. That the Town of Nags Head will adopt and place into effect on or before completion of the project a schedule of fees and charges and other available funds which will provide adequate funds for proper operation, maintenance, and administration of the system and the repayment of all principal and interest on the debt.
- '3. That the governing body of the Town of Nags Head agrees to include in the loan agreement a provision authorizing the State Treasurer, upon failure of the Town of Nags Head to make scheduled repayment of the loan, to withhold from the Town of Nags Head any State funds that would otherwise be distributed to the local government unit in an amount sufficient to pay all sums then due and payable to the State as a repayment of the loan.
- '4. That the Town of Nags Head will provide for efficient operation and maintenance of the project on completion of construction thereof.
- '5. The Town Manager, or in absence designee, of the Town of Nags Head is hereby authorized, individually and collectively, to execute and file an application on behalf of the Town of Nags Head with the State of North Carolina for a loan and/or grant to aid in the projects described above.
- '6. That the Town Manager, and successors so titled, is hereby authorized and directed to furnish such information as the appropriate State agency may request in connection with such application or the project: to make the assurances as contained above; and to execute such other documents as may be required in connection with the application.

'7. That the Town of Nags Head has substantially complied or will substantially comply with all Federal, State, and local laws, rules, regulations, and ordinances applicable to the project and to Federal and State grants and loans pertaining thereto."

MOTION: Mayor Pro Tem Siers made a motion to approve the extension of the loan payment time to up to five (5) years as provided for in the updated Septic Health Loan Policy. The motion was seconded by Comr. Sanders which passed unanimously.

Discussion of Stormwater Master Plan process/public engagement

Town Engineer David Ryan provided an update on the Stormwater Master Plan process. The agenda summary sheet read in part as follows:

"An NCDEQ - Division of Water Infrastructure Stormwater Planning Grant was received in the amount of \$400,000 to fund the preparation of a stormwater master plan update. As part of the grant funding requirements, preliminary scoping documents were developed, reviewed, and approved through NCDEQ-Division of Water Infrastructure. The preliminary scope of work in the master plan will expand on planning work established in the 2015 stormwater master plan update with a condition assessment, identification of current system deficiencies, development of an updated stormwater CIP listing, public engagement, and planning level cost information for general budgeting.

'Public participation and engagement are identified as an integral part of the stormwater master plan process. Several techniques can be employed to invite participation of various targeted audiences and will be presented for Board consideration. Staff is requesting Board feedback on selecting a public engagement approach considered to be the most beneficial to the stormwater master plan process. A memo is attached which describes in detail prior stormwater planning efforts and public engagement approaches.

'The second part of this request is for consideration of the fee proposal submitted by McAdams to initiate the first phase of work for the Stormwater Master Plan. Requesting the Board to authorize the Town Manager to execute the planning proposal with McAdams in the amount of \$208,000 to begin the stormwater master plan process. Attached is a copy of the September 25, 2024 McAdams proposal."

Mayor Cahoon spoke of the well-attended workshops and felt that pushing notification helped; Comr. Lambert agreed to the importance of community involvement as was done with the septic health project.

Town Engineer Ryan said he would like to keep building momentum on this process and keep it moving forward. He is asking for the first phase of work which consists of data collection, stakeholder and public engagement meetings, and problem area discussion.

Town Manager Garman pointed out that McAdams includes the Bio-Habitat and McKim & Creed agencies.

MOTION: Comr. Sanders made a motion to authorize the Town Manager to execute the planning proposal with McAdams in the amount of \$208,000 to begin the Stormwater Master Plan process. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

ITEMS REFERRED TO AND PRESENTATIONS FROM TOWN ATTORNEY

Attorney Leidy had nothing new to report for today's meeting.

ITEMS REFERRED TO AND PRESENTATIONS FROM TOWN MANAGER

Town Manager Garman - Presentation - Annual Beach Condition Survey – Moffat & Nichol
Consideration of amendment to Beach Nourishment Maintenance Capital Project Ordinance

Town Engineer David Ryan summarized the agenda summary sheet which read in part as follows:

"Annually, the Town subcontracts surveying and engineering services to perform an annual beach condition survey and engineering data analysis in accordance with the Town's Beach Monitoring & Maintenance Plan. The survey scope of work includes the base nourishment project area data acquisition in conjunction with additional transect information data acquisition both north and south of the project area. Results of the beach surveys aid in determining nourishment triggers and initiating planning for the next beach nourishment maintenance project. The attached report describes the findings from our beach surveys which were conducted this past June and July.

'Beth Sciaudone, Ph.D., PE and Ayse Karanci, PhD, PE from the consulting firm of Moffat & Nichol will present the findings of the condition surveys and will be available to answer questions from the Board.

'One of the items noted in the draft report is the recent significant erosion within Reaches 3 & 4. We have observed additional erosion in these reaches after the surveys were conducted. The Board may want to consider conducting a supplemental fall survey to evaluate the magnitude and extent of changes to the beach condition. Fee proposal amounts have been submitted by McKim & Creed to perform the survey field work in the amount of \$44,790 and from Moffat & Nichol to conduct analysis of the data in the amount of \$26,350.

'If the Board of Commissioners would like to proceed with approving a fall condition survey, a motion will be in order to authorize the Town Manager to execute change orders in the amount of **\$44,790** with McKim & Creed and **\$26,350** with Moffat & Nichol to conduct the additional monitoring work."

Town Engineer Ryan introduced Beth Sciaudone and Ayse Karanci from Moffat & Nichol. He noted that hard copies of the annual report has been distributed to Board members. Ms. Sciaudone presented her report slides which are attached to and made a part of these minutes as shown in Addendum "H".

She reported gains in Reaches 1 and 2, but in Reaches 3 and 4 there are losses and Reach 4 has over 50% loss. If losses continue, there may be a need to move up the next beach nourishment project. She stated that she will be at the Board's November 6th meeting to present an update to the Town's Beach Monitoring and Maintenance Plan.

Mayor Cahoon confirmed that there has not been any evidence that the southernmost outfall is having an impact with no accumulation seen on either side.

Engineer David Ryan confirmed with the Board to move forward as quickly as possible to accelerate the beach nourishment project permitting process. He pointed out that the area most concerning is from Pelican Street to the southern limits of the Town. He questioned if the Board would want to consider an additional fall beach condition survey. Finance Officer Amy Miller reported that funds were available in the Capital Project fund for the additional survey.

MOTION: Mayor Pro Tem Siers made a motion to approve the additional fall beach condition survey and to authorize Town Manager to execute the change orders for McKim & Creed and Moffat & Nichol as presented. The motion was seconded by Comr. Sanders which passed unanimously.

MOTION: Mayor Pro Tem Siers made a motion to approve Capital Project Ordinance #12 to transfer funds for the surveying and monitoring line item as presented. The motion was seconded by Comr. Sanders which passed unanimously.

Town Manager Garman reported that he and staff rode the beach recently; For the beach driving season, he has closed beach driving from Pelican St south to the town line as this area is often impassable during high tides.

Town Manager Garman - Update on construction of the Public Services Facility

Town Engineer David Ryan provided an update on the Public Services Facility construction. Staff is currently operating out of the new fleet bays and servicing the Town fleet; Solar Panels are now online; the former Public Works office building was recently demolished.

Town Manager Garman – Statewide Mutual Aid Agreement

Town Manager Garman presented the Statewide Mutual Aid Agreement for 2023 – the last one adopted by the Town was from 2020.

MOTION: Comr. Sanders made a motion to approve the Statewide Mutual Aid Agreement for 2023 as presented. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

A copy of the agreement, as approved, is on file in the Town Clerk's Office.

MAYOR'S AGENDA

Mayor Cahoon – Upcoming election

Mayor Cahoon spoke of the resolution the Board adopted a couple of years ago entitled: *A Resolution Showing Appreciation And Support For Dare County Elections Staff And Precinct Workers*. He cited the following from the resolution: "... the Dare County Board of Elections ensures that these elections are free, fair, accurate, convenient and accessible to all voters in Dare County ..." He said that he is proud that there is such great staff that runs these elections.

Mayor Cahoon – Vacant Board of Commissioners seat

Mayor Cahoon reported that at the November 6th Board meeting the process to fill the Board of Commissioners seat now vacant due to Comr. Brinkley's resignation will be presented. Detailed information will be provided as the Board will be open and transparent about the selection.

ADJOURNMENT

MOTION: Mayor Pro Tem Siers made a motion to recess to the Board Retreat on Friday, October 18th at 8:30 am at the Public Services Dept Training Room. The motion was seconded by Comr. Lambert which passed unanimously. The time was 11:30 a.m.

Carolyn F. Morris, Town Clerk

Date Approved: _____

Mayor: _____
Benjamin Cahoon



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM E.4.

Consideration of Amendment to Town Code Sec 44-35 re: Water Cut-Offs

Prepared by

Brittany Phillips, Deputy Town Clerk

Reviewed by

Brittany Phillips

Carolyn Morris

Amy Miller

Andy Garman

Staff Comments/Recommendation

Specific Action Requested

Request Board consideration of attached ordinance.

Summary

The proposed ordinance amending Town Code Chapter 44 UTILITIES modifies when water services can be disconnected due to nonpayment is attached. The following addition is being considered:

Sec. 44-35. Payment of bills – Water services cannot be disconnected on Fridays, weekends, Town holidays, the day before a Town holiday, or the day before Town Hall is closed. In this event, non-payment fees will still be applied on the date that corresponds with the respective billing cycle and water service will be disconnected the following business day.

Attachments

1. 11 E4 Water cut off Sec 44-35 ord



**AN ORDINANCE AMENDING THE TOWN CODE OF THE
TOWN OF NAGS HEAD, NORTH CAROLINA AS IT PERTAINS
TO CHAPTER 44 UTILITIES, SEC 44-35**

NOW, THEREFORE, BE IT ORDAINED by the Board of Commissioners of the Town of Nags Head, North Carolina, that section 44-35 of the Town Code shall be amended.

PART I. That **Chapter 44 UTILITIES**, Division 1. GENERALLY be amended as follows:

Sec. 44-35. Payment of bills.

Water bills shall be mailed on the 10th and 25th of each month depending on the cycle to which your address corresponds. When Town Hall is closed, they will be mailed on the previous business day. Each cycle will receive a bill every other month. A calendar is established at the beginning of each fiscal year outlining dates for billing, due date, penalty date, late notices and cut-off dates for each cycle. Water services charges are immediately due and become past due on the 5th and the 20th, respectively, of the following month. After the expiration of the appropriate water billing past due date, there shall be levied a late payment fee in an amount equal to ten percent of the ~~principle~~principal amount of the bill. Water services may be cut off for nonpayment on the 20th and the 5th, respectively, following the billing past due date, without further notice and a non-payment fee per the consolidated fee schedule will be added to the account. If Town Hall is closed, bill due dates and nonpayment water services cut offs will be the following business day. Water services cannot be disconnected on Fridays, weekends, Town holidays, the day before a Town holiday, or the day before Town Hall is closed. In this event, non-payment fees will still be applied on the date that corresponds with the respective billing cycle and water service will be disconnected the following business day. Even when service is cut off, water customers retain the liability for the minimum charge for each billing period the service is discontinued. Payment of water bills may be enforced as provided in G.S. 160A-314.

PART II. Effective Date.

This ordinance amendment shall be in full force and effect upon the date of adoption by the Board of Commissioners.

Benjamin Cahoon, Mayor
Town of Nags Head

ATTEST:

Carolyn F. Morris, Town Clerk

APPROVED AS TO FORM:

John Leidy, Town Attorney

Date adopted: November 6, 2024

Motion to adopt by Commissioner _____

Motion seconded by Commissioner _____

Vote: _____ Ayes _____ Nays



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM E.5.

Consideration of Fee Waiver for Fire Department Training Live Burn

Prepared by

Brittany Phillips, Deputy Town Clerk

Reviewed by

Brittany Phillips

Carolyn Morris

Amy Miller

Andy Garman

Staff Comments/Recommendation

Specific Action Requested

This item is provided for Board review and approval.

Summary

Staff is requesting Board consideration of waiving the Consolidated Fee Schedule charges related to a Structure Burn Permit (\$1,500) plus water use.

The homeowner at 4114 S Va Dare Trl is demolishing their property and has offered the property, consisting of 2 structures (main house and smaller garage), to our Fire and Rescue division for live burn training. Training will consist of interior fire attacks and a final burn down and is planned to occur in November. This type of training allows us to fight fires in a controlled and supervised setting, which is invaluable when applied to a real fire scene. The homeowner has paid for and been issued a demolition permit through our Planning & Development department.

Attachments

None



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM E.6.

Consideration of Policy for Streaming/Recording Board Meetings

Prepared by

Carolyn Morris, Town Clerk

Reviewed by

Carolyn Morris
Andy Garman

Staff Comments/Recommendation

Staff recommends approval of the attached policy for streaming and recording both Planning Board and Board of Commissioners Meetings

Specific Action Requested

Approval of the policy related to streaming and recording meetings

Summary

Staff has drafted the attached policy for streaming and recording both Planning Board and Board of Commissioners meetings. This policy establishes consistency and transparency with respect to how meetings are made available to the public. This was discussed at the Board's 2024 Fall retreat.

Attachments

1. 11 E6 livestreaming process policy



Town of Nags Head

Post Office Box 99
Nags Head, NC 27959
Telephone 252-441-5508
Fax 252-441-0776
www.nagsheadnc.gov

Board of Commissioners Policy

Livestreaming of Board of Commissioners and Planning Board Meetings

Adopted: _____

Purpose/Policy Statement

To enhance transparency and public access to governmental proceedings, the Town of Nags Head will livestream meetings of the Board of Commissioners and the Planning Board. This shall include CIP and budget workshops, as well as any other workshops. This shall not require the streaming and recording of emergency or special meetings, as defined in GS 160A-171, the Board's annual retreat, or informal Board gatherings with three or more members which are required to be advertised. An example would be three or more Board members attending a conference or a meeting held by another agency.

Technical Provisions

The Town will ensure that appropriate technology is in place to facilitate reliable and high-quality livestreaming of the meetings.

Livestreamed meetings will be made available on the Town's website and YouTube channel.

Accessibility

All livestreams shall comply with applicable laws and regulations regarding accessibility, ensuring that all community members can engage with their local government.

Recording

All livestreamed meetings will be recorded for public access.

Responsible for Update: XXX



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM E.7.

Consideration of Reimbursement Resolution in Support of Property Purchase

Prepared by

Brittany Phillips, Deputy Town Clerk

Reviewed by

Brittany Phillips

Carolyn Morris

Amy Miller

Andy Garman

Staff Comments/Recommendation

Town Manager: The Town currently has this property under contract and expects to close within 210 days of execution of the purchase agreement, pending resolution of several contract contingencies. Closing could occur in advance of this timeframe, depending on progress. This resolution would allow the Town to reimburse itself for expenses related to the purchase.

Finance Officer: The installment finance contract is anticipated to fund the amount of \$3,000,000. The Town expects to reimburse itself for the original expenditures incurred and paid by the Town from the General Fund within 210 days.

Specific Action Requested

Request Board consideration of attached resolution authorizing the financing of the purchase of property located at 4222 S Croatan Highway.

Summary

At the November 6, 2024 Board of Commissioners meeting, request Board consideration of attached resolution authorizing the financing of the purchase of vacant land (4222 S Croatan Highway). The purchase includes the costs of professional fees, closing costs, appraisal, and surveying.

Attachments

1. 11 E7 TM Reimb 4222 S Cro Hwy res



**REIMBURSEMENT RESOLUTION – FISCAL YEAR 2024-2025
OF THE TOWN OF NAGS HEAD
DECLARING THE INTENTION TO REIMBURSE
THE COST OF CERTAIN EXPENDITURES**

WHEREAS, The Town Manager and the Finance Officer have described to the Board of Commissioners the desirability of adopting a resolution, as provided under federal tax law, to facilitate the Town's use of financing proceeds to restore Town funds when the Town makes capital expenditures prior to closing on installment financing.

BE IT HEREBY RESOLVED by the Board of Commissioners of the Town of Nags Head, North Carolina as follows:

Section 1. The purpose of the financing is to purchase vacant land (including but not limited to professional fees, closing costs, appraisal, surveying, etc.) located at 4222 S. Croatan Highway Nags Head, NC, identified in the fiscal year 2024/2025 amended budget.

Section 2. The property purchase is to be financed. The currently expected type of financing (which is subject to change) is an installment finance contract. The currently expected maximum amount to be financed for the projects is \$3,000,000.

Section 3. The Town presently intends, and reasonably expects, to reimburse itself for the original expenditures incurred and paid by the Town from the General Fund within 210 days of adoption of this Resolution from a portion of the financing proceeds.

Section 4. This Resolution shall become effective immediately upon the date of its adoption.

This the 6th day of November 2024.

Benjamin Cahoon, Mayor
Town of Nags Head

ATTEST:

Carolyn F. Morris, Town Clerk



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM E.8.

Consideration of Design Scope of Services for Replacement Fitness Center

Prepared by

Carolyn Morris, Town Clerk

Reviewed by

Carolyn Morris
Andy Garman

Staff Comments/Recommendation

Staff would recommend Board approval of the scope of services for the design of the replacement fitness center. A budget amendment for this scope is included in item E.1 on the consent agenda. This project will be financed and a reimbursement resolution for this project was previously approved by the Board.

Specific Action Requested

Staff would request Board authorization of the Town Manager to enter into a contract with Oakley Collier to design a replacement fitness center per the attached scope of services.

Summary

Over the past year the Board and staff have been working on a master plan to determine existing and future needs for town departments occupying the Town Hall property as well as the two properties across from Town Hall. These properties are currently used by the Fire Department (Station 16) and a temporary location for the Town's fitness center. In late 2023, the existing Town fitness center was closed due to mold and persistent moisture within the building envelope. This building is roughly 50 years old and is functionally obsolete. The master plan has identified a location for a replacement fitness center in the vicinity of the parking area on the north side of the existing building. This is envisioned as a simple 3,000+ square foot building that would be designed to be expanded with a half-story 2nd floor space in the future. The replacement fitness center was included in the FY 2024/25 budget. It is anticipated that Dare County will take possession of the temporary fitness center at 105 W Seachase Drive in the Fall of 2025 to begin construction of an EMS station. Although there will likely be a lag time between demolition of the temporary fitness center and completion of the replacement fitness center, staff would like to get started ASAP to minimize the time we are without a facility. Attached is the proposed design scope from Oakley Collier. Civil/site design will either be handled in-house or through a separate agreement with the Town's on-call services engineer.

Attachments

1. 11 E8 Fitness Center replacement OCA memo

November 1, 2024

Andy Garman, Town Manager
Town of Nags Head
5401 S. Croatan Hwy
Nags Head, NC 27959



Re: Design Services for the Replacement Fitness Center

Dear Andy:

Below is our letter of proposal for Professional Services as requested. This proposal shall outline the cost of services for all design services for the Replacement Fitness Center. The scope of work required is outlined below.

Replacement Fitness Center:

This project entails designing a new Fitness Center as outlined in the attached program and conceptual plan. The building shall be approximately 3,200 square feet, single story building. The roof structure shall be designed so that a future second floor could be added for apartments. The building shall be elevated above the base flood elevation and will be of a similar architectural style as the Town Hall. It is contemplated the new facility shall connect to the existing septic field and water supply on the campus. Additional parking shall be added to support the parking needs of the building as depicted in the attached sketch, and shall be designed by Owner.

Based on the current market conditions for a hard bid construction project, I would estimate the cost per square foot to be +/- \$400/ S.F. This cost does not include site improvements or any septic field repair or replacement.

Based on the above cost I would estimate the cost of the vertical construction to be **\$1,280,000**.

The project budget breaks down as follows:

- A/E Design
 - Structural Engineering \$11,680
 - MEP Engineering \$30,720
 - Architectural Design \$51,424
 - TOTAL A/E Design Fee: **\$93,825**
 - (Total Est. Man Hours 500)

- Vertical Construction \$1,280,000
- TOTAL \$1,373,825**

While the above Construction Budget is aggressive, we will endeavor to maintain the project costs as outlined above. It must also be understood that the current Construction Market is rapidly changing, and the final cost determination shall be made based on the program requirements and marketplace conditions at the time of bidding.

The Professional Service fees for the Replacement Fitness Center are as follows:

Schematic Design Thru Construction Documents	70%	\$65,678
Bidding	5%	\$4,691
Construction Administration	20%	\$18,765
Close Out	5%	\$4,691
Total Fee	100%	\$93,825

The above fees are quoted as a fixed lump sum and are based on the level of effort to produce the project.

I have not included the following services in the base fee:

- Topographic / Boundary Survey
- Geotechnical Report
- Hazardous Material Testing or Abatement Design
- Furnishings Design and Specifications

Should these services be required, they shall be considered additional services and a separate proposal will be prepared. Standard reimbursables, travel, lodging, sustenance, prints and postage shall be billed as incurred with a not to exceed amount of \$3,500.

Our proposed team for the Project is:

Civil Engineering Consultant
By Owner

Structural Engineering
Stewart Engineering
223 S. West St Suite 1100
Raleigh, NC 27603

PME Consultant
Atlantec Engineers
3221 Blue Ridge Rd #113
Raleigh, NC 27612

We propose the following completion schedule for the project:

Schematic / Design Development	4 weeks
Construction Documents	4 weeks
Regulatory Approvals	6 weeks
Receive Bids	4 weeks
Award Contracts	3 weeks
Construction Completion	44 weeks
TOTAL PROJECT DURATION:	65 weeks

The schedule above includes the required review times for Owner & Regulatory agencies.

Andy, after your review please do not hesitate to contact me. If you are in agreement with this proposal, we can prepare an AIA B101 Standard Form of Agreement between Owner & Architect, or a Service Order as part of the Master Service Agreement.

Regards,



Timothy D. Oakley, AIA, LEED AP



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM E.9.

Request for Public Hearing to Consider Amendments to UDO re: Hotel Parking Standards

Prepared by

Kelly Wyatt, Planning Director

Reviewed by

Kelly Wyatt
Carolyn Morris
Andy Garman

Staff Comments/Recommendation

Planning staff finds the proposed text amendment to be consistent with the 2022 Comprehensive Land Use Plan and recommend adoption of the amendment as presented.

Planning Board Recommendation

At their October 15, 2024, meeting, the Planning Board voted unanimously to recommend adoption of the proposed text amendment as presented.

Specific Action Requested

Schedule the Public Hearing for the Board of Commissioners December 4, 2024 meeting.

Summary

At their meeting on August 7, 2024, the Board of Commissioners requested staff to review the Town's existing parking standards for hotels and restaurants to assess their adequacy in meeting current needs. On August 20, Planning staff presented an analysis of both current and past parking standards within the town. They noted that while updating hotel parking standards may be straightforward, revising restaurant standards is more complex due to factors like outdoor dining and entertainment, which are not currently addressed. During further discussions at their September 17 meeting, the Planning Board highlighted that some hotel units feature multiple beds, potentially leading to more than one vehicle per unit. They recommended that any revised parking standards account for both the number of units and the number of bedrooms. The Board reached a consensus that the most appropriate standard is the one used in the late 1980s and 1990s: 1.2 parking spaces per rentable unit or one space per bedroom—whichever is greater—plus one space for every two employees on the largest shift. This standard effectively accommodates the additional parking needs for hotels offering multi-bedroom options, such as family and executive suites, as well as extended stay rooms.

Attachments

None



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM F.1.

Public Hearing to Consider a Special Use/Site Plan Review for the Construction of a Two Story, Eight Bedroom Dormitory

Prepared by

Kelly Wyatt, Planning Director

Reviewed by

Kelly Wyatt
Carolyn Morris
Andy Garman

Staff Comments/Recommendation

STAFF RECOMMENDATION Planning staff finds that the proposal is consistent with applicable land use and development standards, as well as relevant land use policies. Additionally, staff finds that the requirements necessary to offer a reduction in parking pursuant to Section 10.15.2.2. of the UDO, Shared Parking Associated with a Special use Plan, has been met given that it will not result in increased traffic congestion or negatively impact existing traffic flow or pedestrian and vehicular safety, will not create parking impacts for adjacent properties or within Town rights-of-way, will not be contrary to the objectives specified in the Comprehensive Plan, is necessary to permit the reasonable use of the subject property, and will not adversely impact adjacent property or the surrounding area.

PLANNING BOARD RECOMMENDATION At their September 17, 2024, meeting, the Planning Board voted unanimously to recommend approval of the Special Use Permit/Site Plan Review as presented, to include shared parking arrangements based upon the Community Care Clinic and the Town's Ocean Rescue personnel having staggered parking demands.

Specific Action Requested

This item is provided for Board review and approval.

Summary

GENERAL INFORMATION

Applicant: Michael Strader, P.E. of Quible & Associates, PC & Chis Nason, AIA of Beacon Architecture and Design on behalf of the Town of Nags Head.

Application Type: Special Use Permit/Site Plan Review.

Purpose/Request: Construction of an approximately 3,460 square feet, two-story, eight-bedroom dormitory (duplex) and all associated site improvements. This dormitory is for use by the Town of Nags Head workforce or as approved by the Town Manager.

Property Location: 425 W. Health Center Drive, Nags Head.

Existing Land Use: Medical Offices, Community Care Clinic.

Zoning Classification of Property: SED-80, Special Environmental District.

Zoning Classification of Surrounding Properties: Properties to the north, west, south, and east are zoned SED-80, Special Environmental District (Peak Resources and vacant/Nature Conservancy).

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 of habitable space will be elevated well above the 9-foot RFPE as existing topographic information shows an elevation greater than 20 ft. msl in the area of the proposed structure.

Land Use Plan Map/Policies: The 2022 Comprehensive Plan, Future Land Use Map classifies this property as Institutional/Community Services. This proposal is consistent with this land use classification and stated Land Use Policies.

SPECIFIC INFORMATION

Applicable Zoning Regulations:

- Use Regulations: Pursuant to the text amendment adopted by the Board of Commissioners at their September 4, 2024, meeting, "Dormitory" is a Special Use within the SED-80, Special Environmental District, with supplemental regulations set forth Section 7.10 of the UDO. These supplemental regulations are as follows:

Dormitory is permitted in accordance with [Section 6.6](#), Table of Uses and Activities, provided that the following additional requirements and conditions are met:

7.10.1. A minimum lot area of 25,000 square feet and a minimum lot width of 100 feet shall be required. *Staff comment: This property is 123,600 in area with a lot width greater than 250 feet.*

7.10.2. Sleeping rooms shall have a minimum floor area of seventy (70) square feet for the first occupant and a minimum floor area of fifty (50) square feet for each additional occupant. *Staff comment: Each floor contains 4 bedrooms with an expected occupancy of 8, a total of 8 bedrooms with an expected occupancy of 16. The proposed sleeping rooms will accommodate two occupants. Each sleeping room is approximately 170 square feet in area. As proposed, this regulation has been met.*

7.10.3. At least one restroom in the facility shall have a minimum of two (2) water closets, two (2) sinks, and two (2) showers. In all cases, reference the North Carolina Plumbing Code for the required number of dormitory bathroom fixtures. *Staff comment: Each dwelling unit contains two full bathrooms for a total of 2 toilets, 2 sinks, and 2 showers. As proposed, this regulation has been met.*

7.10.4. A minimum floor area of twenty (20) square feet per occupant is required for adequate common living areas (including kitchen and dining) but not less than 220 square feet per unit or floor. Circulation spaces less than six (6) feet wide shall not be counted as common living areas. *Staff comment: An area greater than 500 square feet has been provided in each dwelling unit. As proposed, this regulation has been met.*

7.10.5. No dormitory facility shall house more than twenty-five (25) occupants. *Staff comment: As proposed, this two-story dormitory/duplex would house no more than 16 occupants at any time.*

- Lot Coverage: Pursuant to Section 8.4.3.3.6.1 of the UDO, Special Development Standards within the SED-

80 (Special Environmental District) the maximum allowable lot coverage for this property is 20% of the total lot area. While the exact lot area remains uncertain, using the most conservative estimate, the current site conditions result in approximately 28.6% lot coverage.

Upon researching the history of how this property was developed to such an extent, it was discovered that this area was previously zoned as SPD-40 (Special Planned Development), where the maximum allowable lot coverage was 30%. This zoning designation and the associated dimensional standards date back to the 1982 Official Zoning Map and the Town of Nags Head Zoning Ordinance from 1977, with amendments through February 1983 (attached). It is important to note that the structure on this property was built in 1975.

The increase in lot coverage beyond the current allowable limit constitutes a site nonconformity. According to Section 5.4 of the UDO, nonconforming site conditions may continue but cannot be increased. Therefore, the site is considered legally nonconforming at 28.6% lot coverage. While lot coverage can be removed, replaced, or relocated, it cannot exceed the 28.6% threshold. The proposed redevelopment of the dormitory, including the removal of the non-functional helipad and various other improvements, results in 28.3% lot coverage and is therefore compliant.

- **Height:** The maximum allowable building height within the town is 35 feet. However, pursuant to Section 8.2.1, Dimensional requirements, total height may be increased to 42 feet with the use of an 8:12 roof pitch or greater. The applicant has proposed a structure with an overall height of approximately 32 feet measured from grade, while also proposing an 8:12 roof pitch. Therefore, height is compliant.
- **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 special use permit or site plan review. This project must adhere to the Commercial Design Standards set forth within Part VI of the UDO. As proposed, this project will comply with standards set forth in Division II – Building Design including a human scale design with a second-floor covered porch, residential style single or double hung windows, board and batten siding, gable brackets, etc. Additionally, we intend to incorporate a few other desirable elements such as workable shutters and column trim.
- **Parking:** Pursuant to Article 10, Table 10-2, *Required Parking by Use*, dormitory uses are required to provide one parking space for every four occupants. For this structure, which will have a maximum occupancy of 16, a total of four (4) parking spaces are required. However, considering that this structure is intended to house the Town of Nags Head workforce, including seasonal lifeguards, it is understood that actual parking needs will likely exceed the minimum requirement.

Currently, there are 37 existing parking spaces onsite. Based on a liberal application of the medical office parking standard to the Community Care Clinic, which is also located onsite, we estimate that approximately 25 parking spaces are necessary for the clinic. This leaves 12 parking spaces available for dormitory use, providing parking for three-quarters of the dormitory occupants. Ideally, 16 spaces—one per occupant—would be available for this use.

Section 10.15.2.2 provides a mechanism, through the Special Use Permit process, to consider shared parking arrangements when multiple uses on the site have staggered hours or differing peak parking demands (see below). Under this provision, no more than 50% of the required parking spaces for the proposed use can be shared with existing and conforming parking spaces for other uses.

Staff is requesting that the Board of Commissioners consider approving this shared parking provision to address the four (4) additional parking spaces needed to meet the desired total of 16 spaces for the dormitory. The Community Care Clinic operates between 9:00 AM and 4:00 PM, Monday through Friday, and is closed on weekends. In contrast, the Town's ocean rescue staff typically work from 9:00 AM to

6:00 PM, with some early morning training sessions. Given these staggered hours, there should be minimal overlap in parking demand between the clinic and the ocean rescue staff.

10.15.2.2. Shared Parking Associated with a Special Use Plan or Plan Amendment.

Proposed commercial uses in all commercial zoning districts may share a portion of existing and conforming parking spaces with other commercial uses in commercial zoning districts provided that the following conditions are met:

10.15.2.2.1. *The uses should have staggered or different business hours and parking demands, such as an office building open between 9:00 a.m. and 5:00 p.m. and a restaurant open between 5:30 p.m. and 11:00 p.m., or a business open during the week and a church where parking demand peaks on the weekend;*

10.15.2.2.2. *No more than fifty (50) percent of required parking spaces for the proposed use may be shared with existing and conforming parking spaces of the other commercial use;*

10.15.2.2.3. *Commercial uses must be abutting and integrated with unrestricted traffic and parking flow between them or may be across a Town street or private easement or alley within the same block;*

10.15.2.2.4. *When shared parking is devoted to a use other than parking, or business hours of one or more of the uses change to preclude the shared use of the parking spaces, or one or more uses change, increasing the amount of parking spaces required, or other changes in use or parking configuration occur, the special use permits for both sites must be amended appropriately; and*

10.15.2.2.5 *For proposed commercial uses that redevelop existing commercial sites abutting the NC 12 Beach Road corridor from East Gulfstream to Eighth Street, an alternative parking plan may be proposed that provides a ten (10) percent reduction in required parking and may be approved with or without a shared parking arrangement at the discretion of the Board of Commissioners as part of a special use plan.*

- **Buffering/Landscaping:** Several sections of the Unified Development Ordinance speak to Buffering and Landscaping, however, due to the design and location of this proposed structure and the use of the existing parking lot, they would not be applicable.
- **Special Land Disturbance Considerations in the SED-80:** Within the SED-80 (Special Environmental District), the removal of any tree with a diameter at breast height (DBH) greater than four (4) inches is prohibited, except in specific areas. These exceptions include trees within the principal building site and a 20-foot perimeter around it, within required accessways, parking lots, driveways, utility installations and a 5-foot perimeter around those areas, and within septic tank drain fields and the surrounding area as determined by the Dare County Department of Health to ensure proper septic function. Other exemptions apply to trees that are at risk of falling, as evidenced by cracking, splitting, leaning, or physical damage, as well as trees that pose a threat to public facilities or services, or are in irreversible decline due to disease, or are no longer living, If an applicant wishes to remove a tree larger than four (4) inches DBH outside if these exempted areas, approval must be obtained from the Board of Commissioners.

At this time, no trees are proposed for removal that fall outside of the exempted areas. However, if a tree is later identified for removal that does not meet the exemption criteria, we will bring the request to the Planning Board and Board of Commissioners for approval.

- **Lighting:** At this time, no additional parking lot lighting is needed or proposed. The dormitory will feature standard residential lighting.

- Signage: No additional signage is proposed.

Water and Sewage Disposal: The Dare County Health Department is currently reviewing the proposed sewage design. This authorization will be required prior to review by the Board of Commissioners.

Traffic Circulation: No changes are proposed to the existing parking lot design or traffic circulation patterns.

Stormwater Management: Section 11.4.1 of the Unified Development Ordinance states, Redevelopment of property within existing commercial uses does not require submission of a stormwater plan under the following circumstances:

11.4.1.1. The development is consistent with the zoning regulations of this UDO relating to redevelopment and nonconformities;

11.4.1.2. The redevelopment does not result in a net gain of built upon area;

11.4.1.3. The redevelopment does not include the importation of any fill material.

Stormwater management is not required for this project, provided that lot coverage remains at 28.6%, with no net increase in built-upon area and no importation of fill material. However, if there is any increase in lot coverage or the addition of fill material, the Town Engineer will require stormwater management to accommodate a 4.3-inch rainfall event for the net increase in built-upon area.

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.

Attachments

1. 11 F1 PH Dormitory at CCC site plan
2. 11 F1 PH Dormitory at CCC pn



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

SPECIAL USE (\$500.00)

(Optional) VESTED RIGHT (no fee)

= TOTAL FEE DUE _____

TOWN OF NAGS HEAD

DATE RECEIVED _____

SITE PLAN REVIEW APPLICATION & CHECKLIST FOR SPECIAL USES

1. LOCATION AND ZONING INFORMATION

- A. PROJECT TITLE Ocean Rescue Housing
- B. STREET ADDRESS 425 W. Health Center Drive
- C. SUBDIVISION None
 LOT(S) N/A BLOCK N/A SECTION N/a
- D. PRESENT ZONING Special Environmental District SED-80
- E. PRESENT USE Government Owned Medical Office/Clinic
- F. EXISTING NONCONFORMITIES Lot coverage
- G. ABUTTING PROPERTY ZONING R-2 Medium Density Residential/SED-80
- H. ABUTTING PROPERTY USE Nursing Home/Nature Preserve/Single-Family 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.

Town of Nags Head
 OWNER AGENT CONTRACT
 PURCHASER

- B. APPLICANT/DEVELOPER: NAME Town of Nags Head
 ADDRESS PO Box 99
Nags Head, NC 27959
 TELEPHONE 252-619-0437
- C. CONTACTPERSON: NAME Andrew Garman
 ADDRESS Same as above
 TELEPHONE Same as above

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

- NAME/ADDRESS (N) Peak Realty Nags Head LLC, 101 Baines Court, Cary, NC 27511
- NAME/ADDRESS (S) The Nature Conservancy 334 Blackwell Street, Suite 300 Durham, NC 27701/ Town Nags Head
- NAME/ADDRESS (E) Town of Nags Head
- NAME/ADDRESS (W) The Nature Conservancy 334 Blackwell Street, Suite 300 Durham, NC 27701/ Town Nags Head

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

4. SITE PLAN AND SITE PLAN ATTACHMENT DATA

A. Site plan preparer Cathleen Saunders, PE Phone# 252.202.7112
 NC Registered Engineer Architect Surveyor. License# 043652

- 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 _____
 State County

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

E. Amount of land-disturbing activity proposed 23,145 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.	YES	
2. Current PIN Number.	YES	
3. Site Address.	YES	
4. Owners' names, lot numbers or map book and page reference of all adjacent property owners.	YES	
5. Boundary of the entire parcel by course and distance.	YES	
6. Widths of the existing rights-of-way that abut the site.	YES	
7. Nature or purpose, location and size of existing easements.	YES	
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.	YES	
9. Plan to at least 1"=50' scale, showing north arrow and whether true or magnetic.	YES	
10. Signature and seal of preparer.	YES	
B. Existing features		
1. Streets, curbs, and sidewalks with type and width of pavement.	YES	
2. Topographic features of site and existing grades for any streets, storm drainage system including existing grades at four comers of all structures.	YES	

	YES	COMMENT
3. Flood zone(s) as determined by latest FEMA Flood Insurance Rate Map, with notation, "flood zone subject to change by FEMA."	YES	
4. All underground utilities and facilities including gasoline tanks and existing septic facilities (including tanks and fields).	YES	
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	
C. Site improvements 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.	YES	
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.	YES	
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.	YES	
4. Existing and proposed ground elevations at the corners of proposed structure(s).	YES	
5. Sanitary sewer facilities with connection to sewer system or septic tank.	YES	
6. Approximate locations of proposed underground utilities and any necessary easements.	YES	
7. Screened dumpster pad(s) accessible to left-side loaders and sized in accordance with the Town Code of Ordinances.	N/A	
8. Proposed fire hydrants and extensions of water distribution lines.	YES	
9. Location and height of proposed free-standing signs. See requirements of Article 10, Part III of the Unified Development Ordinance.	N/A	
10. Location of all sidewalks, curbs, drives, and parking within the site and proposed finished elevations.	YES	
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.	YES	
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.	YES	
13. Layout of numbered stalls/loading zones in accordance with Article 10, Part II of the Unified Development Ordinance.	YES	

Commercial <input type="checkbox"/> Residential <input type="checkbox"/>	Parking Spaces Required	Parking Spaces Shown	Loading Spaces
<u>Proposed 2</u> STORIES BUILDING SQUARE FOOTAGE: PRINCIPAL <u>2,143 sq.ft.</u> ACCESSORY _____ TOTAL <u>2,143 sq.ft.</u>	For existing building: 4,365 SF * 1 space/300 sf = 15 spaces	37 Parking Spaces Shown (Including 2 ADA spaces)	N/A
# EMPLOYEES <u>Ten Existing</u>	Ten employees @ 1 space/employee = 10 spaces		N/A
#DWELLING/LODGING UNITS <u>Eight</u>	Proposed two-story building: 1 space/bedroom = 8 spaces		N/A
	33 required spaces total	37 provided spaces total	

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.

DATE

SIGNATURE OF ENGINEER ARCHITECT SURVEYOR

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

Name	Phone#	Information Provided
_____	_____	_____
_____	_____	_____
_____	_____	_____

Site Specific Development Plan Option - Vested Right for Site Plans

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.

NOTES:

- PROPERTY OWNER/ADDRESS: TOWN OF NAGS HEAD
P.O. BOX 99
NAGS HEAD, NC 27959
- PROPERTY INFORMATION: 425 W. HEALTH CENTER DRIVE
- PARCEL ID NUMBER: 989209175322
- ZONE: SOCIAL ENVIRONMENT DISTRICT (SED-80)
- RECORDED REFERENCE: BK. 0324, PG. 0641
- PROPERTY IS LOCATED IN FIRM ZONE X (0.2%) AND SUBJECT TO CHANGES BY FEMA.
- TOTAL PARCEL AREA 123,600 sqft / 2.84 acres
- LOT COVERAGE

EXISTING COVERAGE

BUILDINGS & DECKS.....	6,314.0	SQ.FT.
SIDEWALK, HVAC, & PUMP HOUSE.....	484.3	SQ.FT.
ASPHALT.....	25,769.0	SQ.FT.
HELICOPTER PAD.....	2,811.8	SQ. FT.
TOTAL.....	35,369.1	SQ.FT. (28.6%)

EXISTING TO BE REMOVED

CONCRETE (HELICOPTER PAD).....	2,811.8	SQ.FT.
ASPHALT.....	268.4	SQ. FT.
TOTAL.....	3,288.9	SQ.FT. (26.1%)

- SETBACKS SHOWN ARE PER TOWN OF NAGS HEAD AND DO NOT REFLECT ANY RESTRICTIVE COVENANTS THAT MAY EXIST.
- PROJECT SCOPE: PERMITTING AND CONSTRUCTION OF A ±10,400 SQ.FT. ADDITION TO THE EXISTING CANCER CENTER WITH ASSOCIATED PARKING AND APPURTENANCES.
- WASTEWATER: 22 EMPLOYEES @ 250 GPD/EMPLOYEE = 5,500 GPD (WASTEWATER IS PROPOSED TO BE CONVEYED TO CWS WWTP)
- WATER SUPPLY PER TOWN OF NAGS HEAD. WATER CONNECTION MUST BE MADE IN ACCORDANCE WITH TOWN OF NAGS HEAD SPECIFICATIONS AND SHALL BE PERFORMED BY A LICENSED WATER UTILITY CONTRACTOR. NOTIFY TOWN PRIOR TO INSTALLATION.
- ALL UTILITIES TO BE PLACED UNDERGROUND UNLESS OTHERWISE NOTED
- LANDSCAPING AND BUFFERYARDS TO BE IN ACCORDANCE WITH ARTICLE 10 OF THE TOWN OF NAGS HEAD UNIFORM DEVELOPMENT ORDINANCES.
- SITE WILL BE LIGHTED IN ACCORDANCE WITH ARTICLE 10, PART IV "OUTDOOR LIGHTING" OF THE TOWN OF NAGS HEAD CODE OF ORDINANCES.
- PRIOR TO LAND DISTURBANCE, A TOWN APPROVED SOIL EROSION AND SEDIMENTATION CONTROL PLAN IS REQUIRED.
- NO U.S.A.C.O.E. SECTION 404 JURISDICTIONAL WETLANDS EXIST ON SITE.
- EXISTING VEGETATION TO BE PRESERVED WHERE POSSIBLE.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL PROPERTY MONUMENTS DURING CONSTRUCTION. DISTURBED OR REMOVED PROPERTY MONUMENTS SHALL BE REPLACED BY A NORTH CAROLINA LICENSED PROFESSIONAL LAND SURVEYOR.
- ALL WORK WITHIN THE NC DOT RIGHT-OF-WAY REQUIRES AN APPROVED NC DOT RIGHT-OF-WAY ENCROACHMENT AGREEMENT.
- A STATE HIGH DENSITY STORMWATER PERMIT IS REQUIRED IN ADVANCE OF ANY ONSITE DISTURBANCE.
RECEIVING STREAM: ROANOKE SOUND (30-21)(SA; HW)
- THIS PLAN SET TO BE UTILIZED FOR THE INSTALLATION OF SITE LAYOUT IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, GRADING & DRAINAGE, INSTALLATION OF SEDIMENT CONTROL MEASURES, WATER SYSTEM AND WASTEWATER CONNECTION FOR BUILDING DESIGN AND ASSOCIATED PLUMBING, SEE APPROPRIATE SEPARATE PLANS.

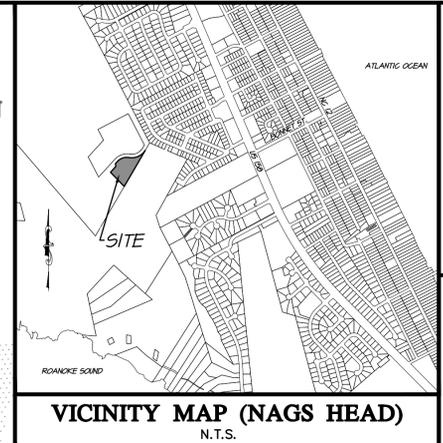
DEMOLITION NOTES:

- CONTRACTOR SHALL LOCATE EXISTING UNDERGROUND SERVICES - TO INCLUDE BUT NOT LIMITED TO ELECTRIC, CABLE, TELEPHONE, GAS, SANITARY SEWER AND WATER - AND SHALL COORDINATE PROPER PROTECTION AND/OR RELOCATE WITH APPROPRIATE OWNER/UTILITY COMPANY.
- CONTRACTOR SHALL WALK THE SITE AND BE FAMILIAR WITH THE SCOPE OF DEMOLITION REQUIRED. ALL DEMOLITION WORK REQUIRED TO CONSTRUCT NEW IMPROVEMENTS WILL BE PERFORMED BY THE CONTRACTOR AND BE UNCLASSIFIED EXCAVATION.
- DEMOLITION SHALL INCLUDE BUT IS NOT LIMITED TO THE EXCAVATION, HAULING AND OFFSITE DISPOSAL OF CONCRETE CURBS AND GUTTERS, BITUMINOUS CONCRETE PAVEMENTS AND ALL MATERIALS OR VEGETATION CLEARED AND STRIPPED TO THE EXTENT NECESSARY FOR THE INSTALLATION OF NEW IMPROVEMENTS AND WITHIN THE LIMITS OF CLEARING AND GRADING, COORDINATE WITH APPROPRIATE DRAWINGS.
- THE CONTRACTOR SHALL PROTECT ALL PROPERTY AND UTILITIES ON THE PROPERTY NOT TO BE DEMOLISHED. DAMAGE TO THE PROPERTY DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT NO COST TO THE OWNER.
- ALL EXISTING IMPROVEMENTS INDICATED OR REQUIRED TO BE DEMOLISHED SHALL INCLUDE REMOVAL FROM PROJECT AREA.
- THE CONTRACTOR SHALL PRODUCE A PHOTOGRAPHIC RECORD OF DEVELOPMENT COMMENCING WITH A RECORD OF THE SITE AS IT APPEARS BEFORE DEMOLITION IS BEGUN. AFTERWARDS A PHOTOGRAPHIC RECORD SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS.
- EXISTING PAVEMENT, CURB AND GUTTER, LIGHTS, FENCES, TREE/VEGETATION AND UTILITIES NOT INTENDED FOR DEMOLITION SHALL BE MAINTAINED, PROTECTED, AND UNDISTURBED DURING DEMOLITION. CONTRACTOR SHALL COORDINATE THE REMOVAL OF BITUMINOUS CONCRETE, PAVEMENTS AND CURBS AND GUTTER WITH THE SITE PLAN.
- SMOOTH SAW CUT OF EXISTING PAVEMENTS, CURBS AND GUTTERS TO BE DEMOLISHED SHALL BE PROVIDED.
- ALL DEMOLITION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS AS WELL AS OSHA REGULATIONS.
- CONTRACTOR'S ACTIVITIES SHALL NOT IMPEDE USAGE OR INGRESS/EGRESS TO ADJACENT PROPERTIES. COORDINATE WITH OWNER MAINTENANCE OF TRAFFIC/PEDESTRIAN CIRCULATION DURING CONSTRUCTION.
- MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDINGS AT ALL TIMES DURING DEMOLITION.
- A DEMOLITION PERMIT MUST BE OBTAINED FROM THE TOWN OF NAGS HEAD PRIOR TO DEMOLITION WORK.

CURVE#	LENGTH	RADIUS	CHD LENGTH	CHD BEARING
C1	288.55'	280.00'	275.45'	S 81° 52' 04" E

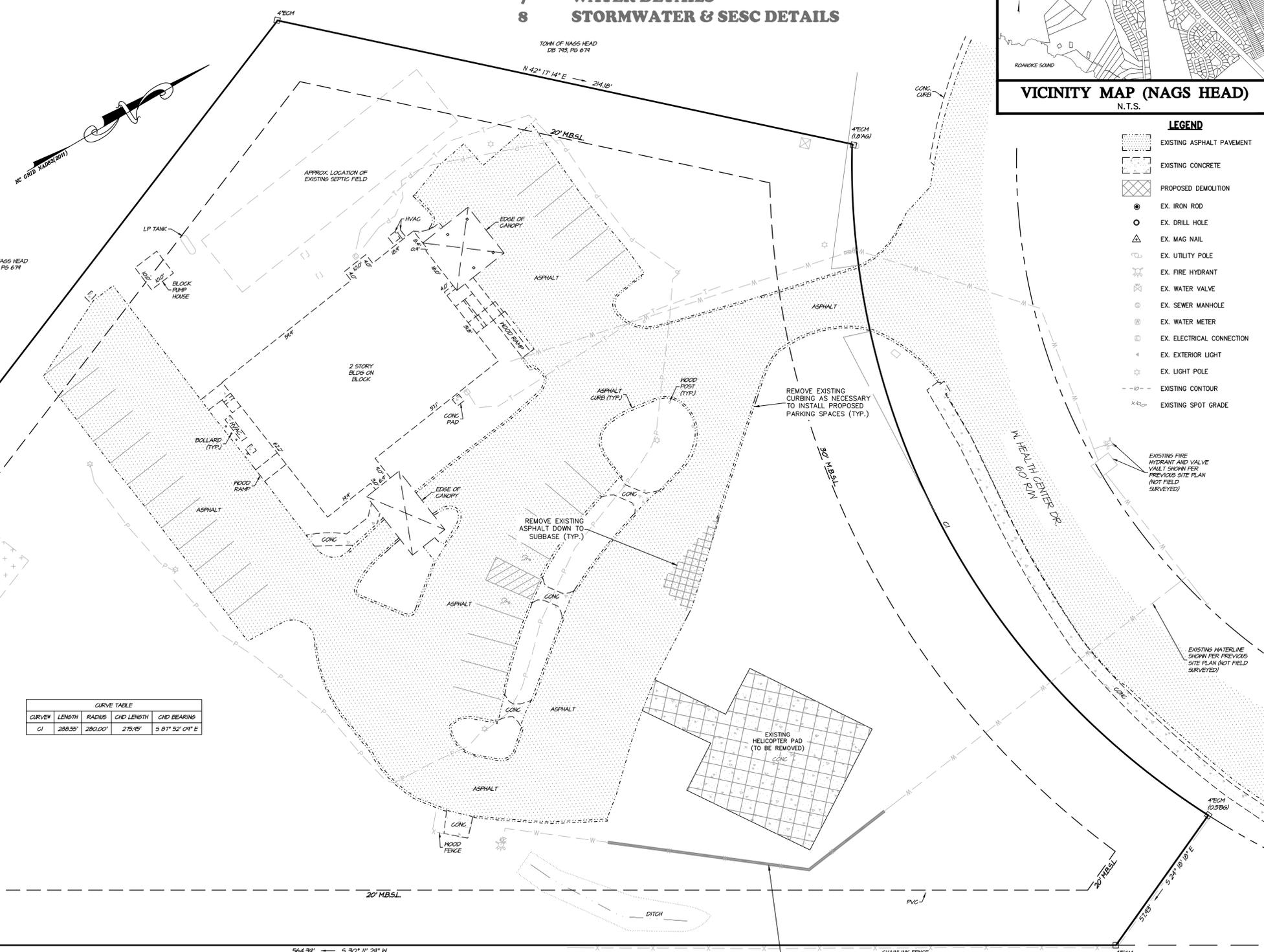
SHEET INDEX

- EXISTING CONDITIONS PLAN
- PROPOSED SITE, UTILITY, & LANDSCAPING PLAN
- GRADING & DRAINAGE PLAN
- SESC PLAN
- SITE & UTILITY DETAILS
- WASTEWATER DETAILS
- WATER DETAILS
- STORMWATER & SESC DETAILS



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REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NORTH CAROLINA
NO. 10000
JAMES M. WILSON
CATHOLIC



LEGEND

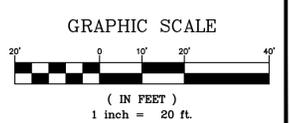
[Symbol]	EXISTING ASPHALT PAVEMENT
[Symbol]	EXISTING CONCRETE
[Symbol]	PROPOSED DEMOLITION
[Symbol]	EX. IRON ROD
[Symbol]	EX. DRILL HOLE
[Symbol]	EX. MAG NAIL
[Symbol]	EX. UTILITY POLE
[Symbol]	EX. FIRE HYDRANT
[Symbol]	EX. WATER VALVE
[Symbol]	EX. SEWER MANHOLE
[Symbol]	EX. WATER METER
[Symbol]	EX. ELECTRICAL CONNECTION
[Symbol]	EX. EXTERIOR LIGHT
[Symbol]	EX. LIGHT POLE
[Symbol]	EXISTING CONTOUR
[Symbol]	EXISTING SPOT GRADE

NOTE: THIS DOCUMENT IS PRELIMINARY - NOT FOR CONSTRUCTION, RECORDATION, SALES OR CONVEYANCES - THIS DOCUMENT IS FOR DISCUSSION PURPOSES ONLY! EXISTING INFORMATION SHOWN ON THIS DOCUMENT IS BASED ON BEST AVAILABLE DATA AND IS NOT A CERTIFIED SURVEY. ALL INFORMATION SHOWN ON THIS DOCUMENT IS SUBJECT TO ANY REQUIREMENTS BY ANY REGULATORY AGENCY, ENTITY OR AUTHORITY.

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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 SHALL CONTINUE UPON ENGINEERS NOTICE TO PROCEED.



EXISTING CONDITIONS/DEMO PLAN

OCEAN RESCUE HOUSING
425 HEALTH CENTER DRIVE

NAGS HEAD TOWNSHIP DARE COUNTY NORTH CAROLINA

PROJECT NO.	P01057.1
DESIGNED BY	ND
DRAWN BY	ND
CHECKED BY	CMS
ISSUE DATE	08/07/24

SHEET NO. **1** OF 8 SHEETS

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DIVISION 0: GENERAL CONDITIONS

GENERAL CONDITIONS (00700):

WORK INCLUDED:

- CONFORM WORK TO THE CONTRACT DOCUMENTS WHICH CONSIST OF THE NOTICE TO BIDDERS; INSTRUCTIONS TO BIDDERS; GENERAL TERMS AND CONDITIONS OF THE CONTRACT; SPECIAL CONDITIONS IF APPLICABLE; THE DRAWINGS AND SPECIFICATIONS, INCLUDING ALL BULLETINS, ADDENDA OR OTHER MODIFICATIONS OF THE DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THE DOCUMENTS PRIOR TO THEIR EXECUTION; THE BID; THE CONTRACT BETWEEN OWNER AND CONTRACTOR; THE PERFORMANCE BOND AND PAYMENT BOND IF APPLICABLE; AND INSURANCE CERTIFICATES.
- THE ARCHITECT IS NOT RESPONSIBLE FOR MEANS METHODS OR TECHNIQUES IN THE CONSTRUCTION OF THE PROJECT.

STAGING OF WORK:

- THE PROJECT SHALL BE CONSTRUCTED SUCH THAT THE ADJACENT OFFICE BUILDING CAN COMPLETE DAILY OPERATIONS.
- SCHEDULING OF PHASES SHALL BE DISCUSSED WITH BIDDERS AT THE PRE-BID MEETING AND FINALIZED BY THE SELECTED CONTRACTOR PRIOR TO COMMENCING WORK IN CONJUNCTION WITH TOWN OFFICIALS.
- CONSTRUCTION SHALL ALLOW FOR THE PARKING OF ADJACENT BUILDING VISITORS AND STAFF IN A SAFE MANNER.

DIVISION 1: GENERAL REQUIREMENTS

SUBMITTALS (01340):

PROCEDURES:

- PRIOR TO COMMENCING SUBSTANTIAL PORTIONS OF THE WORK, PREPARE A MASTER SUBMITTAL LOG SHOWING EACH REQUIRED SUBMITTAL AND SPECIFICATION SECTION NUMBER, THE PROPOSED SCHEDULE AND SEQUENCING OF THE SUBMITTALS AND EACH AFFECTED CONTRACTOR. MAINTAIN THE LOG CURRENT WITH THE PROGRESS OF THE WORK. PROVIDE A COPY OF THE INITIAL AND UPDATED LOG TO THE ARCHITECT.
- REVIEW SUBMITTALS AND INDICATE RESULTS OF REVIEW PRIOR TO SUBMITTING TO ARCHITECT.
- AFTER REVIEW OF SUBMITTAL, REVISE AND RESUBMIT IF SO INDICATED; IDENTIFY CHANGES MADE SINCE PREVIOUS SUBMITTAL.
- DISTRIBUTE COPIES OF REVIEWED SUBMITTALS TO CONCERNED CONTRACTORS INSTRUCT RECIPIENTS TO PROMPTLY REPORT ANY INABILITY TO COMPLY WITH PROVISIONS.
- MAKE SUBMITTALS FAR ENOUGH IN ADVANCE OF SCHEDULED INSTALLATION DATES TO PROVIDE TIME REQUIRED FOR REVIEWS, FOR SECURING OF NECESSARY APPROVALS, FOR POSSIBLE REVISIONS AND RESUBMITTALS, AND FOR PLACING ORDERS AND SECURING DELIVERY.
- SUBMITTALS PROVIDED FOR WORK AND FOR WHICH NO REQUIREMENT FOR SUBMITTAL IS STATED IN THE DRAWINGS OR SPECIFICATIONS WILL BE RETURNED WITHOUT REVIEW.
- ABIDE BY THE STANDARD RULES AND REGULATIONS SET FORTH BY THE TOWN OF NAGS HEAD FOR SUCH OPERATIONS FOR ALL OCCUPANT ON THE SITE.

SHOP DRAWINGS:

- SUBMIT THREE REPRODUCIBLE COPIES OF SHOP DRAWINGS FOR REVIEW.
- 8 1/2" X 11" MINIMUM SIZE SHEETS.

SAMPLES:

- SUBMIT A REASONABLE RANGE OF MANUFACTURER'S STANDARD COLORS, TEXTURES, ETC. FOR SELECTION WHERE SPECIFIC PRODUCT REQUIREMENTS HAVE NOT BEEN STATED OR WHERE SUBSTITUTIONS ARE PROPOSED.
- SUBMIT SAMPLES TO ILLUSTRATE FUNCTIONAL AND SIGHT-EXPOSED CHARACTERISTICS OF THE PRODUCT, WITH INTEGRAL PARTS AND ATTACHMENT DEVICES.
- INCLUDE IDENTIFICATION ON EACH SAMPLE, GIVING FULL INFORMATION.
- SUBMIT THREE (3) SETS OF EACH PRODUCT FOR THE ARCHITECT PLUS ADDITIONAL SETS AS REQUIRED BY THE CONTRACTOR.

SUBSTITUTIONS (01630):

REQUESTS FOR SUBSTITUTIONS:

- SUBMIT SEPARATE REQUESTS FOR EACH PRODUCT AND SUPPORT EACH REQUEST WITH:
 - PRODUCT IDENTIFICATION
 - MANUFACTURER'S LITERATURE
 - SAMPLES AS APPLICABLE
 - NAME AND ADDRESS OF SIMILAR PROJECTS ON WHICH PRODUCT HAS BEEN USED AN DATE OF INSTALLATION.
- REASON FOR SUBSTITUTION.
- ITEMIZE A COMPARISON OF THE PROPOSED SUBSTITUTION WITH PRODUCT SPECIFIED AND LIST SIGNIFICANT VARIATIONS.
- SUBMIT DATA RELATING TO CHANGES IN CONSTRUCTION SCHEDULE.
- INCLUDE ACCURATE COST DATA COMPARING PROPOSED SUBSTITUTION WITH PRODUCT AND THE AMOUNT OF ANY NET CHANGE IN THE CONTRACT PRICE.
- SUBSTITUTIONS WILL NOT BE CONSIDERED WHEN:
 - THEY ARE INDICATED OR IMPLIED ON SUBMITTALS WITHOUT A FORMAL REQUEST.
 - ACCEPTANCE WILL REQUIRE SUBSTANTIAL REVISION OF DRAWINGS AND SPECIFICATIONS.
 - DO NOT ORDER OR PROVIDE SUBSTITUTE PRODUCTS WITHOUT APPROVAL.
 - BURDEN OF PROOF OF MERIT OF PROPOSED SUBSTITUTION IS THE RESPONSIBILITY OF THE CONTRACTOR.

DIVISION 2-5: SITEWORK

(SEE CIVIL ENGINEERING DRWINGS, TYP.)

THIRD-PARTY TESTING REQUIRED (TO BE PROVIDED BY GENERAL CONTRACTOR):

- CONCRETE CYLINDER MATERIAL TESTING (AS REQUIRED BY STRUCTURAL ENGINEER)
- BUILDING SUBGRADE COMPACTION TESTING
- MONITORING OF UNDERCUTS DURING THE FIRST EXCAVATION FOR THE BUILDING FOOTINGS
- BUILDING SUBGRADE EVALUATION
- SAMPLING AND TESTING OF BUILDING FILL
- REPORTS SHALL BE PROVIDED TO THE DESIGN TEAM PRIOR TO POURING OF SLAB.

DIVISION 3: CONCRETE

(SEE STRUCTURAL ENGINEERING SPECIFICATIONS FOR MORE INFORMATION)

GYPHUM CEMENT UNDERLAYMENT (035400):

PRODUCT DESCRIPTION:

GYPHUM CEMENT UNDERLAYMENT FOR INTERIOR WOOD SUBFLOORS. MATERIAL SHALL BE FAST-SETTING, SELF LEVELING, CRACK-RESISTANT SURFACE AND PROVIDES A UL FIRE RESISTANCE RATED UNDERLAYMENT. MAXXON® GYP-CRETE® BASIC OR ARCHITECT APPROVED EQUIVALENT

PRODUCT INFORMATION:

COMPRESSIVE STRENGTH (MODIFIED ASTM C472): 1,000 PSI MIN. (UP TO 2,200 PSI, 15.2 MPA)
INSTALLATION DEPTH: 3/4" THICK REQUIRED FOR THIS INSTALLATION
DRY DENSITY: 110-120 LBS/FT3 (1,762-1,922 KG/M3)
FIRE PERFORMANCE (ASTM E84): FLAME SPREAD - 0
FUEL CONTRIBUTION - 0
SMOKE DEVELOPMENT - 0

CODE LISTINGS :

UL FIRE RESISTANCE: ICC ESR 2540, UL ER 8477-01, HUD12865
UL DESIGN L528 OR ARCHITECT APPROVED EQUIVALENT

INSTALLATION:

BUILDING INTERIOR AND FLOOR SHOULD BE MAINTAINED ABOVE 50 °F (10 °C) FOR AT LEAST 24 HOURS PRIOR TO INSTALLATION AND UNTIL GYPHUM CEMENT UNDERLAYMENT HAS SET. THERE SHOULD BE NO AIR MOVEMENT UNTIL GYPHUM CEMENT UNDERLAYMENT HAS SET, THEN PROVIDE ADEQUATE AIR MOVEMENT BY OPENING WINDOWS TO HASTEN UNDERLAYMENT DRYING. MINIMIZE DIRECT SUNLIGHT DURING THE POUR AND THROUGH THE NEXT 72 HOURS. PLUMBING OR ELECTRICAL PENETRATIONS SHOULD BE PACKED WITH INSULATION AND SEALED.

WOOD SUBFLOOR PREPARATION:

WOOD SUBFLOORS MUST BE STRUCTURALLY SOUND, CLEAN, AND FREE OF DUST AND CONTAMINANTS. WOOD SUBFLOORS MUST BE PRIMED WITH A FLOOR PRIMER (BY THE UNDERLAYMENT MFG.) PRIOR TO GYPHUM CEMENT UNDERLAYMENT APPLICATION. CONTINUOUS VENTILATION AND ADEQUATE HEAT SHOULD BE PROVIDED TO RAPIDLY REMOVE MOISTURE FROM THE AREA UNTIL THE GYPHUM CEMENT UNDERLAYMENT IS DRY. THE GENERAL CONTRACTOR/ PROJECT SUPERINTENDENT MUST SUPPLY MECHANICAL VENTILATION AND HEAT IF NECESSARY. UNDER THE ABOVE CONDITIONS, 3/4" (19 MM) THICKNESS DRYING TIME IS USUALLY 5 TO 7 DAYS, G.C. TO SEE MANUFACTURER FOR COMPLETE INSTALLATION GUIDELINES.

LIMITATIONS:

- FOR INTERIOR USE ONLY. IF GYPHUM CEMENT UNDERLAYMENT WILL BE INSTALLED PRIOR TO DOORS AND WINDOWS, CONTACT VENDOR.
- NEVER INSTALL A MOISTURE VAPOR BARRIER PRODUCT OVER GYPHUM CEMENT UNDERLAYMENTS. DO NOT USE WHERE THOSE PRODUCTS WILL COME IN PROLONGED CONTACT WITH, OR REPETITIVE EXPOSURE TO, WATER OR WATER VAPOR.
- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COMPLETE MOISTURE TESTING BEFORE UNDERLAYMENT IS INSTALLED. USE THE METHODS SPECIFIED BY THE FLOORING MANUFACTURER, TYPICALLY ASTM F710. IF THE MVER EXCEEDS 5 LBS (2.3 KG)/1,000 FT2 (92.9 M2)/24 HOURS OR AN RH GREATER THAN 80%, TREAT THE GYPHUM CEMENT SUBFLOOR WITH A GYPHUM CEMENT MFG APPROVED MOISTURE MITIGATION PRIMER OR TWO-PART EPOXY. IF THE FLOORING MANUFACTURER SPECIFIES MORE STRINGENT MOISTURE LIMITATIONS OR PRACTICES, THEY MUST BE FOLLOWED.
- DO NOT CLEAN WOOD OR CONCRETE SUBFLOORS WITH OIL-BASED OR SILICONE-BASED SWEEPING COMPOUNDS. THESE COMPOUNDS LEAVE A FILM ON THE SUBFLOOR SURFACE THAT WILL INTERFERE WITH BOND DEVELOPMENT. INSTEAD, USE A VACUUM WITH A HEPA FILTER TO CLEAN THE SUBFLOOR IN PREPARATION FOR GYPHUM CEMENT UNDERLAYMENT APPLICATION.
- FOR APPLICATIONS WHERE ORGANIC ADHESIVES, ASPHALT, COAL-TAR BASED ADHESIVES AND OTHER OIL-BASED CONTAMINANTS ARE FOUND, CONTACT MAXXON FOR PROPER REMEDIATION METHODS.
- GYPHUM CEMENT UNDERLAYMENT MAY BE SCHEDULED BEFORE OR AFTER INSTALLATION OF DRYWALL. FOR POURING BEFORE DRYWALL, CONTACT SELECTED MFG. FOR MORE INSTALLATION INSTRUCTIONS.
- GYPHUM CEMENT UNDERLAYMENTS ARE NON-STRUCTURAL AND THEREFORE CANNOT BE EXPECTED TO REINFORCE STRUCTURALLY DEFICIENT SUBFLOORS. THE STRUCTURAL FLOOR SHOULD BE ADEQUATE TO WITHSTAND DESIGN LOADS WITH DEFLECTION LIMITATIONS OF L/360. SOME FLOOR COVERINGS MAY REQUIRE MORE RESTRICTIVE DEFLECTION LIMITS. G.C. IS SOLELY RESPONSIBLE FOR COMMUNICATION OF DEFLECTION LIMITATIONS WITH THE TRUSS MANUFACTURER OR OTHER RELATED SUBCONTRACTORS.
- RESPECT ACTIVE CONTROL JOINTS. ALWAYS ENSURE SUCH JOINTS ARE HONORED COMPLETELY THROUGH GYPHUM CEMENT UNDERLAYMENTS. IN CASES WHERE CONTROL OR EXPANSION JOINTS ARE NOT PRESENT IN THE SUBFLOOR, OR CRACKING HAS OCCURRED DUE TO SLAB MOVEMENT, CONSULT THE STRUCTURAL ENGINEER.
- AVOID WALKING ON INSTALLED SURFACE UNTIL SET, TYPICALLY WITHIN 2-4 HOURS.
- TRADE TRAFFIC MAY RESUME 24 HOURS AFTER INSTALLATION. AFTER TRADES RESUME, THE GYPHUM CEMENT UNDERLAYMENT MAY BE EXPOSED TO ROLLING DYNAMIC LOADS. TO LIMIT DAMAGE WHERE GYPHUM CEMENT UNDERLAYMENT WILL BE SUBJECTED TO HEAVY WHEELED OR CONCENTRATED LOADS, PLACE TEMPORARY WOOD PLANKING OVER THE GYPHUM CEMENT UNDERLAYMENT.
- PRIOR TO FLOOR-COVERING INSTALLATION, A MOISTURE TEST OF GYPHUM CEMENT UNDERLAYMENT SHALL BE REQUIRED. WHEN TESTING THE UNDERLAYMENT FOR DRYNESS, USE ASTM F2659. THE MOISTURE CONTENT SHOULD NOT EXCEED 5%. IF THE GYPHUM CEMENT UNDERLAYMENT POUR IS GREATER THAN 2", TEST USING ASTM F2170. THAT RH SHOULD NOT EXCEED 80%. DO NOT INSTALL FLOOR GOODS UNTIL THOSE LIMITATIONS ARE MET. IF THE FLOORING MANUFACTURER SPECIFIES MORE STRINGENT MOISTURE LIMITATIONS, THEY MUST BE FOLLOWED.

STORAGE AND DISPOSAL:

STORE IN ORIGINAL SEALED PACKAGING IN A COOL, DRY ENVIRONMENT AND PROTECT FROM HUMIDITY AND WATER. RECOMMENDED STORAGE TEMPERATURE RANGE OF 50-100 °F (10-38 °C). DISPOSE OF CONTENTS AND CONTAINER IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

WARRANTY AND TECH SERVICES:

THE GENERAL CONTRACTOR SHALL WARRANTY THE GYPHUM CEMENT UNDERLAYMENT FOR A PERIOD OF NOT LESS THAN ONE YEAR (FROM ISSUANCE OF THE CERTIFICATE OF OCCUPANCY) AND COVER ALL LABOR OR MATERIALS DURING THAT TIME.

DIVISION 4: MASONRY

NOT APPLICABLE

DIVISION 5: STRUCTURAL METALS

SEE STRUCTURAL ENGINEERING SPECIFICATIONS FOR MORE INFORMATION

DIVISION 6: WOOD & PLASTICS

ROUGH CARPENTRY (06100):

WORK INCLUDED:

- WOOD BLOCKING IN WALLS AND ABOVE CEILINGS.
- PLYWOOD PANEL BOARDS.
- SUB FLOORING
- EXTERIOR SHEATHING
- ROOF SHEATHING- BOTH PLYWOOD AS WELL AS CORRUGATED METAL ROOF DECKING
- FIRE-RETARDANT TREATMENT
- FOR STRUCTURAL SHEATHING SEE STRUCTURAL DRAWINGS.

EXECUTION:

- CORRELATE LOCATION OF FURRING, NAILERS, BLOCKING, GROUNDS AND SIMILAR SUPPORTS SO THAT ATTACHED WORK WILL COMPLY WITH DESIGN REQUIREMENTS AND BE PROPERLY LOCATED.
- CONSTRUCT MEMBERS OF CONTINUOUS PIECES OF LONGEST POSSIBLE LENGTHS.
- FIT CARPENTRY WORK TO OTHER WORK. SCRIBE AND COPE AS REQUIRED FOR ACCURATE FIT.
- SHIM WITH METAL OR SLATE FOR BEARING ON CONCRETE AND MASONRY SUBSTRATES.
- SECURELY ATTACH CARPENTRY WORK TO SUBSTRATES BY ANCHORING AND FASTENING AS REQ'D. BY RECOGNIZED STANDARDS.

- PROVIDE WASHERS UNDER BOLT HEADS AND NUTS IN CONTACT WITH WOOD.
- NAIL PLYWOOD TO COMPLY WITH RECOMMENDATIONS OF THE AMERICAN PLYWOOD ASSOCIATION.

- WOOD GROUNDS, NAILERS, BLOCKING AND FURRING:
 - PROVIDE FOR SCREEDING AND ANCHORAGE OF OTHER WORK. FORM TO SHAPES SHOWN AND AS REQUIRED.

- COUNTERSINK BOLTS AND NUTS FLUSH WITH SURFACES WHERE NECESSARY FOR FLUSH INSTALLATION.
- PROVIDE GROUNDS OF DRESSED, KEY-BEVELED LUMBER NOT LESS THAN 1 1/2" WIDE AND OF THICKNESS REQUIRED TO BRING FACE OF GROUND TO EXACT THICKNESS OF FINISH MATERIAL INVOLVED. REMOVE TEMPORARY GROUNDS WHEN NO LONGER REQUIRED. WHERE INDICATED AS PERMANENT GROUND, PROVIDE TREATED LUMBER.

- WALL AND ROOF SHEATHING: PROVIDE EXTERIOR GRADE PER STRUCTURAL ENGINEER SPECIFICATIONS EXTERIOR WALLS AND ROOF. PROVIDE STRUCTURAL GRADE WHERE SHOWN ON THE STRUCTURAL DRAWINGS. SHEATHING MUST BE COVERED WITH VAPOR BARRIER ON ROOFS AND WALLS. G.C. TO TAPE SEAMS AS REQ'D. AND SUBMIT MANUF. WARRANTIED PRODUCT FOR REVIEW BY THE ARCHITECT IN A SUBMITTED SHOP DRAWING. COVER SHEATHING AS SOON AS POSSIBLE AFTER INSTALLATION. DO NOT COVER WET OR DAMP SHEATHING. SHEATHING MUST BE DRY BEFORE INSTALLING MOISTURE PROTECTION. INSTALL SHEATHING IN ACCORDANCE WITH LOCAL AND STATE BUILDING CODES.

CABINETWORK AND ARCHITECTURAL WOODWORK (06410):

- PROVIDE SHOP FABRICATED CABINETWORK AND ARCHITECTURAL WOODWORK ITEMS COMPLETE WITH HARDWARE AND ACCESSORIES, AS INDICATED ON ARCHITECTURAL DRAWINGS.
- ALL CABINETWORK AND ARCHITECTURAL WOODWORK INDICATED ON ARCHITECTURAL DRAWINGS SHALL BE FABRICATED IN ACCORDANCE WITH THE STANDARDS OF THE "ARCHITECTURAL WOODWORKING INSTITUTE" (AWI), INCLUDING WOOD SELECTION, JOINERY, SIZING FASTENING AND SHOP FINISHING AS FOLLOWS:

- "CUSTOM GRADE" FOR PLASTIC LAMINATE OR OPAQUE FINISHED MILLWORK FINISHES AS INDICED ON THE DRAWINGS.
- "HIGH PRESSURE LAMINATE AS AN ARCHITECTURAL WOODWORK MATERIAL" REFERENCED FOR PLASTIC LAMINATE MILLWORK.
- "PREMIUM GRADE" FOR EXPOSED WOOD VENEER MILLWORK

3. SUBMITTALS:

- SUBMIT THE FOLLOWING IN ACCORDANCE WITH DIVISION 1, SECTION 01340
- SUBMIT SHOP DRAWINGS FOR ALL ARCHITECTURAL WOODWORK INCLUDING DIMENSIONED PLANS, ELEVATIONS, CROSS-SECTIONS, AND LARGE-SCALE DETAILS OF CONSTRUCTION TO ARCHITECT FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS SHALL INDICATE MATERIALS AND WOOD SPECIES, COMPONENT PROFILES, FASTENING, JOINTING, FINISHES, HARDWARE AND ACCESSORIES; AND ADJACENT WORK OF OTHER TRADES.
- SUBMIT THREE (3) SAMPLES OF ALL ARCHITECTURAL WOODWORK FINISHES: PAINTED, LACQUER, AND PLASTIC LAMINATE, TO ARCHITECT FOR REVIEW AND ACCEPTANCE PRIOR TO FABRICATION.
- PROTECT ALL ARCHITECTURAL WOODWORK ITEMS DURING TRANSIT, DELIVERY, STORAGE AND HANDLING TO PREVENT DAMAGE, SOILING AND DETERIORATION. THE WOODWORK CONTRACTOR AND GENERAL CONTRACTOR SHALL BE JOINTLY RESPONSIBLE TO MAKE CERTAIN THAT WOOD WORKING IS NOT DELIVERED UNTIL PAINTING, WET WORK AND SIMILAR OPERATIONS WHICH COULD DAMAGE FINISH WORK HAS BEEN COMPLETED.
- CONTRACTOR SHALL HAVE EXAMINED THE JOB SITE IN CONJUNCTION WITH PROJECT DOCUMENTS SO AS TO BE SATISFIED AS TO THE CONDITIONS UNDER WHICH THE WORK WILL BE PERFORMED, INCLUDING SUCH MATTERS AS UNLOADING FACILITIES, LOCATION AND SIZE OF ELEVATORS, EQUIPMENT OR DOCK FACILITIES AND ANY OTHER CONDITIONS NEEDED PRELIMINARY TO AND DURING THE WORK.
- WOODWORK CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND FIELD CONDITIONS AND SHALL NOT PROCEED WITH THE PORTION OF WORK IN QUESTION UNTIL THE DISCREPANCIES ARE CLARIFIED.

7. MATERIALS:

- PLASTIC LAMINATE COLOR, MANUFACTURER, AND FINISH AS DESIGNATED ON FINISH PLANS, SHALL BE OF THE FOLLOWING TYPES FOR SPECIFIC APPLICATION, CONFORMING TO NEMA LD-3 AND ARCHITECT APPROVED SAMPLES. ADHESIVE: CONTACT TYPE, FS MM-A 130, AS RECOMMENDED BY MANUFACTURER TO SUIT APPLICATION.

- HORIZONTAL SURFACES: GENERAL PURPOSE TYPE, NOMINAL 0.050 INCH.
- VERTICAL SURFACES: VERTICAL SURFACE TYPE, NOMINAL 0.032 INCH.
- UNEXPOSED SURFACES: BALANCED WITH 0.020 INCH BACKING SHEET.
- BASES: SPECIFIED PURPOSE TYPE, NOMINAL 0.125 INCH.
- POSTFORMED COUNTERTOPS: POSTFORMING TYPE, NOMINAL 0.040 INCH.
- SEMI-EXPOSED SURFACES: CABINET LINER, LOW PRESSURE POLYESTER OVERLAY, NOMINAL 0.020 INCH, UNLESS NOTED TO RECEIVE PLASTIC LAMINATE ON DRAWINGS.
- EXPOSED WOOD VENEER SHALL BE STAINED TO MATCH EXISTING, OPEN PORE W/STAIN RUBBED LACQUER FINISH. PROVIDE THE FOLLOWING MATCH AND ASSEMBLY FOR CONTINUOUS SEQUENTIAL USE OF FLITCHES OR EACH SEPARATE EXPANSE OF MATCHED WORK AS INDICATED (I.E. PANELS, DOORS, AND CASEWORK).

- HORIZONTAL MATCH: BOOK MATCH
- VERTICAL MATCH: END MATCH
- ASSEMBLY: CENTER MATCH EACH ASSEMBLY (USE EVEN NUMBER OF EQUAL WIDTH PIECES TO MAKE UP PANEL WIDTH)

- CABINET HARDWARE AND RELATED ACCESSORIES SHALL BE INDICATED ON MILLWORK DETAILS FOR APPROVAL.
- JUST PRIOR TO OWNER ACCEPTANCE, REMOVE PROTECTIVE COVERING, TOUCH UP AS REQUIRED, WIPE CLEAN, ADJUST AND LUBRICATE HARDWARE, AND CHECK FOR PROPER OPERATION OF ALL ITEMS. COORDINATE THIS WITH THE GENERAL CONTRACTOR.

- WOOD SUBSTRATE SHALL BE 3/4" PLYWOOD WITH LAMINATE/VENEER APPLIED FINISH. TRIM MOULDING SHALL BE APPLIED OVER JOINTS OF LAMINATE/VENEER SO THAT MINIMAL JOINTS ARE VISIBLE.

- PROVIDE SOLID WOOD TRIM OF STAIN/PAINT GRADE TO MATCH SAMPLE FOR BASE TRIM. PROVIDE SHAPES AND THICKNESS SHOWN ON PLANS. ALL WORK IS TO BE TAPERED AND MITERED IN A PROFESSIONAL MANNER.

DIVISION 7: THERMAL AND MOISTURE PROTECTION

WEATHER RESISTIVE (VAPOR) BARRIERS (07200):

- PROVIDE 30# FELT PAPER VAPOR OR MANUFACTURER APPROVED WEATHER RESISTIVE BARRIER UNDER ROOF SYSTEM.
- PROVIDE WEATHER RESISTIVE BARRIER AT EXTERIOR WOOD FRAME CONSTRUCTION WALLS TO MEET 2018 NCBC.

INSULATION (07210):

BLANKET INSULATION (BATTS): CONFORM TO FEDERAL SPECIFICATIONS HH-1-521, TYPE III.

- 5/8" THICK WITH R-19 KRAFT-FACED GLASS FIBER INSULATION AT ALL EXTERIOR WALLS.
- 9" THICK WITH R-19 UNFACED GLASS FIBER INSULATION AT CEILINGS AND ATTIC SPACES
- 3 1/2" THICK ACOUSTIC INSULATION AT INTERIOR WALLS MEETING ASTM C 665 WITH A NRC 1.05.
- +/- 10" THICK WITH R-38c KRAFT-FACED GLASS FIBER INSULATION AT ALL ROOF RAFTERS.
- GLASS FIBER INSULATION IS TO BE AS MANUFACTURED BY OWENS CORNING OR APPROVED EQUIVALENT.

ASPHALT SHINGLES (07310):

- PROVIDE LIFETIME WARRANTY GRADE (50 YEAR) ASPHALT ROOFING SHINGLES AS SHOWN ON THE DRAWINGS.
- ROOF SHINGLES ARE TO BE LAMINATED AND FIBERGLASS REINFORCED WITH AN OVERLAP BOND THAT MECHANICALLY FUSES SHINGLE LAYERS FOR IMPROVED DURABILITY.
- SHINGLES SHALL COME WITH A WIND WARRANTY AND SHALL BE MIAMI-DADE COMPLIANT.
- PROVIDE FASTENERS AS REQUIRED BY THE ROOFING MANUFACTURER FOR EACH CONDITION.
- ROOFING SHALL BE INSTALLED AS PER THE RECOMMENDATIONS OF THE MANUFACTURER AND AS REQUIRED BY LOCAL BUILDING CODES.
- CONTRACTORS SHALL HAVE A MINIMUM OF 5 YEARS EXPERIENCE IN INSTALLING ASPHALT SHINGLE ROOFING AND SIDING.

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PROJECT NAME:

TOWN OF NAGS HEAD

Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR REBID	10 /30 / 24

DRAWING NAME:

SPECIFICATIONS

ISSUED FOR BID

DRAWN BY: CN

DATE: 10 /30 / 24

SCALE: NOT TO SCALE

STAMP:

INCOMPLETE FOR INTERIM REVIEW ONLY AND NOT INTENDED FOR PERMIT OR CONSTRUCTION PURPOSES.

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SHEET:

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EXTERIOR BUILDING SIDING AND TRIM (07460):

1. REINFORCED ENGINEERED WOOD SIDING BY LP SMARTSIDE OR ARCHITECT APPROVED EQUIVALENT. STYLE AND LOCATION AS INDICATED ON THE BUILDING ELEVATIONS FOR DESIGN INTENT- MATCH EXISTING STYLE AND EXPOSURE.
2. REFER TO SELECTED MFG. FOR INSTALLATION INSTRUCTIONS AND ADDITIONAL SPECIFICATION INFO.
3. ENGINEERED WOOD SIDING TO HAVE SMOOTH TEXTURE AND BE $\frac{1}{8}$ " THICK MINIMUM.
4. SUBMIT SAMPLE TO ARCHITECT FOR APPROVAL PRIOR TO PURCHASE.
5. SIDING AND TRIM IS TO BE WARRANTIED FOR 30 YEARS (MIN.) AND ACCEPTABLE FOR USE IN EXTREME COASTAL ENVIRONMENTS.
6. FASTENERS TO BE APPROVED BY THE SELECTED MANUFACTURER TO CONFORM TO PRODUCT SPECIFICATIONS AND TO PROVIDE CORROSION RESISTANCE.
7. ALL ENGINEERED WOOD BOARD PRODUCTS TO RECEIVE A FACTORY PRIMER WITH TOP COAT APPLIED IN THE FIELD TO THE SPECS. OF THE SELECTED PRODUCT MANUFACTURER TO MAINTAIN WARRANTY.
8. COLOR TO BE DETERMINED BY THE ARCHITECT AND CLIENT IN THE FIELD.
9. PROVIDE VENTED ENGINEERED WOOD SIDING SHEET MATERIALS FOR EXTERIOR SOFFITS AND SOFFIT FACIAS. (USE 12' LONG SHEETS)
10. BUILDING TRIM TO BE ENGINEERED WOOD OF SIZES AND LOCATIONS TO MATCH ELEVATIONS. REFER TO SELECTED MFG. FOR INSTALLATION INSTRUCTIONS AND ADDITIONAL SPECIFICATION INFO.
11. TRIM TO BE $\frac{1}{2}$ " THICK ENGINEERED WOOD (OR EQUIV. PRODUCT) WITH A SMOOTH FINISH. SEE ARCHITECTURAL DRAWINGS FOR MORE INFORMATION. PRODUCT SHOULD BE PAINTABLE PER SELECTED MFG SPECIFICATIONS.
12. EAVE AND PORCH SOFFIT MATERIAL SHALL BE VENTED REINFORCED ENGINEERED WOOD SIDING OR ARCHITECT APPROVED EQUIVALENT. CAULK ALL SEAMS PER MFG REQ'S.
13. THE EXTERIOR ELEVATIONS INDICATE LOCATION OF EXTERIOR BOARD & BATTEN, WHICH SHALL HAVE BATTEN AT 24" O.C. G.C. TO REVIEW AND ADVISE ARCHITECT OF ANY DEVIATIONS PRIOR TO INSTALLATION.
14. COVER ALL SEAMS (VERTICAL OR HORIZONTAL) WITH BATTEN STRIPS.

GUTTERS AND DOWNSPOUTS (077123):

1. K-STYLE GUTTER COIL AND GUTTER ACCESSORIES (INCLUDING GUTTER DOWNSPOUTS AND ELBOWS) SHALL BE PRODUCED AND FACTORY PAINTED TO ENSURE COLOR CONSISTENCY AND PRODUCT QUALITY.
2. G.C. TO FOLLOW MFG. INSTALLATION INSTRUCTIONS AND OBTAIN ALL GUTTER ACCESSORIES AND PARTS NEEDED FROM OUR ROLL-FORMING MACHINES AND GUTTER COIL TO DOWNSPOUTS, HANGERS, AND FASTENERS FROM MFG. OR ARCHITECT APPROVED EQUIVALENT.
3. G.C. TO PROVIDE SUBMITTAL OF GUTTER SPEC SHEETS AND COLOR CHART SAMPLE.
4. G.C. TO PROVIDE SPLASH BLOCKS AT DOWNSPOUTS AS REQ'D. PER ENGINEERING DRAWINGS.

SEALANTS AND CAULKING (07915):

GENERAL: ALL SEALANTS AND CAULKING SHALL BE NON-STAINING TO ADJACENT EXPOSED MATERIALS.

1. POLYURETHANE OR LOW MODULUS SILICONE SEALANTS: ONE PART SEALANT SHALL BE USED AT ALL EXTERIOR JOINTS, AT DOORS, WINDOWS AND WHERE DISSIMILAR MATERIALS ABUT. USE LEXEL CAULKING AS RECOMMENDED AND PRICED BY GENERAL CONTRACTOR.
2. ACRYLIC LATEX CAULKING: ONE COMPONENT ACRYLIC WATER BASED COMPOUND TRIMFLEX 834 BY PECORA OR APPROVED EQUAL. USE LATEX CAULKING FOR ALL INTERIOR JOINTS. DO NOT USE IF TEMPERATURE IS BELOW 45 DEGREES F. (USE BUTYL RUBBER BASED PERCORA AC-20 BELOW 45 DEGREES F.)
3. BACKUP MATERIALS, FILLERS AND JOINT PACKING: AS RECOMMENDED BY SEALANT MANUFACTURER. IN GENERAL, USE CLOSED CELL, BEAD OR ROPE SHAPED EXPANDED POLYURETHANE.

DIVISION 8: DOORS, WINDOW & GLASS

EXTERIOR DOORS AND FRAMES (081000):

GENERAL:

1. DOORS STYLE TO MATCH EXTERIOR ELEVATIONS AND DOOR SCHEDULE.
2. DOORS TO HAVE SMOOTH FINISH TO MATCH SIDING, U.O.N.
3. FACTORY GLAZED INSERTS (AS REQUIRED PER ARCHITECTURAL PLAN) SHOULD BE LOW-E FLUSH PANELS W/GLASS AS DESCRIBED ON THE DOOR LEGEND. GLASS TO BE $\frac{1}{2}$ " MIN. TEMPERED GLASS.
4. WEATHERSTRIPPING TO BE INSTALLED AS REQUIRED AND TO MEET ADA REQ'S.
5. HINGES AND STRIKES TO BE CORROSION RESISTANT MATERIAL (COASTAL HARDWARE) WITH SCREWS TO MATCH.
6. FRAME CAN BE FIELD CONSTRUCTED OR BE PROVIDED BY THE DOOR MANUFACTURER WITH $\frac{1}{2}$ " KILN-DRIED PINE PROFILE AND STOP TO MATCH WALL THICKNESS.
7. G.C. TO PROVIDE PRE-CUT AND PREDRILLED $\frac{1}{2}$ " TH. STRUCTURAL PLYWOOD PANELS AND PROPER STAINLESS STEEL SCREWS TO MEET BASELINE WINDBOURNE DEBRIS REQUIREMENTS. COORDINATE WITH LOCAL BUILDING INSPECTOR FOR ALL REQ'S.

INTERIOR WOOD DOORS & FRAMES (081400):

1. PROVIDE SOLID-CORE WOOD DOORS AS INDICATED ON ARCHITECTURAL DRAWINGS.
2. TWO-PANEL TYPE 1 $\frac{1}{2}$ " THICK (MINIMUM, UNLESS OTHERWISE NOTED) SOLID BLOCK OR STILE AND RAIL CORE. TYPE AS (5-PLY) CONSTRUCTION DOORS SHALL BE PREMIUM GRADE PER AWI STANDARDS. FACE VENEERS AND SHALL FINISH BE INDICATED ON DOOR SCHEDULE.
 - A. PROVIDE SOLID WOOD BLOCKING FOR ALL DOOR HARDWARE SUCH THAT NO THROUGH BOLT WILL BE REQUIRED TO PERMANENTLY MOUNT HARDWARE ON DOOR. IF BLOCKING IS NOT PRACTICAL, PROVIDE STAVE-CORE WOOD DOORS.
 - B. EXECUTION: DOORS SHALL HAVE ALL HANDLING MARKS OR EFFECTS OF EXPOSURE TO MOISTURE. FINAL SANDING OVER ALL EXPOSED SURFACES USING 150 GRIT OR FINER SANDPAPER AND SHALL THEN BE BRUSHED CLEAN.
 - C. PRIME OR SEAL ALL WOOD DOORS ON ALL SIDES AND EDGES. WHERE ITEMS ARE FURNISHED PRE-PRIMED, TOUCH UP ALL ABRASIONS.
3. INSTALLATION:
 - A. HANGING DOORS: ALL DOORS SHALL BE EXPERTLY HUNG, PLUMB AND LEVEL AND SHALL FIT SNUG AGAINST ALL STOPS. FIT ACCURATELY AND HANG FREE FROM HINGE.
 - B. CLEARANCE FOR NON FIRE RATED DOORS PROVIDE CLEARANCES OF $\frac{1}{8}$ " AT JAMS AND HEADS, $\frac{1}{4}$ " AT MEETING STILES FOR PAIRS OF DOORS, AND $\frac{1}{2}$ " FROM BOTTOM OF DOOR TO TOP OF DECORATIVE FLOOR FINISH OR COVERING, UNLESS OTHERWISE NOTED. WHEN THRESHOLD IS SHOWN OR SCHEDULED. PROVIDE $\frac{1}{8}$ " CLEARANCE FROM BOTTOM OF DOOR TO TOP OF THRESHOLD.
 - C. HARDWARE SHALL BE PROVIDED BY THIRD PARTY TOWN CONSULTANT, SEE ATTACHED BID DOCUMENT PROVIDED BY HARDWARE SPECIALIST AS A REFERENCE.
 - D. PREHUNG DOORS AND FRAMES ARE PERMITTED.

EXTERIOR WINDOWS (085000):

1. WINDOWS SHALL BE VINYL CLAD OR COMPOSITE FIBREX MATERIAL AS SHOWN AND SCHEDULED. SPEC. BASED ON ANDERSEN 400 SERIES OR ARCHITECT APPROVED EQUIVALENT.
2. ALL OPERABLE WINDOWS MUST HAVE INSECT SCREENS
3. FOR SIZING AND GRILLE PATTERNS SEE PLANS AND ELEVATIONS FOR FURTHER INFORMATION.
4. GLAZING TO BE LOW-E TO MATCH LOCAL DESIGN PRESSURE (50 DP MIN.) AND ASTM REQUIREMENTS FOR 140 MPH WIND PRESSURE AS WELL AS NC RESIDENTIAL ENERGY CODE REQUIREMENTS.
5. WEATHERSTRIPPING TO BE PROVIDED TO MEET REQUIREMENTS FOR EXTREME COASTAL ENVIRONMENTS.
6. COLOR IS TO BE WHITE TO MATCH THE EXISTING. SEE WINDOW SCHEDULE FOR MORE INFORMATION.
7. STRICTLY COMPLY WITH MANUFACTURERS INSTALLATION INSTRUCTIONS. FOLLOW FLASHING REQUIREMENTS CLOSELY.
8. ALL HARDWARE TO BE WARRANTIED FOR COASTAL LOCATIONS.

FINISH HARDWARE (08700):

1. PROVIDE FINISH HARDWARE AS INDICATED ON DOOR/HARDWARE SCHEDULE ON ARCHITECTURAL DRAWINGS.
2. SUBMITTALS:
 - A. FOLLOW IN ACCORDANCE WITH DIVISION 1 SECTION 01340.
 - B. PRODUCT DATA; SUBMIT MANUFACTURER CATALOG CUTS FOR EACH HARDWARE ITEM.
3. HARDWARE ITEMS:
 - A. SEE DOOR SCHEDULE FOR HARDWARE GROUP FUNCTIONS, LOCATIONS AND DOOR TYPES.
 - B. BUTTS: ALL EXTERIOR DOORS TO HAVE NONFERROUS BUTTS WITH NON-REMOVABLE PINS. LABELED DOORS SHALL HAVE STEEL BUTTS. WHERE LABELED DOORS ARE EXTERIOR OUT SWINGING, PROVIDE STAINLESS STEEL BUTTS UNLESS OTHERWISE SPECIFIED. SIZE OF BUTTS WILL BE DETERMINED BY THE FOLLOWING TABLE:
 1. SIZE AND TYPE 3 1
 - A. DOORS 1 " THICK AND UP TO 41" WIDE: 4 " HEAVYWEIGHT BALL BEARING 4 2 3 1
 - B. DOORS 1 " THICK AND 41" TO 48" WIDE: 4 " EXTRA HEAVYWEIGHT BALL BEARING OR 4 2 OILITE BEARING.
 - C. DOORS 2" THICK AND/OR OVER 48" WIDE: 5" EXTRA HEAVYWEIGHT BALL BEARING OR OILITE BEARING.
 2. PROVIDE WIDTHS SUFFICIENT TO CLEAR TRIM PROJECTION WHEN DOOR SWINGS 180 DEGREES.
 3. PROVIDE 2 HINGES TO 60" HIGH, 3 HINGES TO 90" HIGH, 4 HINGES TO 120" HIGH FOR EACH DOOR LEAF, UNLESS OTHERWISE SPECIFIED OR INDICATED
 4. FINISH: MATCH LOCKSET OR LATCHSET, UNLESS OTHERWISE SPECIFIED OR INDICATED.
 - C. LOCKSETS AND LATCHSETS; PROVIDE HEAVY DUTY CYLINDER (MORTISE) CASES OF METAL MATCHING SPECIFIED FINISH; INTERIOR PARTS OF STEEL AND ZINC-DICHROMATE PLATING TO RESIST RUSTING AND CORROSION. DO NOT SUPPLY PLASTIC, DIE-CAST OR ALUMINIUM MECHANISMS. CYLINDERS SHALL HAVE FULL ROUND PLUGS OF EXTRUDED BRASS BAR MATERIAL, AND BE 6-PIN TUMBLER TYPE.
 1. FINISH: COORDINATE WITH ARCHITECT AND TOWN IN THE FIELD
 2. BACK SET: MATCH FINISH
 3. STRIKES- PROVIDE STANDARD BOX-TYPE STRIKES; FURNISH WITH EXTENDED LIPS WHERE REQUIRED TO PROTECT TRIM FROM BEING MARRED BY LATCH BOLT. VERIFY WHETHER STANDARD OR ANSI CUTOUTS ARE PROVIDED IN METAL FRAMES.
 4. KEYS AND KEYING - COORDINATE KEYING WITH OWNERS.

DIVISION 9: FINISHES

GYPSUM WALLBOARD SYSTEMS (092000):

1. GYPSUM WALLBOARD MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF ASTM C645, C754, AND C840; AND GYPSUM ASSOCIATION GA-216.
 - A. FIRE-RATED CONSTRUCTION SHALL BE LISTED AND LABELED UL AND CONFORM TO REQUIREMENTS OF GOVERNING CODES AND REGULATIONS.
 - B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR USING COMPATIBLE PRODUCTS FOR COMPLETE CONSTRUCTION ASSEMBLY.
2. GYPSUM WALLBOARD SHALL BE $\frac{1}{2}$ " OR $\frac{5}{8}$ " THICK MIN. (OR TO MATCH EXISTING THICKNESSES ON COPLANER WALLS) AS SPECIF ON THE ARCHITECTURAL PLANS, AND APPLIED VERTICALLY WITH SCREW FASTENERS. IN GENERAL, PROVIDE TAPING AND FINISH SPACKLING WITH COMPATIBLE MATERIAL. PARTITIONS SHALL BE BRACED OR SECURED SUFFICIENTLY FROM DEFLECTION OF $\frac{1}{8}$ " PER 10'-0" LENGTH IN ANY DIRECTION. PROVIDE TEMPORARY BRACING OF PARTITIONING WORK WHERE REQUIRED TO DIMINISH DEFLECTION PROBLEMS.
3. JOINTS GREATER THAN $\frac{1}{2}$ " AT CEILINGS SHALL BE REJECTED. PROVIDE CAULKING AT CEILING FOR PARTITIONS THAT TERMINATE AT THE CEILING.
4. . ALL DRYWALL PARTITIONING SHALL BE PLUMB, LEVEL, TRUE AND STRAIGHT, PROPERLY BRACED AND RIGID. SURFACES SHALL BE SMOOTH, UNTEXTURED, AND FREE FROM FLAWS AND DEFECTS IN A READY TO PAINT CONDITION. ALL TAPING AND FINISH SPACKLING SHALL BE PREPARED SO THAT LOCATION OF JOINTS AND BLEMISHES CANNOT BE DETECTED AFTER WALL HAS BEEN PAINTED.
5. ALL DRYWALL IS TO BE TAPED, SANDED AND READY FOR PAINT APPLICATION.

RESILIENT LVT FLOORING (096500):

1. HIGH-PERFORMANCE COMMERCIAL GRADE LUXURY VINYL TILE WITH SQUARE EDGE PROFILE WOOD LOOK PLANK.
2. WEAR LAYER TO BE 20 MIL. MINIMUM, SCRATCH RESISTANT, CARRY A COMMERCIAL WARRANTY AND BE FLOORSCORE CERTIFIED
3. PROVIDE SAMPLES FOR REVIEW BY THE ARCHITECT PRIOR TO INSTALL. SEE DIVISION 1 FOR MORE INFORMATION.
4. INSTALLATION:
 - A. EXAMINE THE SUBSTRATE AND CONDITIONS UNDER WHICH THE FLOORING IS TO BE INSTALLED AND NOTIFY THE ARCHITECT IN WRITING OF CONDITIONS DETRIMENTAL TO THE PROPER AND TIMELY COMPLETION OF THE WORK.
 - B. USE PROPER ADHESIVE FOR SUBSTRATE.
 - C. FOLLOW MANUFACTURERS INSTALLATION METHOD INCLUDING THAT OF OFFSET END JOINTS AND DIRECTION OF PRODUCT PLACEMENT ON SUBSTRATE.
 - D. BASED ON MANNINGTON ADURA MAX "PARISIAN OAK" WOOD PLANK MAX721 OR OWNER APPROVED EQUIVALENT.

CARPETING (096800):

1. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES AND PERFORM ALL OPERATIONS REQUIRED FOR COMPLETE INSTALLATION OF CARPETING AND RELATED WORK AS INDICATED ON THE DRAWINGS.
2. QUALITY ASSURANCE:
 - A. FLAME SPREAD RATING: PROVIDE ONLY CARPET WHICH HAS BEEN TESTED AND PASSES FEDERAL FLAMMABILITY STANDARD (DOC-FF-1-70) (THE PILL TEST) AND ASTM E 648, FLOOR RADIANT AND COMPLIES WITH REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION.
 - B. MANUFACTURER'S QUALIFICATIONS: FIRM (MATERIAL PRODUCER) WITH NOT LESS THAN 3 YEARS OF PRODUCTION EXPERIENCE WHOSE PUBLISHED LITERATURE CLEARLY INDICATES GENERAL COMPLIANCE OF PRODUCTS WITH REQUIREMENTS OF THIS SECTION.
 - C. INSTALLER QUALIFICATIONS: FIRM SPECIALIZING IN CARPET INSTALLATION WITH NOT LESS THAN 2 YEARS OF EXPERIENCE IN INSTALLATION OF CARPETING SIMILAR TO THAT REQUIRED FOR THIS PROJECT.
 - D. SINGLE SOURCE RESPONSIBILITY: PROVIDE MATERIAL PRODUCED BY A SINGLE MANUFACTURER FOR EACH CARPET TYPE.
 - E. SAMPLES- DIVISION 1 FOR MORE INFORMATION.
3. INSTALLATION:
 - A. SUBSTRATE: EXAMINE THE SUBSTRATE AND CONDITIONS UNDER WHICH THE CARPET IS TO BE INSTALLED AND NOTIFY THE ARCHITECT IN WRITING OF CONDITIONS DETRIMENTAL TO THE PROPER AND TIMELY COMPLETION OF THE WORK.
 - B. INSTALL UNDER MOVABLE PARTITIONS, FURNITURE AND EQUIPMENT, AND EXTEND INTO ALCOVES AND CLOSETS OF EACH SPACE.
 - C. VACUUM SUBSTRATE IMMEDIATELY PRIOR TO CARPET INSTALLATION AND REMOVE ALL DELETERIOUS SUBSTANCES.
 - D. PATCH HOLES AND LEVEL SMOOTH SURFACE IF PREVIOUS FINISH WAS CHEMICALLY STRIPPED, RESEAL CONCRETE.
 - E. CARPET IS TO BE INSTALLED USING A STRETCH-IN SYSTEM, TRADES SHALL FOLLOW CRI-104 AND MANUFACTURER INSTALLATION INSTRUCTIONS.
3. CLEANING:
 - A. REMOVE ADHESIVE FROM CARPET SURFACES WITH MANUFACTURER'S RECOMMENDED CLEANING AGENT.
 - B. REMOVE AND DISPOSE OF DEBRIS AND UNUSABLE SCRAPS.
 - C. VACUUM USING COMMERCIAL MACHINE WITH FACE-BEATER ELEMENT. REMOVE SOIL. REMOVE PROTRUDING FACE YARN.
 - D. PROVIDE FINAL PROTECTION AND MAINTAIN CONDITIONS IN A MANNER ACCEPTABLE TO MANUFACTURER AND INSTALLER, TO ENSURE WORK IS NOT DAMAGED OR DETERIORATED AT THE TIME OF SUBSTANTIAL COMPLETION.
 - E. THE MANUFACTURER SHALL GUARANTEE THAT CARPET UNDER ORDINARY USE WILL NOT SHOW REVELING OR SUBSTANTIAL WEAR (LOSS OF MORE THAN 10% YARN WEIGHT) WITHIN 10 YEARS FROM DATE OF INSTALLATION, PROVIDED MAINTENANCE PROCEDURES ARE SUBSTANTIALLY FOLLOWED.

PAINTING (09900):

1. APPLICATOR SHALL INSPECT ALL SURFACES SCHEDULED TO RECEIVE NEW FINISH. TAPE, JOINTS AND INDENTATIONS SHALL NOT "TELESCOPE" OR READ THROUGH THE PAINT FINISH OR WALL COVERING DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
2. WORK SHALL BE 3 COAT APPLICATION USING COMPATIBLE PRIMERS AND PREPARATION ON SUBSTRATES AS RECOMMENDED BY FINISH COAT MANUFACTURERS. ALL PAINTING MATERIALS SHALL BE USED ONLY IN STRICT CONFORMANCE WITH THE MANUFACTURER'S LATEST PRINTED SPECIFICATIONS AND INSTRUCTIONS.
3. PAINT SHALL BE APPLIED BY SKILLED TRADESMEN AND SHALL BE FREE OF ALL RUNS, BRUSH MARKS, SAGS, HOLIDAYS AND OTHER DEFECTS. ARCHITECT WILL REJECT SUCH DEFECTS.
4. EDGES ADJOINING OTHER MATERIALS OR COLORS SHALL BE SHARP AND CLEAN, WITHOUT OVERLAPPING.
5. BEFORE PAINTING WORK IS TO BEGIN, ARRANGEMENTS SHALL BE MADE FOR PROPER VENTILATION.
6. PROPER PRECAUTIONS SHALL BE TAKEN TO PROTECT ALL AREAS FROM PAINT DRIPS, SPLASHES, OVERLAY, ETC. ALL GLAZING SHALL BE MASKED ON BOTH SIDES.
7. PROVIDE A SAMPLE, MINIMUM 8 $\frac{1}{2}$ " X 11" IN SIZE OF EACH PAINT TYPE FOR ARCHITECT'S REVIEW PRIOR TO COMMENCEMENT OF WORK.
8. BEFORE PAINTING WORK IS TO BEGIN, THE FOLLOWING ENVIRONMENTAL CONDITIONS SHALL BE PROVIDED:
 - A. MAINTAIN INTERIOR OF BUILDING SPACE WITH TEMPERATURE OF 60 DEGREES F. MIN. AND 85 DEGREES F. MAXIMUM AND A RELATIVE HUMIDITY OF LESS THAN 70% FOR THREE DAYS PRIOR TO START OF PAINTING WORK. DURING THE PAINTING PROCESS AND AFTER PAINTING WORK HAS BEEN APPLIED.
 - B. LIGHTING IN ALL SPACES SHALL BE FULL FINAL ILLUMINATION LEVEL. CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING WHERE REQUIRED.
 - C. WHERE PAINTS ARE SPECIFIED, CONTRACTOR TO USE THE METHODS AND MATERIALS AS SPECIFIED BY THE MANUFACTURER.
 - D. COLORS AND FINISHES AS INDICATED IN FINISH SCHEDULE.
 - E. UPON SUBSTANTIAL COMPLETION OF THE CONTRACT OR WHEN SO DIRECTED BY THE ARCHITECT, THE CONTRACTOR SHALL RETOUCH ALL PORTIONS OF THE WORK HEREIN SPECIFIED TO BE PAINTED OR FINISHED WHICH MAY HAVE BEEN MARRED OR DAMAGED.

DIVISION 10

RESIDENTIAL TOILET ACCESSORIES (102816.13):

1. G.C. SHALL PROVIDE RESIDENTIAL BATH ACCESSORIES IN SATIN NICKEL FINISH FOR EACH BATHROOM.
2. ACCESSORIES SHALL INCLUDE (2) 18" TOWEL BARS, TOILET PAPER HOLDER, HAND TOWEL BAR/RING, AND (2) ROBE HOOKS.
3. G.C. SHALL COORDINATE MOUNTING LOCATIONS WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

DIVISIONS 11, 13 AND 14

NOT APPLICABLE

DIVISION 12: FURNISHINGS

COUNTERTOPS (123600):

COUNTERTOP SURFACE:

1. ALL SURFACES SHALL BE COMMERCIAL GRADE, ANTI-MICROBIAL (MAN-MADE) QUARTZ OR SOLID SURFACE TO BE USED IN EACH DWELLING UNIT.
2. PROVIDE SAMPLES FOR REVIEW BY THE ARCHITECT PRIOR TO INSTALL. SEE DIVISION 1 FOR MORE INFORMATION.

SHOWER CURTAINS & ROD (124400):

SHOWER ROD SURFACE:

1. SHOWER CURTAIN ROD SHALL BE WALL MOUNTED STRAIGHT ROD, 1" DIA. ROD W/ END FLANGES FOR CONCEALED MOUNTING BRACKETS. SATIN STAINLESS STEEL FINISH WITH ROLLING BALL CURTAIN HOOKS FOR EASY OPERATION.
2. TUB/SHOWER ROD SHALL BE WALL MOUNTED CURVED STYLE 1" DIA. ROD W/ PIVOTING BRACKET ASSEMBLY. SATIN STAINLESS STEEL FINISH WITH ROLLING BALL CURTAIN HOOKS FOR EASY OPERATION.
3. ALL SHOWER CURTAINS SHALL BE 72" WIDE MIN. OPAQUE, MATTIE WHITE PEVA, HEAVY DUTY 8G (MIN.) THICK, ANTBACTERIAL AND FLAME RETARDANT, NICKEL-PLATED BRASS GROMMETS ALONG TOP, ONE EVERY 6", HEMMED BOTTOM AND SIDES.
4. PROVIDE SAMPLES FOR REVIEW BY THE ARCHITECT PRIOR TO INSTALL. SEE DIVISION 1 FOR MORE INFORMATION.

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PME ENGINEER: **COASTAL**
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Facsimile (757) 563-9028

PROJECT NAME:
TOWN OF NAGS HEAD
Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR REBID	10 / 30 / 24

DRAWING NAME:
SPECIFICATIONS

ISSUED FOR BID

DRAWN BY: **CN**

DATE: **10 / 30 / 24**

SCALE: **NOT TO SCALE**

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PURPOSES.

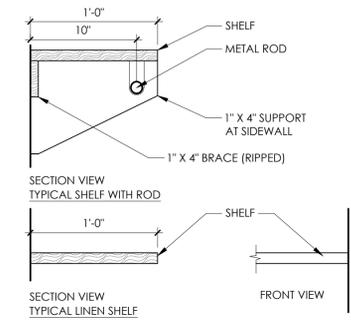


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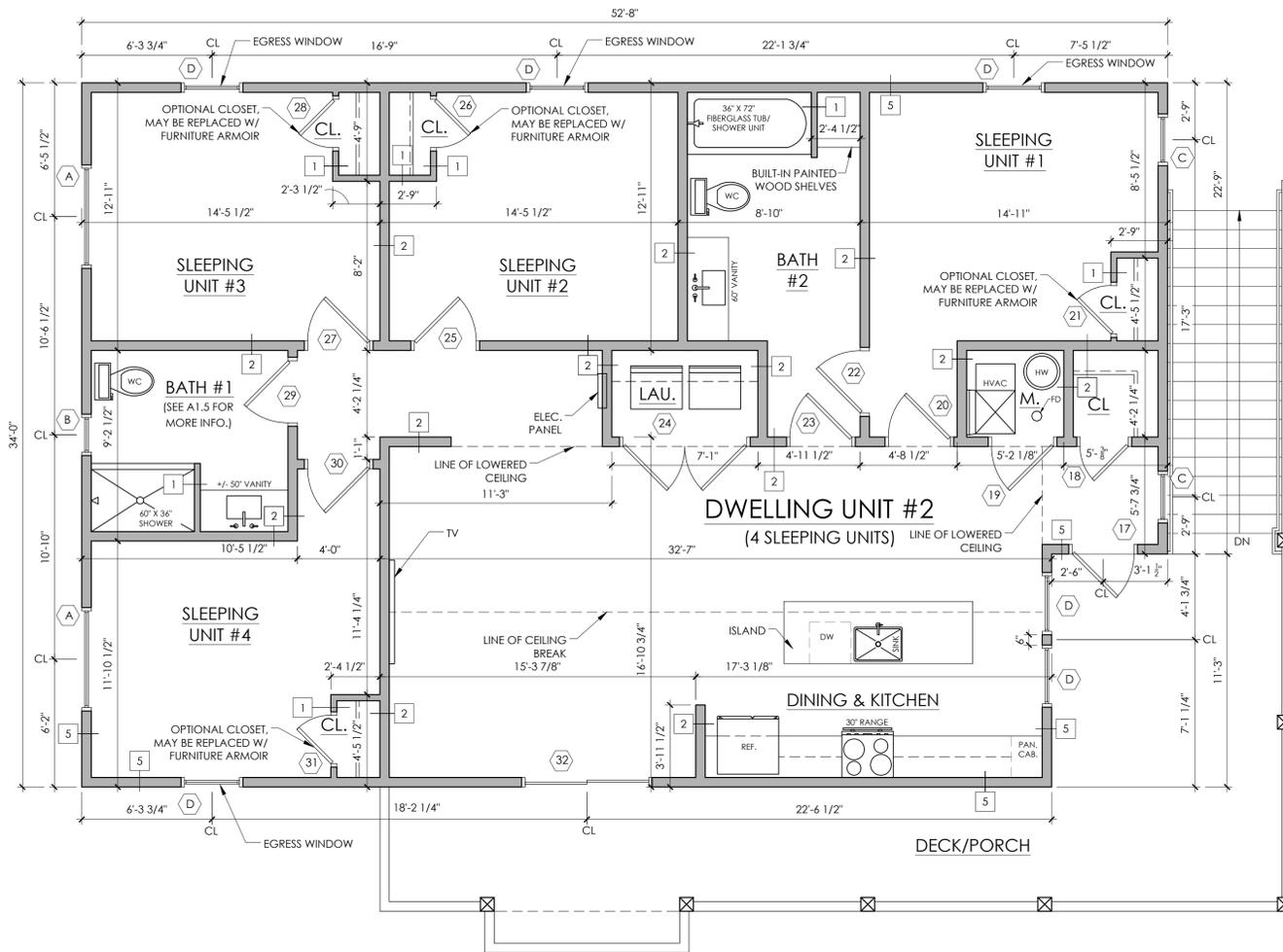
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REVISIONS:	DATE:
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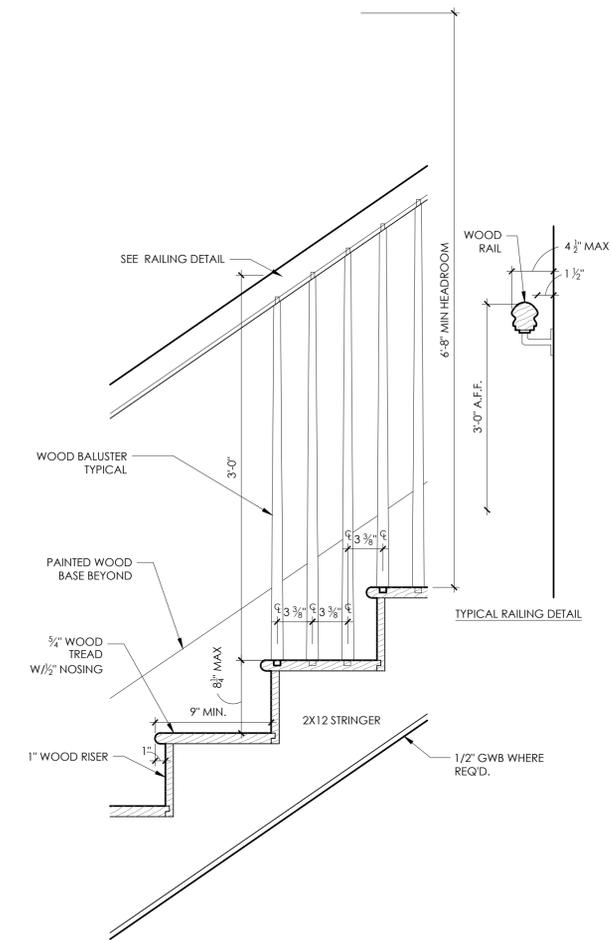
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3 TYPICAL CLOSET SHELF & ROD DETAIL
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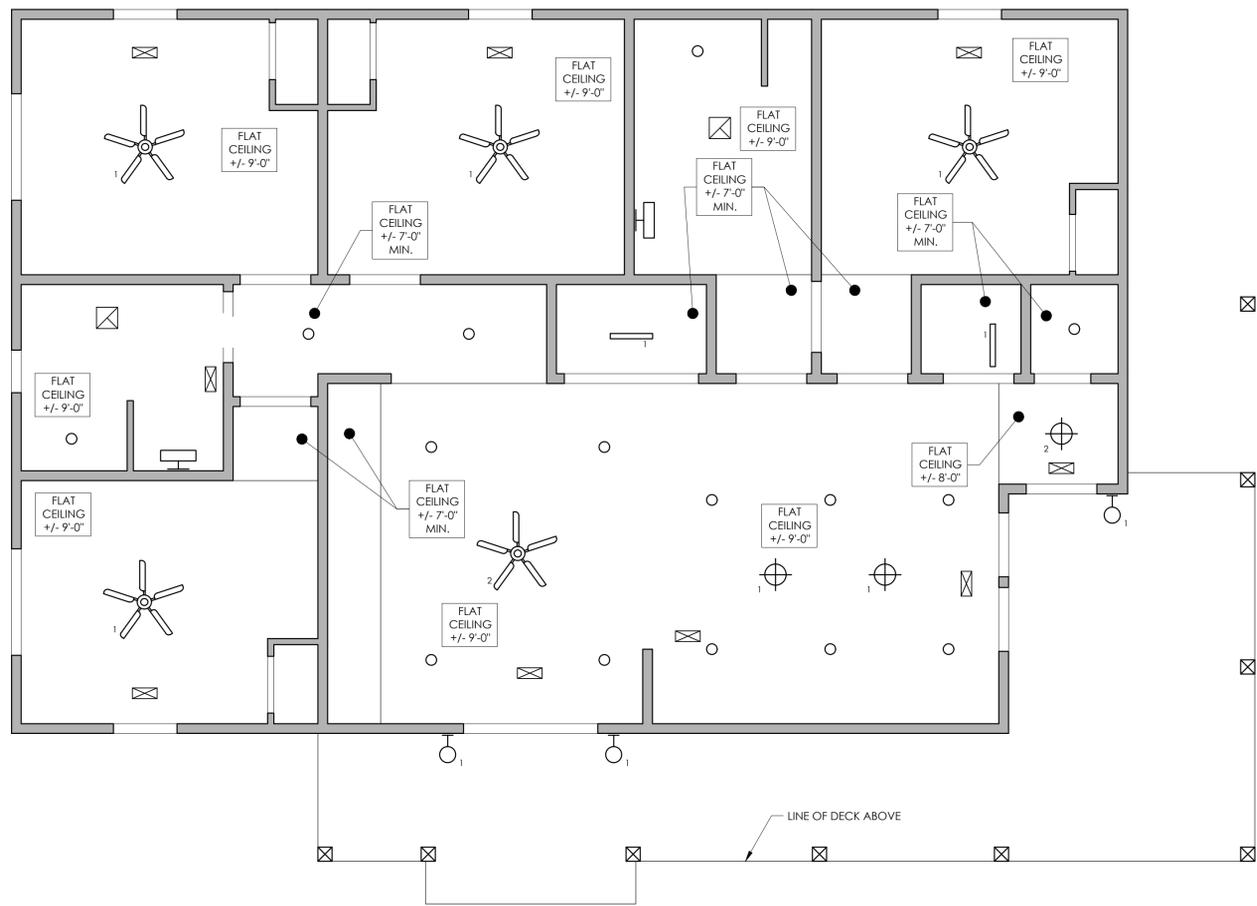
1 SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"



2 TYPICAL STAIR DETAIL
 NOT TO SCALE

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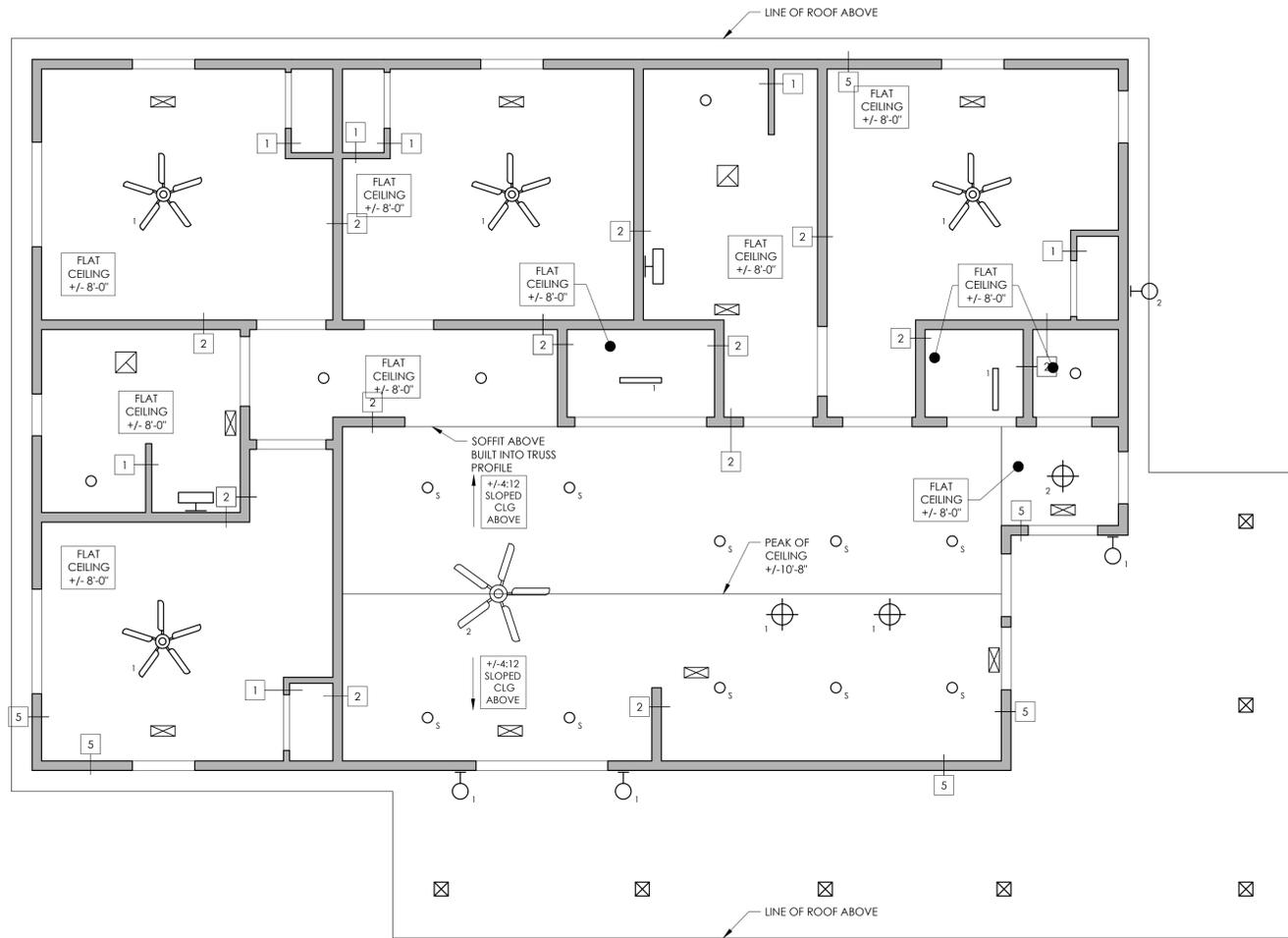
- 1 BEDROOM FAN, 52" FAN, WHITE FINISH, WITH LED LIGHT KIT
- 2 LIVING ROOM FAN, 62" FAN, WHITE FINISH, NO LIGHT KIT, PROVIDE SLOPED CEILING MOUNTING KIT AS REQ'D.
- 1 KITCHEN PENDANT, LED
- 2 ENTRY FLUSH MOUNT, LED
- 24" LED SURFACED MOUNTED LINEAR FIXTURE
- BATHROOM VANITY SCONCE, DAMP RATED, LED, CHROME FINISH
- 4" LED ULTRA THIN RECESSED CAN, FIRE RATED, BASED ON WESTGATE RSL4 WAFER
- 4" LED ULTRA THIN RECESSED CAN, ADJUSTABLE, FIRE RATED, BASED ON WESTGATE RSL4 WAFER
- EXTERIOR LED WALL SCONCE, CATLEYA, WET RATED, ADA COMPLIANT, BLACK FINISH
- EXTERIOR LED WALL PACK, WET RATED, DARK SKY COMPLIANT, BRONZE FINISH
- EXHAUST FAN
- HVAC SUPPLY

1 FIRST FLOOR REFLECTED CEILING PLAN
 SCALE: 1/4" = 1'-0"

2 REFLECTED CEILING PLAN LEGEND
 NOT TO SCALE

REVISIONS:	DATE:
ISSUED FOR REBID	10 / 30 / 24

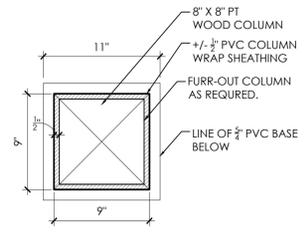
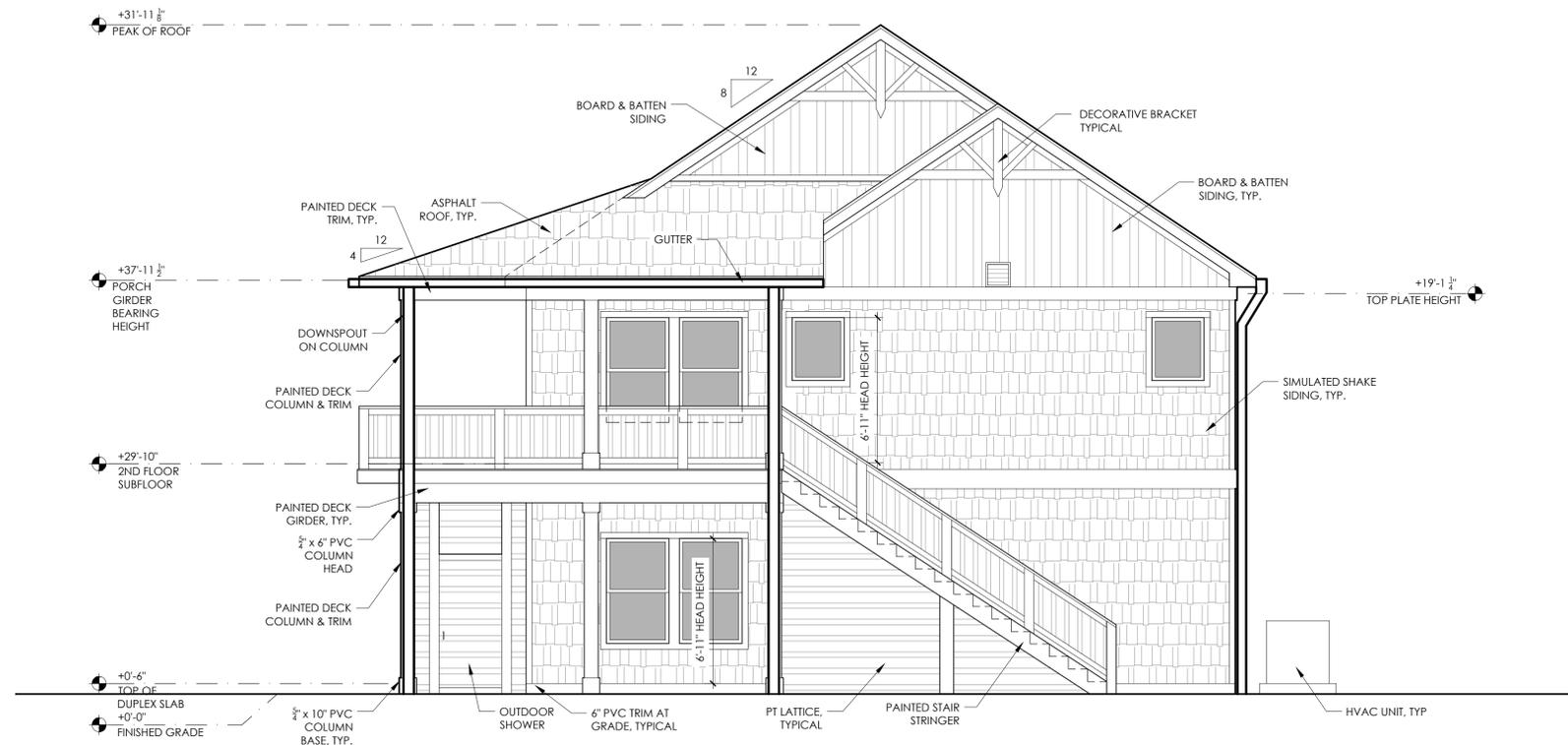
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-  BEDROOM FAN, 52" FAN, WHITE FINISH, WITH LED LIGHT KIT
-  LIVING ROOM FAN, 62" FAN, WHITE FINISH, NO LIGHT KIT, PROVIDE SLOPED CEILING MOUNTING KIT AS REQ'D.
-  KITCHEN PENDANT, LED
-  ENTRY FLUSH MOUNT, LED
-  24" LED SURFACED MOUNTED LINEAR FIXTURE
-  BATHROOM VANITY SCONCE, DAMP RATED, LED, CHROME FINISH
-  4" LED ULTRA THIN RECESSED CAN, FIRE RATED, BASED ON WESTGATE RSL4 WAFER
-  4" LED ULTRA THIN RECESSED CAN, ADJUSTABLE, FIRE RATED, BASED ON WESTGATE RSL4 WAFER
-  EXTERIOR LED WALL SCONCE, CATTLEYA, WET RATED, ADA COMPLIANT, BLACK FINISH
-  EXTERIOR LED WALL PACK, WET RATED, DARK SKY COMPLIANT, BRONZE FINISH
-  EXHAUST FAN
-  HVAC SUPPLY

1 SECOND FLOOR REFLECTED CEILING PLAN
 SCALE: 1/4" = 1'-0"

2 REFLECTED CEILING PLAN LEGEND
 NOT TO SCALE



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

3 COLUMN WRAP DETAIL
NOT TO SCALE



2 EXTERIOR ELEVATION
SCALE: 1/4" = 1'-0"

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Facsimile (757) 563-9028

PROJECT NAME:
TOWN OF NAGS HEAD
Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR REBID	10 / 30 / 24

DRAWING NAME:
EXTERIOR ELEVATIONS

ISSUED FOR BID

DRAWN BY: CN

DATE: 10 / 30 / 24

SCALE: -

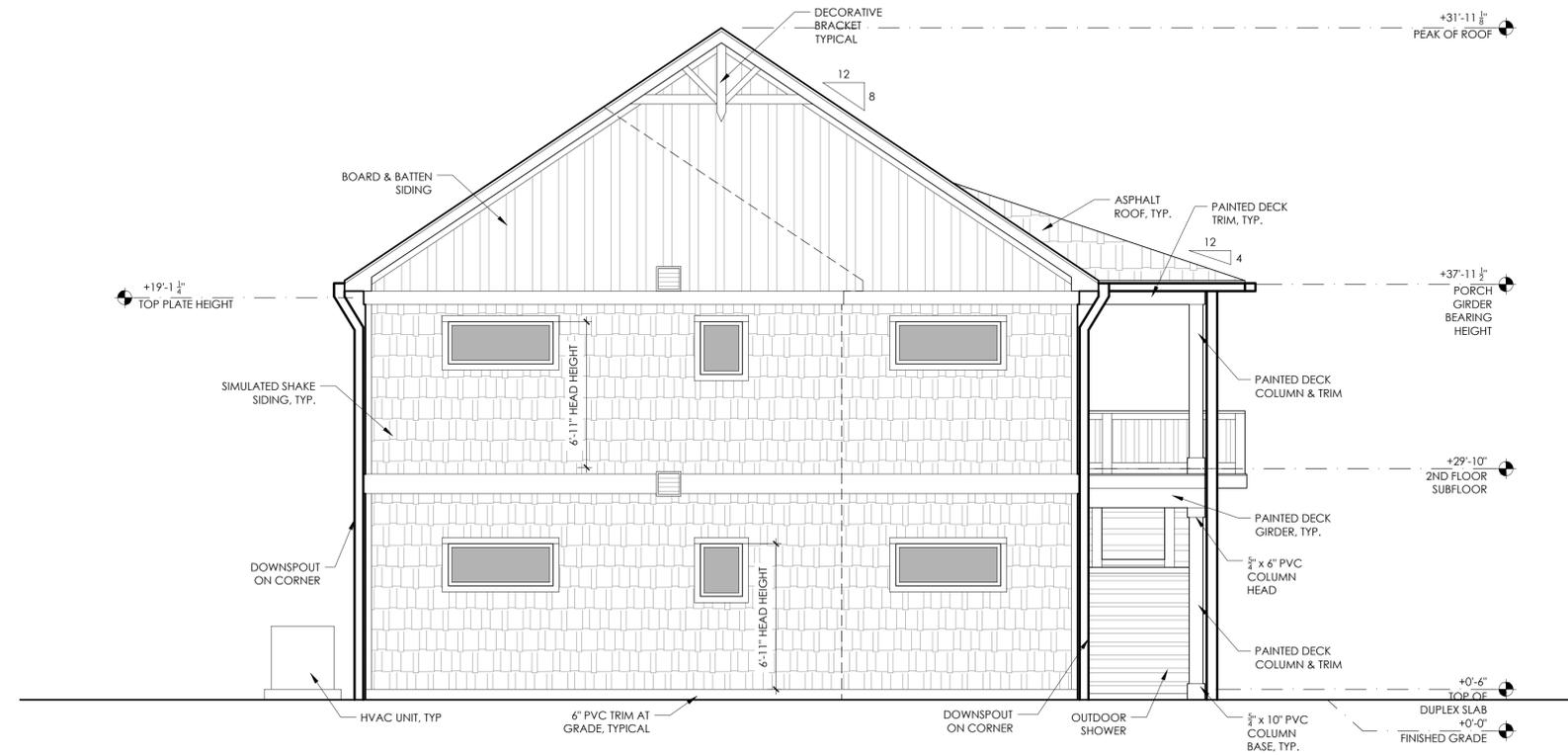
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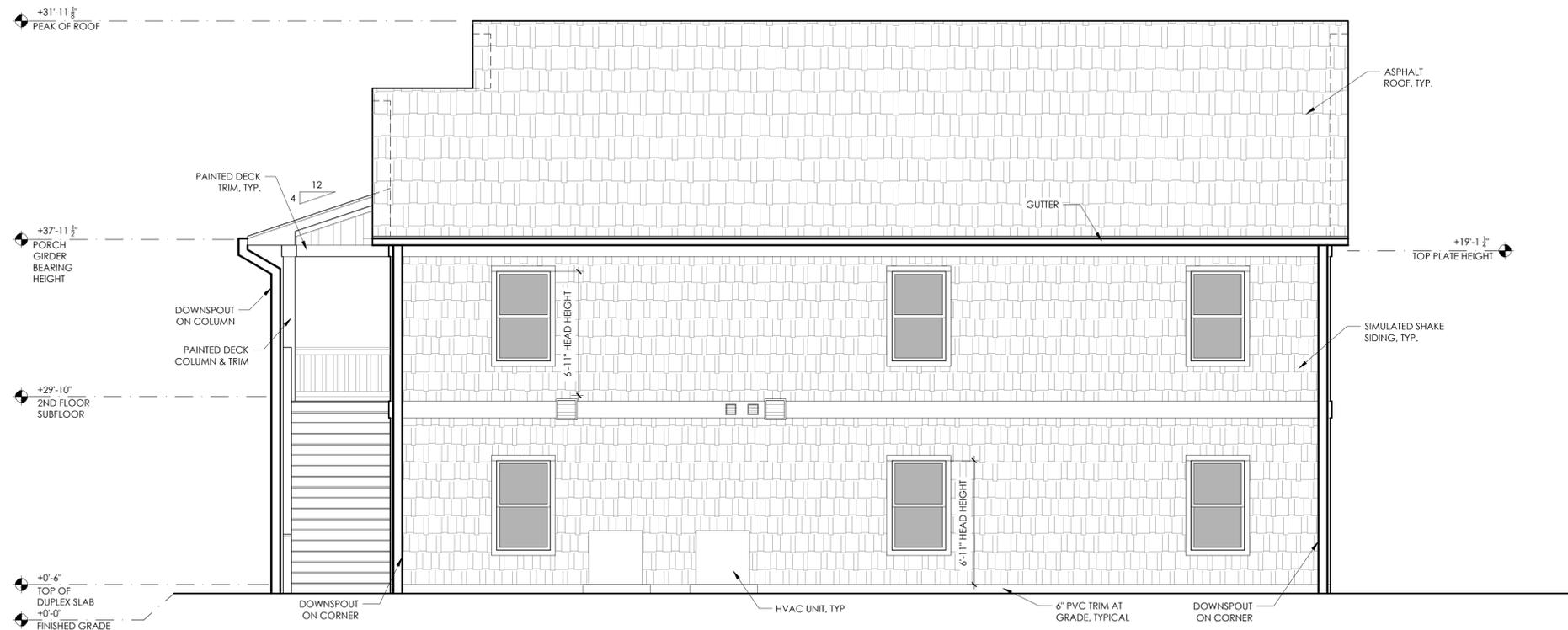
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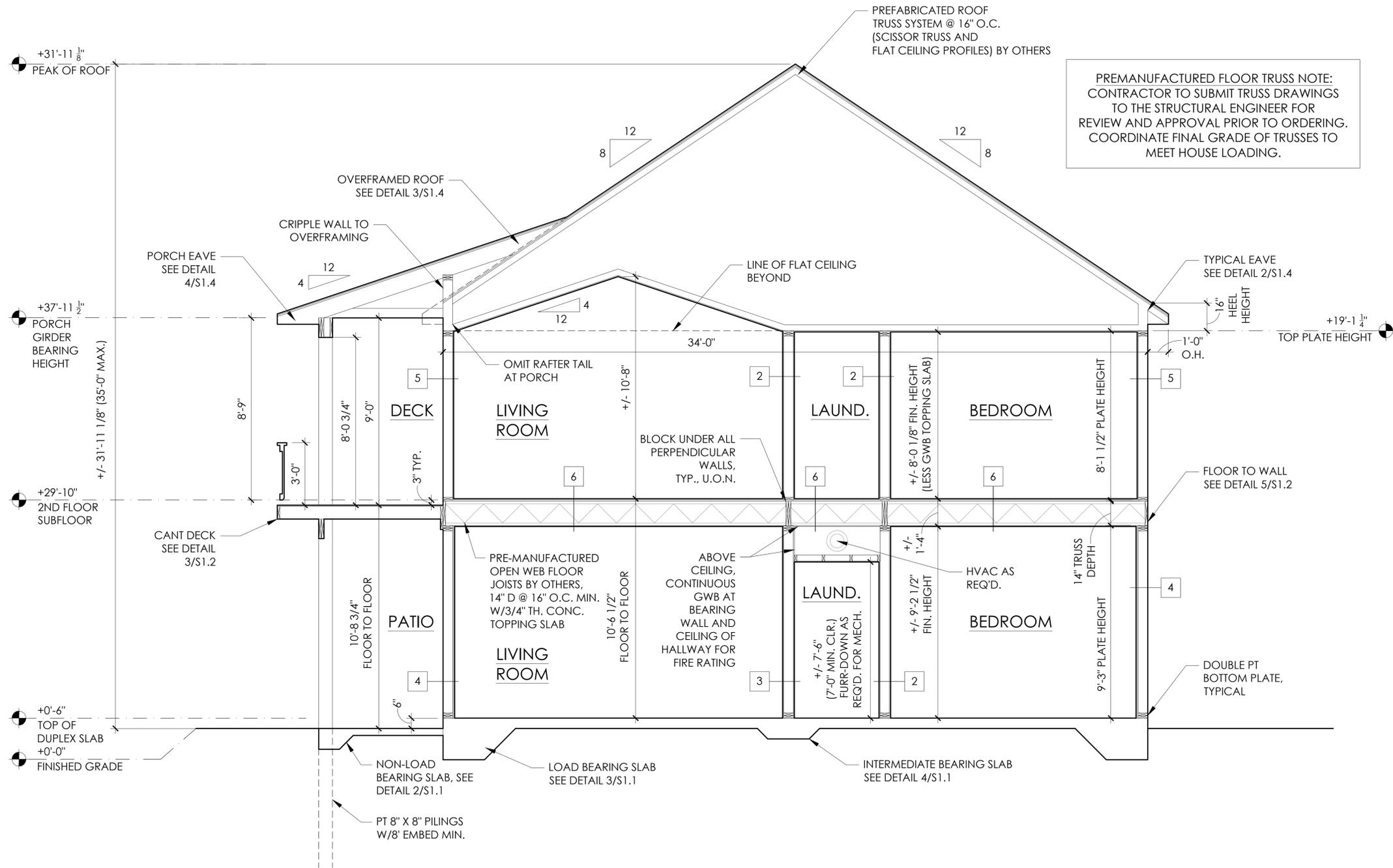
1 EXTERIOR ELEVATION
 SCALE: 1/4" = 1'-0"



2 EXTERIOR ELEVATION
 SCALE: 1/4" = 1'-0"

REVISIONS:	DATE:
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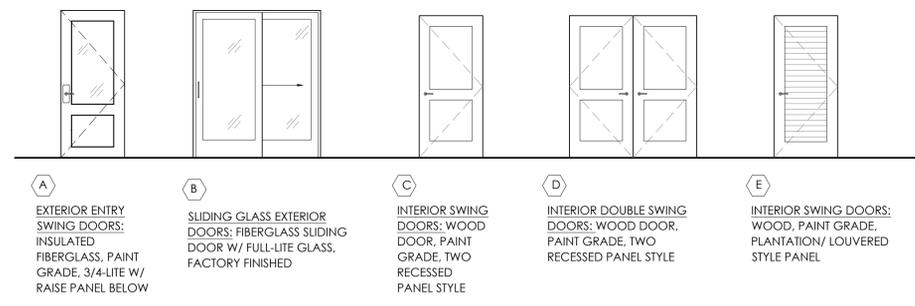
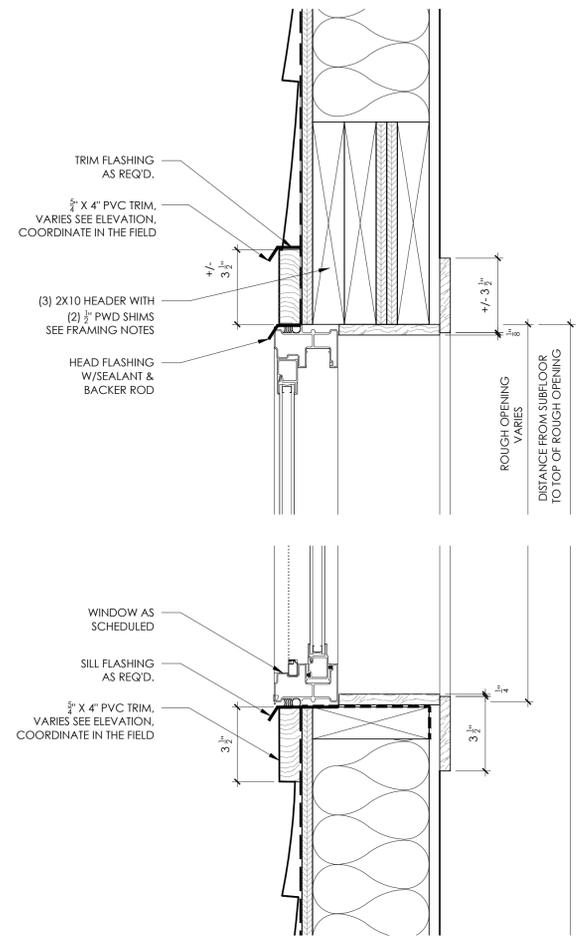
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PREMANUFACTURED FLOOR TRUSS NOTE:
 CONTRACTOR TO SUBMIT TRUSS DRAWINGS
 TO THE STRUCTURAL ENGINEER FOR
 REVIEW AND APPROVAL PRIOR TO ORDERING.
 COORDINATE FINAL GRADE OF TRUSSES TO
 MEET HOUSE LOADING.

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

DOOR SCHEDULE											
TAG	TYPE	TH.	DOOR				FRAME			HDWE	NOTES
			MATERIAL	FINISH	WIDTH	HEIGHT	MATERIAL	FINISH	THRES/SILL		
1	A	1 3/4"	INSULATED FIBERGLASS	PAINTED	3'-0"	6'-11"	COMPOSITE	PAINTED		A	EXTERIOR DOOR
2	C	1 3/4"	HOLLOW-CORE WOOD	PAINTED	2'-4"	6'-8"	WOOD	PAINTED		D	
3	E	1 3/4"	LOUVERED WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		B	
4	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
5	C	1 3/4"	HOLLOW-CORE WOOD	PAINTED	2'-4"	6'-8"	WOOD	PAINTED		D	
6	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
7	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
8	D	1 3/4"	HOLLOW-CORE WOOD	PAINTED	6'-0"	6'-8"	WOOD	PAINTED		C	
9	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
10	C	1 3/4"	HOLLOW-CORE WOOD	PAINTED	2'-4"	6'-8"	WOOD	PAINTED		D	
11	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
12	C	1 3/4"	HOLLOW-CORE WOOD	PAINTED	2'-4"	6'-8"	WOOD	PAINTED		D	
13	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
14	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
15	D	1 3/4"	HOLLOW-CORE WOOD	PAINTED	2'-4"	6'-8"	WOOD	PAINTED		D	
16	B	1 3/4"	FIBERGLASS	FACTORY	6'-0"	6'-11"	COMPOSITE	PAINTED		F	EXTERIOR DOOR
17	A	1 3/4"	INSULATED FIBERGLASS	PAINTED	3'-0"	6'-11"	COMPOSITE	PAINTED		A	EXTERIOR DOOR
18	C	1 3/4"	HOLLOW-CORE WOOD	PAINTED	2'-4"	6'-8"	WOOD	PAINTED		D	
19	E	1 3/4"	LOUVERED WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		B	
20	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
21	C	1 3/4"	HOLLOW-CORE WOOD	PAINTED	2'-4"	6'-8"	WOOD	PAINTED		D	
22	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
23	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
24	D	1 3/4"	HOLLOW-CORE WOOD	PAINTED	6'-0"	6'-8"	WOOD	PAINTED		C	
25	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
26	C	1 3/4"	HOLLOW-CORE WOOD	PAINTED	2'-4"	6'-8"	WOOD	PAINTED		D	
27	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
28	C	1 3/4"	HOLLOW-CORE WOOD	PAINTED	2'-4"	6'-8"	WOOD	PAINTED		D	
29	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
30	C	1 3/4"	SOLID-CORE WOOD	PAINTED	3'-0"	6'-8"	WOOD	PAINTED		E	
31	C	1 3/4"	HOLLOW-CORE WOOD	PAINTED	2'-4"	6'-8"	WOOD	PAINTED		D	
32	B	1 3/4"	FIBERGLASS	FACTORY	6'-0"	6'-11"	COMPOSITE	PAINTED		F	EXTERIOR DOOR



HARDWARE SETS:
ALL LOCKSETS AND LATCHSETS TO RECEIVE ADA APPROVED LEVER HANDLES. ALL EXPOSED HARDWARE IS TO HAVE A SATIN NICKEL FINISH.

HARDWARE SET A: ENTRY DOORS - ADA APPROVED LEVER HANDLE W/ KEYED LOCKSET AND DEADBOLT. COASTAL HARDWARE FOR INCREASED RUST RESISTANCE.

HARDWARE SET B: UTILITY DOORS - ADA APPROVED LEVER HANDLE W/ KEYED LOCKSET, OUTSIDE LEVER LOCKS AND UNLOCKS W/ KEY, INSIDE LEVER ALWAYS UNLOCKS FOR IMMEDIATE EGRESS.

HARDWARE SET C: PAIR PASSAGE DOORS - DOUBLE DOOR ADA COMPLIANT DUMMY LEVER HANDLES W/ FRAME MOUNTED MAGNETIC CATCH, WIDE THROW HINGES W/ HINGE PIN DOOR STOPS ON EACH LEAF.

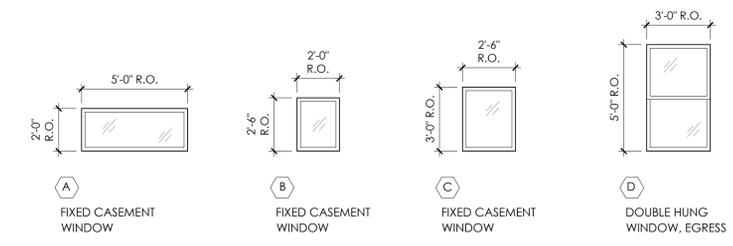
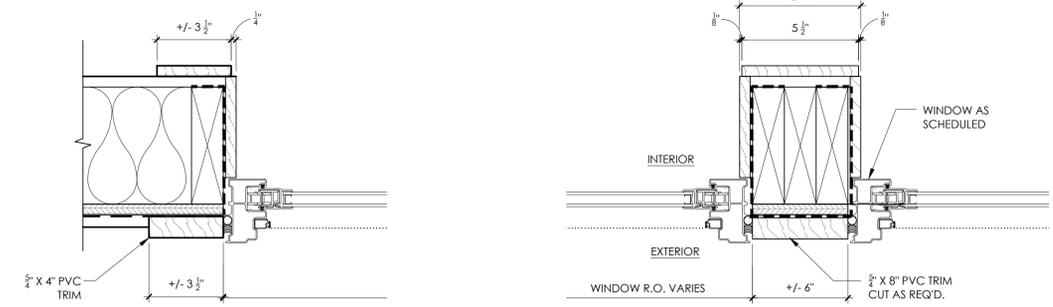
HARDWARE SET D: PASSAGE DOOR - PASSAGE LATCHSET, ADA COMPLIANT LEVER HANDLE, HINGE PIN DOOR STOPS.

HARDWARE SET E: PRIVACY DOOR - PRIVACY LOCKSET, ADA COMPLIANT LEVER HANDLE, THUMB TURN LOCK ON INSIDE LEVER LOCKS OUTSIDE LEVER ALWAYS UNLOCK INSIDE FOR IMMEDIATE EGRESS. HINGE PIN DOOR STOPS.

HARDWARE SET F: SLIDING DOOR: ADA COMPLIANT PULL HANDLE W/ THUMB LATCH AND MORTISED LOCKSET AS PROVIDED BY SLIDING DOOR MFG. COASTAL HARDWARE FOR INCREASED RUST RESISTANCE

NOTES:
1. FOR INTERIOR DOORS, WIDTH AND HEIGHT VALUES REPRESENT ACTUAL DOOR SIZE AND NOT FRAME SIZE.
2. ALL FRAMES THAT ARE PART OF A RATED ASSEMBLY MUST BE RATED.
3. CONTRACTOR TO CONFIRM THE CORRECT "HAND" OF EACH DOOR PRIOR TO PURCHASING
4. ALL LOCKSETS AND LATCHSETS TO RECEIVE ADA APPROVED LEVER HANDLES.

3 TYPICAL WINDOW TRIM DETAILS
NOT TO SCALE



2 WINDOW SCHEDULE
NOT TO SCALE

WINDOW NOTES:
1. WINDOWS BASED ON ANDERSEN 400 SERIES W/ WHITE INTERIOR AND EXTERIOR FRAME, OR OWNER APPROVED EQUIVALENT.
2. IMPACT RESISTANT GLASS MAY BE REQUIRED BY LOCAL BUILDING INSPECTORS. G.C. TO COORDINATE WITH JURISDICTION PRIOR TO ORDERING WINDOWS.
3. LOW-E GLASS IS REQUIRED AND MUST MEET DESIGN PRESSURE RATINGS FOR THE LOCAL JURISDICTION.
4. SEE 2018 NC RESIDENTIAL CODE FOR U VALUE, R VALUE AND MIN SHADING COEFFICIENTS.
5. SEE THE LEGEND ABOVE FOR MUNTIN PATTERN
6. ALL WINDOWS TO HAVE A DP-50 MIN. WIND RATING, MIN.
7. SET ALL WINDOWS AT DOOR HEAD HEIGHT, U.O.N.
8. ALL WINDOW SIZES ARE APPROXIMATE. ACTUAL SIZE MAY VARY DEPENDING UPON FINAL MANUFACTURER.
9. ALL OPERABLE WINDOW WITH SILLS LESS THAN 24\"/>

1 DOOR SCHEDULE
NOT TO SCALE

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PME ENGINEER:
COASTAL
ENGINEERING
2406 Princess Anne Road
Suite 200
Virginia Beach, VA 23456
Phone (757) 563-9027
Facsimile (757) 563-9028

PROJECT NAME:
TOWN OF NAGS HEAD
Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR REBID	10 / 30 / 24

DRAWING NAME:
SCHEDULES

ISSUED FOR
BID

DRAWN BY: **CN**

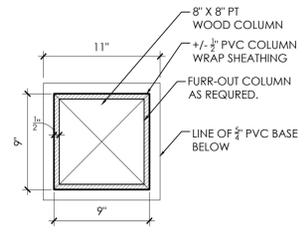
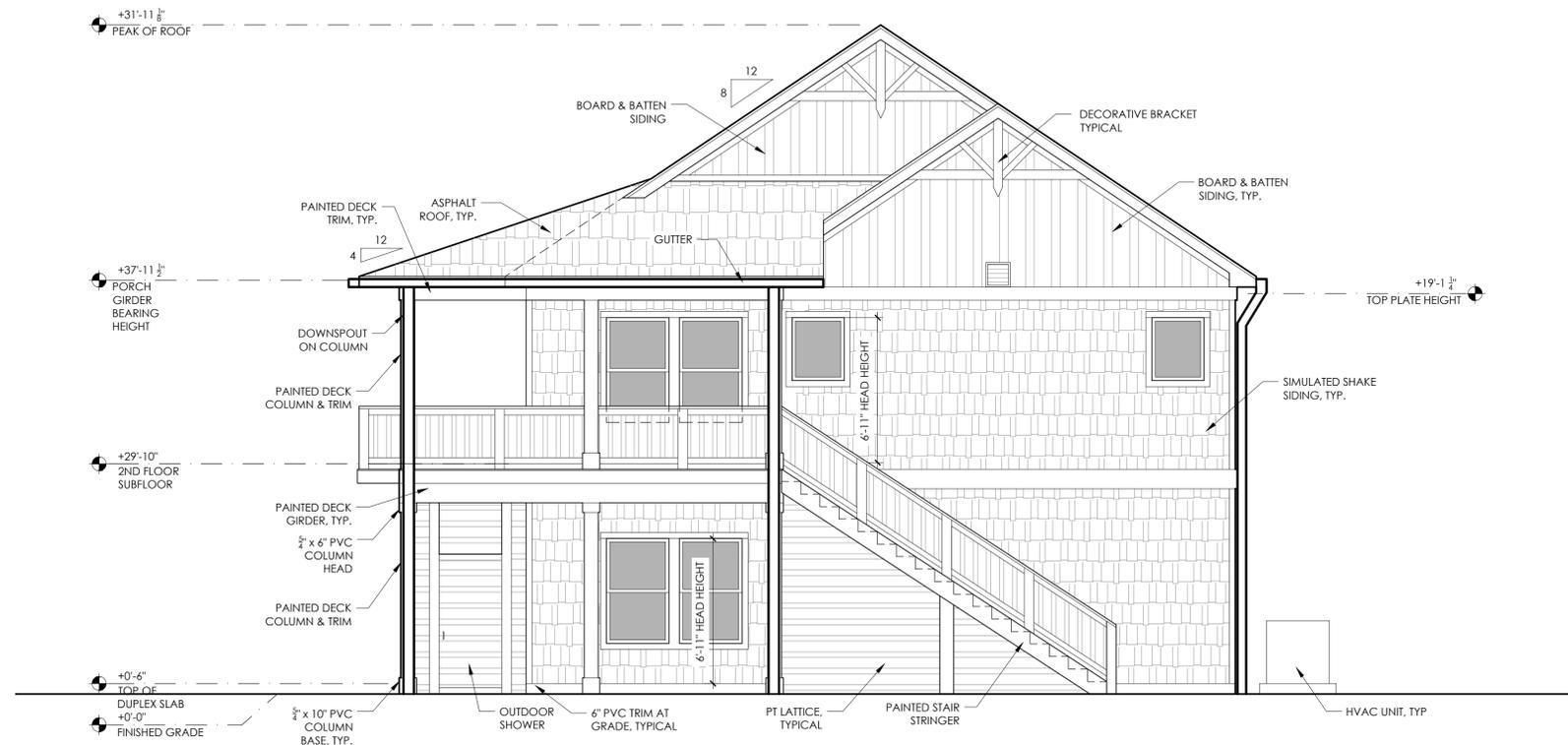
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1 EXTERIOR ELEVATION
SCALE: 1/4" = 1'-0"

3 COLUMN WRAP DETAIL
NOT TO SCALE



2 EXTERIOR ELEVATION
SCALE: 1/4" = 1'-0"

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PROJECT NAME:
TOWN OF NAGS HEAD
Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR REBID	10 / 30 / 24

DRAWING NAME:
EXTERIOR ELEVATIONS

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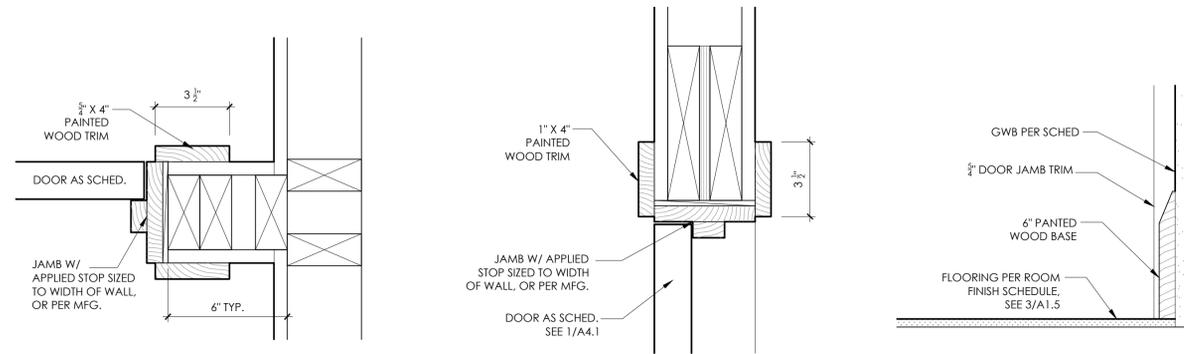
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2 INTERIOR DOOR TRIM DETAILS
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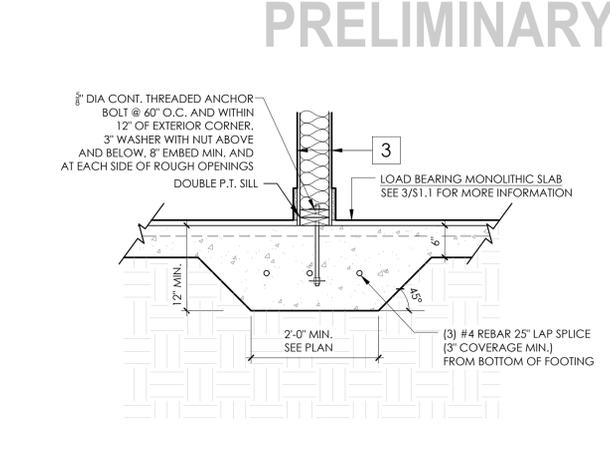
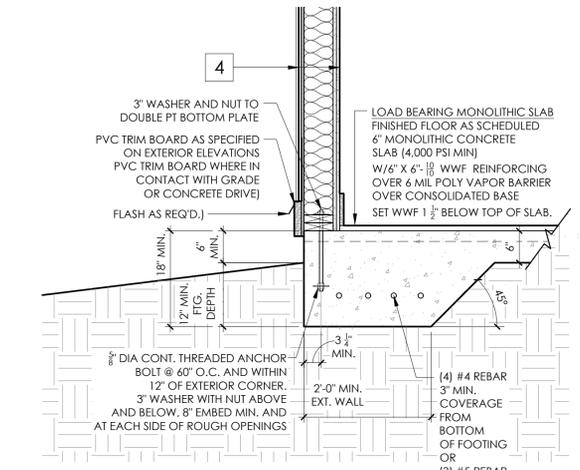
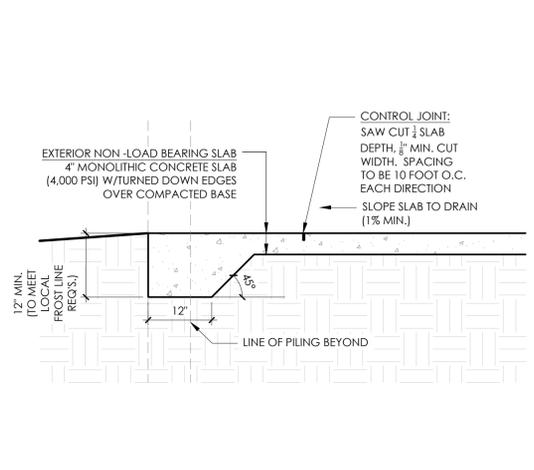
3 WOOD BASE DETAIL
 NOT TO SCALE

CEILING:		
CLG-1	MANUFACTURER: PRODUCT: FINISH: COLOR: LOCATION:	US GYPSUM OR EQUIVALENT GYPSUM WALLBOARD KNOCKDOWN BRIGHT WHITE THROUGHOUT
PAINT:		
PC-1	MANUFACTURER: COLOR: NUMBER: FINISH: LOCATION:	BENJAMIN MOORE - INTERIOR "CHANTILLY LACE" OC-65 FLAT INTERIOR CEILINGS
PC-2	MANUFACTURER: COLOR: NUMBER: FINISH: LOCATION:	BENJAMIN MOORE - INTERIOR "REVERE PEWTER" HC-172 EGGSHELL INTERIOR WALLS
PC-3	MANUFACTURER: COLOR: NUMBER: FINISH: LOCATION:	BENJAMIN MOORE "CHANTILLY LACE" OC-65 SATIN INTERIOR TRIM
PC-4	MANUFACTURER: COLOR: NUMBER: FINISH: LOCATION:	SHERWIN-WILLIAMS - EXTERIOR TBD TBD SATIN EXTERIOR SIDING
PC-5	MANUFACTURER: COLOR: NUMBER: FINISH: LOCATION:	SHERWIN-WILLIAMS - EXTERIOR TBD TBD SATIN EXTERIOR TRIM, SOFFIT, & FASCIA
PC-6	MANUFACTURER: COLOR: NUMBER: FINISH: LOCATION:	SHERWIN-WILLIAMS - EXTERIOR TBD TBD SEMI-GLOSS OPT. ACCENT COLOR (ENTRY DOOR)
WALL FINISH:		
WF-1	MANUFACTURER: PRODUCT: FINISH: SIZE: LOCATION:	US GYPSUM OR EQUIVALENT GYPSUM WALLBOARD KNOCKDOWN 4'X8' OR 4'X10' SHEETS THROUGHOUT, U.O.N.
WALLBASE:		
WB-1	MANUFACTURER: PRODUCT: COLOR: SIZE: LOCATION:	WOOD PINE PRIMED 6" THROUGHOUT, U.O.N.

FLOORING:		
FL-1	MANUFACTURER: PRODUCT: COLOR: INSTALL: LOCATION:	MANNINGTON COMMERCIAL (BROADLOOM) FRAME (DWELLINGS COLLECTION) TWIN (81724) WALL-TO-WALL, STRETCH-IN BEDROOMS
FL-2	MANUFACTURER: PRODUCT: COLOR: INSTALL: LOCATION:	MANNINGTON ADURA MAX (LVT) PARISIAN OAK, 7" X 48" TILE CROISSANT MAX721 FLOATING, RANDOM OFFSET ALL COMMON AREAS AND BATHROOMS, U.O.N.
TILE:		
TILE-1	MANUFACTURER: PRODUCT: COLOR: GROUT: INSTALL: LOCATION:	MSI (WALL TILE) 3"X12" RENZO GLOSSY CERAMIC SUBWAY DOVE TBD "S" LINE VERTICAL STACKED, STRAIGHT SHOWER TILE 1 (UPPER PORTION)
TILE-2	MANUFACTURER: PRODUCT: COLOR: GROUT: INSTALL: LOCATION:	MSI (WALL TILE) 3" X 12" RENZO GLOSSY CERAMIC SUBWAY DENIM TBD "S" LINE HORIZONTAL STACKED, STRAIGHT SHOWER TILE 2 (WAINSCOTING)
TILE-3	MANUFACTURER: PRODUCT: COLOR: GROUT: INSTALL: LOCATION:	IVY HILL TILE (WALL TILE) 4" X 4" AMAGANSETT HANDMADE LOOK GIN WHITE TBD "ARCTIC WHITE", 3/8" TH. HALF OFFSET KITCHEN BACKSPLASH
COUNTERTOP:		
CT-1	MANUFACTURER: PRODUCT: COLOR: LOCATION:	LG (SOLID SURFACE) HI-MACS ARCTIC WHITE S06 OR APPROV. EQUIV. ALL BATHROOM VANITIES
CT-2	MANUFACTURER: PRODUCT: COLOR: LOCATION:	LG (QUARTZ) VIATERA MINUET OR APPROV. EQUIV. KITCHEN
EXTERIOR:		
1A	MANUFACTURER: PRODUCT: COLOR: LOCATION:	LP SMARTSIDE OR APPROV. EQUIVALENT 4'X8' BOARD PANELS, BRUSHED SMOOTH PRIMED SEE EXTERIOR ELEVATIONS FOR LOCATION
1B	MANUFACTURER: PRODUCT: COLOR: LOCATION:	LP SMART SIDE OR APPROV. EQUIVALENT 3" BATTEN STRIP TRIM, BRUSHED SMOOTH, 24" O.C. PRIMED SEE EXTERIOR ELEVATIONS FOR LOCATION
2	MANUFACTURER: PRODUCT: COLOR: LOCATION:	GAF OR APPROV. EQUIVALENT TIMBERLINE HDZ CHARCOAL OR APPROV. EQUIVALENT THROUGHOUT

1 FINISH SCHEDULE
 NOT TO SCALE

PRELIMINARY - NOT FOR CONSTRUCTION



- GENERAL NOTES:**
- 1) THIS STRUCTURAL DOCUMENT IS THE PROPERTY OF MICHAEL D. O'STEEN, P.E. AND IS TO BE USED ONLY FOR THE PROJECT AND SHALL NOT BE REPRODUCED FOR OTHER PURPOSES.
 - 2) THIS STRUCTURE IS ONLY STABLE IN ITS COMPLETED FORM. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPORARY BRACING DURING CONSTRUCTION TO STABILIZE THE STRUCTURE.
 - 3) THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE METHODS, TECHNIQUES, AND SEQUENCES OF PROCEDURES TO PERFORM THE WORK. THE SUPERVISION OF THE WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ERRORS AND/OR OMISSIONS FOUND ON THE STRUCTURAL DRAWINGS MUST BE BROUGHT TO THE STRUCTURAL ENGINEER'S ATTENTION IMMEDIATELY.
 - 4) VERIFICATION OF ASSUMED FIELD CONDITIONS IS NOT THE RESPONSIBILITY OF THE ENGINEER. THE CONTRACTOR SHALL VERIFY THE FIELD CONDITIONS FOR ACCURACY AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE CONSTRUCTION BEGINS.
 - 5) IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR BUILDER TO CONFORM TO ALL STANDARDS, PROVISIONS, REQUIREMENTS, METHODS OF CONSTRUCTION, AND USES OF MATERIALS IN BUILDINGS AND/OR STRUCTURES PROVIDED BY THE 2018 NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE (2015 IRC WITH NORTH CAROLINA AMENDMENTS), ANY OTHER LOCAL AGENCIES, AND IN ACCORDANCE WITH GOOD ENGINEERING AND CONSTRUCTION PRACTICES.
 - 6) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE PROPER INSTALLATION OF ALL METAL FASTENERS PER MANUFACTURER'S SPECIFICATIONS.
 - 7) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND INFORM ENGINEER OF RECORD OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
 - 8) CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL STAIR LAYOUTS.
 - 9) FINAL APPROVAL IS THE RESPONSIBILITY OF THE CONTRACTOR AND/OR PERMITTING OFFICIAL.
 - 10) NO INSPECTION OF ACTIVE OR COMPLETED CONSTRUCTION IS TO BE PROVIDED BY MICHAEL D. O'STEEN, P.E., UNLESS SPECIFICALLY AUTHORIZED BY SEPARATE CONTRACT FROM THE OWNER OR CLIENT.

DESIGN LOADS (PSF):

	LIVE LOAD	DEAD LOAD	
ROOF (TRUSSES):	20	20	GYPSUM CEMENT UNDERLAYMENT SEE ARCHITECTURAL SPECS FOR DEFLECTION REQUIREMENTS. G.C. TO COORDINATE WITH SELECTED PRODUCT AND TRUSS MFG.
FLOOR (NON-SLEEPING AREAS):	40	15	
FLOOR (SLEEPING AREAS):	30	15	
EXTERIOR DECKS:	40	10	

WIND LOADS: 140 MPH; EXPOSURE B
OCCUPANCY CATEGORY: II (PER TABLE 1.1 ASCE/SEI 7-10)

- TIMBER:**
- 1) SOLID SAWN WOOD FRAMING SHALL CONFORM TO THE SPECIFICATION AS LISTED IN THE AMERICAN FOREST AND PAPER ASSOCIATION: NDS-15 "NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION - WITH 2015 SUPPLEMENT". ALL SAWN LUMBER SHALL BE NO. 2 SOUTHERN PINE (MIN.)
 - 2) ALL LVL MATERIAL SHALL BE 2.0E (MIN.)
 - 3) LUMBER IN CONTACT WITH CONCRETE, MASONRY, OR EARTH SHALL BE PRESSURE TREATED IN ACCORDANCE WITH THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) STANDARD C1-03.
 - 4) NAILS SHALL BE COMMON WIRE NAILS UNLESS OTHERWISE NOTED. ALL METAL FASTENERS SHALL BE HOT DIPPED GALVANIZED OR AN APPROVED EQUAL.
 - 5) ALL BEAMS BEARING ON TIMBER FRAMING SHALL HAVE FULL BEARING FOR THE WIDTH OF THE BEAM AND BE SUPPORTED BY A MINIMUM OF THREE STUDS, WHERE BEAMS BEAR ONTO A WALL PARALLEL TO THE BEAM SHALL HAVE A MINIMUM BEARING LENGTH OF 4".
 - 6) EXTERIOR STUD WALLS SHALL CONSIST OF 2X4 @ 16" O.C. STUDS UNLESS NOTED OTHERWISE. INTERIOR STUD WALLS SHALL CONSIST OF 2X4 @ 16" O.C. STUDS UNLESS NOTED OTHERWISE. STUDS SHALL BE CONTINUOUS FROM THE SOLE PLATE TO THE DOUBLE TOP PLATE AT THE CEILING OR ROOF. STUDS SHALL ONLY BE DISCONTINUOUS AT BEAMS OR HEADERS FOR WINDOW OR DOOR OPENINGS. HEADER SHALL HAVE A MINIMUM OF ONE KING STUD AT EACH END OF THE HEADER. KING STUDS SHALL BE CONTINUOUS WITH THE SAME REQUIREMENTS AS STUD WALLS.
 - 7) INDIVIDUAL STUDS FORMING A COLUMN SHALL BE ATTACHED TOGETHER WITH ONE 12g CC NAIL AT 6" O.C. STAGGERED. THE STUD COLUMN SHALL BE CONTINUOUS TO THE FOUNDATION OR BEAM. THE COLUMN SHALL BE PROPERLY BLOCKED AT ALL FLOOR LEVELS TO ENSURE PROPER LOAD TRANSFER.
 - 8) BEAMS CONTAINING MULTIPLE PLYS OF LUMBER SHALL HAVE EACH PLY ATTACHED TO ITS ADJACENT PLY WITH (3) 12g CC NAILS AT 12" O.C.
 - 9) MULTI-PLY GIRDERS SHALL HAVE PLY NOTCHED FOR 2-PLY GIRDER UNLESS NOTED OTHERWISE. SEE MULTI-PLY GIRDER DETAILS AS AN OPTION TO USING PILE STRAPS.

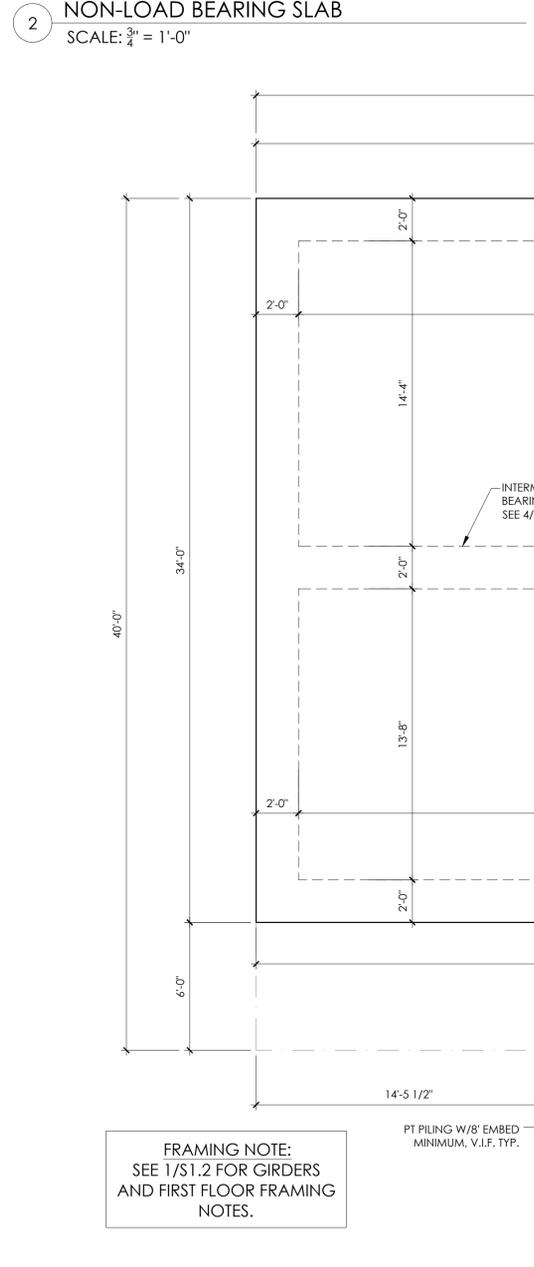
- CONCRETE:**
- 1) CONCRETE SHALL HAVE NORMAL WEIGHT AGGREGATE AND A MINIMUM COMPRESSIVE STRENGTH (Fc) AT 28 DAYS AS LISTED BELOW:
SLABS-ON-GRADE: 4,000 PSI
 - 2) CONCRETE SHALL BE PROPORTIONED, MIXED, AND PLACED IN ACCORDANCE WITH ACI 318-08 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" AND ACI 332-08 "CODE REQUIREMENTS FOR RESIDENTIAL CONCRETE CONSTRUCTION"
 - 3) CONCRETE SHALL BE NORMAL WEIGHT CONCRETE - 150 PCF
 - 4) THE CONCRETE SLAB HAS BEEN DESIGNED USING A SUBGRADE MODULUS OF k=250 PCI AND A DESIGN LOADING OF 200 PSF. THE ENGINEER IS NOT RESPONSIBLE FOR DIFFERENTIAL SETTLEMENT, SLAB CRACKING OR OTHER FUTURE DEFECTS RESULTING FROM UNREPORTED CONDITIONS MITIGATING THE ABOVE ASSUMPTIONS.
 - 5) CONTROL JOINTS SHALL BE PRODUCED USING CONVENTIONAL PROCESSES WITHIN 4 TO 12 HOURS AFTER THE SLAB HAS BEEN FINISHED. REINFORCING STEEL SHALL NOT EXTEND THROUGH THE CONTROL JOINT.

FOUNDATIONS:

1) THE FOUNDATION DESIGN IS BASED UPON AN ASSUMED SOIL BEARING CAPACITY OF 2,000 PSF (ALLOWABLE).

- TIMBER PILES:**
- 1) ALL PILES SHALL BE T.W. NO.2 SOUTHERN PINE.
 - 2) PRESERVATIVE TREATMENT OF TIMBER PILES SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) STANDARD U1-18 USE CATEGORY U1C4C (MIN.)
 - 3) ALL PILES SHALL BE T.W. #2 SOUTHERN PINE. PILE TIP SHALL EXTEND TO A DEPTH OF NOT LESS THAN 8 FOOT MINIMUM BELOW THE NATURAL GRADE OR FINISHED GRADE OF THE LOT, WHICHEVER IS LOWER.
 - 4) SHOULD ANY SUDDEN DECREASE IN DRIVING RESISTANCE BE ENCOUNTERED, CONTACT A LICENSED SOILS ENGINEER BEFORE PROCEEDING.
 - 5) PILES ARE DESIGNED AS FRICTION PILES WITH AN ALLOWABLE LOAD OF 1/2 TON PER FOOT OF EMBEDMENT IN SUPPORTING STRATUM.
 - 6) MULTI-PLY GIRDERS SHALL HAVE PLY NOTCHED FOR 2-PLY GIRDER UNLESS NOTED OTHERWISE. SEE MULTI-PLY GIRDER DETAILS AS AN OPTION TO USING PILE STRAPS.

- WOOD TRUSSES:**
- 1) THE WOOD TRUSS MANUFACTURER/FABRICATOR IS RESPONSIBLE FOR THE DESIGN OF THE WOOD TRUSSES, SHOP DRAWINGS AND SUPPORTING CALCULATIONS FOR WOOD TRUSSES AND OTHER ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE GENERAL CONTRACTOR BEFORE SUBMITTAL. THE ENGINEER SHALL HAVE A MINIMUM OF FIVE DAYS FOR REVIEW. THE ENGINEER'S REVIEW IS TO BE FOR CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE RELEVANT CONTRACT DOCUMENTS. THE ENGINEER SHALL ASSUME NO RESPONSIBILITY FOR THE CORRECTNESS OF THE STRUCTURAL DESIGN FOR THE WOOD TRUSSES. THE ENGINEER'S REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK, AND COORDINATE THE SHOP DRAWINGS PRIOR TO SUBMISSION. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, DIMENSIONS, ETC. AT THE TIME OF THIS SUBMITTAL THE GENERAL CONTRACTOR HAS NOT PROVIDED THE ENGINEER OF RECORD WITH SHOP DRAWINGS; UNTIL SUCH TIME DOCUMENTATION PROVIDED BY THE ENGINEER IS CONSIDERED "PRELIMINARY-NOT FOR CONSTRUCTION".
 - 2) THE WOOD TRUSSES SHALL BE DESIGNED FOR ALL REQUIRED LOADINGS AS SPECIFIED IN THE NORTH CAROLINA RESIDENTIAL CODE, THE ASCE STANDARD "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" (ASCE 7-10), AND THE LOADING REQUIREMENTS SHOWN ON THESE SPECIFICATIONS. THE TRUSS DRAWINGS SHALL BE COORDINATED WITH ALL OTHER CONSTRUCTION DOCUMENTS AND PROVISIONS PROVIDED FOR LOADS SHOWN ON THESE DRAWINGS INCLUDING BUT NOT LIMITED TO HVAC EQUIPMENT, PIPING, AND ARCHITECTURAL FIXTURES ATTACHED TO THE TRUSSES.
 - 3) THE TRUSSES SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" (NDS) LATEST EDITION AND THE LATEST EDITION OF THE "DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES".
 - 4) THE TRUSS MANUFACTURER SHALL PROVIDE ADEQUATE BRACING INFORMATION IN ACCORDANCE WITH THE TRUSS PLATE INSTITUTE "COMMENTARY AND RECOMMENDATIONS FOR HANDLING, INSTALLING, AND BRACING METAL PLATE CONNECTED WOOD TRUSSES" (HIB-91). THIS BRACING, BOTH TEMPORARY AND PERMANENT, SHALL BE SHOWN ON THE SHOP DRAWINGS. ALSO, THE SHOP DRAWINGS SHALL SHOW THE REQUIRED ATTACHMENTS FOR THE TRUSSES.
 - 5) SUPPORT SHALL BE PROVIDED FOR ALL NON-LOAD BEARING PARTITIONS PARALLEL TO THE TRUSSES. THIS SUPPORT SHALL EITHER BE ACHIEVED BY INSTALLING AN EXTRA TRUSS UNDER THE PARTITION OR BY PROVIDING 2x BLOCKING ATTACHED TO EACH ADJACENT TRUSS WITH A JOIST HANGER. EITHER METHOD MAY BE USED. HOWEVER THIS DESIGN IS THE RESPONSIBILITY OF THE TRUSS MANUFACTURER AND SHALL BE PROVIDED EVEN IF THE PARTITIONS ARE NOT SPECIFICALLY NOTED ON THE PROPOSED TRUSS LAYOUT.
 - 6) ANY CHORDS OR TRUSS WEBS SHOWN ON THESE DRAWINGS HAVE BEEN SHOWN AS A REFERENCE ONLY. THE FINAL DESIGN OF THE TRUSSES SHALL BE PER THE TRUSS MANUFACTURER.



1 FOUNDATION AND PILING PLAN
SCALE: 1/4" = 1'-0"

5 STRUCTURAL NOTES
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TOWN OF NAGS HEAD
Workforce Housing
425 Health Center Dr.
Nags Head, NC

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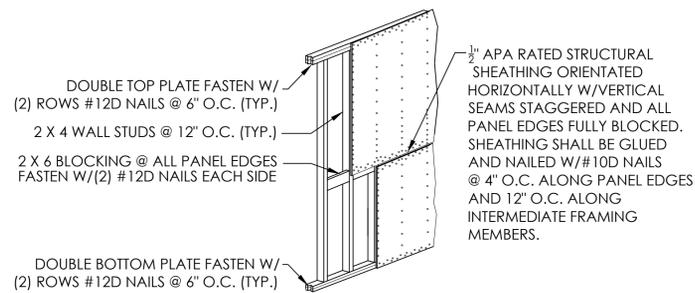
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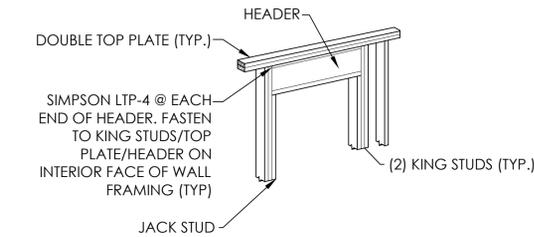
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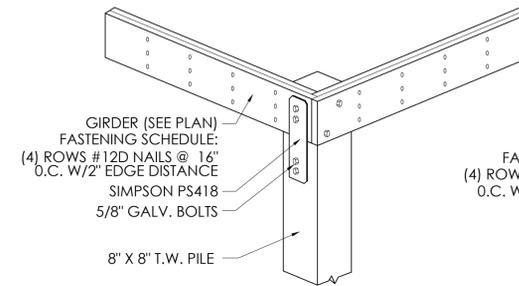


2 WALL SHEATHING DETAIL AT SLAB
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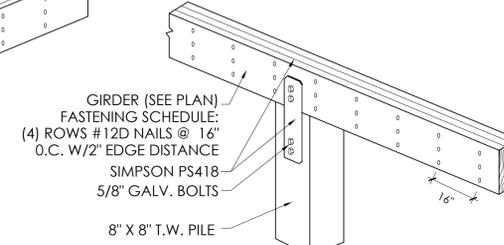


NOTE: ATTACHED EXTERIOR SHEATHING W/DOUBLE ROW OF #10D GALV. NAILS @ 4" O.C. HORIZONTAL SPACING ALONG ALL DOUBLE TOP PLATES, ROUGH OPENING PERIMETERS, AND HEADERS. SET NAIL HEAD FLUSH W/EXTERIOR FACE OF SHEATHING (TYP)

3 LOAD BEARING SLAB
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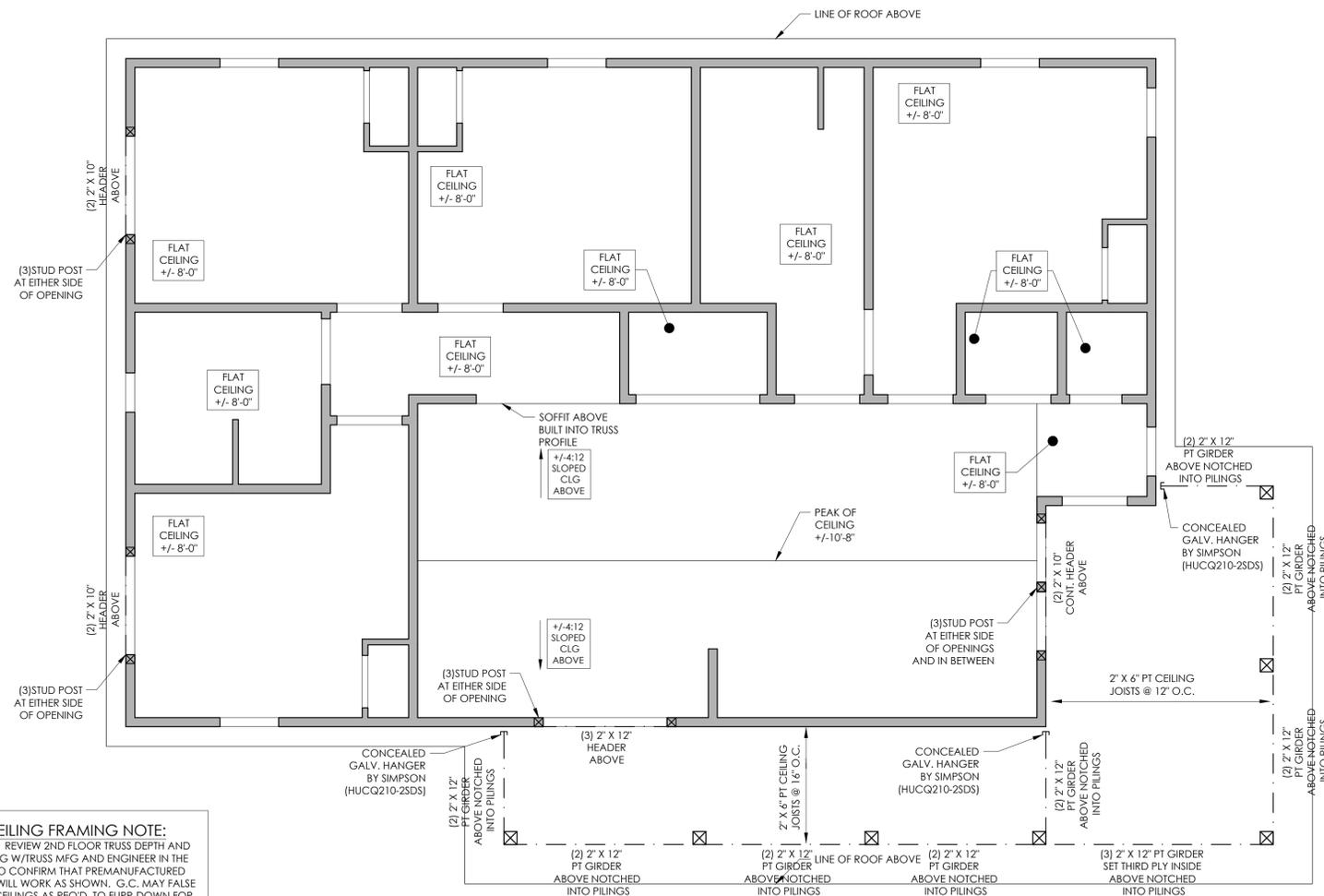


NOTE: REQUIRED ONLY WHEN 8X8 PILE CROSS SECTION NOTCHED GREATER THAN 50%. SHALL BE PLACED ON EXTERIOR AND INTERIOR FACE OF PILE.



NOTE: SIMPSON PS418 REQUIRED ON OPPOSING SIDES OF PILE, TYPICAL

4 TYPICAL PILING DETAILS
 NOT TO SCALE



CEILING FRAMING NOTE:
 G.C. TO REVIEW 2ND FLOOR TRUSS DEPTH AND SPACING W/TRUSS MFG AND ENGINEER IN THE FIELD TO CONFIRM THAT PREMANUFACTURED TRUSSES WILL WORK AS SHOWN. G.C. MAY FALSE FRAME CEILINGS AS REQ'D. TO FURR-DOWN FOR MECHANICAL SYSTEMS/DUCTS. COORDINATE IN THE FIELD WITH THE ENGINEER.

1 SECOND FLOOR CEILING FRAMING PLAN
 SCALE: 1/4" = 1'-0"

GENERAL SPECIFICATIONS:

- THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO DETERMINE THE EXTENT OF THE WORK. LACK OF KNOWLEDGE OF EXISTING CONDITIONS WILL NOT BE CONSIDERED A BASIS FOR CHANGE ORDERS. THIS WILL INCLUDE A SATISFACTORY EFFORT BY THE CONTRACTOR TO FIELD VERIFY PROPER FIT. EXPENSE INCURRED BY THE CONTRACTOR, WHICH COULD HAVE BEEN AVOIDED BY THIS STEP SHALL NOT BE A BASIS FOR CHANGE ORDER.
- CONTRACTOR TO ELECTRONICALLY SPECIFICATIONS AND DETAIL FOR EQUIPMENT AND FABRICATED MATERIALS FOR OWNER'S APPROVAL PRIOR TO ISSUING PURCHASE ORDER. OWNER WILL RETURN WITH ACTION NOTED. OWNER'S APPROVAL DOES NOT RELIEVE CONTRACTOR OF ANY RESPONSIBILITY FOR PERFORMANCE AND OPERATION.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS FOR A COMPLETE INSTALLATION IN ALL RESPECTS READY OF INTENDED USE AND THE STRICT ACCORDANCE WITH STATE AND LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. PAY NECESSARY FEES AND OBTAIN PERMITS. INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY PRECAUTIONS AND PROCEDURES.
- EQUIPMENT AND MATERIALS SHALL BE OF THE TYPE, SIZE AND MANUFACTURERS INDICATED ON THE DRAWINGS OR AN APPROVED EQUIVALENT.
- THE CONTRACTOR SHALL SUPPLY AND INSTALL THE MATERIALS AND EQUIPMENT COVERED BY THE PLANS AND SPECIFICATIONS TO THE OWNER COMPLETE AND IN FIRST CLASS CONDITION IN EVERY RESPECT. HE SHALL GUARANTEE THAT THE MATERIAL, EQUIPMENT, AND WORKMANSHIP SUPPLIED AND INSTALLED BY HIM SHALL BE ENTIRELY FREE FROM DEFECTS AND THAT HE WILL REPAIR OR REPLACE AT HIS OWN EXPENSE, ANY MATERIALS, EQUIPMENT, AND WORKMANSHIP IN WHICH DEFECTS ARE FOUND.
- PROVIDE WARRANTY FOR A PERIOD OF 12 MONTHS AGAINST DEFECTIVE WORKMANSHIP AND MATERIALS AFTER FINAL ACCEPTANCE AT NO ADDITIONAL COST TO THE OWNER.
- WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE LOCAL AND STATE CODES.

PLUMBING ABBREVIATIONS:

AC	AIR CONDITIONING	MIN	MINIMUM
BLDG	BUILDING	MISC	MISCELLANEOUS
CLG	CEILING	NA	NOT APPLICABLE
CONC	CONCRETE	NC	NORMALLY CLOSED
DIA	DIAMETER	NC	NOT IN CONTRACT
(E)	EXISTING	OC	ON CENTER
EA	EACH	OD	OUTSIDE DIAMETER
EFF	EFFICIENCY	PD	PRESSURE DROP
ELEC	ELECTRICAL	POC	POINT OF CONNECTION
FD	FLOOR DRAIN	PSI	POUNDS PER SQUARE INCH GAUGE
FT	FOOT OR FEET	SL	SLOPE
FU	FIXTURE UNIT	SP	STATIC PRESSURE
GA	GAUGE	SPECS	SPECIFICATIONS
GAL	GALLON	STD	STANDARD
GALV	GALVANIZED	STOR	STORAGE
GPH	GALLONS PER HOUR	STRUCT	STRUCTURAL
GPM	GALLONS PER MINUTE	TEMP	TEMPERATURE
HD	HEAD	TYP	TYPICAL
HP	HORSEPOWER	UF	UNDER FLOOR
HVAC	HEATING, VENT & AIR CONDITIONING	UG	UNDERGROUND
LAB	LABORATORY	UON	UNLESS OTHERWISE NOTED
IN	INCH	V	VENT OR VOLTS
LAB	LABORATORY	VR	VENT RISER
LBS	POUNDS	VTR	VENT THROUGH ROOF
LVL	LEVEL	W	WATTS
MAX	MAXIMUM	WT	WEIGHT

PLUMBING LEGEND

-----	VENT PIPING
-----	DOMESTIC COLD WATER PIPING
-----	DOMESTIC HOT WATER PIPING
-----	SANITARY WASTE PIPING
○	FLOOR CLEANOUT
VTR	VENT THRU ROOF
FLA	FULL LOAD AMPS
⏏	BACKFLOW PREVENTER
①	KEY NOTE MARK
⊗	VALVE

PLUMBING FIXTURE CONNECTION SCHEDULE

SYMBOL	TYPE	CW	HW	WASTE	VENT	MANUFACTURER	MODEL	REMARKS
P-1	WATER CLOSET	1/2"	1/2"	3"	1 1/2"			1, 2, 3, 4
P-2	LAVATORY	1/2"	1/2"	1 1/2"	1 1/2"			3, 8
P-2A	LAVATORY ACCESSIBLE	1/2"	1/2"	1 1/2"	1 1/2"			1, 3, 8
P-3	KITCHEN SINK	1/2"	1/2"	1 1/2"	1 1/2"			1, 3, 8
P-4	OUTDOOR SHOWER	1/2"	1/2"					3
P-5	DISH WASHER	-	1/2"	1 1/2"	-			1, 6
P-6	WASHING MACHINE CONNECTION BOX	1/2"	1/2"	1 1/2"	1 1/2"	WATER-TITE	85709	9
P-7	ICE MAKER CONNECTION BOX	1/2"	-	-	-	WATER-TITE	82419	9
P-8	BATHTUB / SHOWER	1/2"	1/2"	2"	1 1/2"		0	1, 3
P-9	SHOWER	1/2"	1/2"	2"	1 1/2"			1, 2, 3
FD-1	FLOOR DRAIN			2"	1 1/2"	WATTS	FD-100	11, 12
BFP-1	BACK FLOW PREVENTER	1"				WATTS	9	10
WH-1	WALL HYDRANT	1/2"				WOODFORD	MODEL 25	7
EW-1	ELECTRIC HOT WATER	3/4"	3/4"	-	-	AO SMITH	ENT-40	5

NOTES:

- PLUMBING FIXTURES SHALL CONFORM TO THE (U.F.A.S) UNIFORM FEDERAL ACCESSIBILITY STANDARDS.
- TANK TYPE FLOOR MOUNTED 1.28 GPF
- PLUMBING FIXTURES TO BE SELECTED BY OWNER.
- COORDINATE FLUSH VALVE TO BE ON OPEN ROOM SIDE OF TANK TO CONFORM WITH ADA STANDARDS.
- 4.5KW, 230V, 1PH, PROVIDE WITH AUXILIARY DRAIN PAN AND RELIEF VALVE
- SEE DISHWASHER INSTALLATION DETAIL
- FREEZE PROOF WALL HYDRANT, PROVIDE WITH VACCUUM BREAKER, COORDINATE WITH WALL THICKNESS AND CONSTRUCTION.
- COORDINATE DRILLING WITH FAUCET AND HEAD SELECTED BY OWNER, PROVIDE WITH DRAIN
- FR-12 SERIES, PROVIDE WATER SHUT OFF VALVES AND WATER HAMMER ARRESTORS. OR APPROVED EQUAL
- REDUCED PRESSURE BACK FLOW PREVENTER RATED FOR POTABLE WATER USE.
- COORDINATE MOUNTING AND TRIM WITH FLOOR FINISH.
- PROVIDE WITH TRAP PRIMER FED FROM THE DOMESTIC COLD WATER LINE.



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PROJECT NAME:

TOWN OF NAGS HEAD

Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
SPECIFICATIONS, LEGEND,
ABBREVIATIONS AND
SCHEDULE

ISSUED FOR
BID

DRAWN BY: LKK

DATE: 9 / 13 / 24

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SHEET:
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REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
**PLUMBING FIRST FLOOR
 NEW WORK PLAN**

**ISSUED FOR
 BID**

DRAWN BY: **LKK**

DATE: **9 / 13 / 24**

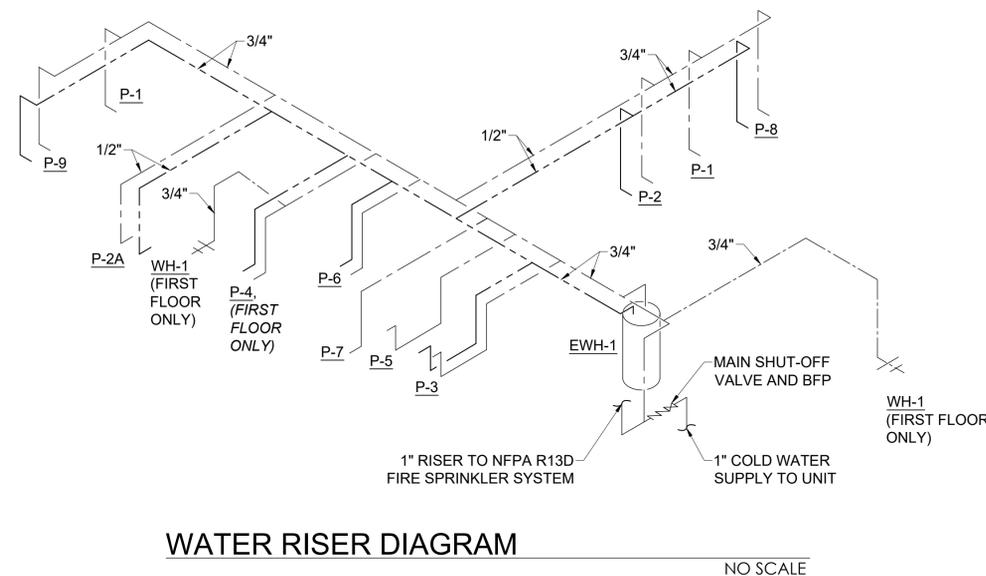
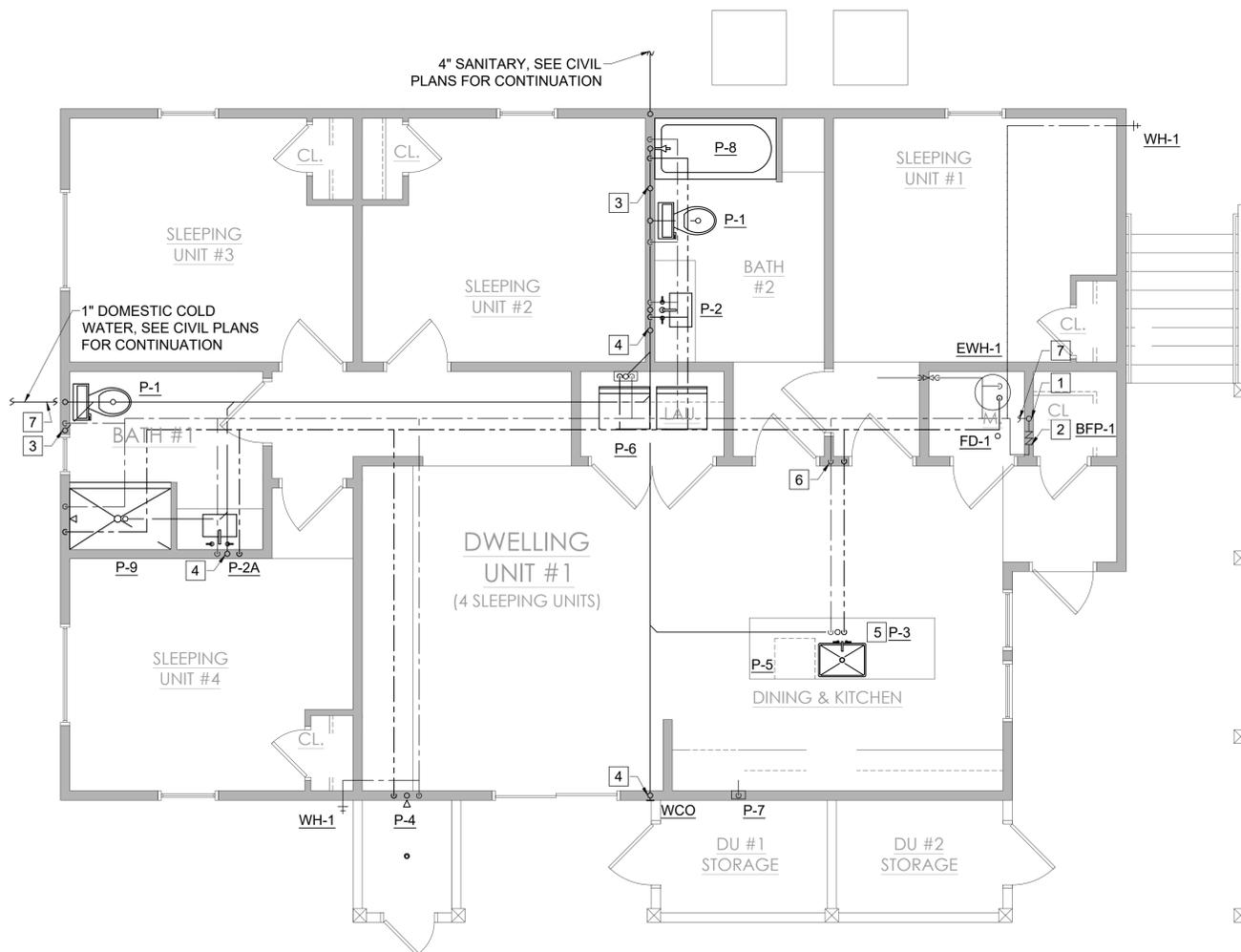
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NEW WORK NOTES:

(THIS SHEET ONLY)

- 1 1" WATER UP TO SECOND FLOOR UNIT.
- 2 UNIT SHUT-OFF VALVE AND BFP-1 IN WALL WITH ACCESS COVER.
- 3 3" SANITARY UP TO SECOND FLOOR.
- 4 2" SANITARY UP TO SECOND FLOOR.
- 5 PROVIDE TRAP WITH AIR ADMITTANCE VALVE IN CABINET.
- 6 1/2" HOT AND COLD WATER DOWN IN WALL, RUN BELOW SLAB TO ISLAND SINK.
- 7 1" COLD WATER, RUN BELOW SLAB, TURN UP IN MECHANICAL CLOSET WALL, SHOWN BROKEN FOR CLARITY.



WATER RISER DIAGRAM

NO SCALE



REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
SECOND FLOOR NEW WORK PLAN

ISSUED FOR BID

DRAWN BY: LKK

DATE: 9 / 13 / 24

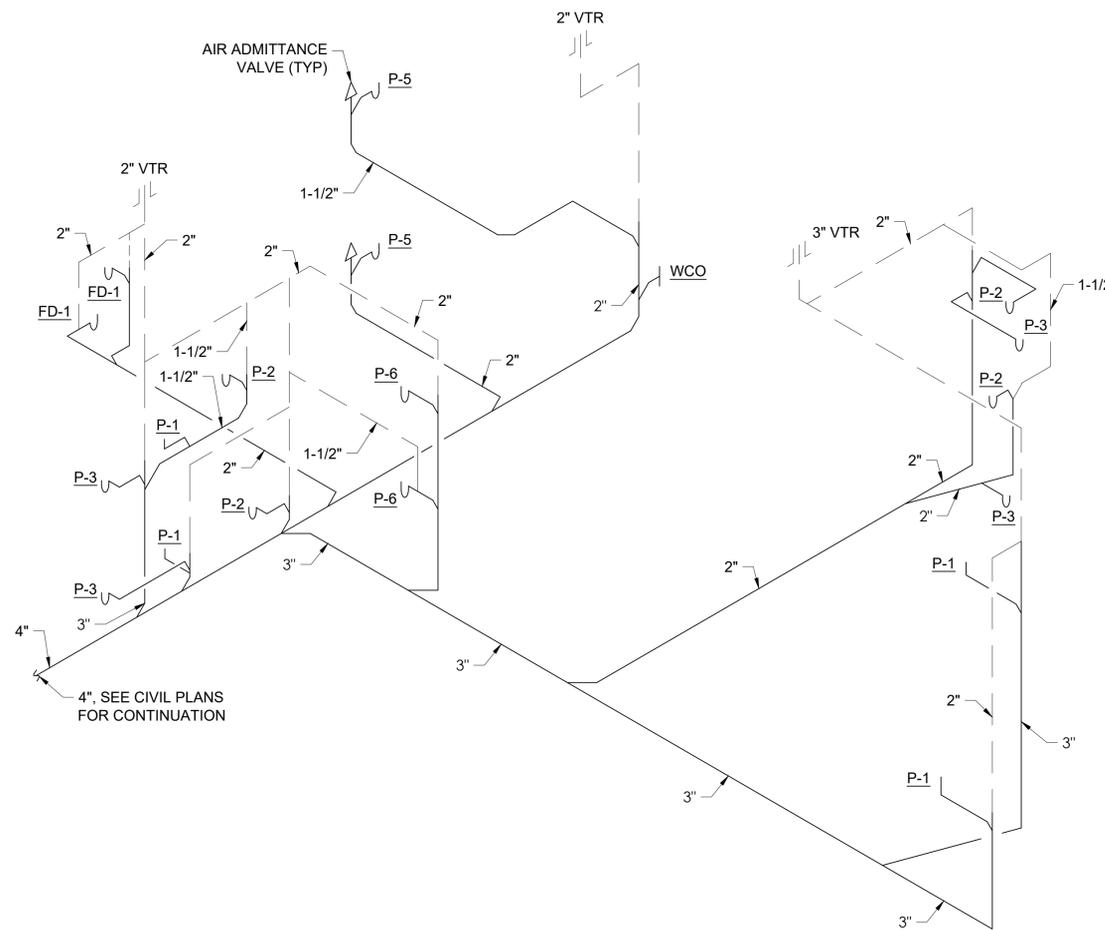
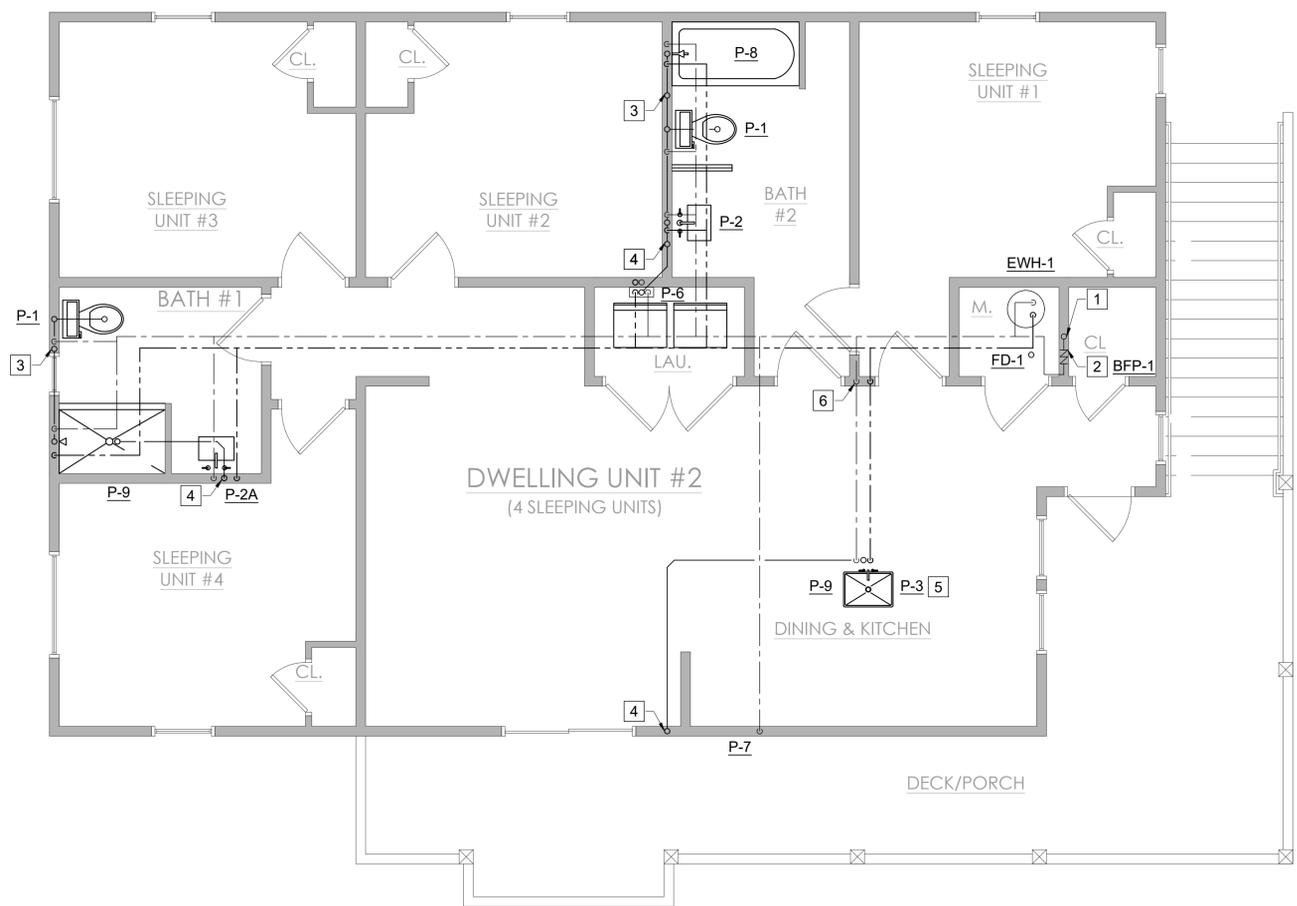
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NEW WORK NOTES:

(THIS SHEET ONLY)

- 1 3/4" WATER DOWN TO FIRST FLOOR UNIT.
- 2 UNIT SHUT-OFF VALVE AND BFP-1 IN WALL WITH ACCESS COVER.
- 3 3" SANITARY DOWN TO FIRST FLOOR.
- 4 2" SANITARY DOWN TO FIRST FLOOR.
- 5 PROVIDE TRAP WITH AIR ADMITTANCE VALVE IN CABINET.
- 6 1/2" HOT AND COLD WATER, DOWN IN WALL, RUN THROUGH FRAMING TO ISLAND SINK.

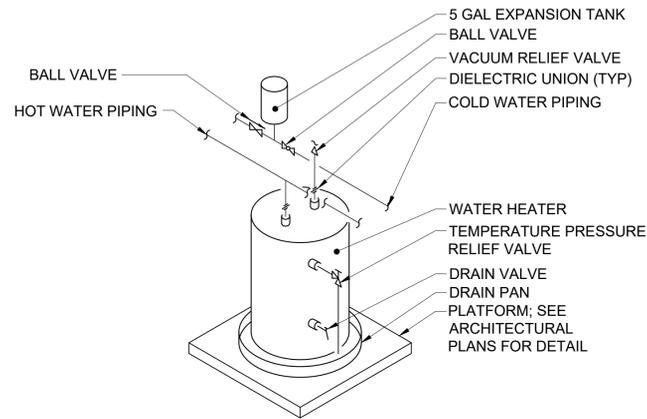


WASTE RISER DIAGRAM

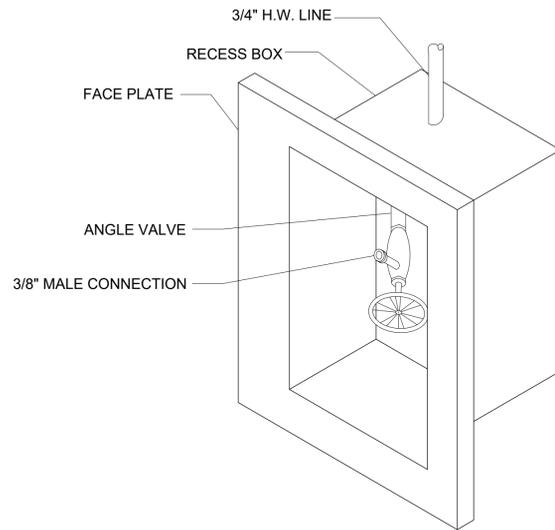
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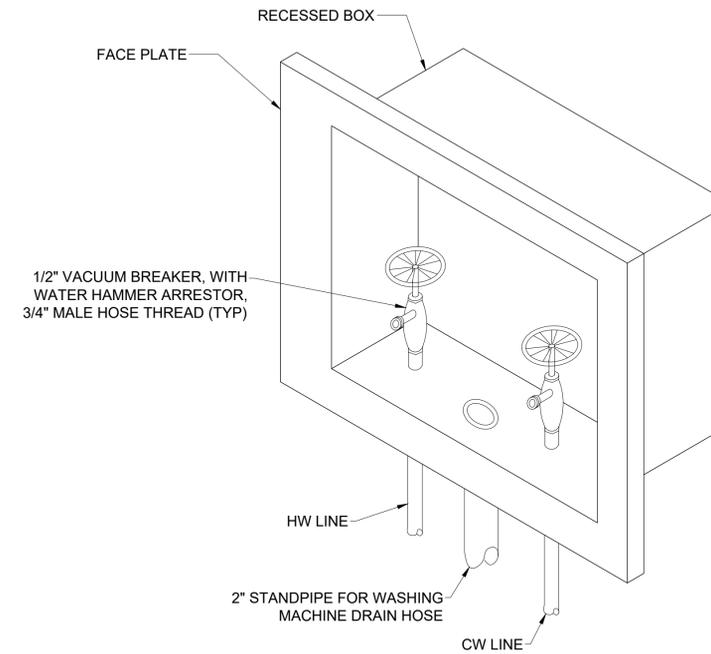




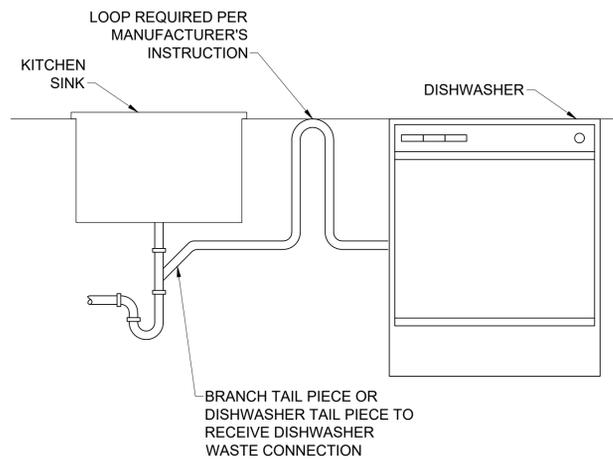
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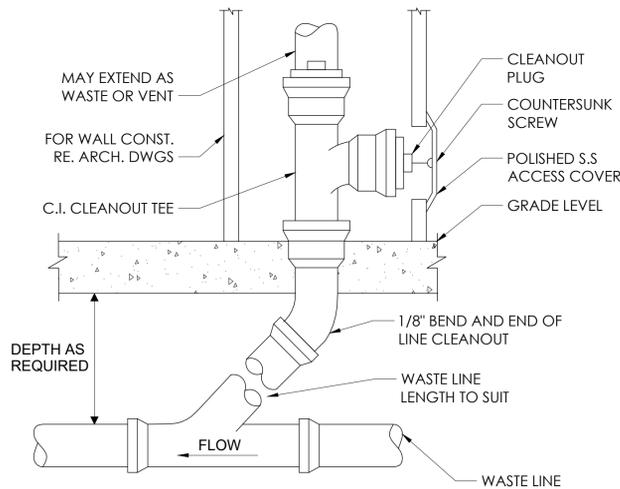
ICE MAKER CONNECTION BOX
NOT TO SCALE



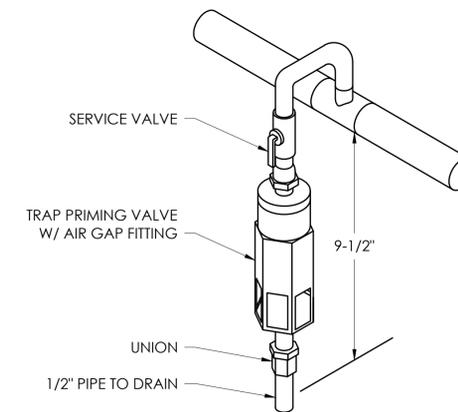
WASHING MACHINE UTILITY BOX DETAIL
NOT TO SCALE



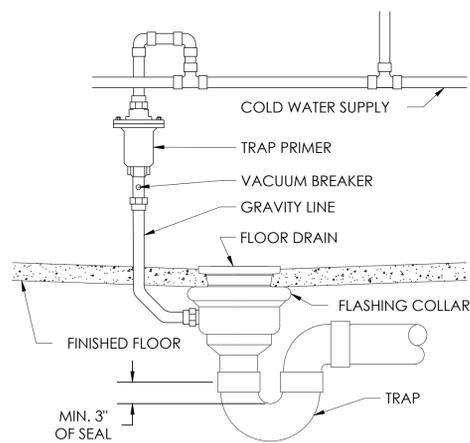
DISHWASHER CONNECTION DETAIL
NO SCALE



WALL CLEAN-OUT DETAIL
NO SCALE



TRAP PRIMER DETAIL
NO SCALE



FLOOR DRAIN DETAIL
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PROJECT NAME:
TOWN OF NAGS HEAD
Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
PLUMBING RISER
DIAGRAMS, SCHEDULES
AND DETAILS

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DRAWN BY: LKK

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PLUMBING SPECIFICATIONS:

1. INTRODUCTION

- 1.1. INCASE OF A CONFLICT BETWEEN THE SPECIFICATION AND THE DRAWINGS, SCOPE OF WORK INCLUDES PROVIDING A FIRST CLASS WORKING SYSTEM IN COMPLIANCE WITH THESE DRAWINGS AND THE SPECIFICATIONS, TESTED READY FOR OPERATION COMPLETE WITH LABOR, MATERIALISM APPARATUS, TRANSPORTATION, AND TOOLS REQUIRED FOR THE INSTALLATION.
- 1.2. SCOPE OF WORK
 - 1.2.1. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL PLUMBING FIXTURES, ACCESSORIES, AND ASSOCIATED PIPING AS A STATED HEREIN. REFER TO THE PLUMBING PLANS AND THE "MATERIALS" PORTION OF THIS SPECIFICATION FOR EQUIPMENT TO BE FURNISHED. EXACT LOCATION OF ALL EQUIPMENT SHALL BE DETERMINED BY REFERENCE TO THE PLANS AND MEASUREMENTS AT THE BUILDING SITE AND IN COOPERATION WITH ALL OTHER TRADES.
 - 1.2.2. EACH DRAWING OF EACH DISCIPLINE, INCLUDING MECHANICAL, ELECTRICAL, AND ARCHITECTURAL IS A PART OF THE CONSTRUCTION DOCUMENTS OF THIS DISCIPLINE AND SHALL BE REVIEWED BY THE CONTRACTOR.
- 1.3. GENERAL
 - 1.3.1. ALL SAFETY PRECAUTIONS SHALL BE TAKEN TO PROTECT PERSON, PROPERTY, AND EQUIPMENT.
 - 1.3.2. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO DETERMINE THE EXTENT OF THE WORK. LACK OF KNOWLEDGE OF EXISTING CONDITIONS WILL NOT BE CONSIDERED A BASIS FOR CHANGE ORDERS. THIS WILL INCLUDE A SATISFACTORY EFFORT BY THE CONTRACTOR TO FIELD VERIFY PROPER FIT. EXPENSE INCURRED BY THE CONTRACTOR, WHICH COULD HAVE BEEN AVOIDED BY THIS STEP SHALL NOT BE A BASIS FOR CHANGE ORDER.
 - 1.3.3. ANY DEVIATION BY PLUMBING CONTRACTOR FROM THE PLANS AND SPECIFICATIONS, OR ANY SUBSTITUTION OF EQUIPMENT FROM THAT SPECIFIED, SHALL FIRST BE APPROVED BY THE ENGINEER.
 - 1.3.4. CONTRACTOR TO SUBMIT 6 SETS (OWNER WILL RETURN 3 SETS NOTED WITH ACTION TAKEN)SPECIFICATIONS AND DETAIL FOR EQUIPMENT AND FABRICATED MATERIALS FOR OWNER'S APPROVAL PRIOR TO ISSUING PURCHASE ORDER. OWNER'S APPROVAL DOES NOT RELIEVE CONTRACTOR OF ANY RESPONSIBILITY FOR PERFORMANCE AND OPERATION.
 - 1.3.5. THE PLUMBING CONTRACTOR SHALL REPAIR ANY MATERIAL OR WORK WHICH HE HAS DAMAGED.
 - 1.3.6. PROVIDE 3/16" THICK ENGRAVED WHITE PLASTIC LABEL TAB ON ALL SHUT-OFF AND DRAIN VALVES. THE TAGS SHALL BE A MINIMUM OF 3" X 5" AND BE ATTACHED TO THE VALVE BODY NON-CORROSIVE CHAIN. LETTERS SHALL BE ENGRAVED A MINIMUM OF 1/4" HIGH AND PAINTED BLACK. THE TAG SHALL IDENTIFY USE DRAIN, SHUT-OFF, ETC, AND WHICH APARTMENT IT SERVES.
 - 1.3.7. CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS FOR A COMPLETE INSTALLATION IN ALL RESPECTS READY OF INTENDED USE AND THE STRICT ACCORDANCE WITH STATE AND LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. PAY NECESSARY FEES AND OBTAIN PERMITS. INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY PRECAUTIONS AND PROCEDURES.
 - 1.3.8. EQUIPMENT AND MATERIALS SHALL BE OF THE TYPE, SIZE AND MANUFACTURERS INDICATED ON THE DRAWINGS OR AN APPROVED EQUIVALENT.
 - 1.3.9. THE CONTRACTOR SHALL SUPPLY AND INSTALL THE MATERIALS AND EQUIPMENT COVERED BY THE PLANS AND SPECIFICATIONS TO THE OWNER COMPLETE AND IN FIRST CLASS CONDITION IN EVERY RESPECT. HE SHALL GUARANTEE THAT THE MATERIAL, EQUIPMENT, AND WORKMANSHIP SUPPLIED AND INSTALLED BY HIM SHALL BE ENTIRELY FREE FROM DEFECTS AND THAT HE WILL REPAIR OR REPLACE AT HIS OWN EXPENSE, ANY MATERIALS, EQUIPMENT, AND WORKMANSHIP IN WHICH DEFECTS ARE FOUND.
 - 1.3.10. MISCELLANEOUS ITEMS NOT SHOWN ON THE PLANS BUT NECESSARY FOR A COMPLETE OPERABLE SYSTEM, SHALL BE SUPPLIED AND INSTALLED.15. COORDINATE WORK WITH THAT OF OTHER TRADES. SEE ARCHITECTURAL PLANS FOR THE EXACT LOCATIONS OF FIXTURES.
 - 1.3.11. INSTALL PIPING NEATLY AND PARALLEL WITH OR PERPENDICULAR TO LINES OR THE STRUCTURE. THE EXACT LOCATIONS OF PIPES SHALL BE DETERMINED BY THE CONTRACTOR TO AVOID INTERFERENCE WITH DUCTWORK, OTHER PIPING AND LIGHTING FIXTURES. INSTALL PIPE HANGARS TO MAINTAIN ACCURATELY ALIGNED PIPING SYSTEMS ADEQUATELY SUPPORTED BOTH LATERALLY AND VERTICALLY. PIPE HANGARS SHALL BE ADJUSTABLE TYPE, MSS SP-58 AND MSS SP-69. PROVIDE INSULATION PROTECTION SHIELDS WHERE REQUIRED. PROVIDE GALVANIZED STEEL SUPPORT RODS. SUPPORT ALL PIPING FROM THE BUILDING STRUCTURE.
 - 1.3.12. INSTALL EQUIPMENT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - 1.3.13. REMOVE EXCESS MATERIAL, SCRAP, ETC, FROM THE JOB SITE AND LEGALLY DISPOSE.
 - 1.3.14. PLUMBING CONTRACTOR SHALL VERIFY EXISTING SEWER LOCATION, SIZE AND ELEVATION AND SHALL VERIFY THAT PROPER SLOPES ARE AVAILABLE BEFORE INSTALLING NEW SEWER PIPING.
 - 1.3.15. MAINTAIN A MINIMUM SLOPE OF 1/8" PER FOOT FOR SANITARY SEWER PIPING 4" AND LARGER AND 1/4" PER FOOT FOR PIPING SMALLER THAN 4."
 - 1.3.16. SANITARY SEWER PIPING SHALL BE TYPE PVC SCHEDULE 40 -PLASTIC PIPE AND FITTINGS U.O.N.
 - 1.3.17. PROVIDE STOPS FOR ALL PLUMBING FIXTURE CONNECTIONS.
 - 1.3.18. WATER PIPING SHALL BE STERILIZED IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION AWA 601 AND AS REQUIRED BY THE LOCAL HEALTH BOARD.
 - 1.3.19. WATER PIPING SHALL BE STERILIZED IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION AWA 601 AND AS REQUIRED BY THE LOCAL HEALTH BOARD.
 - 1.3.20. COORDINATE ALL FIRE STOPPING REQUIREMENTS WITH THE ARCHITECTURAL PLANS.
- 1.4. OPERATIONS AND INSTALLATION
 - 1.4.1. ALL DELIVERIES TO COINCIDE WITH CONSTRUCTION SCHEDULE. MATERIALS SHALL BE STORED WHERE AND/OR AS DIRECTED BY THE OWNER. STORAGE MUST BE IN SUCH A PLACE AS TO AVOID ACCIDENTAL MUTILATION BY EQUIPMENT BY ANY CONTRACTOR WHILE PERFORMING THEIR WORK, WHETHER ON SITE OR OFF.
 - 1.4.2. ALL UNDER FLOOR PIPING SHALL BE INSTALLED IN CONJUNCTION WITH THE GENERAL CONTRACTORS WORK SCHEDULE. NO UNDERGROUND WORK SHALL BE COVERED OR ENCLOSED UNTIL IT HAS BEEN INSPECTED AND TESTED.
 - 1.4.3. PLUMBING CONTRACTOR SHALL DO THE NECESSARY TRENCHING, SHORING AND BACKFILLING REQUIRED TO FULFILL HIS CONTRACT. BOTTOMS OF TRENCHES SHALL BE CUT TO GRADE.
 - 1.4.4. ALL OPENINGS AND STUB-UP FOR PLUMBING PIPING AND FIXTURES SHALL BE CAREFULLY LOCATED AND COORDINATED WITH THE EQUIPMENT BEING SERVED, EXISTING CONDITIONS, AND ALL OTHER TRADES, REFER TO ARCHITECTURAL DRAWINGS FOR ACTUAL FIXTURE LOCATIONS.
- 1.5. CODE AND PERMIT REQUIREMENTS

- 1.5.1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES, AND CODES, WHICH SHALL BE DELINEATED, AND ALL MODIFICATIONS REQUIRED BY THE INSPECTION AUTHORITIES SHALL BE MADE BY PLUMBING CONTRACTOR WITHOUT ADDITIONAL COST TO OWNER.
 - 1.5.2. PLUMBING CONTRACTOR SHALL OBTAIN, PAY FOR AND FURNISH ALL PERMITS REQUIRED BY LOCAL OR STATE ORDINANCES OR CODES, OR THE AUTHORITY HAVING JURISDICTION.
- ## 2. MATERIALS
- 2.1. DOMESTIC WATER PIPING:
 - 2.1.1. WATER PIPING ABOVE GROUND SHALL BE TYPE L COPPER TUBING WITH 95-5 TIN ANTIMONY SOLDER JOINTS. BURIED PIPING SHALL BE TYPE K COPPER TUBING WITH SILVER SOLDERED JOINTS.
 - 2.1.1.1. FITTINGS SHALL BE WROUGHT COPPER SOLDER JOINT FITTINGS. JOINING MATERIAL SHALL ME ASTM B813 WATER-FLUSHABLE, LEAD-FREE FLUX ALLOY SOLDER.
 - 2.1.1.2. VALVES SHALL BE OF ONE MANUFACTURER 125 PSI SWP, BRASS BODY THREADED OR SOLDERED END, AS MANUFACTURED BY CRANE, POWELL, JENKINS OR ACCEPTED EQUIVALENT AND SHALL BE INSTALLED WITH STEM UPRIGHT OR HORIZONTAL. WHEN VALVES ARE NOT SHOWN IN DETAIL ON THE PLANS, IT SHALL BE UNDERSTOOD THAT THE PLUMBING CONTRACTOR SHALL PROVIDE ALL VALVES AND FITTINGS NECESSARY FOR THE CONTROL AND OPERATION OF ALL EQUIPMENT. ALL SHUT-OFF AND SYSTEM DRAIN VALVES SHALL BE FULL PORT BALL VALVES.
 - 2.1.2. AT OWNERS OPTION, ABOVE AND BELOW GRADE WATER PIPING MAY BE PEX TUBING CONFORMING TO ASTM F877 CROSS-LINKED POLYETHYLENE TUBING HOT AND COLD WATER DISTRIBUTION SYSTEMS, ASTM F876 CROSS-LINKED POLYETHYLENE TUBE ASTM F876 FITTING AND ASTM F2159 FITTINGS, COMPLY WITH NSF STANDARD 14 AND 61. PEX TUBING SHALL BE WATTS WATER PEX CROSS-LINKED POLYETHYLENE OR EQUAL. ALL PEX TUBING BELOW GRADE SHALL BE SLEEVED WITH PVC PIPE.
 - 2.1.2.1. FITTINGS: FITTINGS SHALL BE MECHANICAL CRIMP FITTINGS IN COMPLIANCE WITH ASTM F1807 AND F2159.PEX FITTINGS SHALL BE WATTS BRASS CRIMPING FITTINGS USING EITHER WATTS COPPER CRIMPING OR STAINLESS STEEL CINCHCLAMP OR EQUAL. INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - 2.1.3. PROVIDE SYSTEM DRAINS AT ALL LOW POINTS. SLOPE ALL PIPING TOWARDS LOW POINT DRAINS. LOW POINT DRAINS SHALL CONSIST OF A TEE IN MAIN PIPE WITH A REDUCER AND A 1/2" BALL VALVE AND HOSE CONNECTION.
 - 2.1.4. AT OWNERS OPTION ABOVE AND BELOW GRADE WATER MAY BE CPVC SCHEDULE 80 PIPING AND FITTINGS. PIPE, FITTINGS, AND SOLVENT CEMENT SHALL BE CERTIFIED FOR POTABLE WATER USAGE AND MEET ASTM D2864.
 - 2.2. SOIL, WASTE AND VENT PIPES:
 - 2.2.1. ABOVE AND BELOW GRADE SOIL, WASTE AND VENT PIPING SHALL BE PVC PLASTIC, SCHEDULE 40 DWV PIPE CONFORMING TO ASTM D2665 WITH PLAIN ENDS. CELLULAR (FOAM) CORE PVC IS NOT ALLOWED. INSTALL PER ASTM D665 AND ASTM D2321.
 - 2.2.1.1. FITTINGS SHALL BE PVC SOCKET-TYPE DWV PIPE FITTINGS; ASTM D2665 MADE TO ASTM D3311 DRAIN, WASTE AND VENT PATTERNS.
 - 2.2.2. ABOVE GRADE SOIL, WASTE AND VENT PIPING SHALL BE ALLOWED TO BE COPPER DRAINAGE TUBING CONFORMING TO ASTM B306 AT PLUMBING CONTRACTOR'S OPTION, OR NO HUB CAST IRON WITH RUBBER COMPRESSION FITTINGS.
 - 2.3. FLASHING:
 - 2.3.1. SHEET LEAD. 4 POUNDS PER SQUARE FOOT, MINIMUM.
 - 2.4. INSULATION:
 - 2.4.1. DOMESTIC COLD WATER (WITHIN BUILDING):
 - 2.4.1.1. COPPER PIPE: 1/2" WALL ONE-PIECE FIBERGLASS COVERING HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELF-SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINEED, OWENS-CORING OR ARMSTRONG. (SEE BELOW FOR PLUMBING FITTING INSULATION REQUIREMENTS).
 - 2.4.1.2. PEX TUBING: NO INSULATION REQUIRED. EXCEPTION: FOR NON-RECIRCULATING HOT WATER SYSTEM, PROVIDE 1/2" WALL ONE-PIECE FIBERGLASS COVERING HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELF -SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINEED, OWENS-CORING OR ARMSTRONG IN THE FIRST 8 FEET OF INLET PIPING AT WATER HEATER. CPVC TUBING: NO INSULATION REQUIRED.
 - 2.4.2. DOMESTIC HOT WATER:
 - 2.4.2.1. COPPER PIPE: 1/2" WALL ONE-PIECE FIBERGLASS COVERING HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELF -SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINEED, OWENS-CORING OR ARMSTRONG. (SEE BELOW FOR PLUMBING FITTING REQUIREMENTS).
 - 2.4.2.2. PEX TUBING: 1/2" WALL ONE-PIECE FIBERGLASS COVERING HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELF -SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINEED, OWENS-CORING OR ARMSTRONG. (SEE BELOW FOR PLUMBING FITTING INSULATION REQUIREMENTS).
 - 2.4.2.3. FOR HOT WATER PIPING BEING SERVED BY SYSTEM WITH RECIRCULATING PUMP, PROVIDE 1" WALL ONE-PIECE FIBERGLASS COVERING HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELF -SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINEED, OWENS-CORING OR ARMSTRONG. (SEE BELOW FOR PLUMBING FITTING INSULATION REQUIREMENTS)
 - 2.4.3. INDIRECT AND CONDENSATE DRAIN PIPING (WITHIN BUILDING):
 - 2.4.3.1. COPPER PIPING: PROVIDE 1" FLEXIBLE UNICELLULAR INSULATION BY ARMACELL WITH VAPOR BARRIER SEAL.
 - 2.4.3.2. PVC PIPING: NO INSULATION REQUIRED FOR CONDENSATE PIPING, INSULATE DOMESTIC HOT WATER PIPING AS SPECIFIED FOR COPPER HOT WATER PIPING.
 - 2.4.4. FOR PIPING AT HANGERS, PROVIDE 8"LONG SECTIONS OF HIGH DENSITY, HIGH TEMPERATURE CALCIUM SILICATE BY JOHNS-MANVILLE, FIBERGLASS BY KNAUF, OR 8" LONG STYROFOAM BILLETTS BY DOW. INSULATION SHALL BE CONTINUOUS ALONG THE PIPE SURFACE, EXCEPT AT VALVES, UNIONS, AND WHERE PIPING IS EXPOSED AT FIXTURES.
 - 2.4.5. FOR HOT AND COLD WATER PIPING EXPOSED, CONCEALED IN WALLS, AND/OR INSTALLED INSIDE MASONRY UNITS OF THE WALLS, COVER FITTINGS WITH ZESTON, KNAUF, OR EQUAL ON-PIECE PVC PREMOLDED INSULATING COVERS. FITTING COVERS, JACKETS AND ADHESIVES SHALL NOT EXCEED FLAME SPREAD RATING OF 25 AND SMOKE DEVELOPMENT RATING OF 50 PER ASTM E84. AT ALL ELBOWS AND TEE'S., FILL VOIDS BETWEEN COVERS AND PIPING WITH FIBERGLASS INSULATION AND TAPE JOINTS, INSTALL PIPE INSULATION IN COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS. WHERE PREMOLDED INSULATION FITTINGS ARE NOT APPROVED BY LOCAL AUTHORITIES, MITER INSULATION AT FITTINGS.

3. GAS PIPING (PROPANE):
 - 3.1. SCHEDULE 40 BLACK CARBON STEEL WITH MALLEABLE IRON THREADED FITTINGS. PROVIDES SHUT-OFF VALVE, DIRT LEG, AND UNION AT EACH APPLIANCE CONNECTION. PAINT ALL GAS PIPING EXPOSED TO WEATHER WITH ONE COAT OF PRIMER, AND TWO COATS OF RUST-PROOF PAINT. COLOR SHALL BE YELLOW COORDINATE WITH OWNERS CONSTRUCTION MANAGER.
4. TESTING AND INSPECTION:
 - 4.1. THE ENTIRE PLUMBING SYSTEM SHALL BE TESTED BEFORE COVERING OR ENCLOSING.
 - 4.2. INSPECTION: WORK SHALL BE INSPECTED FOR COMPLIANCE WITH CODES, ORDINANCES, REGULATIONS AND ADHERENCE TO CONTRACT DOCUMENTS. PLUMBING CONTRACTORS SHALL SUPPLY OWNER WITH SIGNED FORMS OR PROOF OF ACCEPTANCE BY THE LOCAL AUTHORITY BEFORE CONTINUING FROM ONE STAGE TO ANOTHER. FINAL APPROVAL SHALL BE OBTAINED BEFORE FINAL PAYMENT IS MADE ON THE CONTRACT.
 - 4.3. PERFORMANCE REQUIRED:
 - 4.3.1. PLUMBING CONTRACTOR SHALL INSTALL ALL PLUMBING SYSTEMS LEAK FREE AND AS PER PLANS AND SPECIFICATIONS.
 - 4.3.2. ALL EXPOSED EQUIPMENT SHALL BE INSTALLED IN A WORKMANLIKE MANNER AND WILL BE SUBJECT TO ARCHITECTURAL INSPECTION FOR AESTHETIC APPEARANCE.
5. CUTTING AND CLEANING:
 - 5.1. PLUMBING CONTRACTOR SHALL CLEAN ENTIRE SITE OF DEBRIS, TOOLS AND EQUIPMENT RELATED TO THIS WORK
 - 5.2. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF HIS WORK WHICH MAY BE REQUIRED TO RELIEVE THE WORK OF OTHER CONTRACTORS.
6. WARRANTY:
 - 6.1. PLUMBING CONTRACTOR SHALL WARRANTY ALL OF THE WORK AND THE COMPLETE OPERATION WILL BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS. CONTRACTOR AGREES TO REPLACE,WITHOUT EXPENSE TO THE OWNER, ANY PART OF HIS WORK ON THIS INSTALLATION WITH PROVES TO BE DEFECTIVE WITHIN (1) YEAR AFTER ACCEPTANCE OF THE WORK AT NO ADDITIONAL COST TO THE OWNER.



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PROJECT NAME:
TOWN OF NAGS HEAD
Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
PLUMBING SPECIFICATIONS

ISSUED FOR BID

DRAWN BY: **LKK**

DATE: **9 / 13 / 24**

SCALE: **NONE**

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P7.1

GENERAL NOTES

- SCOPE OF WORK INCLUDES PROVIDING A FIRST CLASS WORKING SYSTEM IN COMPLIANCE WITH THESE DRAWINGS AND SPECIFICATIONS, TESTED READY FOR OPERATION COMPLETE WITH LABOR, MATERIALS, APPARATUS, TRANSPORTATION, AND TOOLS REQUIRED FOR THE INSTALLATION.
- COORDINATE WORK WITH THAT OF OTHER TRADES. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR THE EXACT LOCATIONS OF CEILING MOUNTED DEVICES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MODIFICATIONS, CHANGES, ETC. FOR THE EQUIPMENT HE PROVIDES, EVEN IF APPROVED AS AN EQUAL.
- MISCELLANEOUS ITEMS NOT SHOWN ON THE PLANS BUT NECESSARY FOR A COMPLETE OPERABLE SYSTEM, SHALL BE SUPPLIED AND INSTALLED.
- INSTALL EQUIPMENT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. MAINTAIN ALL RECOMMENDED CLEARANCES.
- REMOVE EXCESS MATERIAL, SCRAP, ETC. FROM THE JOB SITE.
- REPAIR ANY MATERIAL OR WORK WHICH HE HAS DAMAGED.
- BALANCE AIR AND WATER SYSTEMS WITHIN $\pm 10\%$ OF THE VALUES INDICATED.
- TEST THE ENTIRE SYSTEM IN ALL MODES OF OPERATION TO INSURE PROPER OPERATION.
- FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS FOR A COMPLETE INSTALLATION IN ALL RESPECTS READY OF INTENDED USE AND IN STRICT ACCORDANCE WITH ALL STATE AND LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. PAY NECESSARY FEES AND OBTAIN PERMITS. INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY PRECAUTIONS AND PROCEDURES.
- ALL INDICATED DUCT DIMENSIONS ARE INSIDE CLEAR DIMENSIONS.

LEGEND

NOTE: HEAVY LINE WEIGHT INDICATES NEW EQUIPMENT OR EQUIPMENT TO BE REMOVED, LIGHT LINE WEIGHT INDICATES EQUIPMENT WHICH IS EXISTING TO REMAIN

	BACKFLOW PREVENTER		SUPPLY DUCT SECTION
	UNION		EXHAUST DUCT SECTION
	GAS SHUT-OFF COCK		RETURN DUCT SECTION
	RELIEF VALVE	FD	FIRE DAMPER WITH ACCESS DOOR
	ECCENTRIC PIPE REDUCER		THERMOSTAT/SENSOR MOUNT 48" ABOVE FLOOR SUBSCRIPT INDICATES EQUIPMENT BEING CONTROLLED
	PIPE CAP		ELBOW WITH TURNING VANES
	DIRECTION OF FLOW		MANUAL BALANCING DAMPER WITH LOCKING QUADRANT
	PIPE ANCHOR		FLEXIBLE DUCT CONNECTION
	CONDENSATE DRAIN		DOOR LOUVER - SEE SCHEDULE PROVIDED BY G.C.
	GAS PIPING		UNDER CUT DOOR MIN. 1" / SEE ARCH. PLANS FOR SIZES
EF-1	EXHAUST FAN MARK - SEE SCHEDULE		(AD) ACCESS DOOR
AHU-1	AIR HANDLING UNIT MARK - SEE SCHEDULE		FLEXIBLE DUCT CONNECTION WITH BALANCING DAMPER
VAV-1	VARIABLE AIR VOLUME BOX MARK - SEE SCHEDULE		LOW PRESSURE SUPPLY OR RETURN DUCT WORK
HP-1	HEAT PUMP UNIT MARK - SEE SCHEDULE		
	GRILLE OR DIFFUSER MARK - SEE SCHEDULE OR SPECIFICATION (CFM NOTE)		
	KEY NOTE MARK		

ABBREVIATIONS

L	ANGLE	KW	KILOWATT
AD	ACCESS DOOR	L-1	LOUVER MARK - SEE SCHEDULE
AFF	ABOVE FINISHED FLOOR	LAT	LEAVING AIR TEMPERATURE
AFG	ABOVE FINISHED GRADE	LBS/HR	POUND PER HOUR
APD	AIR PRESSURE DROP	LDB	LEAVING DRY BULB
APPROX	APPROXIMATELY	LWB	LEAVING WET BULB
AS-1	AIR SEPARATOR MARK - SEE SCHEDULE	LWT	LEAVING WATER TEMPERATURE
BD	BALANCING DAMPER	MAX	MAXIMUM
BDD	BACK DRAFT DAMPER	MOC	MAXIMUM OVER CURRENT PROTECTION
BTUH	BRITISH THERMAL UNIT PER HOUR	MIN	MINIMUM
CFH	CUBIC FEET PER HOUR	MBH	THOUSAND BTU/HR
CFM	CUBIC FEET PER MINUTE	MCA	MINIMUM CIRCUIT AMPS
CHLR-1	CHILLER MARK - SEE SCHEDULE	MFS	MAXIMUM FUSE SIZE
COP	COEFFICIENT OF PERFORMANCE	NOM	NOMINAL
CP-1	CONDENSATE PUMP MARK - SEE SCHEDULE	NO	NUMBER
CU-1	CONDENSING UNIT MARK - SEE SCHEDULE	OA	OUTSIDE AIR
CWR	CHILLED WATER RETURN	OD	OUTSIDE DIAMETER
CWS	CHILLED WATER SUPPLY	PD	PRESSURE DROP
DN	DOWN	PH	PHASE
DSS-1	DUCTLESS SPLIT SYSTEM MARK - SEE SCHEDULE	PSIG	POUNDS PER SQUARE INCH GAGE
EAT	ENTERING AIR TEMPERATURE	%RH	PERCENT RELATIVE HUMIDITY
EDB	ENTERING DRY BULB	PRV	PRESSURE RELIEF VALVE
EMD	END OF MAIN DRIP	RA	RETURN AIR
EWB	ENTERING WET BULB	RBJ	RUN BETWEEN JOIST
EWT	ENTERING WATER TEMPERATURE	RIH-1	ROOF INTAKE HOOD MARK - SEE SCHEDULE
ESP	EXTERNAL STATIC PRESSURE	RLA	RATED LOAD AMPS
EXIST	EXISTING	RPM	REVOLUTIONS PER MINUTE
FD	FIRE DAMPER WITH ACCESS DOOR	RTJ	RUN THRU JOIST
FDB	DEGREE FAHRENHEIT DRY BULB	SA	SUPPLY AIR
FF	FINISHED FLOOR	SCT	SATURATED CONDENSING TEMPERATURE
FPM	FEET PER MINUTE	SEER	SEASONAL ENERGY EFFICIENCY RATING
FT	FEET	SF	SQUARE FEET
FWB	DEGREE FAHRENHEIT WET BULB	SP	STATIC PRESSURE
GA	GAUGE	SST	SATURATED SUCTION TEMPERATURE
GPH	GALLONS PER HOUR	TS	TIP SPEED
GPM	GALLONS PER MINUTE	T'STAT	THERMOSTAT
"HG	INCHES OF MERCURY	TYP	TYPICAL
HP	HORSE POWER	UH-1	UNIT HEATER MARK - SEE SCHEDULE
HWC	HOT WATER CONVERTER MARK - SEE SCHEDULE	VAV-1	VARIABLE AIR VOLUME UNIT AND MARK - SEE SCHEDULE
HWR	HOT WATER RETURN	"WC	INCHES WATER COLUMN
HWS	HOT WATER SUPPLY	WPD	WATER PRESSURE DROP
ID	INSIDE DIAMETER		

INTAKE AIR LOUVER SCHEDULE

MARK	MANUFACTURER/ MODEL	SIZE		MINIMUM FREE AREA SF	AIRFLOW CFM	APD "WC	MOTORIZED DAMPER	MATERIAL	REMARKS
		WIDTH INCHES	HEIGHT INCHES						
L-1	ARCHITECTURAL LOUVERS / E4DF	12	12	.43	70	.04	NO	ALUMINUM	1, 2, 3
L-2	ARCHITECTURAL LOUVERS / E4DF	12	12	.43	70	.04	NO	ALUMINUM	1, 2, 3

NOTES:

- PROVIDE WITH BIRD SCREEN.
- DRAINABLE STORM BLADE.
- COLOR TO BE SELECTED BY THE ARCHITECT.
- PROVIDE 6" DEEP INSULATED PLENUM BOX FULL SIZE OF LOUVER, CONNECT RUN OUT DUCT TO AHU TO PLENUM BOX.



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TOWN OF NAGS HEAD

Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:

MECHANICAL LEGEND,
ABBREVIATIONS, NOTES,
DETAILS AND SCHEDULES

ISSUED FOR BID

DRAWN BY: LKK

DATE: 9 / 13 / 24

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DRAWING NAME:
FIRST FLOOR NEW WORK PLAN

ISSUED FOR BID

DRAWN BY: LKK

DATE: 9 / 13 / 24

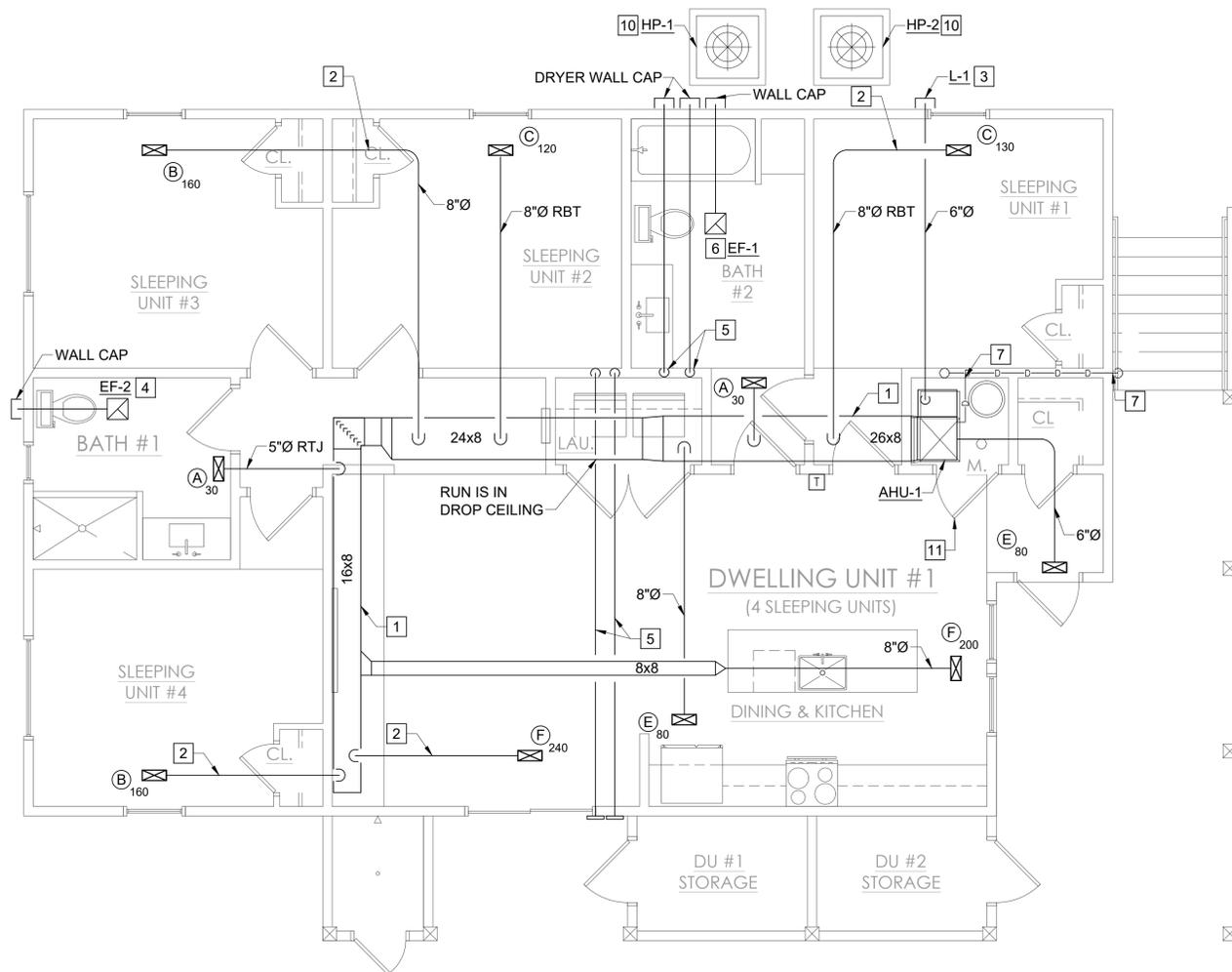
SCALE: 1/4" = 1'-0"

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NEW WORK NOTES:

(THIS SHEET ONLY)

- 1 TRUNK DUCT RUN IN LOWERED CORRIDOR CEILING SPACE.
- 2 DUCT RUN IN BOXED OUT SECTION OF OPEN WEBB JOIST.
- 3 6"Ø OUTSIDE AIR DUCT WITH BALANCING DAMPER AT CONNECTION TO RETURN AIR PLENUM BOX RUN BETWEEN PLENUM BOX RUN OUT BETWEEN JOIST TO EXTERIOR WALL AND CONNECT TO WALL LOUVER.
- 4 EXHAUST FAN RUN DISCHARGE THROUGH OPEN WEBB JOIST TO EXTERIOR WALL AND PROVIDE A WALL CAP WITH BACK DRAFT DAMPER AND BIRD SCREEN.
- 5 4" DRYER VENT AT 30° AFF, RUN UP IN WALL AND BETWEEN JOIST TO EXTERIOR WALL, PROVIDE WITH A DRYER VENT CAP. (MAXIMUM OF 2 90° ELBOWS).
- 6 EXHAUST FAN, RUN DISCHARGE BETWEEN JOIS TO EXTERIOR WALL AND PROVIDE A WALL CAP WITH BACK DRAFT DAMPER AND BACK DRAFT DAMPER.
- 7 1" CONDENSATE DRAIN, RUN OUT THROUGH WALL AT 18" ABOVE FINISHED GRADE, TURN DOWN AND SPILL ON SPLASH BLOCK.
- 8 3/4" CONDENSATE DRAIN DOWN IN WALL FROM SECOND FLOOR UNIT.
- 9 4" Ø DRYER VENT UP TO SECOND FLOOR UNIT.
- 10 AIR COOLED HEAT PUMP SAT ON 4" THICK CONCRETE PAD TO EXTEND 4" BEYOND UNIT IN ALL DIRECTIONS.
- 11 LOUVERED DOOR, SEE ARCHITECTURAL PLANS.



1 FIRST FLOOR NEW WORK PLAN
 SCALE: 1/4" = 1'-0"



REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
SECOND FLOOR NEW WORK PLAN

ISSUED FOR BID

DRAWN BY: LKK

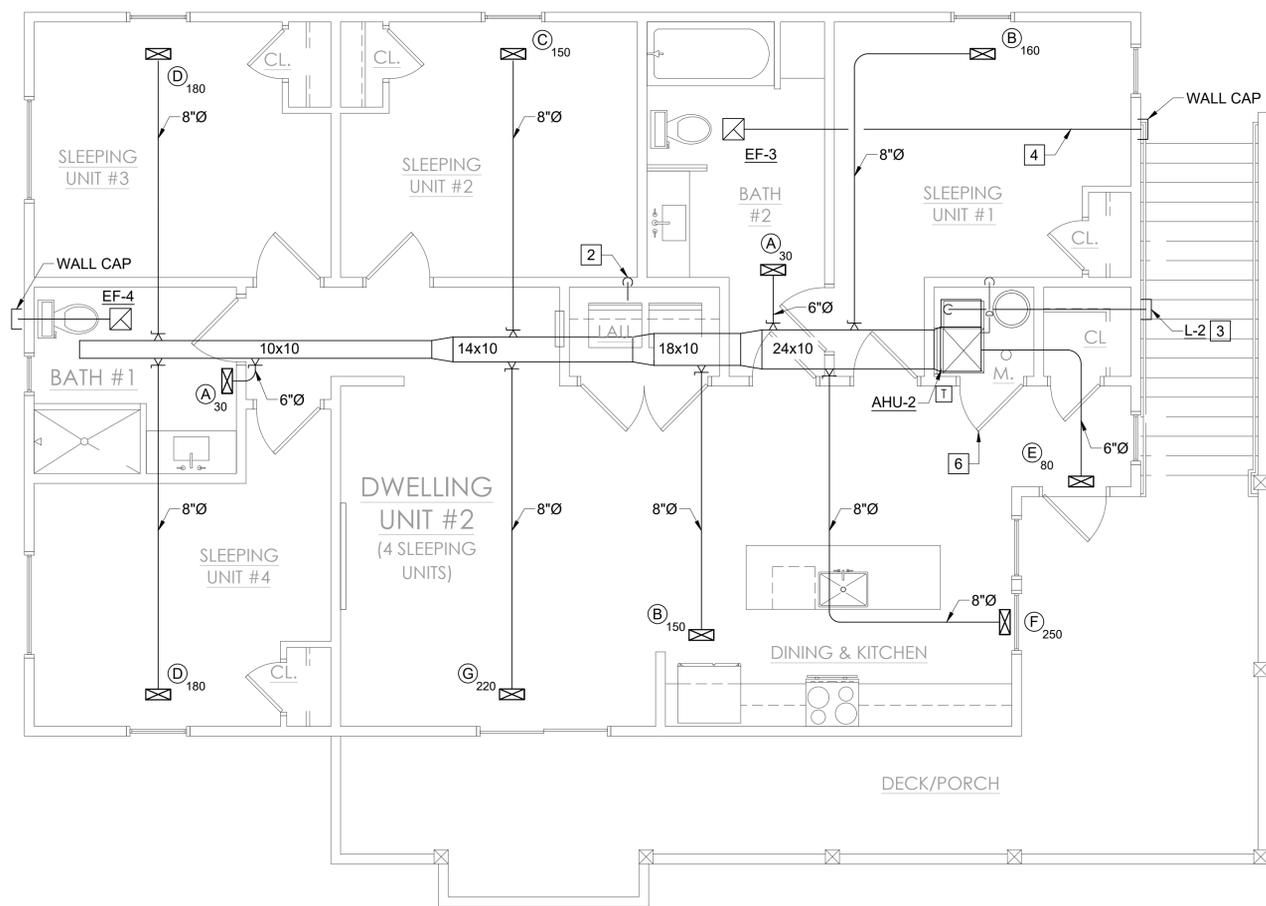
DATE: 9 / 13 / 24

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

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NEW WORK NOTES: (THIS SHEET ONLY)

- 1 TRUNK DUCT RUN IN LOWERED CORRIDOR CEILING SPACE.
- 2 4" DRYER VENT AT 4-0 AFF, RUN DOWN IN WALL AND BETWEEN JOIST TO EXTERIOR WALL, PROVIDE WITH A DRYER VENT CAP. (MAXIMUM OF 2 90° ELBOWS), SEE FIRST FLOOR UNIT PLAN.
- 3 OUTSIDE AIR DUCT WITH BALANCING DAMPER AT CONNECTION TO RETURN AIR PLENUM BOX RUN OUT IN ATTIC SPACE TO EXTERIOR WALL AND CONNECT TO WALL LOUVER.
- 4 EXHAUST FAN RUN DISCHARGE IN ATTIC SPACE, UP THROUGH ROOF, PROVIDE A ROOF CAP WITH BACK DRAFT DAMPER AND BIRD SCREEN.
- 5 3/4" CONDENSATE DRAIN DOWN IN WALL CONNECT TO 1" IN WALL OF FIRST FLOOR UNIT AND RUN OUT THROUGH EXTERIOR WALL TO SPLASH BLOCK "SEE FIRST FLOOR PLAN".
- 6 LOUVERED DOOR, SEE ARCHITECTURAL PLANS.



1 SECOND FLOOR NEW WORK PLAN
 SCALE: 1/4" = 1'-0"



REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
MECHANICAL DETAILS

ISSUED FOR BID

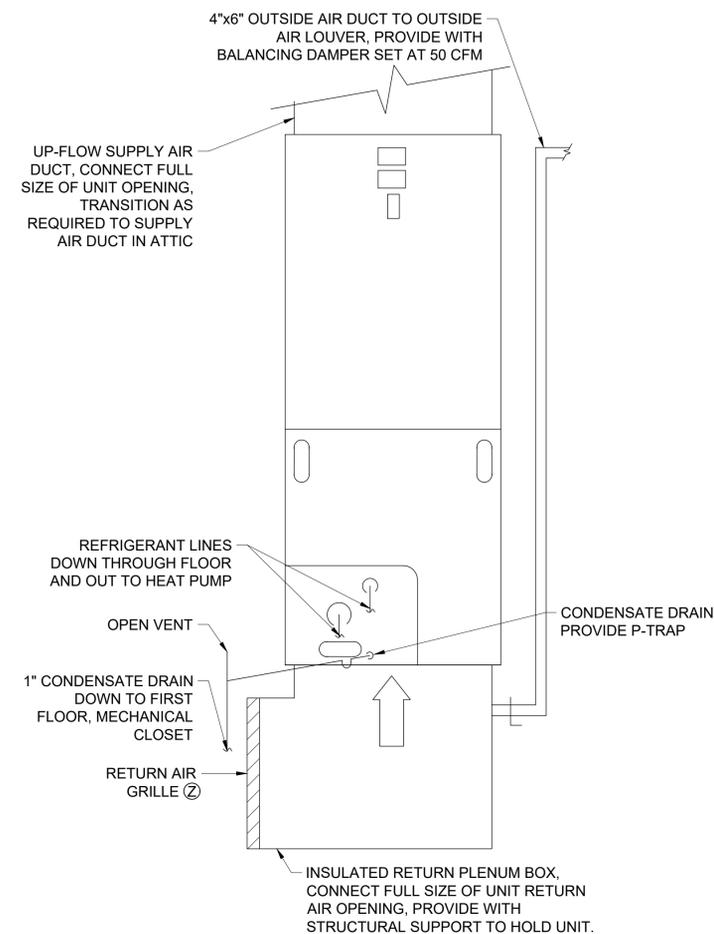
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DATE: **9 / 13 / 24**

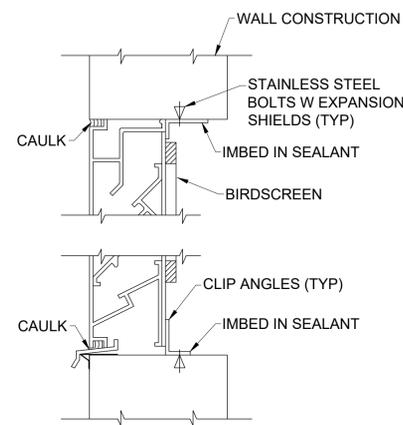
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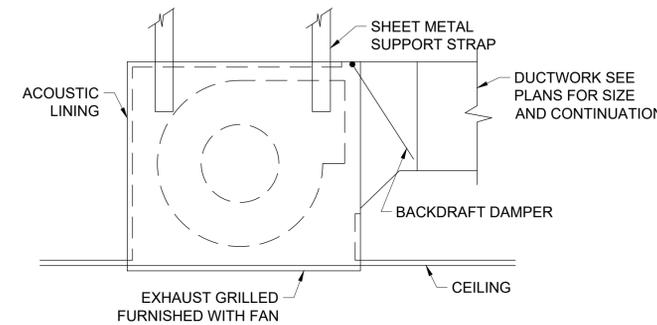
VENTILATION RATE SCHEDULE AHU-4										
SYSTEM	OCCUPANCY CLASSIFICATION	VENTILATION RATE CFM / PERSON	VENTILATION RATE CFM / SQFT	NUMBER OF PERSONS PER SPACE	SQUARE FOOT OF SPACE	TOTAL PER PERSON REQUIRED VENTILATION	TOTAL REQUIRED SQUARE FOOT VENTILATION	REQUIRED VENTILATION (VBZ)	ZONE EFFECTIVENESS FACTOR (EZ)	TOTAL REQUIRED VENTILATION (VOZ)
AHU-1	PRIVATE DWELLING	15	0	5	1397	75	0.0	75.0	1.0	75.0
AHU-2	PRIVATE DWELLING	15	0	5	1397	75	0.0	75.0	1.0	75.0
VENTILATION AND OCCUPANCY RATE IS BASED ON MINIMUM VENTILATION RATES; NORTH CAROLINA MECHANICAL CODE 2018, TABLE 403.3								TOTAL		75.0



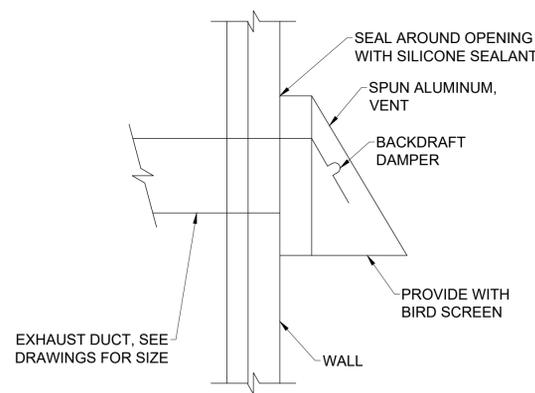
AHU INSTALLATION DETAIL
 NO SCALE (TYP SECOND FLOOR) UP FLOW



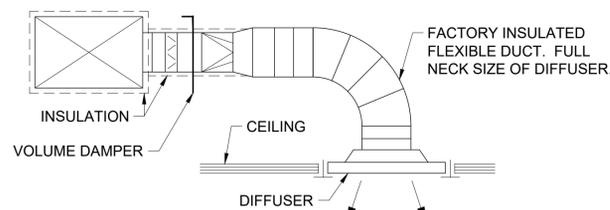
TYPICAL LOUVER DETAIL
 NO SCALE



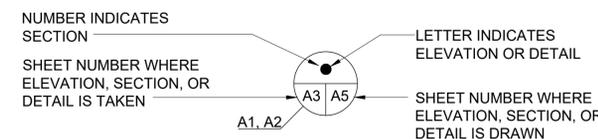
EXHAUST FAN DETAIL
 NO SCALE



EXHAUST WALL CAP DETAIL
 NO SCALE



FLEXIBLE DUCT CONNECTION DETAIL
 NO SCALE



ELEVATION, SECTION, OR DETAIL SYMBOL
 NOTE: SYMBOL SHOULD ALWAYS APPEAR AS PART OF THE TITLE, PLACED UNDER THE VIEW.

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GRILLE REGISTER & DIFFUSER SCHEDULE

MARK	MANUFACTURER/ MODEL	TYPE	SERVICE	NECK SIZE INCHES	APD "WC	NOISE CRITERIA (NC)	MATERIALS	REMARKS
A	HART & COOLEY / 682	2-WAY	CEILING SUPPLY	8x4	.04	20	ALUMINUM	1,2,3,4,5,7
B	HART & COOLEY / 682	2-WAY	CEILING SUPPLY	12x6	.04	20	ALUMINUM	1,2,3,4,5,7
C	HART & COOLEY / 682	2-WAY	CEILING SUPPLY	10x6	.04	20	ALUMINUM	1,2,3,4,5,7
D	HART & COOLEY / 682	2-WAY	CEILING SUPPLY	14X6	.04	20	ALUMINUM	1,2,3,4,5,7
E	HART & COOLEY / 682	2-WAY	CEILING SUPPLY	10X4	.04	20	ALUMINUM	1,2,3,4,5,7
F	HART & COOLEY / 682	2-WAY	CEILING SUPPLY	14X8	.04	20	ALUMINUM	1,2,3,4,5,7
G	HART & COOLEY / 682	2-WAY	CEILING SUPPLY	12X8	.04	20	ALUMINUM	1,2,3,4,5,7
Y	HART & COOLEY / A672A	GRILLE RETURN	WALL RETURN	24 X 24	.02	20	ALUMINUM	4,6
Z	ANEMOSTAT / 3HS	LOUVERED GRILLE	O.A. INTAKE	6 X 6	.02	20	STAINLESS STEEL	8

- NOTES:
- SUPPLY AIR GRILLE, TWO WAY DEFLECTION WITH OPERABLE DAMPER.
 - CEILING SUPPLY AIR GRILLE, ADJUSTABLE DEFLECTION WITH DAMPER.
 - PROVIDE WITH INSULATED ROUND TO GRILLE NECK SIZE TRANSITION AS REQUIRED.
 - COLOR TO BE SELECTED BY THE ARCHITECT.
 - AIR DEVICE SELECTIONS ARE PROVIDED AS A BASIS OF PERFORMANCES ACTURAL SELECTIONS SHALL BE COORDINATED WITH THE ARCHITECT AND OWNER.
 - INSTALL GRILLE ON RETURN DUCT OPENING IN MECHANICAL CLOSET.
 - PROVIDE GRILLE WITH RADIATION DAMPER FOR A 1-HOUR RATING.
 - STAINLESS STEEL GRILLE FOR VENTILATION / EXHAUST AIR INTAKE, 45 DEGREE BLADE ANGLE, COLOR TO BE SELECTED BY THE ARCHITECT.

EXHAUST FAN SCHEDULE

MARK	MANUFACTURER/ MODEL	TYPE	CFM	SP "H2O	FAN RPM	MAX TS FPM	MOTOR HP	VOLTS	PH	MOTOR CONTROL		REMARKS
										SIZE	TYPE	
EF-1	AIR KING/FRAS70	CEILING CABINET	50	.25	1200	1963	125W	120	1			1,2,3,4,5
EF-2	AIR KING/FRAS70	CEILING CABINET	50	.25	1200	1963	125W	120	1			1,2,3,4,5
EF-3	AIR KING/FRAS70	CEILING CABINET	50	.25	1200	1963	125W	120	1			1,2,3,4,5
EF-4	AIR KING/FRAS70	CEILING CABINET	50	.25	1200	1963	125W	120	1			1,2,3,4,5

- NOTES:
- PROVIDE WITH INTEGRAL FACE GRILLE.
 - PROVIDE WITH INTEGRAL BACKDRAFT DAMPER.
 - PROVIDE WITH WALL CAP.
 - CONTROL BY THE ROOM LIGHT SWITCH.
 - FIRE RATED CEILING EXHAUST FAN.

SPLIT SYSTEM HEAT PUMP SCHEDULE

INDOOR UNIT

MARK	MANUFACTURER/ MODEL	FAN DATA				COOLING CAPACITY				HEATING CAPACITY			ELECTRIC HEATER			ELECTRIC SERVICE				REMARKS			
		AIR FLOW CFM	OA CFM	ESP "WC	MOTOR HP	TOTAL MBH	EAT		LAT		TOTAL MBH	EAT °FDB	LAT °FDB	KW	MBH	NO. STAGES	TOTAL FLA	MCA	MOCP		VOLTS	PH	
							°FDB	°FWB	°FDB	°FWB													
AHU-1	TRANE / TEM4A0B31M31	880	75	0.5	0.3	27.6	23.8	77.7	63.0	55.4	53.2	26.8	63.8	80.5	7.7	26.2	1	32.0	44.0	45.0	240	1	1,2,3
AHU-2	TRANE / TEM4B0C37M31	1045	75	0.5	0.3	33.1	27.5	77.3	63.2	55.8	53.5	31.8	65.1	82.0	7.7	26.2	1	32.0	45.0	45.0	240	1	1,2,3

- NOTES:
- PROVIDE WITH PROGRAMMABLE WALL MOUNTED STAND ALONE THERMOSTAT.
 - PROVIDE FOR SINGLE POINT CONNECTION.
 - HEATING CAPACITY AT 47 DEGREE F.

OUTDOOR UNIT

MARK	MANUFACTURER/ MODEL	SERVES	COOLING CAPACITY MBH	MIN SEER	HEATING CAPACITY MBH	MIN COP	REFRIGERANT TYPE	NUMBER OF COMPRESSORS	ELECTRIC SERVICE					REMARKS
									TOTAL FLA	MCA	MOCP	VOLTS	PH	
HP-1	TRANE / 4TWR4030N1	AHU-1	27.2	14.3	26.8	3.9	R410A	1	11.0	15.0	25.0	240	1	1,2,3,4
HP-2	TRANE / 4TWR4036N1	AHU-2	27.2	14.3	26.8	3.9	R410A	1	14.7	18.0	30.0	240	1	1,2,3,4

- NOTES:
- BASED ON 95° FDB AMBIENT TEMPERATURE.
 - BASED ON 47° FDB AMBIENT TEMPERATURE.
 - PROVIDE WITH REFRIGERANT LINE KIT.
 - PROVIDE WITH MANUFACTURERS ANTI-CORROSION HVAC ARMOR COAT ON COIL AND HOUSING.

MECHANICAL SPECIFICATIONS:

1. GENERAL

1.1. GENERAL REQUIREMENTS:

- 1.1.1. REQUIREMENTS UNDER DIVISION ONE AND THE GENERAL AND SUPPLEMENTARY CONDITIONS OF THESE SPECIFICATIONS SHALL BE A PART OF THIS SECTION. EACH CONTRACTOR SHALL BECOME THOROUGHLY ACQUAINTED WITH ITS CONTENTS AS TO REQUIREMENTS THAT AFFECT THIS DIVISION OR SECTION. THE WORK REQUIRED UNDER THIS SECTION INCLUDES MATERIAL, EQUIPMENT, APPLIANCES, TRANSPORTATION, SERVICES, AND LABOR REQUIRED TO COMPLETE THE ENTIRE SYSTEM AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS.
- 1.1.2. THE SPECIFICATIONS AND DRAWINGS FOR THE PROJECT ARE COMPLEMENTARY, AND PORTIONS OF THE WORK DESCRIBED IN ONE, SHALL BE PROVIDED AS IF DESCRIBED IN BOTH. IN THE EVENT OF DISCREPANCIES, NOTIFY THE ENGINEER AND/OR OWNER AND REQUEST CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK INVOLVED.
- 1.3.4. CONTRACTOR TO ELECTRONICALLY SUBMIT SPECIFICATIONS AND DETAIL FOR EQUIPMENT AND FABRICATED MATERIALS FOR OWNER'S APPROVAL PRIOR TO ISSUING PURCHASE ORDER OWNERS WILL RETURN WITH ACTION TAKEN NOTED. OWNER'S APPROVAL DOES NOT RELIEVE CONTRACTOR OF ANY RESPONSIBILITY FOR PERFORMANCE AND OPERATION.

1.4. INSPECTION OF THE SITE:

- 1.4.1. PRIOR TO SUBMITTING BID, THE CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED WORK AND BECOME FULLY INFORMED AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE DONE. FAILURE TO DO SO WILL NOT BE CONSIDERED SUFFICIENT JUSTIFICATION TO REQUEST OR OBTAIN EXTRA COMPENSATION OVER AND ABOVE THE CONTRACT PRICE.

1.5. MATERIAL AND WORKMANSHIP:

- 1.5.1. PROVIDE NEW MATERIAL, EQUIPMENT, AND APPARATUS UNDER THIS CONTRACT UNLESS OTHERWISE STATED HEREIN, OF BEST QUALITY NORMALLY USED FOR THE PURPOSE IN GOOD COMMERCIAL PRACTICE, AND FREE FROM ANY DEFECTS. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT NECESSARILY INTENDED TO DESIGNATE THE REQUIRED TRIM, WRITTEN DESCRIPTIONS OF THE TRIM GOVERN MODEL NUMBERS.
- 1.5.2. WORK PERFORMED UNDER THIS CONTRACT SHALL PROVIDE A NEAT AND "WORKMANLIKE" APPEARANCE WHEN COMPLETED, TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER. WORKMANSHIP SHALL BE THE FINEST POSSIBLE BY EXPERIENCED MECHANICS. INSTALLATIONS SHALL COMPLY WITH APPLICABLE CODES AND LAWS.
- 1.5.3. THE COMPLETE INSTALLATION SHALL FUNCTION AS DESIGNED AND INTENDED WITH RESPECT TO EFFICIENCY, CAPACITY, NOISE LEVEL, ETC. ABNORMAL NOISE CAUSED BY VIBRATING EQUIPMENT, PIPING, DUCTS, AIR DEVICES, AND SQUEAKS IN ROTATING COMPONENTS WILL NOT BE ACCEPTABLE. IN GENERAL, MATERIALS AND EQUIPMENT SHALL BE OF COMMERCIAL SPECIFICATION GRADE IN QUALITY. LIGHT DUTY AND RESIDENTIAL TYPE EQUIPMENT WILL NOT BE ACCEPTABLE.
- 1.5.4. REMOVE FROM THE PREMISES WASTE MATERIAL PRESENT AS A RESULT OF WORK, INCLUDING CARTONS, CRATING, PAPER, STICKERS, AND/OR EXCAVATION MATERIAL NOT USED IN BACKFILLING, ETC. CLEAN EQUIPMENT INSTALLED UNDER THIS CONTRACT TO A NEW AND CLEAN CONDITION AT THE TERMINATION OF WORK.
- 1.5.5. REPAIR OR REPLACE PUBLIC AND PRIVATE PROPERTY DAMAGED AS A RESULT OF WORK PERFORMED UNDER THIS CONTRACT TO THE SATISFACTION OF OWNER, ENGINEER AND AUTHORITIES HAVING JURISDICTION.
- 1.5.6. MISCELLANEOUS ITEMS NOT SHOWN ON THE PLANS BUT NECESSARY FOR A COMPLETE OPERABLE SYSTEM, SHALL BE SUPPLIED AND INSTALLED.
- 1.5.7. CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS FOR A COMPLETE INSTALLATION IN ALL RESPECTS READY OF INTENDED USE AND THE STRICT ACCORDANCE WITH STATE AND LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. PAY NECESSARY FEES AND OBTAIN PERMITS. INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY PRECAUTIONS AND PROCEDURES.
- 1.5.8. EQUIPMENT AND MATERIALS SHALL BE OF THE TYPE, SIZE AND MANUFACTURERS INDICATED ON THE DRAWINGS OR AN APPROVED EQUIVALENT.
- 1.5.9. THE CONTRACTOR SHALL SUPPLY AND INSTALL THE MATERIALS AND EQUIPMENT COVERED BY THE PLANS AND SPECIFICATIONS TO THE OWNER COMPLETE AND IN FIRST CLASS CONDITION IN EVERY RESPECT. HE SHALL GUARANTEE THAT THE MATERIAL, EQUIPMENT, AND WORKMANSHIP SUPPLIED AND INSTALLED BY HIM SHALL BE ENTIRELY FREE FROM DEFECTS AND THAT HE WILL REPAIR OR REPLACE AT HIS OWN EXPENSE, ANY MATERIALS, EQUIPMENT, AND WORKMANSHIP IN WHICH DEFECTS ARE FOUND.

1.6. COORDINATION:

- 1.6.1. COORDINATE WORK WITH THAT OF OTHER TRADES SO THAT THE VARIOUS COMPONENTS OF THE SYSTEMS WILL BE INSTALLED AT THE PROPER TIME, WILL FIT THE AVAILABLE SPACE, AND WILL ALLOW PROPER SERVICE ACCESS TO THOSE ITEMS REQUIRING MAINTENANCE. COMPONENTS WHICH ARE INSTALLED WITHOUT REGARD TO THE ABOVE SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE OWNER.
- 1.6.2. UNLESS OTHERWISE INDICATED, THE CONTRACTOR WILL PROVIDE CHASES AND OPENINGS IN BUILDING CONSTRUCTION REQUIRED FOR THE INSTALLATION OF THE SYSTEMS SPECIFIED HEREIN. MECHANICAL CONTRACTOR SHALL FURNISH THE GENERAL CONTRACTOR WITH THE INFORMATION WHERE CHASES AND OPENINGS ARE REQUIRED. COORDINATE HE WORK OF THE OTHER TRADES ENGAGED IN THE CONSTRUCTION OF THE PROJECT, AND EXECUTE WORK IN A MANNER AS TO NOT INTERFERE WITH OR DELAY THE WORK OF OTHER TRADES.
- 1.6.3. FIGURED DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALE DIMENSIONS. THE CONTRACTOR SHALL TAKE HIS OWN MEASUREMENTS AT THE BUILDING, AS VARIATIONS MAY OCCUR. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ERRORS THAT COULD HAVE BEEN AVOIDED BY PROPER CHECKING AND INSPECTION.
- 1.6.4. PROVIDE MATERIALS WITH TRIM THAT WILL PROPERLY FIT THE TYPES OF CEILING, WALL, OR FLOOR FINISHES ACTUALLY INSTALLED. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT INTENDED TO DESIGNATE THE REQUIRED TRIM.
- 1.6.5. MECHANICAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR DUCTWORK LAYOUT TO THE CONSTRUCTION PROJECT MANAGER FOR OWNER APPROVAL PRIOR TO INSTALLATION.
- 1.6.6. CONTRACTOR TO SUBMIT 6 SETS (OWNER WILL RETURN 3 SETS NOTED WITH ACTION TAKEN) SPECIFICATIONS AND DETAIL FOR EQUIPMENT AND FABRICATED MATERIALS FOR OWNER'S APPROVAL PRIOR TO ISSUING PURCHASE ORDER. OWNER'S APPROVAL DOES NOT RELIEVE CONTRACTOR OF ANY RESPONSIBILITY FOR PERFORMANCE AND OPERATION.

1.7. ORDINANCES AND CODES:

- 1.7.1. WORK PERFORMED UNDER THIS CONTRACT SHALL, AT A MINIMUM, BE IN CONFORMANCE WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES HAVING JURISDICTION. EQUIPMENT FURNISHED AND ASSOCIATED INSTALLATION WORK PERFORMED UNDER THIS CONTRACT SHALL BE IN STRICT COMPLIANCE WITH CURRENT APPLICABLE CODES ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ANY AMENDMENTS AND STANDARDS AS SET FORTH BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), UNDERWRITERS LABORATORIES (UL), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME), AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS (ASHRAE), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICAN SOCIETY OF TESTING MATERIALS (ASTM), AND OTHER NATIONAL STANDARDS AND CODES WHERE APPLICABLE. WHERE THE CONTRACT DOCUMENTS EXCEED THE REQUIREMENTS OF THEIR REFERENCED CODES, STANDARDS, ETC., THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE.
- 1.7.2. PROCURE AND PAY FOR PERMITS AND LICENSES REQUIRED FOR THE ACCOMPLISHMENT OF THE WORK HEREIN DESCRIBED. WHERE REQUIRED, OBTAIN, PAY FOR AND FURNISH CERTIFICATES OF INSPECTION TO THE OWNER. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR VIOLATIONS OF THE LAW.

1.8. PROTECTION OF EQUIPMENT AND MATERIALS:

- 1.8.1. STORE AND PROTECT FROM DAMAGE EQUIPMENT AND MATERIALS DELIVERED TO JOB SITE. COVER

WITH WATERPROOF, TEAR-RESISTANT, HEAVY TARP OR POLYETHYLENE PLASTIC AS REQUIRED TO PROTECT FROM PLASTER, DIRT, PAINT, WATER, OR PHYSICAL DAMAGE. EQUIPMENT AND MATERIAL THAT HAS BEEN DAMAGED BY CONSTRUCTION ACTIVITIES WILL BE REJECTED, AND MECHANICAL CONTRACTOR IS OBLIGED TO FURNISH NEW EQUIPMENT AND MATERIAL OF A LIKE KIND AS APPROVED BY OWNER.

- 1.8.2. KEEP PREMISES ROOM CLEAN FROM FOREIGN MATERIAL CREATED DURING WORK PERFORMED UNDER THIS CONTRACT. PIPING, EQUIPMENT, ETC., SHALL HAVE A NEAT AND CLEAN APPEARANCE AT THE TERMINATION OF THE WORK.
- 1.8.3. PLUG OR CAP OPEN ENDS OF DUCTWORK AND PIPING SYSTEMS WHILE STORED OR INSTALLED DURING CONSTRUCTION WHEN NOT IN USE TO PREVENT THE ENTRANCE OF DEBRIS INTO THE SYSTEMS.

1.9. OPERATION AND MAINTENANCE INSTRUCTIONS:

- 1.9.1. COMPILE A COMPLETE BROCHURE OF FIXTURES, MATERIALS, AND EQUIPMENT FURNISHED AND INSTALLED ON THIS PROJECT. INCLUDE OPERATIONAL AND MAINTENANCE INSTRUCTIONS, MANUFACTURER'S CATALOG SHEETS, WIRING DIAGRAMS, PARTS LISTS, APPROVED SHOP DRAWINGS, AND DESCRIPTIVE LITERATURE FURNISHED BY THE MANUFACTURER. INCLUDE AN INSIDE COVER SHEET THAT LISTS THE PROJECT NAME, DATE, OWNER, ARCHITECT, ENGINEER, GENERAL CONTRACTOR, SUBCONTRACTOR, AND AN INDEX OF CONTENTS.
- 1.9.2. SUBMIT COPIES OF LITERATURE BOUND IN APPROVED BINDERS TO THE ARCHITECT AND OWNER AT THE TERMINATION OF THE WORK. PAPER CLIPS, STAPLES, RUBBER BANDS, AND MAILING ENVELOPES ARE NOT CONSIDERED APPROVED BINDERS. FINAL APPROVAL OF MECHANICAL WILL BE WITHHELD UNTIL THIS EQUIPMENT BROCHURE IS DEEMED COMPLETE BY THE ARCHITECT, ENGINEER, AND OWNER.

1.10. WARRANTIES:

- 1.10.1. WARRANT EACH SYSTEM AND EACH ELEMENT THEREOF AGAINST ALL DEFECTS DUE TO FAULTY WORKMANSHIP, DESIGN OR MATERIAL FOR A PERIOD OF 12 MONTHS OF DATE OF SUBSTANTIAL COMPLETION (COMPRESSORS IN AIR CONDITIONING AND REFRIGERATION EQUIPMENT WITH A 60 MONTH WARRANTY), UNLESS SPECIFIC ITEMS ARE NOTED TO CARRY A LONGER WARRANTY IN THE CONSTRUCTION DOCUMENTS OR MANUFACTURER'S STANDARD WARRANTY EXCEEDS 12 MONTHS. REMEDY ALL DEFECTS, OCCURRING WITHIN THE WARRANTY PERIOD(S), AS STATED IN THE GENERAL CONDITIONS AND DIVISION 1.
- 1.10.2. WARRANTIES SHALL INCLUDE LABOR AND MATERIAL. MAKE REPAIRS OR REPLACEMENTS WITHOUT ANY ADDITIONAL COSTS TO THE OWNER.
- 1.10.3. PERFORM THE REMEDIAL WORK PROMPTLY, UPON WRITTEN NOTICE FROM THE ENGINEER OR OWNER.
- 1.10.4. AT THE TIME OF SUBSTANTIAL COMPLETION, DELIVER TO THE OWNER ALL WARRANTIES, IN WRITING AND PROPERLY EXECUTED, INCLUDING TERM LIMITS FOR WARRANTIES EXTENDING BEYOND THE ONE YEAR PERIOD, EACH WARRANTY INSTRUMENT BEING ADDRESSED TO THE OWNER AND STATING THE COMMENCEMENT DATE AND TERM.

1.11. CUTTING AND PATCHING:

- 1.11.1. PERFORM CUTTING OF WALLS, FLOORS, CEILINGS, ETC., AS REQUIRED TO INSTALL WORK UNDER THIS SECTION. OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO CUTTING. DO NOT CUT OR DISTURB STRUCTURAL MEMBERS WITHOUT PRIOR APPROVAL FROM THE ARCHITECT. CUT HOLES AS SMALL AS POSSIBLE. PATCH WALLS, FLOORS, ETC., AS REQUIRED BY WORK UNDER THIS SECTION. PATCHING SHALL MATCH THE ORIGINAL MATERIAL AND CONSTRUCTION. REPAIR AND REFINISH AREAS DISTURBED BY WORK TO THE CONDITION OF ADJOINING SURFACES IN A MANNER SATISFACTORY TO THE ARCHITECT.

1.12. ROUGH-IN:

- 1.12.1. COORDINATE WITHOUT DELAY ROUGH-IN WITH GENERAL CONSTRUCTION. CONCEAL PIPING AND CONDUIT ROUGH-IN EXCEPT IN UNFINISHED AREAS AND WHERE OTHERWISE SHOWN.
- 1.12.2. RUN ALL PIPING AND DUCTWORK NEAT AND PARALLEL TO THE BUILDING STRUCTURE UNLESS OTHERWISE NOTED.

1.13. STRUCTURAL STEEL:

- 1.13.1. STRUCTURAL STEEL USED FOR PIPE SUPPORTS, EQUIPMENT SUPPORTS, ETC., SHALL BE NEW, CLEAN, AND CONFORM TO ASTM DESIGNATION A-36.
- 1.13.2. SUPPORT EQUIPMENT AND PIPING FROM THE BUILDING STRUCTURE. DO NOT SUPPORT EQUIPMENT FROM CEILINGS, OTHER PLUMBING, MECHANICAL/FIRE PROTECTION, OR ELECTRICAL COMPONENTS, AND OTHER NON-STRUCTURAL ELEMENTS.

1.14. ACCESS DOORS:

- 1.14.1. PROVIDE ACCESS DOORS IN CEILINGS AND WALL WHERE INDICATED OR REQUIRED FOR ACCESS TO CONCEALED VALVES, DAMPERS, AND EQUIPMENT INSTALLED UNDER THIS SECTION. PROVIDE CONCEALED HINGES, SCREWDRIVER-TYPE LOCK, ANCHOR STRAPS; MANUFACTURED BY MILCOR, ZURN, TITUS OR EQUAL. OBTAIN ARCHITECT'S APPROVAL OF TYPE, SIZE, LOCATION, AND COLOR BEFORE ORDERING.

1.15. PENETRATIONS:

- 1.15.1. SEAL FLOOR, EXTERIOR WALL AND ROOF PENETRATIONS WATER AND WEATHER TIGHT WITH APPROPRIATE NON-SHRINK, NON-HARDENING COMMERCIAL CONSTRUCTION SEALANT. SEAL ROOF PENETRATIONS WITH 4 POUND PER SQUARE FOOT LEAD FLASHING. PROVIDE A SLEEVE, AND SEAL NON-FIRE-RATED FLOOR AND WALL PENETRATIONS WITH FIBERGLASS PACKING AND SILICONE CAULK (FOR ACOUSTICAL INSULATION).
- 1.15.2. COORDINATE FIRE RATING REQUIREMENTS AND LOCATIONS WITH THE ARCHITECTURAL DRAWINGS OR EXISTING BUILDING CONDITIONS AND RATINGS. SEAL PENETRATIONS OF FIRE-RATED ASSEMBLIES WITH 3M # CP-25 FIRE BARRIER CAULK (PROVIDE THICKNESS AND METHOD AS REQUIRED AND RECOMMENDED BY MANUFACTURER) TO MAINTAIN THE FIRE RESISTANCE RATING OF FIRE-RATED ASSEMBLIES.
- 1.15.3. SEAL EXTERIOR WALL PENETRATIONS BELOW GRADE WITH CASE IRON WALL PIPES AND MODULAR MECHANICAL SLEEVE SEALS, MANUFACTURED BY THUNDERLINE/LINK SEAL, CALPICO, INC, METRAFLEX OR APPROVED EQUAL.
- 1.15.4. PROVIDE SLEEVE FOR HORIZONTAL PIPE PASSING THROUGH OR UNDER FOUNDATION. SLEEVES SHALL BE CAST IRON SOIL PIPE TWO NOMINAL PIPE SIZES LARGER THAN THE PIPE SERVED. SEAL WATER-TIGHT WITH SILICON CAULK.

2. HEATING, VENTILATION, AND AIR CONDITIONING

2.1. DUCTWORK:

- 2.1.1. PROVIDE ANY DUCTWORK NECESSARY FOR A COMPLETE INSTALLATION OF HVAC SYSTEMS (INCLUDING EXHAUST SYSTEMS AND MAKE-UP AIR SYSTEMS). ALL DUCTWORK IDENTIFICATION AND INSTALLATION TO ADHERE TO SMACNA STANDARDS AND ALL GOVERNING CODES.
- 2.1.2. DUCTWORK SHALL BE GALVANIZED STEEL, CONSTRUCTED AND INSTALLED AS RECOMMENDED BY SMACNA AND INSULATED WITH 2" THICK FIBERGLASS DUCT WRAP WITH FOIL VAPOR BARRIER JACKET. SHEET METAL GAUGES SHALL BE IN ACCORDANCE WITH SMACNA. FLEXIBLE DUCTWORK SHALL BE FACTORY INSULATED WITH VAPOR BARRIER JACKET.
- 2.1.3. DUCTWORK CONNECTIONS TO AIR DEVICES MUST BE MADE WITH HARD PIPE ELBOWS, COVERED WITH SLEEVE INSULATION. FLEX DUCT MUST NOT BE UTILIZED FOR A 90 DEGREE CONNECTION TO AN AIR DEVICE.
- 2.1.4. BALANCING DAMPERS WITH DOUBLE LOCKING QUADS SHALL BE PROVIDED IN ALL ROUND DUCT TAKE-OFFS FROM THE MAIN TRUNKS, UNLESS OTHERWISE NOTED ON PLANS.
- 2.1.5. A MAXIMUM OF 7'-0" OF FLEX DUCT MAY BE USED FOR FINAL CONNECTION OF SUPPLY AIR DIFFUSERS AND GRILLES.
- 2.1.6. FLEX DUCT MUST BE PROPERLY SUPPORTED WITH ONE INCH STRAPS AND CUT TO PROPER LENGTH TO PREVENT SAGGING.
- 2.1.7. FLEX DUCT SHALL BE OWENS-CORNING FOIL-BACK HIGH QUALITY U/L APPROVED. PLASTIC WRAPPED

FLEX DUCT IS NOT ACCEPTABLE. FLEXIBLE DUCTWORK MAYBE USED FOR RUN-OUTS TO AIR DISTRIBUTION DEVICES AS INDICATED BUT SHALL NOT BE USED IN NON-ACCESSIBLE, CONCEALED SPACES.
RIGID DUCT SHALL BE USED FOR RETURN EXHAUST AND MAKE-UP AIR.

2.2. INSULATION:

- 2.2.1. SUPPLY AND RETURN DUCTWORK INSIDE THE BUILDING SHALL BE INSULATED WITH 2" THICK EXTERIOR FIBERGLASS DUCT WRAP WITH A VAPOR BARRIER, SEAL ALL JOINTS AND LAPS TO MAINTAIN VAPOR BARRIER.
- 2.2.2. SUPPLY AND RETURN DUCTWORK OUTSIDE THE BUILDING SHALL BE INSULATED WITH 2" LINER WITH A MINIMUM R-VALUE OF 8.0 AND SEAL SEAMS WEATHER TIGHT.
- 2.2.3. DEDICATED OUTSIDE AIR SUPPLY AND RELIEF DUCTWORK INSIDE THE BUILDING SHALL BE INSULATED WITH 2" THICK DUCT WRAP WITH A MINIMUM R-VALUE OF 6.0.

2.3. FINAL TESTING AND ADJUSTMENTS:

- 2.3.1. AIR BALANCE SHALL BE PERFORMED AT THE COMPLETION OF THE PROJECT. BALANCE EACH SUPPLY, RETURN, OUTSIDE AIR DEVICE WITHIN 5% OF REQUIREMENTS AND FURNISH AN AABC OR NEBB CERTIFIED REPORT TO THE OWNER, MECHANICAL INSPECTOR AND ENGINEER. THE ENTIRE HVAC SYSTEM MUST BE FULLY OPERABLE, BALANCED, AND APPROVED BY OWNER'S REPRESENTATIVE ON OR BEFORE THE DAY OF SUBSTANTIAL COMPLETION.
- 2.3.2. ADJUST THERMOSTATS AND CONTROL DEVICES TO OPERATE AS INTENDED. ADJUST PUMPS, FANS, ETC. FOR PROPER AND EFFICIENT OPERATION. CERTIFY TO ARCHITECT THAT ADJUSTMENTS HAVE BEEN MADE AND THAT SYSTEMS IS OPERATING SATISFACTORILY. CALIBRATE, SET AND ADJUST AUTOMATIC TEMPERATURE CONTROLS. CHECK PROPER SEQUENCES OF INTERLOCK SYSTEMS, AND OPERATION OF SAFETY CONTROLS.
- 2.3.3. VERIFY ECONOMIZER OPERATION PER MANUFACTURER PROCEDURE.

2.4. DIFFUSERS AND GRILLES:

- 2.4.1. ALL SUPPLY AND RETURN AIR DEVICES SHALL BE INSTALLED BY THE CONTRACTOR.
- 2.4.2. ALL AIR TERMINAL DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS IN ORDER TO HANDLE THE DESIGNED AIR FLOW CAPACITIES WITH A MINIMUM AMOUNT OF NOISE AND STATIC PRESSURE. PROVIDE BALANCING DAMPERS FOR ALL AIR FLOW DEVICES TO ALLOW ADJUSTMENT WITH A LOCKING SET POINT. ROOM OPERATED SLIDE ACTUATED DAMPERS ON SUPPLY GRILLES DO NOT MEET THE REQUIREMENTS OF A BALANCING DAMPER.

2.5. CONDENSATE DRAINS:

- 2.5.1. THE MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL AS A MINIMUM A 4" DEEP P-TRAP ON CONDENSATE DRAIN OUTLETS WHERE THE CONDENSATE WATER WILL EXIT THE P-TRAP AT A POINT 1" LOWER THAN THE DRAIN CONNECTION AT THE UNIT. THE MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL CONDENSATE LINES AS REQUIRED TO MEET LOCAL CODES AND AS SHOWN ON THE MECHANICAL PLANS. THESE LINES SHALL BE SLOPED AWAY FROM THE UNITS, SUPPORTED AS REQUIRED TO ASSURE PROPER FLOW, AND AT THE MECHANICAL CONTRACTOR'S OPTION, CONDENSATE DRAIN LINES MAY BE SCHEDULE 40 PVC OR COPPER. ALL JOINTS SHALL BE SECURELY GLUED OR SOLDERED AS REQUIRED. INSULATE 3/4" THICK PIPE INSULATION WHERE REQUIRED.

2.6. CONTROLS:

- 2.6.1. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING AND INSTALLING A COMPLETE OPERATIVE SYSTEM OF CONTROLS, INCLUDING THERMOSTATS, CONTROL DEVICES, TIME CLOCKS, DDC COMPONENTS, AND CONTROL WIRING.
- 2.6.2. SMOKE DETECTORS AND SAMPLING TUBES PROVIDED AND INSTALLED TO THE UNITS AND IN THE DUCTWORK BY THE MECHANICAL CONTRACTOR. THE SMOKE DETECTORS SHALL DISABLE HVAC UNIT OPERATION UPON ACTIVATION.

2.7. ELECTRICAL:

- 2.7.1. LOW VOLTAGE WIRING - ALL PROVISIONS FOR LOW VOLTAGE WIRING SHALL BE PERFORMED BY THE MECHANICAL CONTRACTOR UNLESS CODES OR LABOR SITUATIONS DO NOT PERMIT. IF THE MECHANICAL CONTRACTOR CAN NOT PERFORM LOW VOLTAGE WIRING, THE MECHANICAL CONTRACTOR SHALL INFORM THE GENERAL CONTRACTOR, AS A PART OF THE HVAC BID DOCUMENT, TO HAVE THE ELECTRICAL SUBCONTRACTOR INCLUDE HIS WORK IN THEIR BID.
- 2.7.2. POWER WIRING - ALL ELECTRICAL POWER WIRING TO INCLUDE FINAL CONNECTIONS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR'S ELECTRICAL SUBCONTRACTOR.
- 2.7.3. MOTOR STARTERS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR AND TURNED OVER TO THE ELECTRICAL CONTRACTOR FOR INSTALLATION.

2.8. GAS PIPING:

- 2.8.1. SCHEDULE 40 BLACK CARBON STEEL WITH MALLEABLE IRON THREADED FITTINGS, PROVIDES SHUT-OFF VALVE, DIRT LEG, AND UNION AT EACH ROOFTOP UNIT. PAINT ALL GAS PIPING EXPOSED TO WEATHER WITH ONE COAT OF PRIMER, AND TWO COATS OF RUST-PROOF PAINT. COLOR SHALL MATCH BUILDING COLORS. COORDINATE WITH OWNER'S CONSTRUCTION MANAGER.
- 2.8.2. TREATED WOOD BLOCKING 6X6X12, 8'-0" OC MAX WITH GALVANIZED PIPE STRAP 1 1/4" ZINC COATED LAG SCREWS, AND RUBBER WALKPAD ADHERED TO THE ROOF.

2.9. REFRIGERATION LINES:

- 2.9.1. REFRIGERATION LINE SETS FOR HVAC UNITS ARE TO BE PROVIDED WITH THE EQUIPMENT AND SIZED BY THE MANUFACTURER BASED ON ACTUAL JOB SITE CONDITIONS INCLUDING LENGTH AND ELEVATION CHANGES, AND INSTALLED BY THE CONTRACTOR.
- 2.9.2. INSULATE ALL REFRIGERANT LIQUID LINES AND PROVIDE AN ALL WEATHER COATING ON EXTERIOR INSULATION.

2.10. HYDRONIC PIPING:

- 2.10.1. HARD COPPER TUBING: ASTM B 88, TYPE L (ASTM B 88M, TYPE B) WITH ASME B16.22 WROUGHT-COPPER SOLDER FITTINGS AND ASTM B 32, 95-5 TIN ANTIMONY SOLDER.
- 2.10.2. ON PIPING 2 1/2" OR GREATER, MECHANICAL CONTRACTOR MAY USE: STEEL PIPE: ASTM A 53, SCHEDULE 40, PLAIN ENDS WITH CAST-IRON THREADED FITTINGS.
- 2.10.3. INSULATION: 1 1/2" WALL ONE-PIECE FIBERGLASS COVERING HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELF-SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINTED, OWENS-CORNING OR ARMSTRONG.
- 2.10.3.1. ARMAFLEX INSULATION SHALL NOT BE USED.

2.11. MECHANICAL CONTRACTOR RESPONSIBILITIES:

- 2.11.1. AFTER COMPLETION OF THE WORK DESCRIBED IN THIS SPECIFICATION AND SHOWN ON THE DRAWINGS, THE MECHANICAL CONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVING ALL LABELS AND STICKERS NOT CONTAINING OPERATION INSTRUCTION. MECHANICAL CONTRACTOR SHALL REMOVE CRATING DEBRIS. LEAVING THE INSTALLATION FINISHED AND READY FOR OPERATION, TO INCLUDING CLEAN FILTERS IN AIR HANDLING UNITS.
- 2.11.2. TEST AND DEMONSTRATE TO THE OWNER THE ENTIRE SYSTEM IN ALL MODES OF OPERATION TO INSURE PROPER OPERATION.



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PROJECT NAME:

TOWN OF NAGS HEAD

Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:

**MECHANICAL
SPECIFICATIONS**

**ISSUED FOR
BID**

DRAWN BY: **LKK**

DATE: **9 / 13 / 24**

SCALE: **NONE**

STAMP:

INCOMPLETE
FOR INTERIM REVIEW
ONLY AND NOT
INTENDED FOR PERMIT
OR CONSTRUCTION
PURPOSES.

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SHEET:

M7.1

LEGEND

NOTE: ALL SYMBOLS BELOW MAY NOT BE USED ON PLANS, SYMBOLS NOT SHOWN BELOW ARE IDENTIFIED WHERE THEY OCCUR.

- LED LIGHTING FIXTURES. LETTER INDICATES TYPE, SEE LIGHTING FIXTURE SCHEDULE
- LED NIGHT LIGHTING OR EMERGENCY FIXTURE.
- LED LIGHTING FIXTURE, CEILING OR WALL MOUNTED.
- EXIT LIGHTING FIXTURE. ARROW, WHEN USED INDICATES DIRECTION (SHADING INDICATES FACE OF SIGN ORIENTATION). CEILING OR WALL MOUNTED RESPECTIVELY.
- EMERGENCY BATTERY POWERED LIGHTING UNIT. (TWIN HEAD)
- LIGHTING FIXTURE TYPE SYMBOL. SEE "LIGHTING FIXTURE SCHEDULE"
- LIGHTING CONTACTOR.
- SINGLE POLE LIGHT SWITCH. 20A, 120/277V, MOUNT 42" AFF TO BOTTOM OF BOX U.O.N. SUBSCRIPT INDICATES SWITCH FIXTURE CONFIGURATION
- THREE WAY SWITCH, 20A 120/277V, MOUNT 42" AFF TO BOTTOM OF BOX U.O.N.
- FOUR WAY SWITCH, 20A 120/277V, MOUNT 42" AFF TO BOTTOM OF BOX U.O.N.
- FRACTIONAL HORSEPOWER MANUAL MOTOR STARTER WITH OVERLOADS, 20A, 240V(USED FOR WATER HEATER)
- WALL BOX DUAL TECHNOLOGY OCCUPANCY SENSOR. 120/277V, MOUNT AT 42" AFF TO BOTTOM OF BOX U.O.N.
- DUPLEX CONVENIENCE RECEPTACLE. 20A, 125VAC, NEMA 5-20R, MOUNT 18" AFF TO BOTTOM OF BOX U.O.N.
C = CEILING MOUNT
WP = WEATHERPROOF
GFI = GROUND FAULT INTERRUPTER
48 = MOUNTING HEIGHT AFF IN INCHES
- TWO DUPLEX CONVENIENCE TYPE RECEPTACLES(QUADRIplex), EACH NEMA 5-20R, MOUNT IN TWO GANG RECEPTACLE BOX WITH SINGLE COVER PLATE, MOUNT 18" AFF TO BOTTOM OF BOX U.O.N.
- CONDUIT HOMERUN WITH PANELBOARD & CIRCUIT DESIGNATIONS BRANCH CIRCUIT OF FEEDER WIRING IN CONDUIT. PROVIDE SIZE AND QUANTITY OF CONDUCTORS AS REQUIRED TO FACILITATE CIRCUIT CONFIGURATION AND/OR SWITCHING INDICATED. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG (OR AS INDICATED), MINIMUM CONDUIT SIZE SHALL BE 1/2".
- BRANCH CIRCUIT OR FEEDER WIRING IN CONDUIT. NO TICK MARKS INDICATE 2 CONDUCTORS & 1 GROUND IN CONDUIT UON. TICK MARKS, WHEN SHOWN, INDICATE QUANTITY OF CONDUCTORS IF OTHER THAN THREE; (+) INDICATES GROUND, (-) INDICATES INSULATED ISOLATED GROUND. FOR CONDUIT AND WIRE SIZES REFER TO PANELBOARD SCHEDULES.
- HOMERUNS TO PANEL. PANEL & CIRCUIT DESIGNATIONS AS INDICATED.
- CIRCUIT BREAKER
- PANELBOARD
- DISCONNECT SAFETY SWITCH & CONNECTION
2P = NO. OF POLES
60 = SWITCH RATING
40 = FUSE RATING (NF INDICATES NON-FUSIBLE).
- MOTOR STARTER, CONTROLLER, OR RELAY FOR MECHANICAL EQUIPMENT. DEVICE SUPPLIED BY MECHANICAL CONTRACTOR; INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR. VERIFY EXACT LOCATION.
- MOTOR CONNECTION, HP, AND CHARACTERISTICS AS NOTED
- ELECTRICAL CONNECTION AS NOTED.
- POINT OF WORK, DEMO AND NEW WORK.
- ROOM NUMBER
- NEW WORK NOTE SYMBOL
- DEMO WORK NOTE SYMBOL
- STANDARD TELEPHONE OUTLET BOX AND JACK. MOUNT 18" AFF. TO BOTTOM OF BOX U.O.N. PROVIDE 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING SPACE WITH CAT-6 CABLING BACK TO TELEPHONE MAIN EQUIPMENT U.O.N. 48" = MOUNTING HEIGHT AFF. IN INCHES
- TELECOMMUNICATIONS OUTLET BOX AND JACK. MOUNT 18" AFF. TO BOTTOM OF BOX U.O.N. PROVIDE 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING SPACE WITH CAT-6 CABLING BACK TO TELEPHONE MAIN EQUIPMENT U.O.N. (VOICE AND DATA). MOUNT +18" AFF. U.O.N. 48" = MOUNTING HEIGHT AFF. IN INCHES
- TELEVISION OUTLET BOX AND CONNECTOR. MOUNT 18" AFF. TO BOTTOM OF BOX U.O.N. PROVIDE 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING SPACE WITH RG-6 CABLING BACK TO HEADEND MAIN EQUIPMENT U.O.N. 48" = MOUNTING HEIGHT AFF. IN INCHES
- TELECOMMUNICATIONS SYSTEM TERMINAL BACKBOARD
- TRANSFORMER, DRY TYPE
- FIRE ALARM SYSTEM SMOKE SENSOR, CEILING MOUNT, U.O.N.
- FIRE ALARM SYSTEM HEAT SENSOR, CEILING MOUNT, U.O.N.
- FIRE ALARM SYSTEM CONNECTION TO FLOW SWITCH
- FIRE ALARM SYSTEM CONNECTION TO TAMPER SWITCH
- FIRE ALARM SYSTEM CONNECTION TO ALARM CHECK VALVE
- FIRE ALARM SYSTEM CONTROL PANEL
- PUSH BUTTON (24 VOLT) MOUNT 52" AFG.
- DOOR BELL (24 VOLT) MOUNT ON WALL AT 6" ABOVE CEILING.
- DOOR BELL (24 VOLT) MOUNT 12" ABOVE CEILING/
- BELL TYPE TRANSFORMER (120-24V) WALL MOUNT TO JUNCTION BOX AT 10'-0" AFF.
- JUNCTION BOX (J.B.) FLUSH MOUNTED 4"SQ x DEPTH REQ'D UON. S=SURFACE MOUNTED
- JUNCTION BOX (J.B.) SURFACE MOUNTED ABOVE CEILING. SIZE AS NOTED ON DRAWINGS.
- WATER HEATER CONNECTION.

GENERAL NOTES

- THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, DEVICES AND FIXTURES SHALL CONFORM TO ALL CURRENT LOCAL CODES, ORDINANCES, NATIONAL ELECTRIC CODE, AND UTILITY COMPANY REQUIREMENTS.
- ALL RECEPTACLES AND SWITCHES SHALL BE FLUSH MOUNTED FOR ALL AREAS, UNLESS OTHERWISE NOTED.
- THE ELECTRICAL DRAWINGS ARE GENERALLY DIAGRAMMATIC. THE ELECTRICAL INSTALLATION SHALL BE COORDINATED WITH ALL OTHER TRADES SO THAT INTERFERENCES BETWEEN THE ELECTRICAL INSTALLATION AND ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION AND EQUIPMENT INSTALLATION WILL BE AVOIDED. REFER TO ARCHITECTURAL DRAWINGS. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ALL RELATED ELECTRICAL NOTES AND SHALL BE RESPONSIBLE FOR INCLUDING FIELD VERIFICATIONS IN HIS BID. NO CHANGE ORDERS SHALL BE CONSIDERED FOR LACK OF FIELD VERIFICATION OF ALL PLAN NOTES AND DIMENSIONS.
- SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, ROOM, AND AREA FINISHES, CEILING PLANS, DOOR SWINGS, FIRE RELATED PARTITIONS, CABINET AND CASE AND BUILT-IN DETAILS.
- CONTRACTOR SHALL PROVIDE ALL DISCONNECTS TO MEET LOCAL CODES.
- CONTRACTOR SHALL VERIFY ALL DOOR SWINGS BEFORE INSTALLING LIGHT SWITCHES. ALL LIGHT SWITCHES TO BE INSTALLED ON STRIKE SIDE OF DOOR UNLESS SPECIFICALLY NOTED OTHERWISE. WHERE SWITCHES ARE LOCATED ON HINGE SIDE OF DOOR, SWITCH SHALL BE INSTALLED A MINIMUM OF 36" FROM HINGE.
- ALL FINAL CONNECTIONS SHOWN ON THE DRAWINGS ARE ACTUAL REQUIREMENTS OF THE EQUIPMENT AND ARE SHOWN IN THEIR APPROXIMATE LOCATION.
- ALL EXTERIOR EQUIPMENT AND DEVICES SHALL BE WEATHERPROOF AND RAIN TIGHT.
- COORDINATE ALL LIGHTING WITH MECHANICAL AND PLUMBING EQUIPMENT.
- ALL BATHROOM RECEPTACLES SHALL BE GROUND FAULT PROTECTED. (TYPICAL)
- FINAL DETERMINATION OF FIRE STOPPING REQUIREMENTS SHALL BE BASED ON LOCAL CODE REQUIREMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS AND MEASUREMENTS. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BID.
- ALL 120-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, KITCHENS, LAUNDRY. OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY AFCI BREAKERS.

ABBREVIATIONS

- Ø, PH PHASE
- JB JUNCTION BOX
- A, AMP AMPERE
- KVA KILOVOLT AMPERES
- AFF ABOVE FINISHED FLOOR
- KW KILOWATT
- AFG ABOVE FINISHED GRADE
- MLO MAIN LUGS ONLY
- AIC AMPERE INTERRUPTING CAPACITY
- MT MOUNT (RMS SYMMETRICAL)
- MTD MOUNTED ALTERNATE ALT
- MTG MOUNTING
- MCB MAIN CIRCUIT BREAKER
- APPROX APPROXIMATELY
- NF NONFUSIBLE
- C CONDUIT
- NTS NOT TO SCALE
- ε CENTERLINE
- P POLE
- EF EXHAUST FAN
- RTU ROOF TOP UNIT
- EQUIP EQUIPMENT TYP TYPICAL
- EXIST EXISTING
- UON UNLESS OTHERWISE NOTED
- F FUSE
- V VOLT, VOLTAGE
- FLEX FLEXIBLE
- W WIRE
- GFI GROUND FAULT INTERRUPTER
- WP WEATHERPROOF
- GND GROUND
- HP HORSE POWER
- E EXISTING
- N NEW
- UC UNDER COUNTER

LIGHTING FIXTURE SCHEDULE								
TYPE	DESCRIPTION	CATALOG NUMBER	NUMBER OF LAMPS	LAMP TYPE	TOTAL WATTS	VOLTS	MOUNTING	NOTES
A	4" LED ULTRA THIN RECESSED CAN LIGHT	WESTGATE# RSL4-MCT5-FR	1	LED	9W	120V	FLUSH CEILING	1
A1	4" LED ULTRA THIN RECESSED CAN ADJUSTABLE	WESTGATE# RSL4-ADJ-MCT5-FR	1	LED	9W	120V	FLUSH IN SLOPED CELING	1
B	3-LIGHT BATH VANITY	PROGRESS LIGHTING #P2159-09	3	LED	13W	120V	WALL ABOVE MIRROR	1
C	LOW PROFILE LED ROUND DISK LIGHT	CANARM #LED-SM11DL-BK-C	1	LED	22W	120V	CEILING	1
D	2' LED STRIP	LITHONIA #MNSL L23 1LL MVOLT 40K 80CRI MG	1	LED	11W	120V	CEILING	1
G	EXTERIOR LED WALL SCONCE	CATTLEYA LIGHTING #CA2228-W	1	LED	20W	120V	WALL	1
F1	52" 5-BLADE WHITE CEILING FAN WITH LED LIGHT KIT	HAMPTON BAY CORWIN SERIES	2	LED	17W	120V	CEILING FAN PENDANT	1
F2	62" 5-BLADE WHITE CEILING FAN, NO LIGHT KIT	MINKA-AIRE # F551-CL	-	-	-	120V	CEILING FAN PENDANT	1
H	KITCHEN PENDANT	HAMPTON BAY # AF-1032R/BK	1	LED	14.5W	120V	CEILING PENDANT	1
J	LED WALL PACK WITH PHOTOCELL	COMMERCIAL LIGHTING# PRWX50-H-PC-4K-BZ	1	LED	50W	120V	EXTERIOR WALL	1

- NOTES:
- SELECTIONS BY ARCHITECT. EQUALS REQUIRE PRIOR APPROVAL FROM ARCHITECT
 - ADA COMPLIANT
 -

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PROJECT NAME:
TOWN OF NAGS HEAD
Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
ELECTRICAL LEGEND,
ABBREVIATIONS, NOTES,
PANELBOARD SCHEDULE &
ELECTRICAL RISER DIAGRAM

ISSUED FOR BID

DRAWN BY: BPM

DATE: 9 / 13 / 24

SCALE: NONE

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SHEET:
E1.1

GENERAL WORK NOTES: (THIS SHEET ONLY)

- ALL 120-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, KITCHENS, LAUNDRY, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY AFCI BREAKERS.
- SEE PANEL SCHEDULES ON SHEET E-3.1 FOR ADDITIONAL BRANCH CIRCUIT INFORMATION. ELECTRICAL CONTRACTOR CAN AMEND CIRCUITING AS LONG AS COMPLIANCE TO NEC ARTICLE 210 AND PHASE BALANCE OF PANEL IS WITHIN 3%.

NEW WORK NOTES: (THIS SHEET ONLY)

- BATHROOM EXHAUST FAN FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR.

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PROJECT NAME:
TOWN OF NAGS HEAD
 Workforce Housing
 425 Health Center Dr.
 Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
FIRST FLOOR NEW WORK PLAN - LIGHTING

ISSUED FOR BID

DRAWN BY: **BPM**

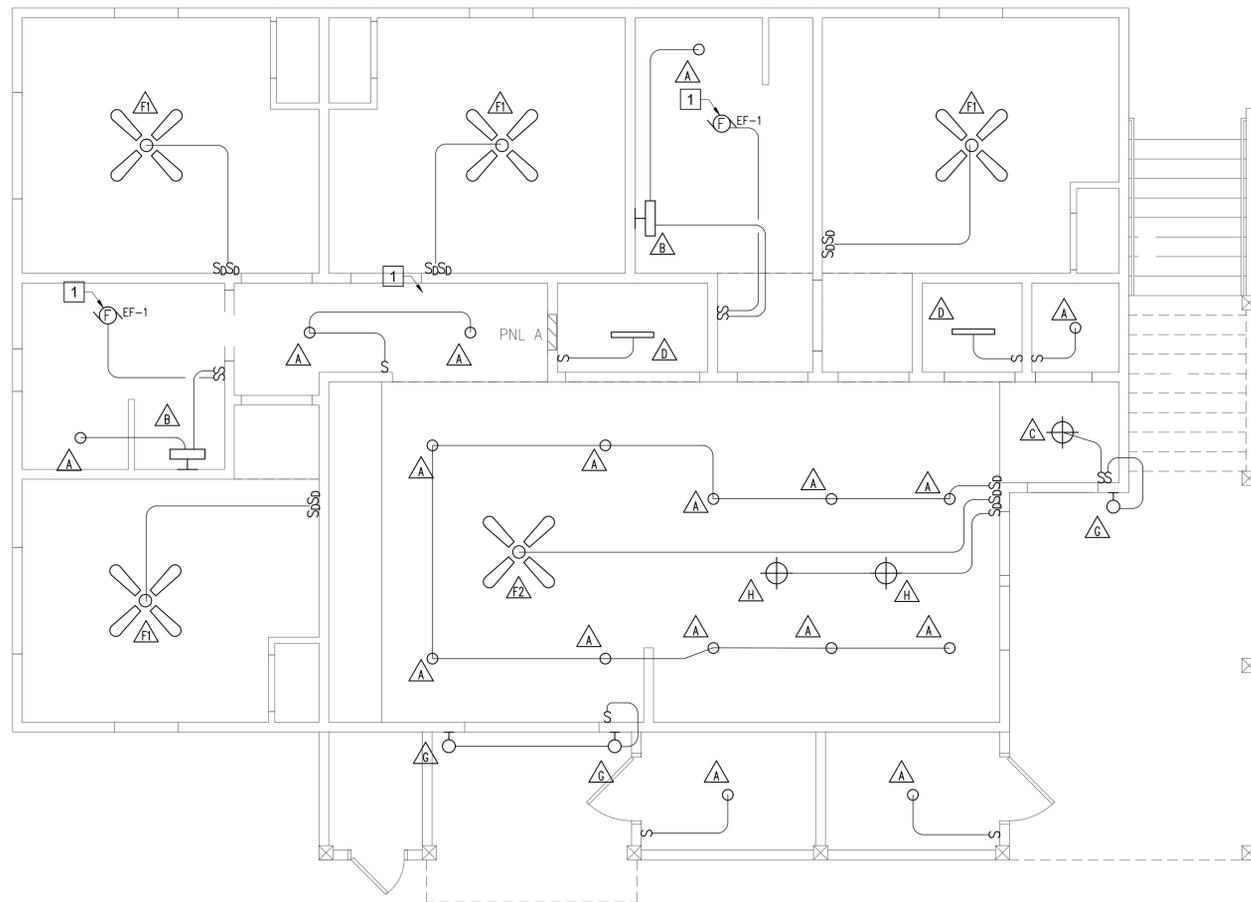
DATE: **9 / 13 / 24**

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

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SHEET:
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1 FIRST FLOOR NEW WORK PLAN - LIGHTING
 SCALE: 1/4" = 1'-0"



GENERAL WORK NOTES:

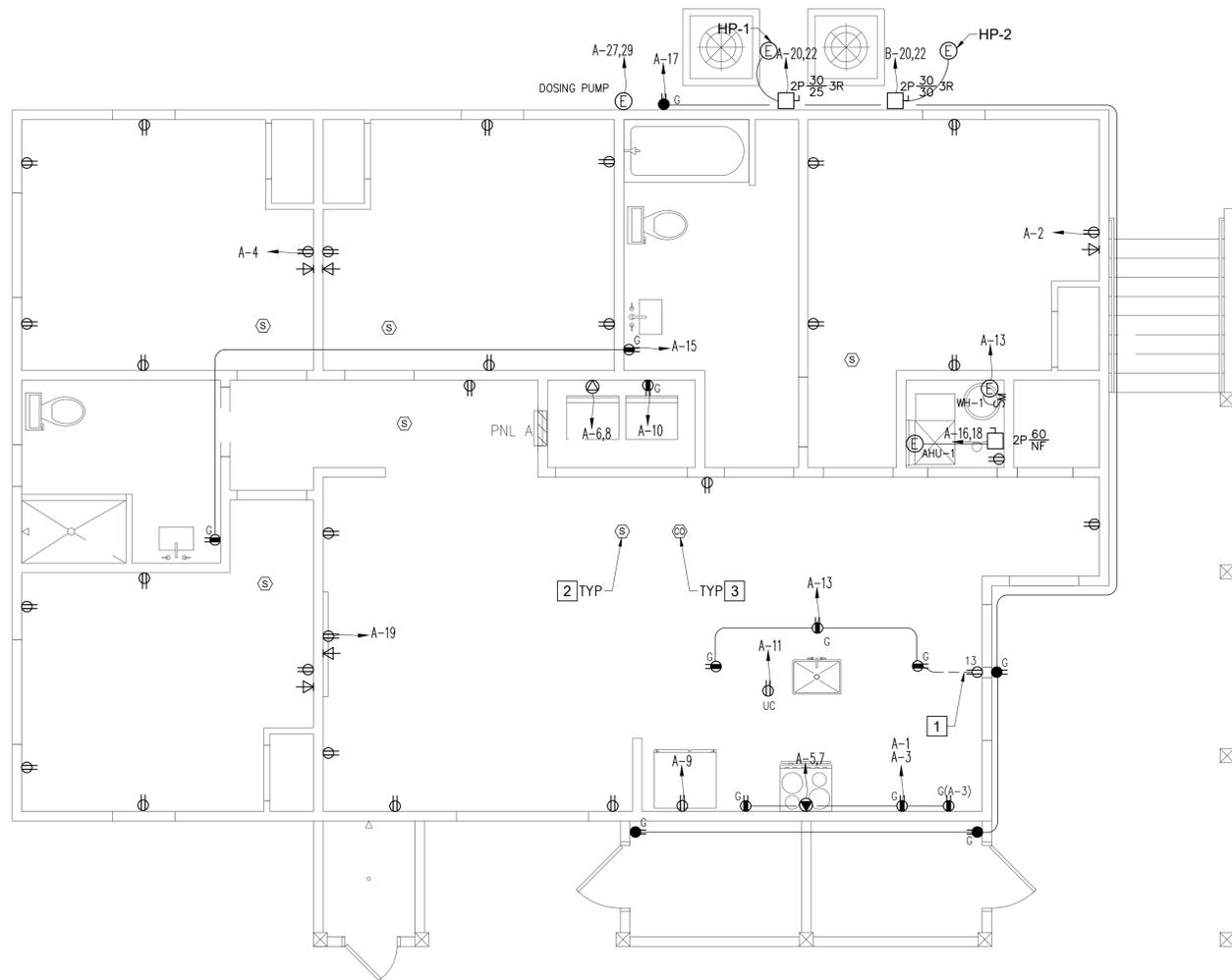
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2. SEE PANEL SCHEDULES ON SHEET E-3.1 FOR ADDITIONAL BRANCH CIRCUIT INFORMATION. ELECTRICAL CONTRACTOR CAN AMEND CIRCUITING AS LONG AS COMPLIANCE TO NEC ARTICLE 210 AND PHASE BALANCE OF PANEL IS WITHIN 3%.
3. SMOKE DETECTORS SHALL BE WIRED TO CIRCUIT "A-24".

NEW WORK NOTES:

(THIS SHEET ONLY)

- 1 CONDUIT AND WIRING SHALL BE RUN THROUGH SLAB TO ISLAND OUTLETS
- 2 TYPICAL CEILING MOUNTED 120V HARDWIRED WITH BATTERY BACKUP SMOKE DETECTOR.
- 3 TYPICAL CEILING MOUNTED 120V HARDWIRED WITH BATTERY BACKUP CO2 DETECTOR.



1 FIRST FLOOR NEW WORK PLAN - POWER AND SPECIAL SYSTEMS
SCALE: 1/4" = 1'-0"



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Facsimile (757) 563-9028

PROJECT NAME:
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Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
**ELECTRICAL FIRST FLOOR
NEW WORK PLAN -
POWER & SPECIAL
SYSTEMS**

**ISSUED FOR
BID**

DRAWN BY: **BPM**

DATE: **9 / 13 / 24**

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

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SHEET:
E2.2

GENERAL WORK NOTES:

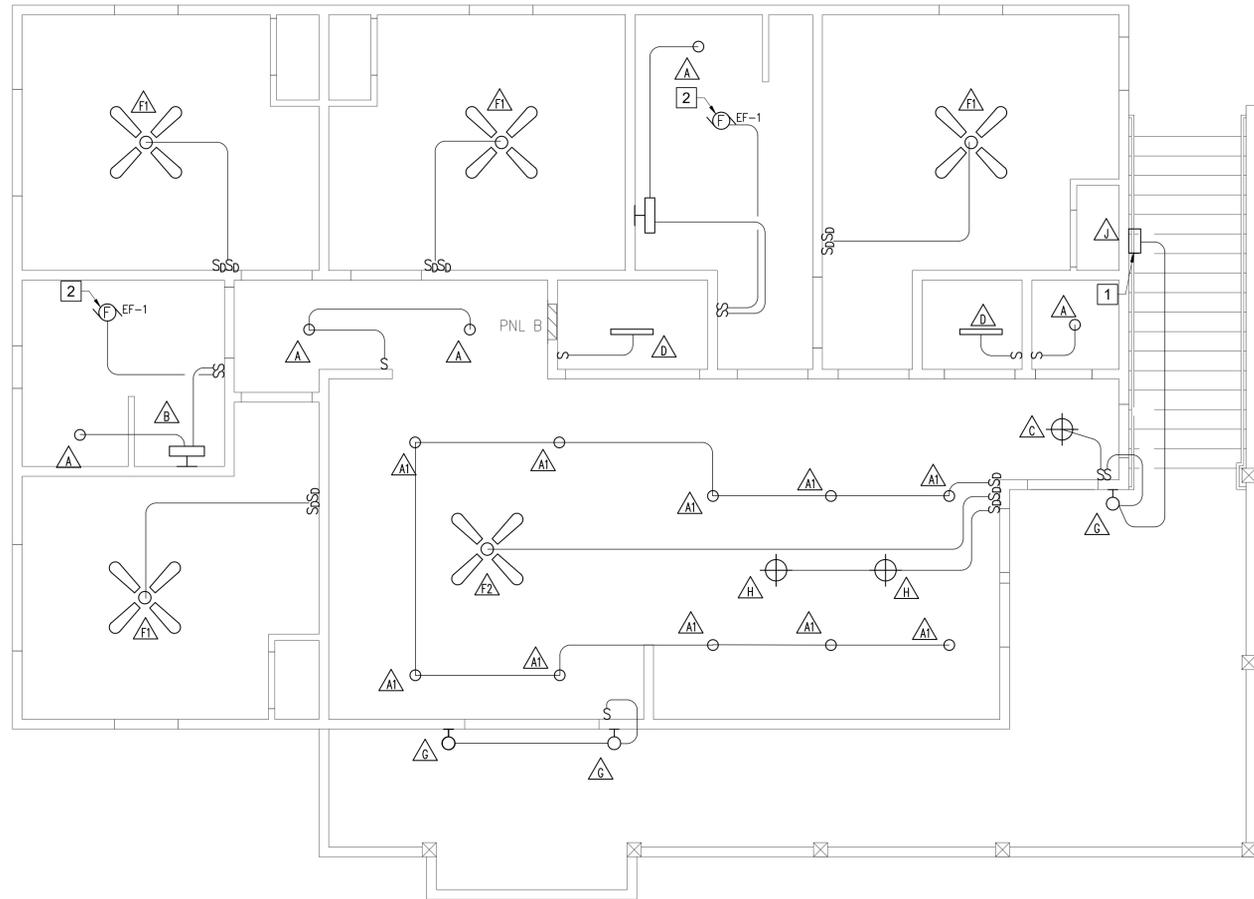
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- SEE PANEL SCHEDULES ON SHEET E-3.1 FOR ADDITIONAL BRANCH CIRCUIT INFORMATION. ELECTRICAL CONTRACTOR CAN AMEND CIRCUITING AS LONG AS COMPLIANCE TO NEC ARTICLE 210 AND PHASE BALANCE OF PANEL IS WITHIN 3%.

NEW WORK NOTES:

(THIS SHEET ONLY)

- MOUNT AT 14'-0" AFF TO BOTTOM OF LIGHT FIXTURE.
- BATHROOM EXHAUST FAN FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR.



1 SECOND FLOOR NEW WORK PLAN - LIGHTING
SCALE: 1/4" = 1'-0"



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PROJECT NAME:
TOWN OF NAGS HEAD
Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
ELECTRICAL SECOND FLOOR NEW WORK PLAN - LIGHTING

ISSUED FOR BID

DRAWN BY: **BPM**

DATE: **9 / 13 / 24**

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

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SHEET:
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GENERAL WORK NOTES:

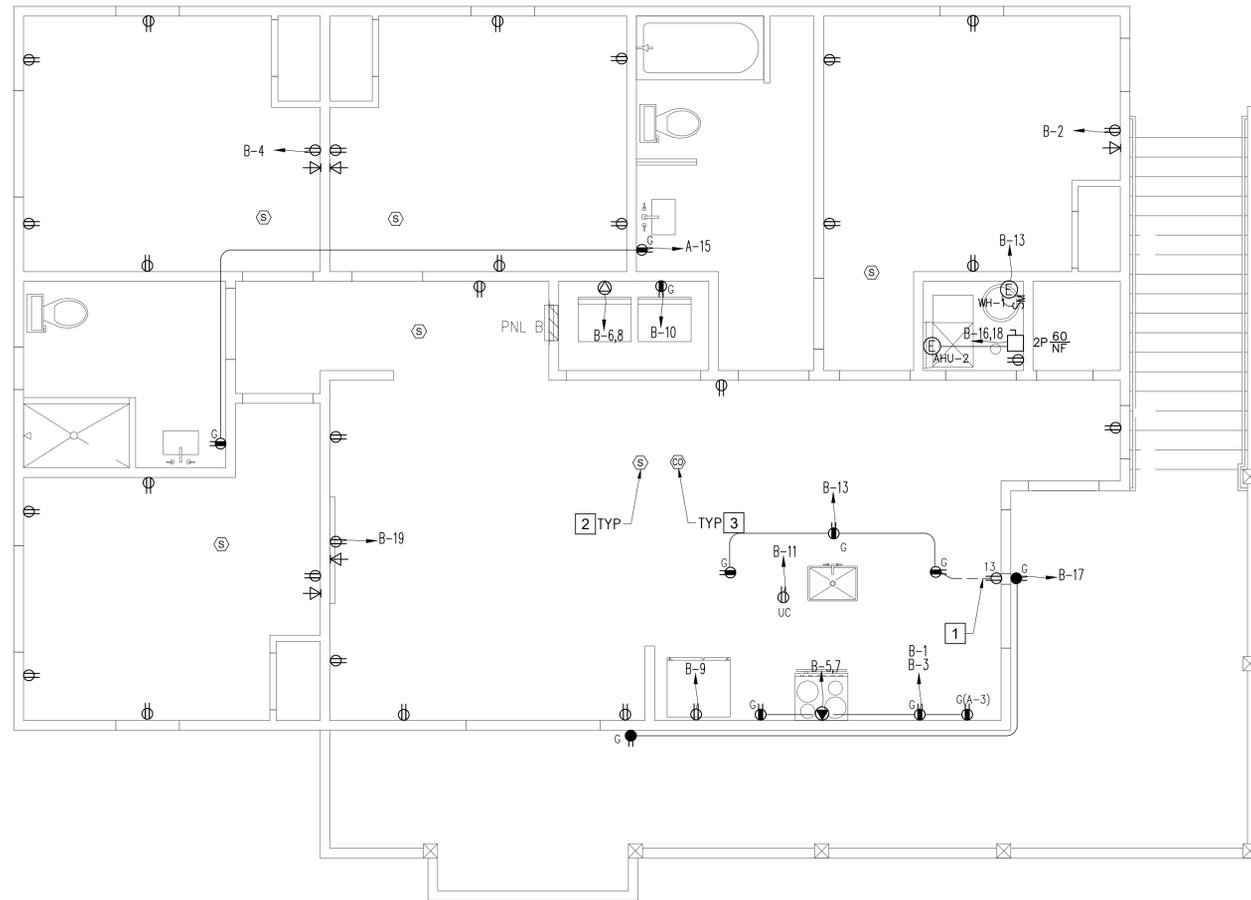
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2. SEE PANEL SCHEDULES ON SHEET E-3.1 FOR ADDITIONAL BRANCH CIRCUIT INFORMATION. ELECTRICAL CONTRACTOR CAN AMEND CIRCUITING AS LONG AS COMPLIANCE TO NEC ARTICLE 210 AND PHASE BALANCE OF PANEL IS WITHIN 3%.
3. SMOKE DETECTORS SHALL BE WIRED TO CIRCUIT "B-24".

NEW WORK NOTES:

(THIS SHEET ONLY)

- 1 CONDUIT AND WIRING SHALL BE RUN THROUGH SLAB TO ISLAND OUTLETS
- 2 TYPICAL CEILING MOUNTED 120V HARDWIRED WITH BATTERY BACKUP SMOKE DETECTOR.
- 3 TYPICAL CEILING MOUNTED 120V HARDWIRED WITH BATTERY BACKUP CO2 DETECTOR.



1 SECOND FLOOR NEW WORK PLAN - POWER AND SPECIAL SYSTEMS
SCALE: 1/4" = 1'-0"

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PROJECT NAME:
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Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
SECOND FLOOR NEW WORK PLAN - AND SPECIAL SYSTEMS

ISSUED FOR BID

DRAWN BY: **BPM**

DATE: **9 / 13 / 24**

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

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SHEET:
E2.4



REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
 DETAIL, RISER DIAGRAM,
 AND PANEL BOARD
 SCHEDULES.

ISSUED FOR BID

DRAWN BY: **BPM**

DATE: **9 / 13 / 24**

SCALE: **NONE**

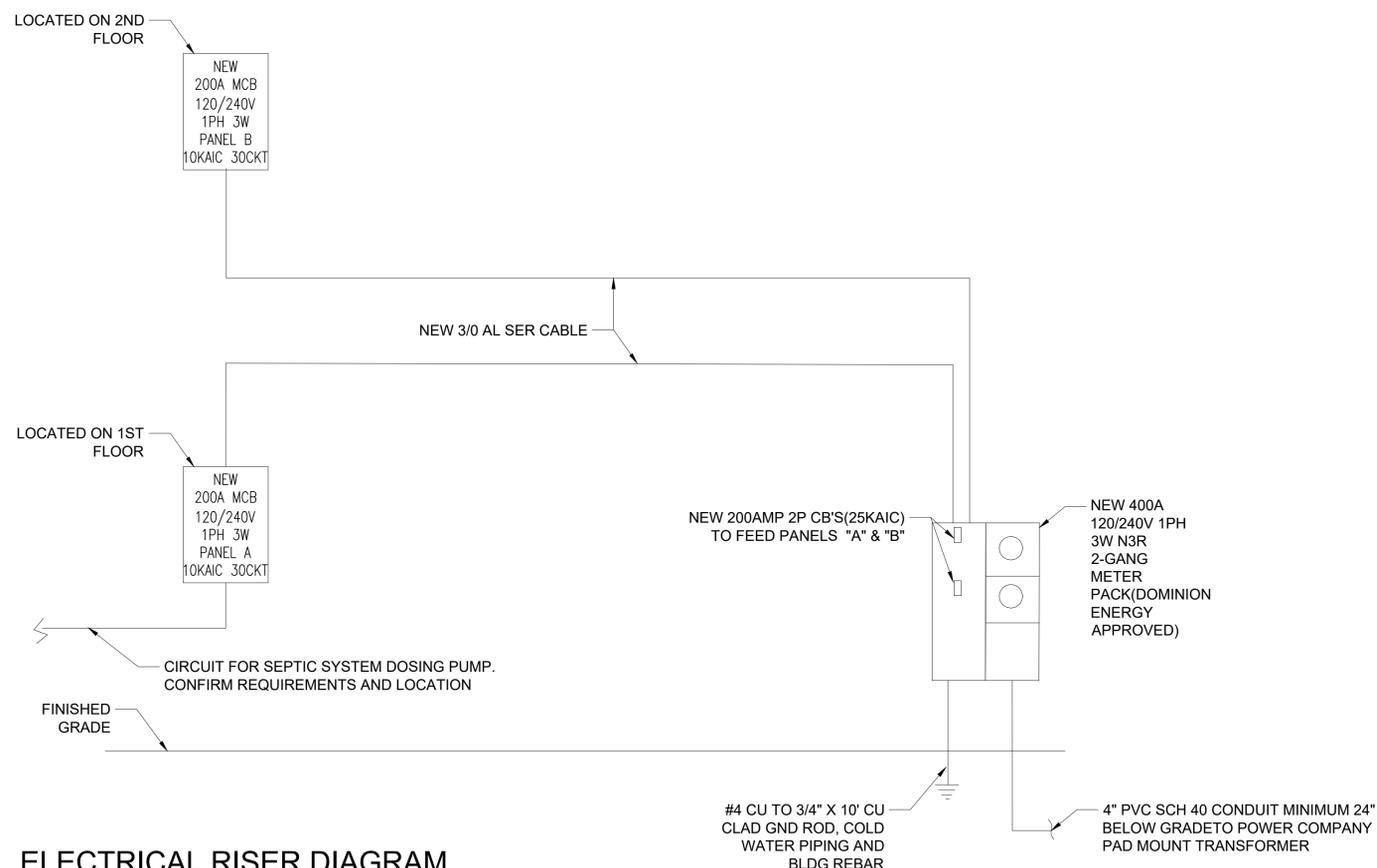
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(NEW) LOADCENTER "A"																
200A MCB, 240/120 VOLT, 1 PHASE, 3 WIRE, 10 KAIC MINIMUM, SURFACE MOUNT																
LOAD SERVED	LOAD (AMPS)		BKR TRIP	WIRE SIZE	GND SIZE	COND SIZE	CKT NO.	PHASE A B	CKT NO.	COND SIZE	GND SIZE	WIRE SIZE	BKR TRIP	LOAD (AMPS)		LOAD SERVED
	A	B												A	B	
KITCHEN COUNTER OUTLETS	12.5		20/1P	12	12		1		2		12	12	20/1P	8.0		SLEEPING UNITS #1 & #2
MICROWAVE		14.0	20/1P	12	12		3		4		12	12	20/1P	8.0		SLEEPING UNITS #3 & #4
RANGE	34.0		50/2P	8	10		5		6		10	10	30/2P	21.0		DRYER
"		34.0					7		8					21.0		"
REFRIGERATOR	10.0		20/1P	12	12		9		10		12	12	20/1P			WASHER
DISHWASHER		9.0	20/1P	12	12		11		12		10	10	30/2P	18.8		WATER HEATER
KITCHEN SINK COUNTER OUTLETS	6.0		20/1P	12	12		13		14							"
BATHROOM GFI OUTLETS		4.0	20/1P	12	12		15		16		10	8	45/2P	32.0		AHU-1
EXTERIOR/STOR. GFI/WP OUTLETS	6.0		20/1P	12	12		17		18					32.0		"
LIVING ROOM		8.0	20/1P	12	12		19		20	3/4"	12	12	25/2P	11.0		HP-1
SPACE							21		22					11.0		"
SPACE							23		24	1/2"	12	12	20/1P	2.0		SMOKE DETECTORS
SPACE							25		26							SPACE
DOSING PUMP(SEPTIC SYSTEM)	12.0		20/2P	10	12	3/4"	27		28							SPACE
"		12.0					29		30							SPACE
TOTAL	68.5	69.0												90.8	92.8	

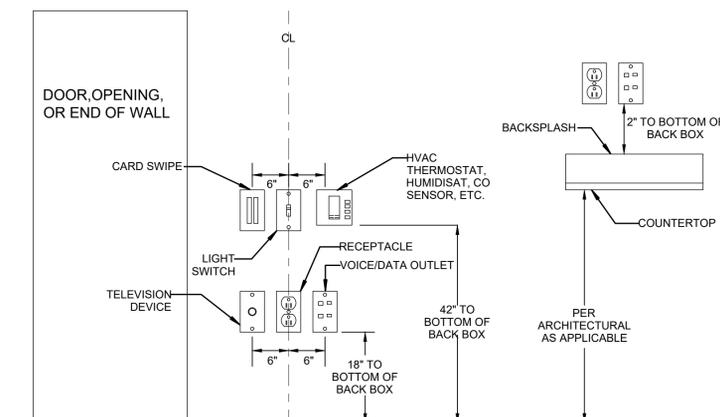
TOTAL CONNECTED AMPS A: 159.3 B: 161.8
 PROVIDE TYPE WRITTEN PANEL DIRECTORY. HAND WRITTEN NOT ACCEPTABLE.
 ALL BRANCH BREAKERS SHALL BE AFCI UNLESS OTHERWISE NOTED.
 BALANCE PHASES WITHIN 5 %

(NEW) LOADCENTER "B"																
200A MCB, 240/120 VOLT, 1 PHASE, 3 WIRE, 10 KAIC MINIMUM, SURFACE MOUNT																
LOAD SERVED	LOAD (AMPS)		BKR TRIP	WIRE SIZE	GND SIZE	COND SIZE	CKT NO.	PHASE A B	CKT NO.	COND SIZE	GND SIZE	WIRE SIZE	BKR TRIP	LOAD (AMPS)		LOAD SERVED
	A	B												A	B	
KITCHEN COUNTER OUTLETS	12.5		20/1P	12	12		1		2		12	12	20/1P	8.0		SLEEPING UNITS #1 & #2
MICROWAVE		14.0	20/1P	12	12		3		4		12	12	20/1P	8.0		SLEEPING UNITS #3 & #4
RANGE	34.0		50/2P	8	10		5		6		10	10	30/2P	21.0		DRYER
"		34.0					7		8					21.0		"
REFRIGERATOR	10.0		20/1P	12	12		9		10		12	12	20/1P			WASHER
DISHWASHER		9.0	20/1P	12	12		11		12		10	10	30/2P	18.8		WATER HEATER
KITCHEN SINK COUNTER OUTLETS	6.0		20/1P	12	12		13		14					18.8		"
BATHROOM GFI OUTLETS		4.0	20/1P	12	12		15		16		10	8	45/2P	32.0		AHU-2
EXTERIOR GFI/WP OUTLETS	6.0		20/1P	12	12		17		18					32.0		"
LIVING ROOM		8.0	20/1P	12	12		19		20	3/4"	12	12	30/2P	14.7		HP-2
SPACE							21		22					14.7		"
SPACE							23		24	1/2"	12	12	20/1P	2.0		SMOKE DETECTORS
SPACE							25		26							SPACE
SPACE							27		28							SPACE
SPACE							29		30							SPACE
TOTAL	68.5	69.0												94.5	96.5	

TOTAL CONNECTED AMPS A: 163.0 B: 165.5
 PROVIDE TYPE WRITTEN PANEL DIRECTORY. HAND WRITTEN NOT ACCEPTABLE.
 ALL BRANCH BREAKERS SHALL BE AFCI UNLESS OTHERWISE NOTED.
 BALANCE PHASES WITHIN 5 %



ELECTRICAL RISER DIAGRAM
 NO SCALE



DEVICE ALIGNMENT DETAIL
 NO SCALE

ELECTRICAL SPECIFICATIONS

1. GENERAL CONDITIONS

1.a. WORK UNDER THIS DIVISION SHALL BE SUBJECT TO THE AIA GENERAL AND SPECIAL CONDITIONS.

2. SCOPE

2.a. THE WORK REQUIRED FOR THIS SECTION INCLUDES LABOR, MATERIALS, EQUIPMENT, APPURTENANCES, SERVICE AND SUPERVISION TO PROVIDE COMPLETE ELECTRICAL SYSTEMS AS SHOWN ON THE DRAWINGS.

3. SPECIFICATIONS, CODES AND STANDARDS

3.a. THE LATEST EFFECTIVE PUBLICATIONS OF THE FOLLOWING STANDARDS, CODES, ETC. FORM A PART OF THESE SPECIFICATIONS:

- 3.a.a. 2021 NATIONAL ELECTRICAL CODE (NEC)
- 3.a.b. STANDARD RULES OF THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS.
- 3.a.c. NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
- 3.a.d. 2021 NC RESIDENTIAL BUILDING CODE
- 3.a.e. 2021 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

3.b. THIS CONTRACTOR SHALL GIVE REQUIRED NOTICES, OBTAIN NECESSARY PERMITS, AND PAY PERMIT FEES.

4. DRAWINGS

4.a. THE DRAWINGS INDICATE DIAGRAMMATICALLY THE EXTENT OF THE WORK. MINOR VARIATIONS IN LOCATION OF EQUIPMENT SHALL BE MADE UPON WRITTEN APPROVAL OF THE ARCHITECT AT NO ADDITIONAL CHARGE.

5. EQUIPMENT

5.a. STARTERS, CONTROLLERS, DISCONNECT, ETC; SHALL BE PROVIDED UNDER THIS DIVISION UNLESS OTHERWISE NOTED.

5.b. POWER WIRING AND POWER CONNECTIONS TO EQUIPMENT SHALL BE PROVIDED UNDER "ELECTRICAL" UNLESS OTHERWISE INDICATED ON THE ELECTRICAL DRAWINGS.

5.c. WHEN SUBSTITUTED MOTORS AND/OR EQUIPMENT REQUIRES ELECTRICAL MODIFICATIONS, THE COST OF THE ELECTRICAL MODIFICATIONS AND COORDINATION SHALL BE INCLUDED UNDER THE DIVISION PROVIDING THE MOTOR AND/OR EQUIPMENT.

6. COORDINATION

6.a. COOPERATE AND COORDINATE THE WORK OF THIS DIVISION WITH OTHER TRADES.

2. MATERIAL AND EQUIPMENT

2.a. ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW, LISTED, AND LABELED BY AN APPROVED TESTING AGENCY.

2.a.a. INSTALL MATERIALS AND EQUIPMENT IN A FIRST CLASS AND WORKMANLIKE MANNER AND RUN CONCEALED THROUGHOUT THE BUILDING, EXCEPT AS INDICATED.

2.b. MATERIAL AND EQUIPMENT SHALL BE PROPERLY STORED AND PROTECTED AT THE PROJECT SITE.

2.c. CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS FOR A COMPLETE INSTALLATION IN ALL RESPECTS READY OF INTENDED USE AND THE STRICT ACCORDANCE WITH STATE AND LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. PAY NECESSARY FEES AND OBTAIN PERMITS. INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY PRECAUTIONS AND PROCEDURES.

2.d. EQUIPMENT AND MATERIALS SHALL BE OF THE TYPE, SIZE AND MANUFACTURERS INDICATED ON THE DRAWINGS OR AN APPROVED EQUIVALENT.

2.e. THE CONTRACTOR SHALL SUPPLY AND INSTALL THE MATERIALS AND EQUIPMENT COVERED BY THE PLANS AND SPECIFICATIONS TO THE OWNER COMPLETE AND IN FIRST CLASS CONDITION IN EVERY RESPECT. HE SHALL GUARANTEE THAT THE MATERIAL, EQUIPMENT, AND WORKMANSHIP SUPPLIED AND INSTALLED BY HIM SHALL BE ENTIRELY FREE FROM DEFECTS AND THAT HE WILL REPAIR OR REPLACE AT HIS OWN EXPENSE, ANY MATERIALS, EQUIPMENT, AND WORKMANSHIP IN WHICH DEFECTS ARE FOUND.

3. SUBSTITUTION OF MATERIAL AND EQUIPMENT

3.a. THE NAME OF A CERTAIN BRAND, MAKE, MANUFACTURER OF DEFINITE SPECIFICATION IS TO DENOTE THE QUALITY STANDARD OF ARTICLE DESIRED. SUBSTITUTION OF ANY OTHER BRAND, MAKE, OR MANUFACTURER, WHICH IN THE OPINION OF THE ENGINEER IS RECOGNIZED THE EQUAL OF THAT SPECIFIED, MAY BE ACCEPTED.

3.b. WHERE THREE OR MORE MANUFACTURERS ARE SPECIFIED, THERE WILL BE NO SUBSTITUTIONS

4. RECORD DRAWINGS

4.a. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SUBMIT (1)ELECTRONIC COPY OF MARKED UP DRAWINGS AND SKETCHES TO THE ARCHITECT.

5. CONDUIT

5.a. CONDUIT AND FITTINGS SHALL CONFORM TO THE FOLLOWING:

- 5.a.a. RIGID STEEL - ANSI C80.1
- 5.a.b. INTERMEDIATE METAL CONDUIT - UL 1242
- 5.a.c. ELECTRICAL METALLIC TUBING (EMT) - ANSI C80.3
- 5.a.d. FLEXIBLE METAL CONDUIT - UL-1
- 5.a.e. PLASTIC CONDUIT (PVC) - NEMA TC-2 AND TC-3

5.b. CONDUIT SHALL BE RUN CONCEALED, EXCEPT CONDUIT MAY BE EXPOSED ABOVE JOIST IN MECHANICAL ROOMS AND SPACES WITH EXPOSED CONSTRUCTION AS APPROVED BY THE ARCHITECT. CONDUIT INDICATED CONCEALED IN WALLS AND ABOVE CEILINGS SHALL BE THIN-WALL TYPE ELECTRICAL METALLIC TUBING FOR SIZES UP TO TWO INCHES.

5.c. INTERMEDIATE METAL CONDUIT SHALL BE PERMITTED IN LIEU OF RIGID WHERE ALLOWED IN ARTICLE 345 OF THE NEC.

5.d. MINIMUM SIZE CONDUIT SHALL BE ONE-HALF INCH WITH LARGER SIZES AS REQUIRED BY THE NATIONAL ELECTRICAL CODE FOR NUMBER OF WIRES CONTAINED THEREIN.

5.e. RIGID CONDUIT FITTINGS SHALL BE THREADED, EXCEPT WHERE RIGID CHANGES TO EMT ABOVE SLAB. FITTING MAY BE THREADLESS TYPE. ELECTRICAL METALLIC TUBE FITTINGS SHALL BE GALVANIZED STEEL; CAST METAL NOT ACCEPTABLE.

5.f. FLEXIBLE CONDUIT SHALL BE GALVANIZED, SINGLE STRIP TYPE. IN AREAS SUBJECT TO MOISTURE, OR WHERE CALLED FOR ON THE DRAWINGS, FLEXIBLE CONDUIT SHALL HAVE PLASTIC COVERING IN ACCORDANCE WITH NEC, ARTICLE 351-A. FITTINGS SHALL BE STANDARD UL APPROVED WITH GROUND CONNECTOR. WATERTIGHT CONNECTORS SHALL BE USED WITH PLASTIC COVERED CONDUIT, FLEXIBLE CONDUIT, MINIMUM 18 INCHES IN LENGTH, SHALL BE USED FOR CONNECTIONS TO MOTORS AND OTHER EQUIPMENT SUBJECT TO VIBRATION, AND FOR CONNECTIONS TO RECESSED OR SEMI-RECESSED FIXTURES.

5.g. EXPOSED CONDUITS SHALL BE RUN PARALLEL AND PERPENDICULAR TO BUILDING CONSTRUCTION AND SHALL BE SUPPORTED AS HEREINAFTER SPECIFIED AND IN ACCORDANCE WITH NEC. THE METHODS OF INSTALLATION SHALL BE REVIEWED BY THE ARCHITECT PRIOR TO INSTALLATION.

5.h. CONDUIT SUPPORTS SHALL BE APPROVED WALL BRACKETS, TRAPEZE, STRAP HANGER OR PIPE STRAPS SECURED TO HOLLOW MASONRY WITH TOGGLE BOLTS; TO METAL SURFACES WITH MACHINE SCREWS; AND TO WOOD WITH WOOD SCREWS. ANY FORM OF TIE WIRE IS UNACCEPTABLE.

5.i. CONDUIT TERMINATIONS ONE AND ONE-QUARTER INCH AND LARGER AND CONDUIT STUBS SHALL HAVE O.Z. TYPE "B" INSULATING BUSHINGS. RIGID CONDUIT TERMINATIONS ONE INCH AND SMALLER SHALL HAVE O.Z. TYPE "A" INSULATING BUSHINGS.

5.j. CONDUITS AND CABLES PASSING THROUGH FIRE RATED ASSEMBLIES SHALL BE SEALED BY APPROVED METHODS OR BY INSTALLING O.Z. FIRE-SEALS TO MAINTAIN "UL" CLASSIFIED FIRE RATING.

6. RECEPTACLE BOXES

6.a. RECEPTACLE BOXES SHALL BE HOT DIPPED GALVANIZED STEEL TYPE WITH STANDARD KNOCKOUTS AS REQUIRED FOR CONDUIT TERMINATION. MINIMUM SIZE OF RECEPTACLE BOX SHALL BE FOUR INCHES SQUARE, ONE AND ONE-QUARTER INCHES DEEP. RECEPTACLE BOXES FOR EXPOSED TILE AND BLOCK SHALL BE PROVIDED WITH SQUARE CORNERED TILE RING, SIZE AS REQUIRED. WHEN USING ROMEX, TYPE NM CABLE BOXES SHALL BE MOLDED PLASTIC OR FIBER STYLE.

6.b. RECEPTACLE BOXES OCCURRING IN FINISHED OUTSIDE WALLS AND WET AREAS SHALL BE CAST AND PROVIDED WITH GASKETS BETWEEN BOX AND WATERPROOF "IN-USE" COVER.

7. WIRING DEVICES

7.a. WIRING DEVICES SHALL BE AS MANUFACTURED BY LEVITON, ARROW-HART, BRYANT, PASS AND SEYMOUR, OR HUBBELL.

7.b. DEVICE PLATES SHALL BE SMOOTH THERMOPLASTIC ON FINISHED WALLS AS REQUIRED.

7.c. DEVICES SHALL BE WHITE.

8. DISCONNECT SWITCHES

8.a. SWITCHES SHALL NEMA TYPE "GD" OR "HD" AS REQUIRED. FUSED SWITCHES SHALL BE NEMA TYPE "HD" UNLESS OTHERWISE INDICATED, WITH CLASS "R" FUSE CLIPS. MAIN DISCONNECT SWITCHES AND SWITCHES RATED 600 VOLTS SHALL BE TYPE "HD" AND HAVE FULL COVER INTERLOCKS AND QUICK-MAKE, QUICK-BREAK MECHANISM.

8.b. FUSED SWITCHES SHALL BE PROVIDED COMPLETE WITH FUSES.

8.c. SWITCHES SHALL BE SQUARE D, GENERAL ELECTRIC, I.T.E., OR WESTINGHOUSE.

8.d. SWITCHES SHALL BE SECURELY MOUNTED TO WALL, STRUCTURE, OR EQUIPMENT. PROVIDE MISCELLANEOUS ACCESSORIES FOR MOUNTING SWITCHES, INCLUDING STEEL ANGLES WHERE REQUIRED.

9. FUSES

9.a. FUSES FOR PROTECTION OF MECHANICAL AND PLUMBING EQUIPMENT SHALL BE "FUSETRON" UL CLASS "RK5" SIZED PER MANUFACTURERS RECOMMENDATION, UNLESS OTHERWISE INDICATED.

10. WIRE AND CABLE

10.a. WIRE AND CABLE SHALL BE TYPE NM (ROMEX) OR MC CABLE..

10.b. WIRE AND CABLE SHALL BE GENERAL ELECTRIC, ANACONDA, ROME, GENERAL CABLE, OR PHELPS DODGE.

10.c. WIRE AND CABLE SHALL BE COPPER 600 VOLT INSULATION, MINIMUM SIZE NO. 12, TYPE "THW", "THWN" OR "THHN" AS APPLICABLE, UNLESS OTHERWISE INDICATED ON DRAWINGS.

10.d. WIRES NO. 10 AND 12 AWG SHALL BE CONNECTED WITH COIL SPRING INSERT "WIRE-NUT" OR "WING-NUT" CONNECTORS MANUFACTURED BY IDEAL INDUSTRIES OR APPROVED EQUAL. CONNECTORS SHALL BE RATED 600 VOLTS. COPPER WIRES NO. 8 AND LARGER SHALL BE JOINED OR TERMINATED WITH PRESSURE TYPE COPPER CONNECTORS.

10.e. WIRE SHALL BE COLOR CODED AS FOLLOWS:

- 10.e.a. 120/240 VOLT SYSTEM
- 10.e.a. PHASE A - BLACK
- 10.e.b. PHASE B - RED
- 10.e.c. NEUTRAL - WHITE
- 10.e.d. GROUND - GREEN

10.f. ELECTRICAL DESIGNS ARE BASED ON COPPER WIRE AND CABLE. (ALUMINUM WIRE AND CABLE SHALL BE PERMITTED FOR FEEDERS AND BRANCH CIRCUITS 40AMPS AND ABOVE.)

11. LIGHTING FIXTURES

11.a. LIGHTING FIXTURES SHALL BE PROVIDED COMPLETE WITH LAMPS, MOUNTING HARDWARE AND ACCESSORIES.

11.b. WHERE RECESSED LIGHTING FIXTURES ARE INDICATED, THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE TYPE FIXTURES WITH THE ACTUAL CEILING BEING INSTALLED. THIS SHALL INCLUDE CHANGES RESULTING FROM ALTERNATE BID ITEMS, CHANGE ORDERS, ETC.

11.c. SURFACE MOUNTED LED LIGHTING FIXTURES SHALL BE MOUNTED INDEPENDENT OF CEILING CONSTRUCTION. LED LIGHTING FIXTURES MOUNTED IN OR ON PLASTER CEILING SHALL ALSO BE MOUNTED INDEPENDENT OF CEILING CONSTRUCTION. WHERE RECESSED LED LIGHTING FIXTURES OCCUR IN LAY-IN TILE OR CONCEALED SPLINE CEILINGS, THE ELECTRICAL CONTRACTOR SHALL INSTALL FIXTURES IN ACCORDANCE WITH ARTICLE 410-16(C) OF NEC AND HAVE THE CEILING CONTRACTOR INSTALL ADDITIONAL SUPPORTING HANGERS WHERE FIXTURES OCCUR, OR SUPPORT FIXTURES INDEPENDENTLY OF CEILING.

11.d. FIXTURES SUPPORTED INDEPENDENTLY OF CEILING SHALL BE HUNG BY STEEL CHANNEL, THREADED RODS AND NUTS, OR AS APPROVED.

11.e. INSULATION SHALL NOT BE PLACED ON TOP OF RECESSED LIGHTING FIXTURES.

12. CUTTING AND PATCHING

12.a. CUTTING, DRILLING, AND CHANNELING REQUIRED FOR THIS WORK SHALL BE DONE UNDER THIS SECTION BY SKILLED MECHANICS OF TRADE INVOLVED.

13. EQUIPMENT MARKING AND PAINTING

13.a. SAFETY SWITCHES, CABINETS, ETC., SHALL BE PROVIDED WITH PERMANENTLY ATTACHED (ADHESIVES NOT ACCEPTABLE) ENGRAVED BAKELITE DESIGNATION PLATES TO INDICATE EQUIPMENT OR CIRCUIT CONTROLLED.

13.b. EXPOSED CONDUIT, SUPPORTS, HANGERS, AND UNFINISHED EQUIPMENT SHALL RECEIVE A MINIMUM OF TWO COATS OF PAINT SUITABLE FOR SERVICE INTENDED. COLORS SHALL BE AS SELECTED OR APPROVED BY THE ARCHITECT.

14. ACCESS DOORS

14.a. THIS CONTRACTOR SHALL FURNISH, AND THE GENERAL CONTRACTOR SHALL INSTALL STEEL ACCESS DOORS WHERE REQUIRED, STYLE NECESSARY FOR SURFACE IN WHICH PLACED. SUBMIT SHOP DRAWINGS OF PROPOSED MATERIAL, INSTALLATION AND EXACT LOCATIONS TO THE ARCHITECT FOR APPROVAL.

15. SUBSTANTIAL COMPLETION

15.a. UPON COMPLETION OF THE ENTIRE WORK, THE CONTRACTOR SHALL PERFORM SUCH TESTS AS REQUIRED BY THE ARCHITECT. THE ARCHITECT SHALL BE GIVEN 48 HOURS NOTICE BEFORE TESTS ARE MADE. THE CONTRACTOR SHALL FURNISH THE ARCHITECT A CERTIFICATE OF APPROVAL FROM THE LOCAL INSPECTION AUTHORITY HAVING JURISDICTION.

16. WARRANTY

16.a. CONTRACTOR SHALL FURNISH WRITTEN WARRANTY, COUNTERSIGNED, AND GUARANTEED BY THE GENERAL CONTRACTOR, STATING THAT THE WORK EXECUTED UNDER THIS DIVISION OF THE SPECIFICATIONS SHALL BE FREE FROM DEFECTS OF MATERIAL AND WORKMANSHIP FOR A PERIOD OF 12 MONTHS FROM DATE OF FINAL ACCEPTANCE. DEFECTS DEVELOPING DURING THAT PERIOD SHALL BE CORRECTED WITHOUT COST TO THE OWNER.

17. FIRE ALARM SYSTEM

17.a. FIRE ALARM PANEL SHALL BE A SUPERVISED, CLASS "B" TYPE WITH DACT. PROVIDE A FIRE ALARM SYSTEM FROM JOHNS BROTHERS SECURITY OR A LOCAL VENDOR IN AREA OF THE PROJECT.



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PME ENGINEER:
 **COASTAL**
ENGINEERING
2406 Princess Anne Road
Suite 200
Virginia Beach, VA 23456
Phone (757) 563-9027
Facsimile(757) 563-9028

PROJECT NAME:
TOWN OF NAGS HEAD
Workforce Housing
425 Health Center Dr.
Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
ELECTRICAL SPECIFICATIONS

ISSUED FOR BID

DRAWN BY: BPM

DATE: 9 / 13 / 24

SCALE: NONE

STAMP:
INCOMPLETE
FOR INTERIM REVIEW
ONLY AND NOT
INTENDED FOR PERMIT
OR CONSTRUCTION
PURPOSES.

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SHEET:
E6.1

HAZARD CLASSIFICATION				DESIGN PARAMETERS					
AREA	DESCRIPTION	CLASSIFICATION (NOTE: 2)	NOTES	AREA	SYSTEM TYPE	DENSITY (GPM/SF)	DESIGN DENSITY AREA (SF)	HOSE DEMAND	REMARKS
1	LIVING AREA	LIGHT HAZARD	1,5	2	WET PIPE	.1	10203	0	1, 2
2	ATTIC	LIGHT HAZARD	4	1	DRY PIPE	.15	4120	0	2

NOTES:

- SPRINKLER DESIGN IN ACCORDANCE WITH NFPA 13D.
- CEILING / FLOOR SPACE IS COMBUSTIBLE CONSTRUCTION, OPEN WEB JOIST FILLED WITH FIBER GLASS BATT INSULATION TO WITH-IN 2" OF FLOOR OR TRUSSES.

LEGEND

NOTE: ALL SYMBOLS BELOW MAY NOT BE USED ON PLANS, SYMBOLS NOT SHOWN BELOW ARE IDENTIFIED WHERE THEY OCCUR.

- 1 NEW WORK NOTE SYMBOL
- * UP-RIGHT SPRINKLER

FIRE HYDRANT FLOW TEST DATA

- CONTACT NAGS HEAD, DEPARTMENT OF UTILITIES FOR FIRE FLOW REPORTS. FIRE PROTECTION CONTRACTOR SHALL ACQUIRE AN UPDATED FLOW DATA PRIOR TO DESIGN, AND BASE THEIR DESIGN ON THE MOST RECENT DATA.
- INITIAL DESIGN CALCULATIONS INDICATE A REQUIRED TWO SPRINKLER HEAD FLOW OF 19.2 GPM AT 43.4 PSI AT THE BUILDING 5'-0" LINE.
- UPON APPROVAL OF FIRE PROTECTION DESIGN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CHANGES AFFECTING THE SYSTEM DESIGN INCLUDING ELECTRICAL REQUIREMENTS AND ALARM CONNECTIONS PRIOR TO COMMENCEMENT OF ANY WORK SO THAT CHANGES CAN BE COORDINATED WITH ALL TRADES.

FIRE PROTECTION NOTES

- FURNISH AND INSTALL A COMPLETE HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM FOR THE NEW BUILDING. THE INCOMING SERVICE SHALL BE HYDRAULICALLY DESIGNED AND INSTALLED TO COVER THE REQUIREMENTS OF NFPA 13D, SPRINKLER, HEAD LOCATIONS AND RISERS SHOWN ON THESE DRAWINGS ARE GENERALLY DIAGRAMMATIC. ALL FIRE PROTECTION PIPING SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES, NFPA-13R-D, AND THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL MAKE ANY ADJUSTMENTS TO MEET THESE REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER. CONTACT LOCAL UTILITY COMPANY FOR REQUIREMENTS CONCERNING VALVE PITS, BACK FLOW PREVENTION DEVICES, METERING DEVICES, FIRE ALARM SYSTEM AND APPROVED PIPING MATERIALS PRIOR TO BIDDING. VERIFY POINT OF CONNECTION TO WATER LINE AND AVAILABLE PRESSURE WITH LOCAL AUTHORITY PRIOR TO BIDDING.
- THE SPRINKLER CONTRACTOR SHALL VERIFY ALL HAZARD CLASSIFICATIONS, DESIGN DENSITIES, DESIGN DENSITY AREAS, AND HOSE DEMANDS WITH NFPA AND THE AUTHORITY HAVING JURISDICTION. ALL DESIGN CRITERIA SHALL BE IN ACCORDANCE WITH NFPA, LOCAL CODES, AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.
- THE CONTRACTOR SHALL COORDINATE ALL PHASES OF HIS WORK (INCLUDING EXACT LOCATIONS OF ALL PIPING AND SPRINKLER HEADS) WITH THE ARCHITECT AND ALL OTHER TRADES PRIOR TO AND DURING THE COURSE OF HIS WORK IN ITS ENTIRETY.
- COORDINATE SPRINKLER HEAD LOCATIONS WITH ALL OTHER TRADES.
- ALL SPRINKLER HEADS IN AREAS WITHOUT FINISHED CEILINGS SHALL BE PENDENT, UPRIGHT OR SIDEWALL AS REQUIRED. AREAS WITH FINISHED CEILINGS SHALL HAVE RECESSED TYPE HEADS UPRIGHT OR SIDE WALL AS REQUIRED. RELATED SPRINKLER PIPING SHALL BE RUN AS TIGHT TO THE STRUCTURE AS POSSIBLE.
- FIRE PROTECTION SYSTEM TO CONFORM TO ALL REQUIREMENTS OF NFPA 13D.
- THE APPROXIMATE BUILDING AREAS ARE AS FOLLOWS:
 - FIRST FLOOR RESIDENTIAL AREA: 1,648 SQ FT
 - SECOND FLOOR RESIDENTIAL AREA: 1,648 SQ FT
- REMOTE SYSTEM DRAINS TO BE INSTALLED AS REQUIRED THROUGH THE EXTERIOR WALL. COORDINATE ALL DRAIN LOCATIONS WITH THE ARCHITECT.
- ANY DISCREPANCIES ENCOUNTERED BY THE CONTRACTOR IN THE REPRESENTATION OF THESE DRAWINGS SHALL IMMEDIATELY BE COORDINATED WITH THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORK.
- THIS FIRE PROTECTION DRAWING IS PROVIDED TO SHOW INTENT SPRINKLED BUILDING IN ACCORDANCE WITH NFPA 13D. FIRE PROTECTION CONTRACTOR TO PROVIDE SHOP DRAWINGS PREPARED AND SEALED BY A LICENSED FIRE PROTECTION ENGINEER WITH ALL PIPE SIZES, SPRINKLER LOCATIONS, ETC. THE SHOP DRAWINGS SHALL BE SUBMITTED TO ALL AUTHORITIES HAVING JURISDICTION AND TO OWNER'S INSURANCE UNDERWRITER FOR APPROVAL. AFTER APPROVAL HAS BEEN OBTAINED FROM THE ABOVE AGENCIES THE SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR FINAL REVIEW.
- THE SPRINKLER CONTRACTOR SHALL OBTAIN ALL REQUIRED FLOW DATA AND POINT OF CONNECTION TO THE WATER SUPPLY AND BASE THEIR HYDRAULIC DESIGN UPON THE FLOW DATA ACQUIRED WITH IN 60 DAYS OF THE COMMENCEMENT OF CONSTRUCTION OR THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION, WHICH EVER IS THE MORE STRINGENT REQUIREMENT.
- REFER TO PLANS FOR APPROXIMATE SPRINKLER SYSTEM COMPONENT LOCATIONS.

NEW WORK NOTES:

(THIS SHEET ONLY)

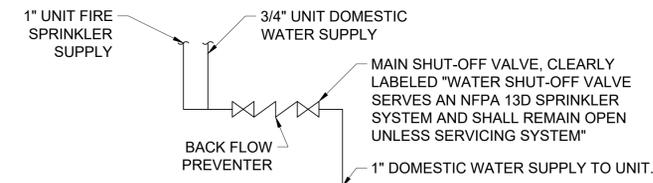
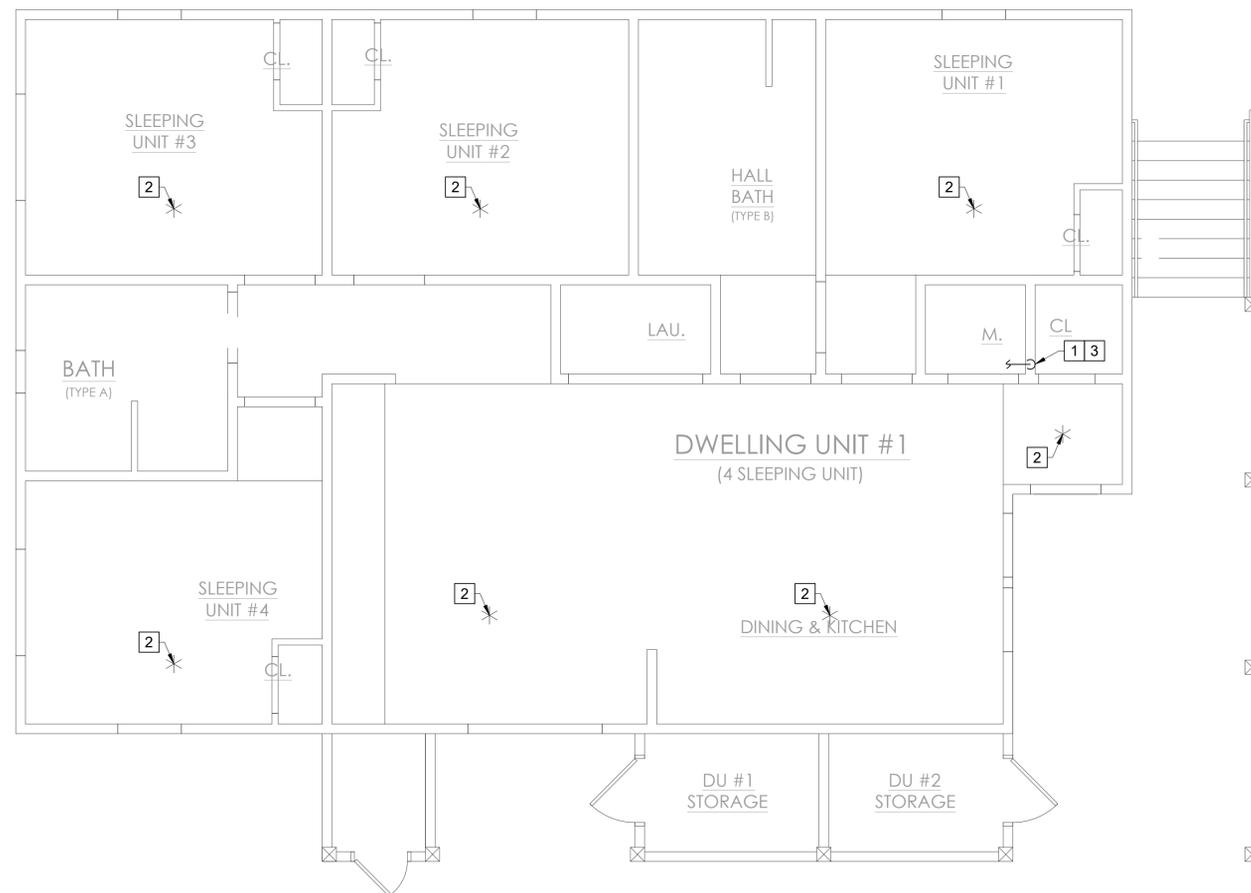
- 1" SPRINKLER OF 1" DOMESTIC WATER SUPPLY.
- SPRINKLER HEAD (LAYOUT AND SPACING IS APPROXIMATE, THE FIRE PROTECTION ENGINEER SHALL PROVIDE FINAL LAYOUT AND SPACING).
- SPRINKLER SYSTEM RISER SHALL TAP 1" SERVICE DOWN STREAM OF THE BACK FLOW PREVENTER.

NOTES TO FIRE PROTECTION CONTRACTOR

THESE DESIGN DOCUMENTS INDICATE APPROXIMATE FIRE SPRINKLER SERVICE AND SPRINKLER HEAD LOCATIONS AND OVERALL SYSTEM INTENT. THESE DRAWINGS SHALL NOT BE USED AS INSTALLATION DRAWINGS. THE FIRE SPRINKLER CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND HYDRAULIC CALCULATIONS FOR PERMITTING AND INSTALLATION OF THE FIRE SPRINKLER SYSTEM. THESE DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE FIRE PROTECTION CONTRACTOR'S REGISTERED ENGINEER OR NICET III OR IV CERTIFIED DESIGNER FOR THE FIRE SPRINKLER PORTION OF THIS WORK.

INSTALLATION/PERMIT DRAWINGS SHALL INCLUDE THE FOLLOWING:

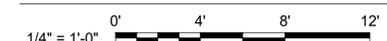
- WORKING DRAWINGS ARE DESCRIBED IN, NFPA-13RD, AT A SCALE OF NOT LESS THAN 1/8" = 1'-0", CONTAINING SPRINKLER DEVICE LOCATIONS, PIPING LAYOUT, DRAWING NOTES AND DETAILS.
- COMPLETE HYDRAULIC CALCULATIONS IN ACCORDANCE WITH APPLICABLE NFPA STANDARDS.
- EQUIPMENT CUT SHEETS OF ALL PRODUCTS INTENDED TO BE INSTALLED ON THIS PROJECT.
- CURRENTLY CONDUCTED FLOW TEST DATE INCLUDING THE FOLLOWING:
 - DATE AND TIME TEST WAS PERFORMED.
 - NAME AND PHONE NUMBER OF PERSON AND COMPANY CONDUCTING THE TEST.
 - STATIC PRESSURE.
 - RESIDUAL PRESSURE.
 - GALLONS PER MINUTE FLOWED.
 - IN COMPLIANCE WITH THE AUTHORITY HAVING JURISDICTION.



SPRINKLER RISER DETAIL - NFPA 13D WET PIPE SYSTEM

NOT TO SCALE

GRAPHIC SCALE



STRUCTURAL ENGINEER:
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PROJECT NAME:
TOWN OF NAGS HEAD
 Workforce Housing
 425 Health Center Dr.
 Nags Head, NC

REVISIONS:	DATE:
ISSUED FOR BID	9 / 13 / 24

DRAWING NAME:
NEW WORK PLAN

ISSUED FOR BID

DRAWN BY: **LKK**

DATE: **9 / 13 / 24**

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

STAMP:
INCOMPLETE
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 OR CONSTRUCTION
 PURPOSES.

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SHEET:
F2.1



This map is prepared from data used for the inventory of the real property for tax purposes. Primary information sources such as recorded deeds, plats, wills, and other primary public records should be consulted for verification of the information contained in this map.

425 W Health Center DR
Nags Head NC, 27959
Parcel: 005688000
Pin: 989209175322

Owners: Town Of Nags Head -Primary
Owner

Building Value: \$523,000
Land Value: \$562,500
Misc Value: \$21,000
Total Value: \$1,106,500

Tax District: Nags Head
Subdivision: Subdivision - None
Lot BLK-Sec: Lot: Blk: Sec:
Property Use: Town Of Nags Head
Building Type: Medical Office Bldg
Year Built: 1975



005688-000 14-989209-011A 02/11

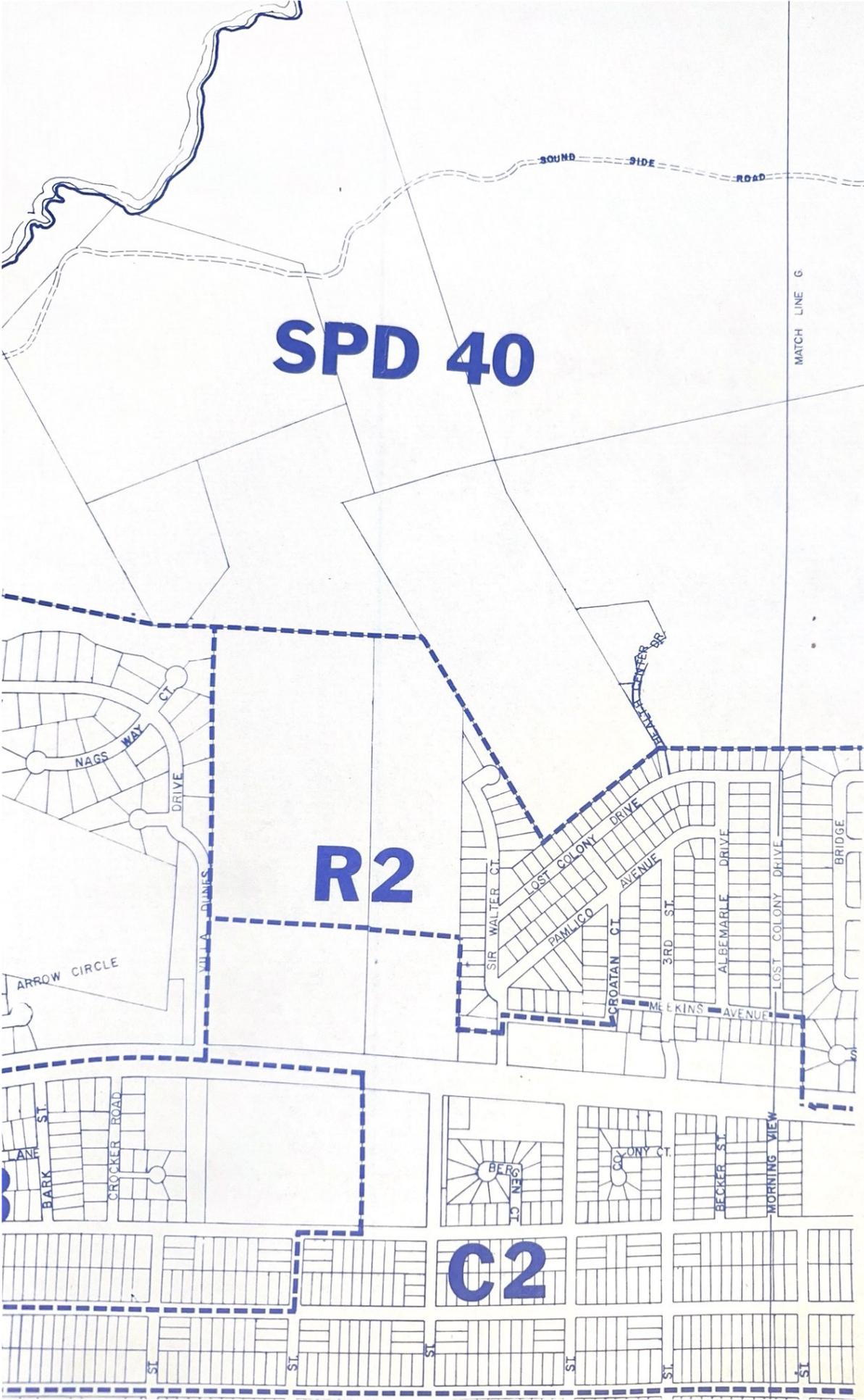
SPD 40

R2

C2

SOUND SIDE ROAD

MATCH LINE 6



NAGS WAY
DRIVE

ARROW CIRCLE

VILLA DUNES

LOST COLONY DRIVE
PAMLICO AVENUE
GROATAN CT
3RD ST
ALBEMARLE DRIVE
MEEKINS AVENUE
LOST COLONY DRIVE

BARK ST
CROCKER ROAD

BIRCH CT
COLONY CT
BECKER ST
MORNING VIEW

BRIDGE

SECTION 8.02

- (2) Minimum required lot width per dwelling unit as measured at the building line for subdivided lots (other than residential cluster) 100 feet.
- (3) Minimum required front yard for subdivided lots (other than residential cluster) 15 feet.
- (4) Minimum required side yard for subdivided lots (other than residential cluster) 15 feet.
- (5) Minimum required rear yard for subdivided lots (other than residential cluster) 15 feet.
- (6) Maximum permissible lot coverage by the principal and all accessory buildings including swimming pools (other than residential clusters) shall not exceed thirty (30) percent of the total lot area.
- (7) Accessory buildings including swimming pools shall meet all yard requirements in this section.
- (8) Planned Residential Developments involving residential clusters or townhouses shall meet all requirements of this ordinance except as herein set out:
 - a. Area requirements within a planned residential development utilizing residential clusters and townhouses shall not be less than: for the first unit - 40,000 square feet; for the second, third and fourth units - 20,000 square feet each; and for the fifth and sixth units - 15,000 square feet each; and 10,000 square feet for each additional unit with the approval of the Planning Board and Board of Commissioners as provided in Section 10.04 of this Ordinance.
 - b. Planned Residential Developments shall be subject to the provisions of Section 10.04 of this Ordinance.
 - c. No unit in a Planned Residential Cluster shall be located within one hundred (100) feet of any other cluster, or the boundary of the area designated for Planned Residential Cluster.

Benjamin Cahoon
Mayor

Michael Siers
Mayor Pro Tem

Andy Garman
Town Manager



Town of Nags Head
Post Office Box 99
Nags Head, NC 27959
Telephone 252-441-5508
Fax 252-441-0776
www.nagsheadnc.gov

Bob Sanders
Commissioner

Megan Lambert
Commissioner

Vacant
Commissioner

PUBLIC NOTICE

NOTICE IS HEREBY GIVEN that the Nags Head Board of Commissioners will conduct public hearings on **Wednesday, November 6, 2024** beginning at 9:00 am in the Board Room of the Municipal Complex, 5401 S Croatan Highway, Nags Head, NC to consider and take action upon the following requests:

Public Hearing to consider a Special Use/Site Plan Review submitted by Quible & Associates, P.C. and Beacon Architecture and Design, PLLC on behalf of the Town of Nags Head for the construction of a 3,460 square foot, two story, eight-bedroom dormitory (duplex) and all associated site improvements. This dormitory is for use by Town of Nags Head workforce, specifically Ocean Rescue and others as approved by the Town Manager. The property is zoned SED-80, Special Environmental District and is located at 425 W. Health Center Drive.

Public Hearing to consider various amendments to the Unified Development Ordinance (UDO) within SPD-C, Village at Nags Head Commercial-1 Zoning District to accommodate a new use, EMS Station

A copy of the application requests will be available for public inspection at the Nags Head Planning and Development Department and the Office of the Town Clerk, Town Municipal Complex, 5401 S. Croatan Hwy, Nags Head, NC 27959, telephone (252) 441-5508 during normal business hours.

As a result of these hearings, substantial changes may be made in the proposals as advertised to reflect objections, debate and discussion at the hearings. Any person desiring to be heard on the proposals as stated above should appear at the time and place specified above.

This is the 14th day of October 2024.

Kelly Wyatt
Planning Director

*For publication in the Coastland Times on Wednesday, October 23rd and on Wednesday, October 30th, 2024.
Please use Nags Head seal and legal print.*



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM F.2.

Public Hearing to Consider Amendments to the UDO within the SPD-C, Village at Nags Head Commercial-1 Zoning District to Accommodate a New Use, EMS Station

Prepared by

Kelly Wyatt, Planning Director

Reviewed by

Kelly Wyatt
Carolyn Morris
John Leidy
Andy Garman

Staff Comments/Recommendation

Staff Analysis and Recommendation - Planning staff finds the proposed text amendment to be consistent with the 2022 Comprehensive Land Use Plan and recommends adoption of the amendment as presented.

Planning Board Recommendation - At their September 17, 2024, meeting, the Planning Board voted unanimously to recommend adoption of the text amendments as presented.

If the Board of Commissioners is inclined to adopt this proposed text amendment, please reference Appendix A for the Statement of Consistency with the Town's adopted Comprehensive Land Use Plan requirements (attached).

Specific Action Requested

Conduct the Public Hearing

Summary

BACKGROUND

In late 2023, staff presented a brief update to the Planning Board regarding the potential future construction of a Dare County EMS Station at 105 W. Seachase Drive. During that update, staff indicated that amendments to the Unified Development Ordinance (UDO) may be required to facilitate this project. The Planning Board reached a consensus at that time, agreeing that staff should move forward with preparing the necessary amendments if deemed appropriate.

Dare County has been working with Oakley Collier Architects on the proposed design for the county's emergency services project. After reviewing the preliminary site development renderings and analyzing the existing SPD-C Village Commercial-1 District standards, the following amendments to the Unified Development Ordinance (UDO) would be necessary:

- **Amend Section 9.36, Table of Uses and Activities** within the SPD-C, Village at Nags Head Commercial-1 District to include "County EMS Station" as a permitted use in the district.
- **Amend Section 9.21.8.2** to reduce the front yard setback requirement from 75 feet to 45 feet. Upon review of this section, it appears that the current regulations were designed to apply primarily to the large

community shopping center within the Village Commercial-1 district (OBX Mall), rather than stand-alone commercial structures that are unaffiliated with or separate from the shopping center. Additionally, Section 9.17, Transportation Standards within the SPD-Village District, specifies a 45-foot setback from US 158, further suggesting that the 75-foot setback applies solely to the shopping center. This amendment would provide clarity and, importantly, would only impact the subject property, as the only other Village Commercial-1 designated property adjacent to US 158 in the Village at Nags Head is the shopping center. The property located at 111 W. Seachase Drive (Rusty Crow Quilt Shop) is zoned Village Commercial-1, however it is not adjacent to US 158.

- **Amend Section 10.16, Required Parking by Use**, to establish a parking standard for the new use category of "County EMS Station."

POLICY CONSIDERATIONS

LU-9, Encourage land uses that serve the needs of both year-round and seasonal residents in support of the town’s overall vision for the community.

Attachments

1. 11 F2 PH UDO EMS Station ord
2. 11 F2 PH UDO EMS Station statement of consistency
3. 11 F2 PH UDO EMS Station pn



AN ORDINANCE AMENDING THE UNIFIED DEVELOPMENT ORDINANCE OF THE TOWN OF NAGS HEAD, NORTH CAROLINA AS IT PERTAINS TO A NEW USE OF COUNTY EMS STATION WITHIN THE SPD-C, VILLAGE AT NAGS HEAD, COMMERCIAL – 1 DISTRICT.

ARTICLE I. Purpose(s) and Authority.

WHEREAS, pursuant to N.C.G.S. § 160D-701, the Town of Nags Head (the "Town") may enact and amend ordinances regulating the zoning and development of land within its jurisdiction and specifically the location and use of buildings, structures and land; pursuant to this authority and the additional authority granted by N.C.G.S. Chap. 160D-702, the Town has adopted comprehensive zoning regulations and has codified the same within the Unified Development Ordinance, Part II of the Town Code, adopted pursuant to N.C.G.S. § 160D-103, which allows the Town to combine certain land development ordinances into a unified ordinance;

WHEREAS, Section 2.4.4.3 of the Unified Development Ordinance provides that the powers and duties of the Planning Board include developing and recommending policies, ordinances, development regulations, administrative procedures, and other means for carrying out plans in a coordinated and efficient manner;

WHEREAS, Section 3.5.1. of the Town Code makes clear that a zoning ordinance text amendment may be initiated by motion of the Board of Commissioners, by motion of the Planning Board, or by application by any person within the zoning jurisdiction of the Town;

WHEREAS, Planning staff requested the Planning Board initiate the amendments necessary to construct a County EMS Station at 105 W. Seachase Drive at their September 2023 meeting;

WHEREAS, the requested amendment is consistent with the 2022 Comprehensive Land Use Plan;

ARTICLE II. Construction.

For purposes of this ordinance amendment, underlined words (underline) shall be considered as additions to existing Town Code language and strikethrough words (~~strikethrough~~) shall be considered deletions to existing language. Any portions of the adopted Town Code which are not repeated herein but are instead replaced by an ellipsis ("...") shall remain as they currently exist within the Town Code.

ARTICLE III. Amendment of the Unified Development Ordinance.

PART I. That **Section 9.36 – Table of Uses and Activities for the SPD-C District**, be amended as follows:

Use Category/Class	Use Type	C1	C2	I	Hotel	SF-DET	SF-ATT	MF	TH	REC	Supp Reg
Institutional	Municipal building, including fire station, police station, and administrative office, <u>and County EMS Station</u>	<u>P</u>		P							

PART II. That **Section 9.28.8.2 Table of Development Standards, Minimum Front Yard**, be amended as follows:

9.21.8.2. Minimum Front Yard. 75 feet from the main complex or the easternmost portion thereof from US 158. Properties that are not affiliated with the community shopping center shall follow the 45-foot front yard setback provided in Section 9.17, Transportation Standards.

PART III. That **Section 10.16, Table 10:2, Required Parking by Use,** be amended as follows:

Use Category/Class	Use Type	Required Parking
<u>Institutional</u>	<u>Emergency Services Facility (Police, Fire, EMS)</u>	<u>1 parking space per employee on duty and 1 parking space per 200 square feet of training facility and customer service areas.</u>

PART IV. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.
This ordinance shall be in full force and effect from and after the 6th day of November 2024.

Benjamin Cahoon, Mayor

ATTEST:

Carolyn F. Morris, Town Clerk

APPROVED AS TO FORM:

John Leidy, Town Attorney

Date adopted: November 6, 2024

Motion to adopt by Commissioner _____

Motion seconded by Commissioner _____

Vote: _____ AYES _____ NAYS

APPENDIX A

SECTION 3.5.4. ACTION BY THE BOARD OF COMMISSIONERS

Pursuant to Section 3.5.4.2. of the UDO, the Board of Commissioners may proceed to vote on the proposed ordinance, refer it to a committee for further study, or take any other action consistent with its usual rules of procedure.

Pursuant to Section 3.5.4.5. of the UDO, prior to voting to adopt or reject the proposed text amendment, the Board should adopt a statement approving the amendment and describing the amendment's consistency with the Town's adopted Comprehensive Plan and explaining why the action taken is reasonable and in the public interest, a statement rejecting the amendment and describing its inconsistency with the adopted Comprehensive Plan and explaining why the action taken is reasonable and in the public interest, or a statement approving the amendment and containing at least all of the following:

- A declaration that the approval is also deemed an amendment to the Comprehensive Plan. The Board of Commissioners shall not require any additional request or application for amendment to the Comprehensive Plan.
- An explanation of the change in conditions the Board of Commissioners took into account in amending the UDO to meet the development needs of the community.
- Why the action was reasonable and in the public interest.

Benjamin Cahoon
Mayor

Michael Siers
Mayor Pro Tem

Andy Garman
Town Manager



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Bob Sanders
Commissioner

Megan Lambert
Commissioner

Vacant
Commissioner

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This is the 14th day of October 2024.

Kelly Wyatt
Planning Director

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AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM G.1.

Update from Planning Director

Prepared by

Kelly Wyatt, Planning Director

Reviewed by

Kelly Wyatt
Carolyn Morris
Andy Garman

Staff Comments/Recommendation

Specific Action Requested

This item is provided for Board information and update.

Summary

This memo provides an overview of selected Planning and Development Department activities, projects, and initiatives. If requested, Staff will be prepared to discuss any of this information in detail at the Board of Commissioners meeting on November 6, 2024.

Monthly Activity Report

Attached for the Board's review is the Planning and Development Monthly Report for September 2024. In addition to permitting, inspections, code enforcement, and Todd D. Krafft Septic Health Initiative activities, staff were involved in the following meetings or activities of note during the month of October:

- Tuesday, October 1st - Technical Review Committee Meeting
- Wednesday, October 2nd - Board of Commissioners Meeting
- Wednesday, October 9th - Committee for Art and Culture Meeting
- Thursday, October 10th - Board of Adjustment Meeting (no hearings scheduled)
- Tuesday, October 15th - Planning Board Meeting
- Tuesday, October 15th - Sand Relocation and Dune Management Contractor Meeting
- Wednesday, October 16th - Board of Commissioners mid-month meeting
- Monday, October 21st - Septic Health Advisory Committee Meeting
- Friday, October 4th at 6:45 pm -Dowdy Park Movie Night, *The Goonies*

Planning Board - Pending Applications and Discussions

The Planning Board's most recent meeting was held on Tuesday, October 15, 2024. The following items were heard:

- Consideration of Sketch Plan Review for construction of a 6,760 square foot Dare County EMS Station located at 105 W. Seachase Drive. Planning Board member David Elder highlighted the benefits of creating interconnectivity along the rear of the property to link the parking lot with the truck bays.

Engineer Mike Robinson acknowledged the suggestion and noted they would explore that adjustment. Overall, the Planning Board expressed appreciation for the design and looks forward to the formal Site Plan Review scheduled for November 19th.

- Consideration of text amendment related to the minimum parking standard for hotel use. The Planning Board voted unanimously to recommend a revised standard requiring 1.2 parking spaces per rentable unit, or one (1) parking space per bedroom—whichever is greater—plus one (1) additional space for every two (2) employees during the largest shift.
- Discussion of Hotel Overlay District. Action Item 2.2 under the Development Goals of the adopted 2024 Strategic Plan directed staff to identify the correct areas of land use incompatibility within the town and correct inconsistencies between the Comprehensive Plan and the Unified Development Ordinance. One area identified for review was the suitability of the current Hotel Overlay District. The Planning Board held a preliminary discussion on this matter and requested that staff provide further information for review at the November 19th meeting.
- Continued discussion related to Accessory Dwelling Units (ADU's). Staff presented the Planning Board with an analysis of comments and survey results from two public input sessions, highlighting several key themes: most respondents supported allowing ADUs in Nags Head, with a preference for long-term rentals; concerns were raised about potential impacts on the town's character; and attached ADUs received greater support than detached units. Staff will continue this discussion with the Planning Board at their November 19th meeting, presenting potential options for consideration.

The Planning Board's next meeting is scheduled for Tuesday, November 19th, 2024. Currently, the agenda is expected to include consideration of a Special Use Permit/Site Plan Amendment for the Soundside Event Site at 6800 S. Croatan Highway, along with continued discussions on the Hotel Overlay District and Accessory Dwelling Units.

Board of Adjustment – Recent and Pending Applications

There were no items for the Board of Adjustments consideration in October 2024.

Additional Updates

- DWMP/Septic Health Advisory Committee - The Septic Health Advisory Committee (SHAC) met on Monday, October 21, 2024. Ella Trainor, a junior at UNC-Chapel Hill and intern with the town through the Outer Banks Field Site at CSI, presented her recent work with Environmental Planner, Conner Twiddy and Deputy Planning Director, Joe Costello on geolocating existing conventional septic systems and drainfields. Her efforts are contributing to an interactive map of the town's septic infrastructure. SHAC members discussed layering data from the Hydromet Cloud, which includes groundwater and water quality logger information, to identify "hotspots" of elevated groundwater and nitrate levels. Additionally, the committee reviewed the status of the Division of Water Infrastructure Grant and expressed interest in increasing the pump-out credit, aiming to cover half of the typical \$500 cost.
- Estuarine Shoreline Management Plan - The town was awarded a \$500,000 grant through the N.C. Resilient Coastal Communities Program to support engineering and design work for estuarine marsh restoration and stabilization projects along Villa Dunes and Soundside Road. The updated scope of work with Moffat & Nichol and Biohabitats includes 60% design documents and necessary permits to prepare for future construction. We are coordinating with consultants to schedule a project kickoff meeting before Thanksgiving. Additionally, the town received a \$500,000 grant from the NC Land and Water Fund to design and construct a living shoreline at the Harvey Sound Access Point, designated as pilot site #3 in the Estuarine Shoreline Management Plan. Staff are also exploring the use of Community Conservation Assistance Program (CCAP) funds and Coastal Federation cost-share funds for a shoreline stabilization

project along the causeway.

- Electric Vehicle Action Plan - Installation of the Level II EV Chargers is complete, and we are awaiting our final inspection from the Department of Environmental Quality(DEC) to receive reimbursement.
- Sand Relocation and Dune Management Cost Share Program - On Tuesday, October 15, Planning staff held a meeting/Q&A session on the sand relocation and dune management cost-share program, attended by equipment operators and property owners. The Sand Relocation season starts on November 15th, with applications opening for review purposes only on November 1st. The Dune Management Cost Share Program will also launch on November 1st.
- Dowdy Park Events/Farmers Market/Holiday Markets/Art & Culture - While Tuesday morning yoga has wrapped up for the season, Event Coordinator Paige Griffin is very busy preparing for the upcoming holiday happenings, including:
 - Dowdy Park Holiday Markets: Saturdays, November 9th & 30th, and December 14th from 9am - noon with a Holiday Night Market on Thursday, December 5th, from 4pm–7pm. Each market will feature an average of 65 vendors.
 - 4th Annual Tree Lighting Ceremony & Santa Visit - Saturday, November 30th from 5pm-7pm.
 - Candy Cane Hunt - Wednesday, December 11th beginning at 4:45pm.

Artist Chris Wheeler has completed the new murals at the skate park. We're planning a community Pizza and Paint Party to showcase the skate park and invite everyone to add their own artwork. Details will be shared as soon as the date is confirmed. Additionally, Manteo High School art students will be painting in the north-south crosswalk at the intersection of Bonnett Street and Wrightsville. They will begin the project on the morning of Saturday, November 16th.

Upcoming Meetings and Other Dates

- Friday, November 1st - Acceptance of sand relocation applications & Dune Management Cost Share opens
- Tuesday, November 5th - Technical Review Committee Meeting
- Wednesday, November 6th - Board of Commissioners Meeting
- Wednesday, November 13th - Committee for Art and Culture Meeting
- Thursday, November 14th - Board of Adjustment Meeting (no hearings scheduled)
- Tuesday, November 19th - Planning Board Meeting
- Wednesday, November 20th - Board of Commissioners mid-month meeting
- Dowdy Park Holiday Markets - Saturdays, November 9th & 30th from 9am - noon.
- Saturday, November 30th - 4th Annual Tree Lighting Ceremony



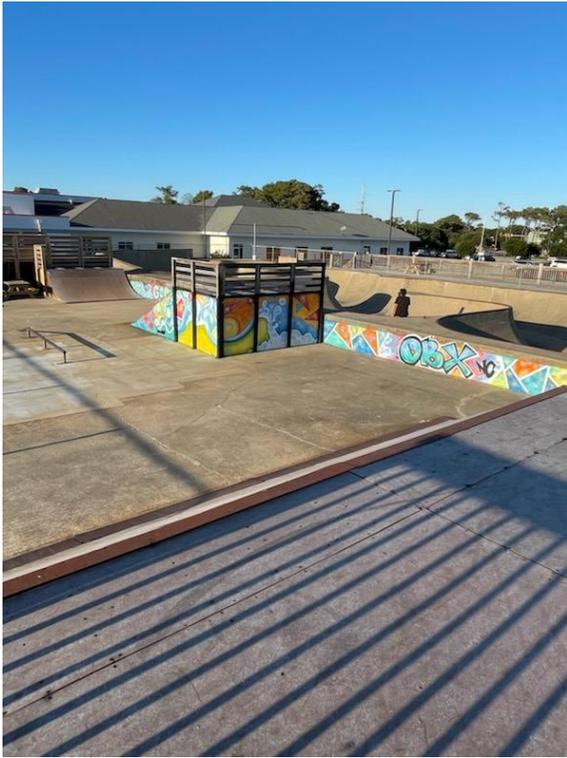
Dowdy Park Farmer's Market

2024 Holiday Markets

Saturday, November 9 | 9 am - 12 pm
Saturday, November 30 | 9 am - 12 pm
Thursday, December 5 | 4 pm - 7 pm
Saturday, December 14 | 9 am - 12 pm

3005 S. Croatan Hwy.





Attachments

1. 11 G1 Planning Monthly Report

**TOWN OF NAGS HEAD PLANNING AND DEVELOPMENT
MONTHLY REPORT
SEPTEMBER 2024**

DATE SUBMITTED: October 7, 2024

	Sep-24	Sep-23	Aug-24	2024-2025 FISCAL YTD	2023-2024 FISCAL YTD	FISCAL YEAR INCREASE/DECREASE
BUILDING PERMITS ISSUED - RESIDENTIAL						
New Single Family	1	1	1	5	2	3
New Single Family, 3000 sf or >	0	3	2	3	3	0
Duplex - New	0	0	0	0	0	0
Sub Total - New Residential	1	4	3	8	5	3
Miscellaneous (Total)	26	34	32	79	89	(10)
<i>Accessory Structure</i>	3	2	4	10	7	3
<i>Addition</i>	1	4	2	3	8	(5)
<i>Demolition</i>	2	0	0	2	0	2
<i>Move</i>	0	0	0	0	0	0
<i>Remodel</i>	5	9	7	17	20	(3)
<i>Repair</i>	15	19	19	47	54	(7)
Total Residential	27	38	35	87	94	(7)
BUILDING PERMITS ISSUED - COMMERCIAL						
Multi-Family - New	0	0	0	0	0	0
Motel/Hotel - New	0	0	0	0	0	0
Business/Govt/Other - New	0	0	0	0	0	0
Subtotal - New Commercial	0	0	0	0	0	0
Miscellaneous (Total)	7	3	3	17	13	4
<i>Accessory Structure</i>	2	2	1	4	7	(3)
<i>Addition</i>	0	0	0	0	0	0
<i>Demolition</i>	0	0	0	0	0	0
<i>Move</i>	0	0	0	0	0	0
<i>Remodel</i>	2	0	2	5	5	0
<i>Repair</i>	3	1	0	8	1	7
Total Commercial	7	3	3	17	13	4
Grand Total	34	41	38	104	107	(3)
SUB-CONTRACTOR PERMITS						
Electrical	30	24	54	145	137	8
Gas	0	4	2	4	13	(9)
Mechanical	28	13	36	109	94	15
Plumbing	5	6	12	19	26	(7)
Fire Sprinkler	0	0	0	0	1	(1)
VALUE						
New Single Family	\$727,000	\$839,282	\$400,000	\$2,761,157	\$1,374,282	\$1,386,875
New Single Family, 3000 sf or >	\$0	\$1,135,000	\$1,998,000	\$2,998,000	\$1,135,000	\$1,863,000
Duplex - New	\$0	\$0	\$0	\$0	\$0	\$0
Misc (Total Residential)	\$774,621	\$1,246,436	\$1,013,209	\$2,579,062	\$3,098,577	(\$519,515)
Sub Total Residential	\$1,501,621	\$3,220,718	\$3,411,209	\$8,338,219	\$5,607,859	\$2,730,360
Multi-Family - New	\$0	\$0	\$0	\$0	\$0	\$0
Motel/Hotel - New	\$0	\$0	\$0	\$0	\$0	\$0
Business/Govt/Other - New	\$0	\$0	\$0	\$0	\$0	\$0
Misc (Total Commercial)	\$949,950	\$19,600	\$47,211	\$1,193,698	\$580,220	\$613,478
Sub Total Commercial	\$949,950	\$19,600	\$47,211	\$1,193,698	\$580,220	\$613,478
Grand Total	\$2,451,571	\$3,240,318	\$3,458,420	\$9,531,917	\$6,188,079	\$3,343,838

**TOWN OF NAGS HEAD PLANNING AND DEVELOPMENT
MONTHLY REPORT
SEPTEMBER 2024**

DATE SUBMITTED: October 7, 2024

	Sep-24	Sep-23	Aug-24	2024-2025 FISCAL YTD	2023-2024 FISCAL YTD	FISCAL YEAR INCREASE/DECREASE
ZONING						
Zoning Permits	39	42	42	116	118	(2)
Soil & Erosion	3	3	3	11	3	N/A
Stormwater Plans	2	6	3	6	9	N/A
CAMA						
CAMA LPO Permits	1	6	0	2	10	(8)
CAMA LPO Exemptions	3	7	5	9	10	0
Sand Relocations						N/A
CODE COMPLIANCE						
Cases Investigated	31	24	31	104	83	21
Warnings	2	3	3	7	7	0
NOVs Issued	29	21	27	96	76	20
Civil Citations (#)	0	1	0	0	1	(1)
Civil Citations (\$)	\$0	\$0	\$0	\$0	\$0	\$0
SEPTIC HEALTH						
Tanks inspected	11	12	7	26	43	(17)
Tanks pumped	7	10	8	21	43	(22)
Water quality sites tested	42	1	21	109	61	48
Personnel Hours in Training/School	24	31	18	81	95	(14)


 Kelly Wyatt, Planning Director



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM H.1.

Committee Reports

Prepared by

Brittany Phillips, Deputy Town Clerk

Reviewed by

Brittany Phillips

Carolyn Morris

Staff Comments/Recommendation

Specific Action Requested

Provided for Board information and update.

Summary

At the November 6, 2024 Board of Commissioners meeting, Board members will provide reports from meetings they have attended on behalf of the Town.

Attachments

None



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM H.2.

Consideration of Amendment To Traffic Control Map Re: S. Linda Lane

Prepared by

Perry Hale, Police Chief

Reviewed by

Perry Hale
Carolyn Morris
Andy Garman

Staff Comments/Recommendation

Staff recommends approval of the requested Traffic Control Map Amendment

Specific Action Requested

To ensure continued vehicular access of emergency vehicles and sanitation trucks, it is recommended to designate the area of the cul-de-sac on S. Linda Lane, "No Parking Between Signs / Tow Away Zone"
Request Board consideration of attached ordinance amending the Traffic Control Map as proposed.

Summary

As part of the Old Nags Head Place drainage restoration project, the center section of the S. Linda Lane cul-de-sac was removed and transformed into a rain garden to help alleviate long-standing drainage issues. A 24-foot wide vehicular surface was maintained around the cul-de-sac to ensure continuous circulation for emergency vehicles and sanitation trucks. However, during peak tourist season, vehicles often park around the cul-de-sac, restricting traffic flow. This situation poses a public safety risk by limiting emergency vehicle access to the houses fronting the cul-de-sac. Therefore, we request the installation of three "No Parking Between Signs-Tow Away Zone" signs around the cul-de-sac portion of Linda Lane to ensure continued access and vehicle circulation.



Attachments

1. 11 H2 TCM NP-TAZ Linda Lane ord



ORDINANCE AMENDING THE NAGS HEAD TRAFFIC CONTROL MAP

BE IT ORDAINED by the Board of Commissioners of the Town of Nags Head, North Carolina, that the Nags Head Traffic Control Map is hereby amended as follows:

- PART I.** Designation of *No Parking Between Signs – Tow-Away Zone* at the following location:
- Cul-de-sac on S Linda Lane in the Old Nags Head Place Subdivision
- PART II.** All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.
- PART III.** This ordinance shall become effective upon notation being made on the Nags Head Traffic Control Map and the erection of appropriate signage.

This the 6th day of November 2024.

Benjamin Cahoon, Mayor
Town of Nags Head

ATTEST:

Carolyn F. Morris, Town Clerk

APPROVED AS TO FORM:

John Leidy, Town Attorney

ADOPTED November 6, 2024

MOTION TO ADOPT BY:
SECONDED BY:
VOTE: __ AYES __ NOES



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM H.3.

Discussion of Scope for Design/Engineering of 2026/2027 Beach Nourishment Project
- Consideration of Amendment to Beach Nourishment Maintenance Capital Project Ordinance

Prepared by

David Ryan, Town Engineer

Reviewed by

David Ryan
Carolyn Morris
Andy Garman

Staff Comments/Recommendation

Staff recommends approval of the requested professional services task order and amendment to the Beach Nourishment Capital Project Ordinance

Specific Action Requested

Staff requests authorization for the Town Manager to execute the attached professional services task order with Moffatt & Nichol.

Request Board consideration of amendment to the Beach Nourishment Maintenance Capital Project Ordinance in the amount of \$481,940 to permit the outlined scope of work.

Summary

Results from the annual beach condition survey were presented to the Board of Commissioners by the town's engineering consultants, Moffatt & Nichol, at the October 2nd meeting. An analysis of the field survey data indicated accelerated erosion along the last mile of the beach nourishment project limits along with localized erosion in several of the northern reaches.

With the recent adoption of the Multi-Decadal Beach Nourishment Plan, the Board of Commissioners approved a master plan which considers the next 50 years of nourishment planning along the Town's shoreline. As a part of the planning process, the volumetric threshold to trigger the next re-nourishment project was re-evaluated and reach-specific volumetric triggers developed based on a level of protection analysis, (nourishment triggers will be described in greater depth under Agenda Item J.1).

Localized segments of Reaches 3 and 4 have profiles below the trigger volumes in conjunction with localized segments of Reaches 1 and 2 closely approaching the specified triggers. Given the results, the Board may want to consider accelerating the planning for the next beach nourishment project.

The consulting firm of Moffatt & Nichol has prepared a proposal for the planning portion of the next beach nourishment project which includes preliminary design, permitting, and preparation of construction plans and specifications. A capital project ordinance amendment in the amount of **\$481,940** is attached and incorporates the Coastal Storm Damage Mitigation grant.

Attachments

1. 11 H3 NH 2026/2027 Beach Nourishment Engineering and Permitting Scope
2. 11 H3 BN Cap Proj amend 13 ord



TASK 16 INTRODUCTION

Annual monitoring of the Town of Nags Head (Town) beach and nearshore system, and conclusions from the Town's Beach Nourishment Master Plan, indicate that the summer of 2026 or 2027 is a likely appropriate timeframe for the next large-scale sand nourishment project on the Town's beaches. It is expected that a summer 2026 or 2027 nourishment project would require on the order of approximately 2.2 million cubic yards (cy) of sand, to be obtained by hopper dredge (and/or hydraulic cutterhead dredge) from previously-investigated borrow areas located within State waters offshore of the Nags Head oceanfront.

The scope of Task 16 is proposed to provide for the engineering design, permitting coordination, and preparation of construction documents for the Town as it implements this next Town-wide beach nourishment project.

Note: The Town's plan to nourish its beaches in 2026 or 2027 is based on an assumption that no other large beach restoration projects will be needed between now and then. If a severe coastal storm event incurs the need for emergency beach restoration, i.e. such as the Town pursued in collaboration with FEMA under FEMA's Public Assistance program Category G reimbursement, it is understood that such an event may change the extent and timing of the Town's next non-Federally funded beach nourishment project.

TASK 16 SCOPE OF WORK

M&N will provide professional services as described in the subtasks below to assist the Town to execute its next Town-wide beach nourishment project in accordance with Town policies and any applicable State of North Carolina procurement practices, and in compliance with applicable State and Federal environmental regulations. The project requires the following tasks:

Task 16.1 – Project Planning, Meetings and Coordination with Agencies and Stakeholder Groups

M&N will attend meetings and provide coordination services related to the beach nourishment project development, acquiring the necessary permits and addressing citizen and other stakeholder concerns. These will include meetings with Town staff and elected officials; regulatory and other governmental agencies such as NCDWM and USACE (and agencies invited by those lead agencies to comment on the permit application); potential construction contractors; and interested or concerned citizens. M&N's proposed fee for Task 16 includes an assumption of up to four (4) in-person meetings in Nags Head or in Washington, NC, and up to four (4) virtual meetings during the course of the 2026 or 2027 nourishment project development. Budget is included to develop presentations for these meetings, when needed.

Task 16.2 – Preliminary Engineering Design and Drawings Development

M&N will develop a preliminary (approximately 70% completion) set of engineering drawings and specifications for the proposed beach nourishment project. The preliminary engineering drawings will consist of preliminary plans and typical cross-sections for a proposed project that would restore the beach berm to the widths and volumes identified in the Beach Nourishment Master Plan. It is expected that the 2026 or 2027 beach nourishment project extent will include the nourished oceanfront of the Town of





Nags Head, from Bonnett Street in the north to the national park boundary adjacent to McCall Court in the south. The proposed berm width will vary along the Project area to achieve a distribution of alongshore fill density to be discussed and agreed with Town staff during project development.

M&N will compile existing data available for the project including available beach surveys and geophysical / geotechnical information collected by the M&N team and by others, and this existing data will become the base data set for the 2026 or 2027 beach nourishment design.

M&N will develop a new digital elevation model of the current survey at the time of preliminary design development (expected to be the most recent annual monitoring survey) to serve as the base map for the permit drawings and preliminary construction drawings.

M&N will identify the most suitable subsection of the borrow area S1 and verify the volume of beach compatible material available for use in the 2026 or 2027 nourishment project.

Deliverables from Task 16.2 to the Town will include:

- Preliminary construction plans and specifications at an approximate 70% level of completion, for Town review and comment prior to preparation of final plans and specifications for project bidding; and
- Preliminary Engineer's Opinion of Probable Construction Cost (OPCC) for the project.

Task 16.3 – Environmental Technical Documents and Permitting

M&N will prepare application packages for the Town to acquire state and federal permits for the project. Agency coordination and stakeholder interaction is expected to be an important part of this project. M&N will participate in an agency pre-project scoping meeting to determine appropriate documentation necessary to support permitting and regulatory review. M&N staff will be available for one additional agency meeting, if necessary, as the project progresses, or for public input.

M&N will work with the Town and with the U.S. Army Corps of Engineers (USACE), NC Division of Coastal Management (NCDQM) and NC Division of Water Resources to obtain permits to allow the Project to proceed. It is expected that the permit application will be similar to and will incorporate lessons learned from prior permits issued for the Town's 2019 beach nourishment and the Town's 2022 post-Dorian beach restoration. The permit drawings will be based on the preliminary engineering plans developed in Task 16.2, and the design of the berm restoration and the construction procedures to be followed will be in accordance with agency requirements. M&N will work closely with permit personnel to identify their requirements and restrictions.

Deliverables from Task 16.3 to the Town will include:

- Permit drawings consisting of preliminary plans and typical cross-sections and construction notes, along with a project narrative for coordination with permitting agencies;
- Notes / minutes of meetings and coordination with permitting agencies; and
- Permit applications and related correspondence occurring during permit review and processing.

Task 16.4 – Final Plans and Specifications and Bid Documents

M&N will develop a complete set of bid documents for advertisement by the Town. This will include a complete set of construction drawings, technical specifications, general provisions, and other necessary documents that form the complete bid package, and the Engineer's Opinion of Probable Construction Cost (OPCC) confirming M&N's opinion that the project can be constructed within the Town's available funds for the project. The preliminary plans will be revised based on the updated monitoring survey conducted prior to construction. It is assumed that the Town will be responsible for any right-of-



way/easement acquisitions as well as identification of staging areas.

Deliverables from Task 16.3 to the Town will include:

- A Prefinal set of plans and specifications for final review by the Town before submittal of the Final signed and sealed bid documents.
- Final bid documents, signed and sealed as necessary by a licensed North Carolina Professional Engineer, for the Town to use in project bidding.

TASK 16 EXCLUSIONS FROM SCOPE

This present Task 16 scope of work does not include any scope or fee for obtaining any new topographic or hydrographic (bathymetric) surveys, nor geophysical or geotechnical field data, nor laboratory testing.

It is assumed that the annual beach monitoring surveys, typically conducted by McKim and Creed under separate contract with the Town, would provide the necessary beach and nearshore topographic information for design and permitting. It is also expected that any bathymetry surveys of the borrow area could be conducted by McKim and Creed under their contract with the Town.

It is noted that permitting agencies required supplemental geotechnical borings and sediment analysis of the borrow areas during the 2022 post-Dorian project permitting. However, it is currently expected that the geophysical and geotechnical field investigations conducted in 2022 and 2023 for the Town's Beach Nourishment Master Plan would provide sufficient information to support the permitting of the proposed 2026 or 2027 beach nourishment project.

Services related to project bidding, negotiation, and award as well as construction observations and administration are not included in this scope of services.

TASK 16 PROJECT COST

The total estimated fee for the 2026 or 2027 Town Beach Renourishment Project tasks inclusive of all efforts is lump sum of **\$481,940.00**, including expenses for reproduction and travel to the Town or Washington, NC for meetings. This fee excludes any additional survey, geophysical, geotechnical or environmental field investigations. If these are deemed necessary during design and permitting of the project, an additional scope and fee will be submitted to the Town for review and approval.

M&N proposes to invoice the Town monthly on a percent complete basis by Task. Our invoice format can be tailored to meet the Town's requirements and preferences, and the invoice would generally be accompanied by a cover letter or cover sheet summarizing progress on the Task during the invoice period.





The fees for each of these subtasks are summarized below:

Task 16: 2026 or 2027 Beach Renourishment Project	M&N Fee
Task 16.1 – Project Planning, Meetings and Coordination with Agencies and Stakeholder Groups	\$86,500.00
Task 16.2 – Preliminary Engineering Design and Plan Development	\$132,460.00
Task 16.3 – Environmental Technical Documents and Permitting	\$165,140.00
Task 16.4 – Final Plans and Specifications and Bid Documents	\$97,840.00
Total for Task 16	\$481,940.00

TASK 16 PROJECT SCHEDULE

The total project duration is expected to be approximately **18 months** to complete design and permitting. At this time, project construction is expected to occur in the summer of 2026 or 2027, with a construction contract end date of approximately October of the corresponding year; this construction timeframe may vary with storm conditions, beach evolution, and the contracting environment over the next two to three years.



BEACH NOURISHMENT MAINTENANCE CAPITAL PROJECT ORDINANCE AMENDMENT #13

BE IT ORDAINED by the Governing Board of the Town of Nags Head, North Carolina, that, pursuant to Section 13.2 of Chapter 159 of the General Statutes of North Carolina, the following capital project ordinance as adopted December 16, 2020, amended February 3, 2021, amended September 1, 2021, amended January 5, 2022, amended August 3, 2022, amended October 5, 2022, amended December 7, 2022, amended December 21, 2022, amended March 1, 2023, amended August 2, 2023, amended February 7, 2024, amended August 7, 2024, amended October 2, 2024, is hereby further amended as follows:

Section 1. The project authorized is a locally funded beach nourishment project to be financed by appropriation of Beach Nourishment Capital Reserve Fund Balance and grants committed by the Federal Emergency Management Agency (FEMA), the N.C. Department of Public Safety (NCDPS), and the N.C. Department of Environmental Quality (NCDEQ).

Section 2. The officers of this unit are hereby directed to proceed with the capital project within the terms of the budget contained herein.

Section 3. The following amounts are appropriated for the project:
Beach Nourishment Restoration-2022 Project

Engineering and construction oversight	\$ 1,002,636
Pumping Costs	6,175,419
Mobilization/Demobilization	5,023,000
Professional fees	793,000
Surveying and monitoring	552,200
Sand fencing	161,000
Capital outlay-other	1,070,500
Sprigging	616,750
Contingency	<u>98,359</u>
	<u>\$ 15,492,864</u>

The following amounts are appropriated for the project:
Beach Nourishment Restoration-2027 project

Engineering and construction oversight	<u>\$ 481,940</u>
--	-------------------

Section 4. The following revenues are anticipated to be available to complete this project:

Intergovernmental Grants	\$14,200,982
Contribution from Capital Reserve Fund	<u>1,773,822</u>
	<u>\$ 15,793,864</u>

Section 5. The Finance Director is hereby directed to maintain within the Capital Project Fund sufficient detailed accounting records to satisfy federal, state, and local regulations.

Section 6. The Finance Director is directed to report, on a quarterly basis, on the financial status of each project element in Section 3.

Section 7. The Budget Officer is directed to include a detailed analysis of past and future costs and revenues in this capital project in every budget submission made to this Board.

Section 8. Copies of this project ordinance shall be furnished to the Clerk of the Governing Board, and to the Budget Officer and Finance Director for direction in carrying out this project.

Section 9. The Town Manager, or in his absence his designee, is hereby authorized to execute change orders or amendments to contracts in amounts up to \$50,000 appropriated from contingency when it contains sufficient funds. The Budget Officer is authorized to reallocate appropriations between contingency and the various objects of expenditures as a result. Such changes shall be reported to the Governing Body at the next regular meeting.

Section 10. In case of emergency which threatens lives, health, and safety of public, the Town Manager may execute contractual documents and authorize expenditures in an amount necessary to meet the emergency so long as such amount does not exceed the amount in the contingency account not to exceed \$125,000 and the expenditure is reported to the Board of Commissioners as soon as possible, and the appropriate budget amendments are submitted at the next regular meeting.

Amended this 6th day of November 2024.

Benjamin Cahoon, Mayor

ATTEST:

Carolyn F. Morris, Town Clerk



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM J.1.

Presentation – Moffatt & Nichol - Time Specific 11 am

- Consideration of Update to the Town's Beach Monitoring and Maintenance Plan
- Discussion of Beach Nourishment Triggers

Prepared by

David Ryan, Town Engineer

Reviewed by

David Ryan
Carolyn Morris
Andy Garman

Staff Comments/Recommendation

Staff requests Board of Commissioners consideration for adoption of the Beach Monitoring and Maintenance Plan as presented.

Specific Action Requested

Provided for Board consideration to adopt the presented Beach Monitoring and Maintenance Plan

Summary

The purpose of the Beach Monitoring and Maintenance Plan (BMMP) is to: (1) Provide a brief overview of the morphological setting of the Town of Nags Head; (2) Detail the construction of the Town of Nags Head's initial and subsequent beach nourishment projects and how those projects were funded; (3) Specify the physical beach monitoring activities; (4) Detail the beach maintenance planning guidelines; and (5) Relate a plan for periodic renourishment funding. The attached document updates the Town of Nags Head's previous Beach Monitoring and Maintenance Plan, dated August 2011.

A primary point of emphasis with the BMMP update is to maintain eligibility with Federal Emergency Management Agency (FEMA) guidelines and applicability for Public Assistance. This plan documents the eligibility of the Nags Head beaches for post-disaster assistance under the Public Assistance Program administered by FEMA via authority of the Stafford Act (FEMA, 2020). Funding from this program could be available to reimburse costs associated with replacing beach sand removed from a beach by a Federally declared disaster event.

The Town of Nags Head's nourished oceanfront qualifies as an improved beach as the initial and subsequent beach nourishment projects were designed by qualified, licensed engineers and permitted by State and Federal regulatory agencies. Additionally, a monitoring plan and maintenance program involving periodic renourishment of sand was established along with the initial project in 2011. This report provides updates to the monitoring protocols as well as the triggers to initiate subsequent nourishment events, in alignment with the Nags Head Multi-Decadal Beach Nourishment Master Plan, adopted by the Town in June 2024. The change in maintenance volumetric triggers will be discussed as part of the presentation.

This updated BMMP provides the required documentation for the Town to support eligibility of the nourished oceanfront. If adopted, the final step would include plan approval through FEMA.

Beth Sciaudone, Ph.D., PE and Ayse Karanci, PhD, PE from the consulting firm of Moffat & Nichol will present an overview of the BMMP and will be available to answer questions from the Board.

Attachments

1. 11 J1 Updated BN Monitoring and Maintenance Plan

FINAL REPORT

Produced for the Town of Nags Head, NC
October 2024



moffatt & nichol

BEACH MONITORING AND MAINTENANCE PLAN

Town of Nags Head, North Carolina



Beach Monitoring and Maintenance Plan

Prepared for:



October 2024

Prepared by:



moffatt & nichol

Document Verification

Client	Town of Nags Head
Project name	Nags Head Beach Nourishment Master Plan
Document title	Nags Head Beach Monitoring and Maintenance Plan
Document sub-title	-
Status	Report
Date	10/30/2024
Project number	10979-11
File reference	Q:\RA\10979-02\0400_REP\FEMA Beach Maintenance and Monitoring Plan\

Revision	Description	Issued by	Date	Checked
00	Draft Report	BS	10/28/2024	NV
01	Final Report	BS	10/30/02024	NV

Produced by:
 Moffatt & Nichol
 4700 Falls of Neuse Road, Suite 300
 Raleigh NC 27609
 (919) 781-4626
www.moffattnichol.com



Executive Summary

This document updates the Town of Nags Head's previous Beach Monitoring and Maintenance Plan, dated August 2011, with documentation of subsequent renourishment projects, as well as updated maintenance triggers, nourishment volume needs, and borrow sources developed as part of the Town's 2024 Multi-Decadal Beach Nourishment Master Plan.

In 1990, the US Congress authorized a Federal project titled the "Dare County Hurricane Protection and Erosion Control Project", however, funding for this Federal project has never been authorized. Because of the lack of funding and the critically eroded condition of the beach, the Town elected to proceed with a locally funded beach restoration project in 2011. Subsequent renourishment events have occurred in 2019 and 2022. The 2019 project was initially designed as a fully locally funded effort, however, after impacts of the Federally declared disaster Hurricane Matthew in 2016 (DR-4285-NC) and accompanying losses, a portion of this event was funded by FEMA. The 2022 renourishment event was funded by FEMA and was designed to replace beach sand lost during Hurricane Dorian, also a Federally declared disaster (DR-4465-NC). During the time period from 2011 to 2024, the maintenance trigger for renourishment was as established at the time of the initial project: the Town would renourish the beach when a volume of approximately 50 percent of the initial project was lost from above the -19 ft NAVD88 elevation (approximate limit of the active profile).

The Town's initial beach nourishment project and all subsequent renourishment projects have complied and will comply with all Federal and State required environmental monitoring, including sea turtle and benthic organism monitoring if required. The Town also performs physical beach monitoring, in compliance with FEMA requirements for disaster assistance to repair improved beaches. Beach and nearshore profile surveys are conducted annually at a minimum of 500 ft spacing, extending from the landward toe of the foredune to a depth of approximately -30 ft NAVD88. All survey work is performed to the Standards of Practice for Land Surveying in North Carolina. Hydrographic surveys are performed to meet or exceed the minimum performance standards for the Corps of Engineers Hydrographic Surveys, USACE specifications manual EM 1110-2-1003.

The monitoring schedule for each year typically includes a comprehensive survey of the profile transects conducted by late spring/early summer to ensure that seasonal differences in the beach profile are consistently measured from year to year, and to document pre-hurricane season beach conditions. Should a named storm or other significant erosion event occur, the Town undertakes a post-storm survey as soon as practicable. This survey is used to quantify storm-induced erosion and other profile changes. Data analysis includes computation of short- and long-term shoreline and volumetric changes as well as evaluation of beach renourishment project performance.

The Town of Nags Head recently completed a Multi-Decadal Beach Nourishment Master Plan (Master Plan), approved by the Town's Board of Commissioners in July 2024. The plan considers the next 50 years of nourishment planning along the Town's shoreline. As a part of the planning process, the volumetric threshold to trigger the next renourishment project was re-evaluated and reach-specific volumetric triggers based on a level of protection analysis including numerical modelling were developed. These new volumetric triggers are now being used to evaluate conditions in the context of timing the next renourishment event for beach maintenance. Additionally, the available borrow source material was characterized and estimated to be adequate to provide sand for the Town's next 50 years of estimated need.

To fund beach renourishment, the Town typically secures municipal bonds to pay for its portion of the cost at the time of construction, and the bonds are then paid back throughout the life of the project. The Town has developed Municipal Service Districts (MSDs) to levy additional property taxes to provide funding for beach nourishment. In addition to these Town funds, Dare County maintains a Beach Nourishment Fund



which has historically supported the Town's beach renourishment projects. Grant funds may also be available via the State's Coastal Storm Damage Mitigation Fund. Local cost share of at least one non-State dollar for every dollar from the fund is required. For post-storm repairs of beach nourishment projects, FEMA funding based on documentation of losses of beach sand, vegetation, and sand fencing may also be available.



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Appendix A: Nourishment Project Construction Documentation [provided electronically]

- A-1: 2011 Beach Nourishment Project
- A-2: 2019 Beach Renourishment Project
- A-3: 2022 Post-Dorian Renourishment Project



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Glossary

CAMA	Coastal Area Management Act
CDIP	Coastal Data Information Program
CSDM	Coastal Storm Damage Mitigation
CSE	Coastal Science & Engineering
FEMA	Federal Emergency Management Agency
MSD	Municipal Service District
NC DCM	North Carolina Division of Coastal Management
NOAA	National Oceanic and Atmospheric Administration
Town	Town of Nags Head



1. Purpose

The purpose of the Beach Monitoring and Maintenance Plan is to: (1) Provide a brief overview of the morphological setting of the Town of Nags Head; (2) Detail the construction of the Town of Nags Head's initial and subsequent beach nourishment projects and how those projects were funded; (3) Specify the physical beach monitoring activities; (4) Detail the beach maintenance planning guidelines; and (5) Relate a plan for periodic renourishment funding.

This document updates the Town of Nags Head's previous Beach Monitoring and Maintenance Plan, dated August 2011.

1.1. FEMA Guidelines and Applicability for Public Assistance

This plan documents the eligibility of the Nags Head beaches for post-disaster assistance under the Public Assistance Program administered by the Federal Emergency Management Agency (FEMA) via authority of the Stafford Act (FEMA, 2020). Funding from this program could be available to reimburse costs associated with replacing beach sand removed from a beach by a Federally declared disaster event. Conditions for this program are delineated in 44 CFR § 206.226(j) (Code of Federal Regulations, 2024):

(j) **Beaches.**

- (1) Replacement of sand on an unimproved natural beach is not eligible.
- (2) Improved beaches. Work on an improved beach may be eligible under the following conditions:
 - (i) The beach was constructed by the placement of sand (of proper grain size) to a designed elevation, width, and slope; and
 - (ii) A maintenance program involving periodic renourishment of sand must have been established and adhered to by the applicant.

The Town of Nags Head's nourished oceanfront qualifies as an improved beach as the initial and subsequent beach nourishment projects were designed by qualified, licensed engineers and permitted by State and Federal regulatory agencies. Additionally, a monitoring plan and maintenance program involving periodic renourishment of sand was established along with the initial project in 2011. This report provides updates in the monitoring protocols as well as the triggers to initiate subsequent renourishment events, in alignment with the Nags Head Multi-Decadal Beach Nourishment Master Plan, adopted by the Town in June 2024.

The FEMA Public Assistance Program and Policy Guide (2020) details the documentation needed to support eligibility of a beach. It states:

"To document eligibility of a beach as a designed and maintained facility, the Applicant must provide the following information (all required unless the beach was previously determined eligible, in which case FEMA may request only a portion of this information):

- Design studies, plans, construction documents, and as-builts for the original nourishment;
- Documentation and details of the maintenance plan, including how the need for renourishment is determined and funded; and
- Renourishment history, design studies, and as-builts for every renourishment, including construction documents if applicable."

This updated Beach Monitoring and Maintenance Plan provides the required documentation for the Town to support eligibility of the nourished oceanfront.



2. Morphological Setting of Nags Head, NC

The Town of Nags Head encompasses approximately 11 miles of oceanfront shoreline on North Carolina’s Outer Banks, a chain of barrier islands between the Albemarle-Pamlico Sound and the Atlantic Ocean (Figure 2-1). The Town is approximately 90 miles south of Norfolk, Virginia. The Town is bordered by the Town of Kill Devil Hills to the north and the Cape Hatteras National Seashore to the south. Oregon Inlet is located approximately 5 miles south of the Town boundary. The Town has a year-round population of approximately 3,000 (U.S. Census Bureau, 2022), with summer visitors adding thousands more during peak season.

Tides along the oceanfront are semi-diurnal with a mean range of 3.2 ft and a spring tidal range of 3.7 ft. The predominant wave directions are from the east, with mean significant wave heights exceeding 3.3 ft at CDIP Station 433, Duck 17m (55.7 ft) waverider buoy (1997-2024). The Town’s shoreline is frequently impacted by nor’easter storms during the winter months and tropical cyclones in the summer and fall. The NOAA tide gauge at the Duck Field Research Facility (NOAA station 8651370) reports a relative sea level rise rate of 4.88 +/- 0.56 mm/yr based on water level records from 1978 to 2023. Long-term shoreline erosion rates as determined by the North Carolina Division of Coastal Management (NC DCM, 2019) generally increase from north to south, with rates as high as 7-8 ft/year measured within Reach 4 (see Figure 2-1 for reach locations). The median sand grain size is approximately 0.3 mm, based on data collected in 2016 by CSE (M&N, 2024). Additional details of the morphological setting are found in Kana and Kaczkowski (2012).

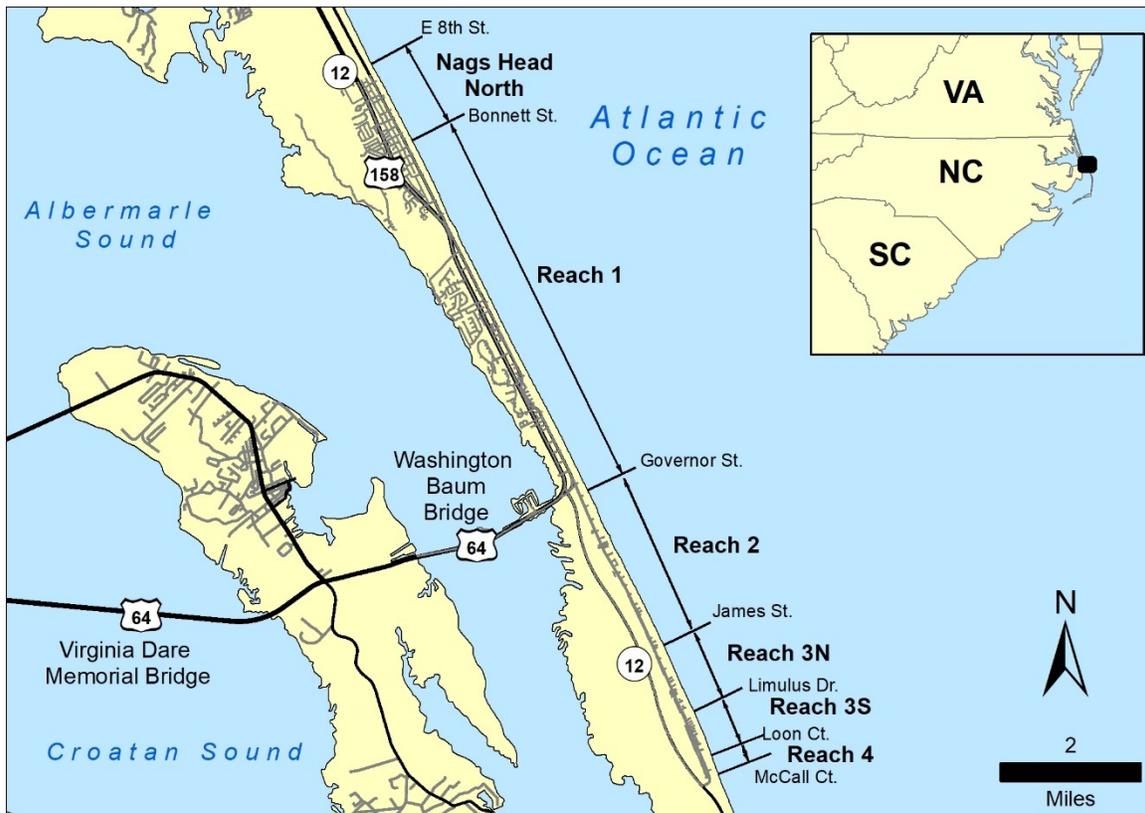


Figure 2-1: Site Vicinity Map of Nags Head, Dare County, NC



3. Engineered Beach Nourishment History

In 1990, the US Congress authorized a Federal project titled the “Dare County Hurricane Protection and Erosion Control Project”. This project included a portion of the Town’s oceanfront shoreline, and identified an offshore borrow area, termed S1, as a sediment source. However, funding for this Federal project has never been authorized. Because of the lack of funding and the critically eroded condition of the beach, the Town elected to proceed with a locally funded beach restoration project in 2011. Subsequent renourishment events have occurred in 2019 and 2022. The 2019 project was initially designed as a fully locally funded effort, however, after impacts of the Federally declared disaster Hurricane Matthew in 2016 (DR-4285-NC) and accompanying losses, a portion of this event was funded by FEMA. The 2022 renourishment event was funded by FEMA and was designed to replace beach sand lost during Hurricane Dorian, also a Federally declared disaster (DR-4465-NC). This section provides additional details of each of these projects, with further information about each project, including design plans, attached in Appendix A.

3.1. Initial 2011 Beach Nourishment Project

The Town of Nags Head carried out the first locally funded beach nourishment project in 2011 along the Town’s shoreline. The 2011 project encompassed approximately 10 miles of shoreline. Reaches were delineated based on historical erosion rates. Two borrow areas (BA2 and BA3) located in the USACE designated borrow area S1 were used in this project (Figure 3-1). The project was designed to restore a protective beach for a minimum of 10 years and to expand the recreational beach for the community. The design template for the beach nourishment extended the berm 50-125 ft at elevation +6 ft NAVD88 and placed approximately 50-140 cy/ft of material. The total volume placed was approximately 4.6 million cubic yards (Mcy) of beach compatible material along the five reaches of Nags Head (Reaches 1, 2, 3N, 3S, and 4, Figure 2-1) between May 24 and October 27, 2011.

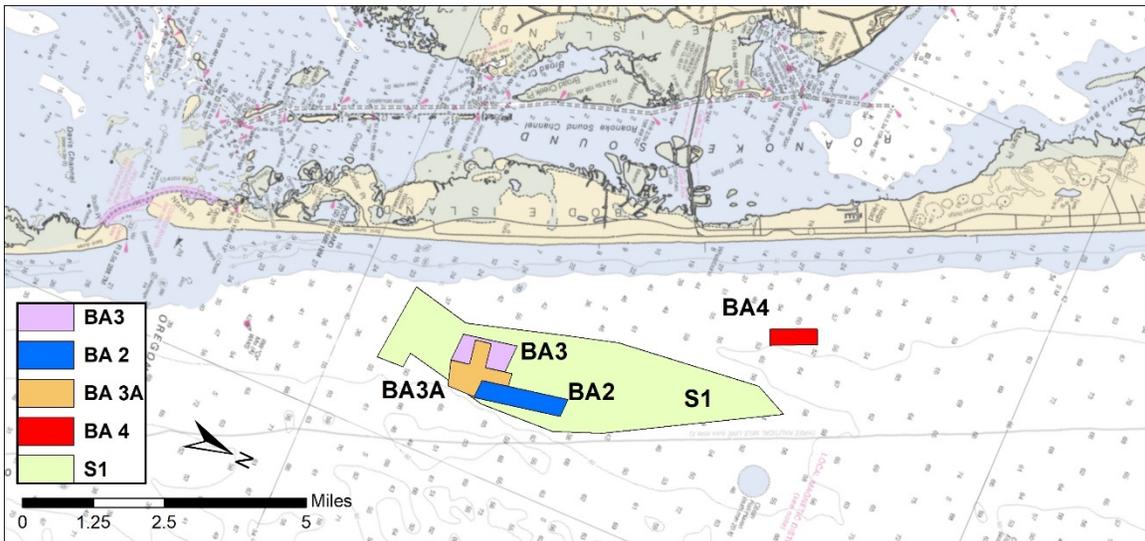


Figure 3-1: Borrow Area Locations

Funding for the initial beach nourishment project in 2011 included the following (Ogburn, 2011):

- \$18 million in cash from the Dare County Beach Nourishment Fund (fund estimated to replenish \$3-\$3.5 million/year from the 1% occupancy tax that it currently receives).
- \$18 million revenue bond to be paid back over 6 years with proceeds from a 1% increase to the occupancy tax. The 1% tax increase will generate about \$2 million/year. Nags Head will be using the \$2 million/year revenue for 5 years to pay back \$10 million of the bond.
- The remainder of the bond was to be paid back through an increase in taxes. The Board has adopted a town-wide tax increase of 2 cents (from 2010’s town tax rate of 15.75 cents to 17.75 cents).



cents) and a tax increase of 15 cents for the ocean-side properties from Bonnett Street (about Mile Post 11.25) south to the National Park Service line.

- \$1 million from the Town's general fund (to cover engineering costs).

3.1.1. Maintenance Trigger - Established 2011

At the time of design of the 2011 nourishment project, the Town's consultant, Coastal Science & Engineering (CSE), had determined that average annual sand losses for 1994-2005 were approximately 275,000 cy/yr. The renourishment trigger set at that time was at the point when less than 50% of the initial nourishment sand remained on the beach within the project boundaries calculated to -19 ft NAVD88. Ongoing monitoring protocols were established to determine the annual losses. At the point in which more than 2.3 Mcy of sand were lost (50% of the initial placement of 4.6 Mcy), the Town would renourish the beach. In addition, when losses were documented as part of a Federally declared disaster, the Town moved forward with seeking reimbursement from FEMA Public Assistance funding.

3.2. 2019 Beach Renourishment Project

In June 2016, the Town retained a consultant (CSE) to plan and design the next renourishment project. During the planning phase, Hurricane Matthew impacted the Town's shoreline and a comprehensive beach condition survey was conducted to determine sand losses due to the storm. On average, Nags Head lost ~27 cy/ft of volume between the foredune and the -19 ft NAVD 88 elevation during Matthew, which is equivalent to a total volume loss of ~1.43 Mcy along the 10-mile project area (Kaczowski and Kana, 2016), which was about 30 percent of the nourishment volume placed during the 2011 project. As a result of these documented losses, the Town obtained funding from FEMA to replace the sand on the beach in the amount of \$16,195,337 which included \$14,567,734.25 for direct construction costs (CSE, 2019).

Consistent with the short-term plan and nourishment trigger which called for renourishment when ~50 percent of the 2011 volume eroded from the project area, the Town of Nags Head incorporated restoration of the volume loss of Hurricane Matthew into a planned four (4) million cubic yards renourishment project along the same 10-mile oceanfront with the following purpose and goals (CSE, 2019):

- 1) Restore sand losses due to chronic erosion and Hurricane Matthew (2016)
- 2) Provide a higher level of storm protection
- 3) Provide wider recreational beach and create habitat for wildlife
- 4) Address high erosion rates at the south end of Nags Head
- 5) Integrate a dune management plan into the renourishment design
- 6) Maintain Nags Head's eligibility for future FEMA community assistance funds

Construction of the 2019 Nags Head Beach Renourishment Project began on May 1, 2019, and was completed on August 18, 2019. Two borrow sources were used for the project: borrow area 3A located in the USACE designated borrow area S1 and borrow area 4 located approximately 1.5 miles offshore from the north central portion of Nags Head beach (Figure 3-1). The entire project took just under 16 weeks, and approximately 4 Mcy of material was placed along the five reaches of Nags Head. Total project construction cost was \$36,644,500 (CSE, 2019).

Funding of the project included contributions from the Dare County Beach Nourishment Fund, Municipal Service District (MSD) taxes within the project limits, a Town-wide tax and reimbursement from FEMA for sand loss due to Hurricane Matthew.

3.3. 2022 Post-Dorian Renourishment Project

Shortly after completion of the 2019 renourishment project, Hurricane Dorian impacted the Town in September 2019. After the storm, the Town applied for and received both Federal and State funding through the FEMA Public Assistance Program and the N.C. Division of Emergency Management Coastal Storm



Damage Mitigation (CSDM) grant program. This funding, which required some local matches, was the basis for the size of the targeted project. A 611,259-cy project was designed with the intention to replace the berm lost during the storm as well as provide some additional berm to allow for an economically constructable fill density.

Borrow areas 2 and 3 (Figure 3-1) within USACE designated borrow area S1 were used to complete the project. The project template consisted of a berm of variable width at +6 ft NAVD88 and a foreshore slope of 1:15 out to the existing ground, landward of the prominent offshore bar. The entire project took approximately 6 weeks to complete, and 614,106 cy of material was placed along four reaches of Nags Head (Reaches 2, 3N, 3S, and 4, Figure 2-1).

The renourishment effort yielded a project totalling 614,106 cy for a total cost of \$11,295,594. Dune planting and sand fencing cost an additional \$29,750 and \$59,800, respectively. The project was paid for with a combination of Local (Town), State (N.C. Division of Emergency Management Funds for Coastal Storm Damage Mitigation), and Federal (FEMA Category G) funds.



4. Monitoring

The Town of Nags Head's initial beach nourishment project and all subsequent renourishment projects have complied and will comply with all Federal and State required environmental monitoring, including sea turtle and benthic organism monitoring if required. The Town also performs physical beach monitoring, in compliance with FEMA requirements for disaster assistance to repair improved beaches. Details of the physical monitoring protocols are presented in this section.

4.1. Physical Beach Profile Survey Protocols

Beach and nearshore profile surveys are conducted annually at a minimum of 500 ft spacing, extending from the landward toe of the foredune to a depth of approximately -30 ft NAVD88. Profile baseline and azimuths for future work will match previous surveys conducted by USACE and the Town to the extent practicable. All survey work is performed to the Standards of Practice for Land Surveying in North Carolina. Hydrographic surveys are performed to meet or exceed the minimum performance standards for the Corps of Engineers Hydrographic Surveys, USACE specifications manual EM 1110-2-1003. Horizontal data are referenced to North Carolina State Plane coordinates or to existing control datum and the vertical datum will be NAVD88.

Overland data are captured beginning at the landward toe of the primary dune and extend out to the surf zone at wading depth (wading occurs at low tide). Hydrographic surveys are collected from -30 ft NAVD88 to the surf zone (during the high tide cycle) to achieve overlapping data as weather/sea conditions allow. Hydrographic survey vessels are fully equipped to meet USACE specifications manual EM 1110-2-1003 including sonar, imu, position, heading and sound velocity.

The monitoring schedule for each year typically includes a comprehensive survey of the profile transects conducted by late spring/early summer to ensure that seasonal differences in the beach profile are consistently measured from year to year, and to document pre-hurricane season beach conditions. Should a named storm or other significant erosion event occur, the Town will undertake a post-storm survey as soon as practicable, meeting the above-described protocols. This survey will be used to quantify storm-induced erosion and other profile changes.

4.2. Data Analysis Protocols

The survey data described in Section 4.1 is used to evaluate shoreline change, volume change, and beach nourishment project performance, as detailed in this section.

4.2.1. Shoreline Change

The beach profile survey data from each survey event will be used to develop a mean high water (MHW) shoreline at elevation +1.18 ft NAVD88. Changes in shoreline position annually and over time will be reported for each of the established reaches.

4.2.2. Volume Change

Volume changes above strategically selected elevations will be computed to ensure the complete tracking of sand movement along the profile. Changes will be computed in accordance with past monitoring efforts from a landward point at the back of the dune out to the seaward edge of the nourishment berm (+6 ft NAVD88), above MHW (+1.18 ft NAVD88), above -6 ft NAVD88 (wading depth), above -14 ft NAVD88 (capturing the offshore bar), above -19 ft NAVD88 (depth of closure), and above -30 ft NAVD88 (approximate seaward extent of surveys), as shown in Figure 4-1. Results at each transect as well as the overall changes for each of the previously established reaches will be evaluated. The volumetric change calculations performed during the annual analyses will be used to update the evaluation of long-term trends by incorporating the current datasets with those acquired during the previous monitoring efforts. Annual volume changes from each year (excluding nourishment) will be evaluated for each transect, allowing for identification of long-term stable locations and erosional hotspots in each survey reach as compared to annual changes that may vary significantly from year to year. The volumetric change calculations performed



during the annual analyses will also be used to update estimates of dune growth/erosion trends, allowing for identification of areas vulnerable to overwash or exhibiting significant dune growth.

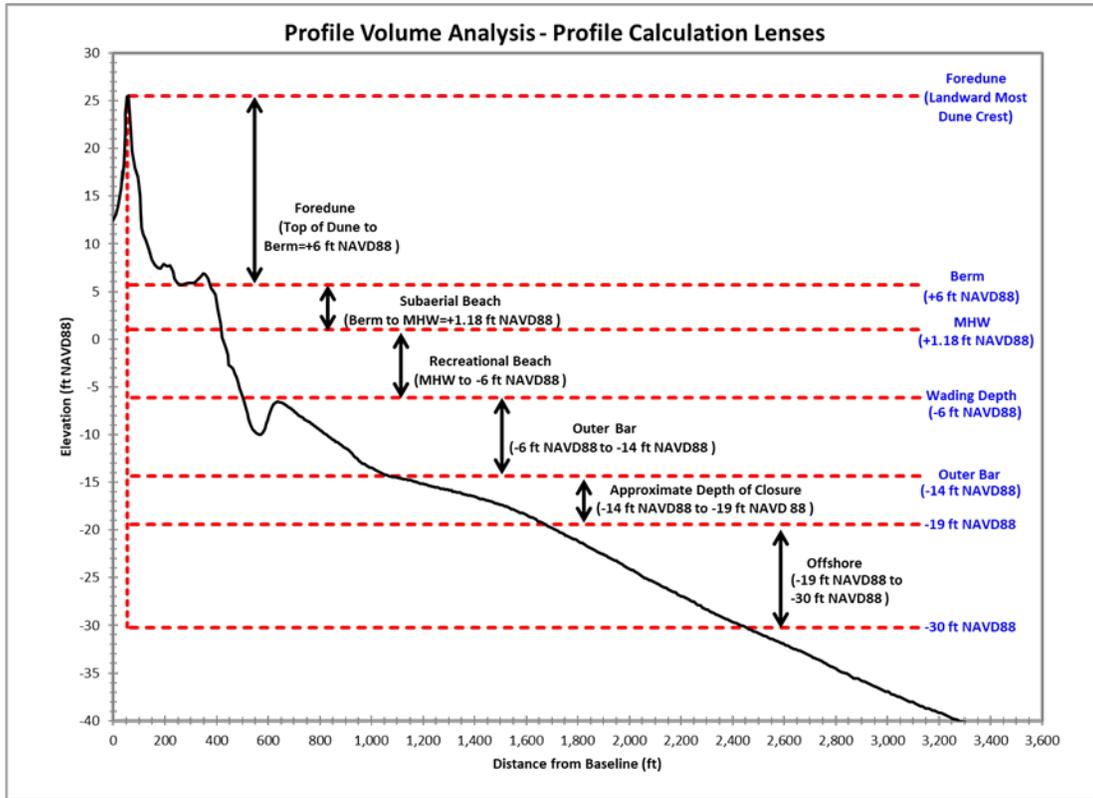


Figure 4-1: Volumetric Calculation Lenses for Profile Volume Analysis

4.2.3. Beach Nourishment Project Performance

The volumetric change calculations performed during the annual analyses will be used to track the performance of any beach nourishment or other maintenance projects. Annual changes from each placement area will be documented throughout the nourishment cycle to gain an understanding of actual volume lost, providing insight into future volume need. Comparisons will be made between the current condition of the beach and the developed renourishment triggers, allowing for estimates of when the next renourishment will be needed.



5. Beach Maintenance Planning: Multi-Decadal Beach Nourishment Master Plan

The Town of Nags Head recently completed a Multi-Decadal Beach Nourishment Master Plan (Master Plan), approved by the Town's Board of Commissioners in July 2024. The Master Plan's purpose is to:

- 1) establish a programmatic plan to facilitate authorization and implementation of beach nourishment events (maintenance and storm response), including borrow source identification and analysis;
- 2) provide a project plan for the long-term maintenance of the dune, beach, and foreshore within the Town of Nags Head to:
 - establish an equivalent level of storm protection to upland property and infrastructure within the town, protecting Nags Head residents' properties as well as protecting the associated local, state, and federal tax bases;
 - ensure the viability of the Nags Head tourism industry;
 - maintain natural resources and associated recreational uses while avoiding and minimizing adverse environmental impacts to the extent feasible; and
- 3) provide an efficient framework to financially and logistically manage the Town of Nags Head's beaches in coordination with Dare County and surrounding communities.

The plan considers the next 50 years of nourishment planning along the Town's shoreline. As a part of the planning process, the volumetric threshold to trigger the next renourishment project was re-evaluated and reach-specific volumetric triggers based on a level of protection analysis including numerical modelling were developed. This section details the updated triggers as well as estimated nourishment needs and borrow sources.

5.1. Maintenance Triggers

Numerical modeling was performed at representative transects along the Nags Head shoreline to develop a preferred beach and dune profile design to achieve adequate Level of Protection (LoP) for habitable structures and infrastructure, along with appropriate trigger conditions for renourishment actions. The representative profiles were established along the Nags Head shoreline, based on the May 2018 profile survey data. These profiles are considered to demonstrate a quasi-natural state of the beach, being surveyed immediately prior to the 2019 beach renourishment project. The 25-year storm was selected as the most appropriate target for adequate LoP. Simulations were performed with the CSHORE 1D profile evolution model using the representative profiles and the 25-year storm conditions to evaluate the quasi-natural LoP of the beach state. Figure 5-1 shows the results of this analysis. In summary, the May 2018 pre-nourishment existing conditions of the beach and dune system are considered to provide a sufficient LoP along the northern and middle portions of Nags Head for up to a 25-year return period design storm event. Before the renourishment event in 2019, the representative profiles at Reaches 2, 3 South and 4 did not have sufficient material available to protect the structures.



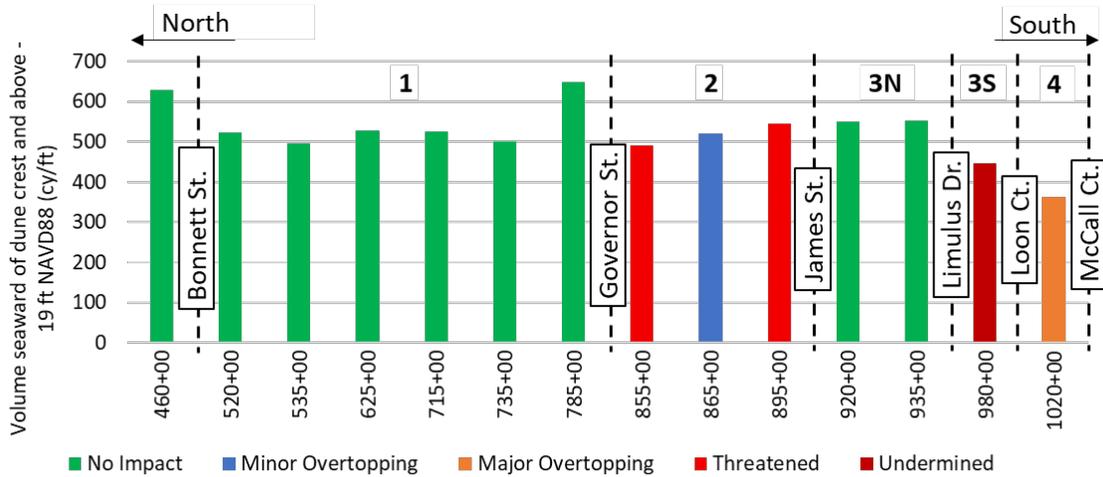


Figure 5-1: Pre-Nourishment Condition CSHORE Pre-Storm Profile Volumes Coded for 25-year Return Period LoP

The CSHORE model was then used along with the representative profiles to adjust the beach profile design to achieve an acceptable LoP along the Town’s oceanfront in the design storm event. For cases where the profiles already provided adequate LoP, (e.g., Nags Head North, Reach 1, Reach 3N) dune and berm volume was removed to determine the threshold volume to meet the minimum LoP. The profiles at Reaches 2, 3 South, and 4 indicated severe impacts, so those were modified by adding dune and berm volumes to provide adequate protection. The volumes required to provide a 25-year LoP at each representative profile and within each reach are presented in Table 5-1. The May 2018 condition at each representative profile is also presented. It is noted that due to the condition of the profiles in Reaches 2, 3 South, and 4 at the time of the May 2018 survey, an estimated 0.6 Mcy would be required to be added to provide the minimum LoP. These triggers provide a basis for comparison with the annual beach monitoring profile surveys. When conditions arise such that the profile volumes are nearing the LoP triggers, the Town will begin planning the next maintenance project. It is noted that there may be individual profiles within a reach where triggers are exceeded which will be considered by the Town, however the composite reach triggers, computed as a weighted average amongst the surveyed beach profiles, are the primary decision-making tool.



Table 5-1: Trigger Volumes Above -19 ft NAVD88 for 25-yr Event

Reach	Length (ft)	Representative Profile	25-yr LoP Trigger Volume (cy/ ft)	Reach Trigger for 25-yr event (cy/ft) (Weighted)	May 2018 Volume Above -19 ft (cy/ ft)
North	6,250	460+00	355	355	578
Reach 1	4,500	520+00	503	470	509
	5,500	535+00	451		472
	7,000	625+00	478		506
	5,500	715+00	479		501
	6,000	735+00	443		490
	2,500	785+00	604		610
Reach 2	5,500	855+00	491	502	446
	2,500	865+00	471		499
	2,500	895+00	526		485
	2,500	920+00	463		504
Reach 3 - North	4,500	935+00	464	446	464
	2,000	980+00	461		407
Reach 3 - South	2,750	1020+00	401		373
TOTAL	59,500				464

5.2. Nourishment Quantities

All of the available long-term monitoring beach profile data was used to perform a statistical analysis of the sediment volume needs for each reach. Volume changes measured since 2011 were used along with the Crystal Ball software package to perform a Monte Carlo simulation and determine volume needs for long-term annual background erosion, as well as additional potential storm impacts, as presented in Table 5-2. Results showed an overall background volume loss along the Nags Head shoreline of approximately 450,000 cy/year at the 50% non-exceedance probability (i.e., there is a 50% likelihood that this volume loss will be exceeded). In order to estimate sediment need over the 50-year planning timeframe, potential impacts of additional storms were considered at the 75% non-exceedance probability (i.e., there is a 25% likelihood that this volume loss will be exceeded, as a conservative approach). An annualized total need of approximately 430,000 cy/year was estimated, considering 16 storms impacting the Town over the 50 years. These annual needs were summed and multiplied by 50 to estimate the 50-year need presented in Table 5-2.

Table 5-2: Nags Head Long-Term Nourishment Need from Background Erosion and Additional Storms

Category	Volume Above -19 ft, NAVD88 (cy)
Annual Background Volume Change (50% non-exceedance probability)	-451,218
Annualized* Storm Volume Change (75% non-exceedance probability)	-431,893
Annual Total Volume Change	-833,111
50-yr Material Need	44,155,550

*16 storms in 50-years



The implications of relative sea level change should also be considered when determining future beach nourishment needs. The dune crest and berm elevations would need to rise by approximately the same amount as relative sea level to maintain an equivalent LoP. An evaluation of the amount of sand volume that would be required to accommodate this required increase in dune crest and berm height and maintain the shoreline position has been performed using the Bruun Rule. Three sea level rise scenarios developed by NOAA for the Duck, NC tide gauge location were used to obtain a range of volume estimates, from 2.6 Mcy to 4.7 Mcy, to meet these needs.

The sea level rise volume need estimates were combined with the background erosion rate need, the additional storm erosion need, and the initial Level of Protection placement need analysis to develop a long-term sediment volume need, considering initial conditions similar to those of May 2018. The total long-term sediment need is presented in Table 5-3. A relatively high estimate of potential volumetric losses during dredging was also computed. This volume estimate is considered to be conservative and can be compared with sand volumes available from identified borrow sources to provide assurance that the beach nourishment master plan can be executed successfully.

Table 5-3: Long-Term (50-Year) Sediment Volume Need

Crystal Ball	Background Erosion 50 years (50%)	22.5 Mcy		
	Additional Storms (16 storms) (75%)	21.5 Mcy		
LoP (25 year) Design		0.6 Mcy		
Relative Sea Level Rise (NOAA, 2022)		Intermediate Low	Intermediate	Intermediate High
		2.6 Mcy	3.4 Mcy	4.7 Mcy
TOTAL		46.7 Mcy	47.5 Mcy	48.8 Mcy
<i>Assumed 20% losses during dredging</i>		<i>56.0 Mcy</i>	<i>57.0 Mcy</i>	<i>58.6 Mcy</i>

5.3. Borrow Sources

A comprehensive evaluation of the previously identified borrow area S1 (Figure 3-1) located offshore of Nags Head was performed as part of the Master Plan development, including collection of detailed geophysical and geological data to characterize and quantify the beach-compatible sand available. Sub-zones were delineated as shown in Figure 5-2, with allowable dredge cut elevation and available beach-compatible sand also presented. Based on this analysis of borrow area S1, approximately 67.9 Mcy of beach compatible material is available. This quantity is considered sufficient to accommodate the estimated placement requirement of approximately 49 Mcy (Intermediate High scenario for sea level rise, Table 5-3) for the town's beach management efforts over the next 50 years.



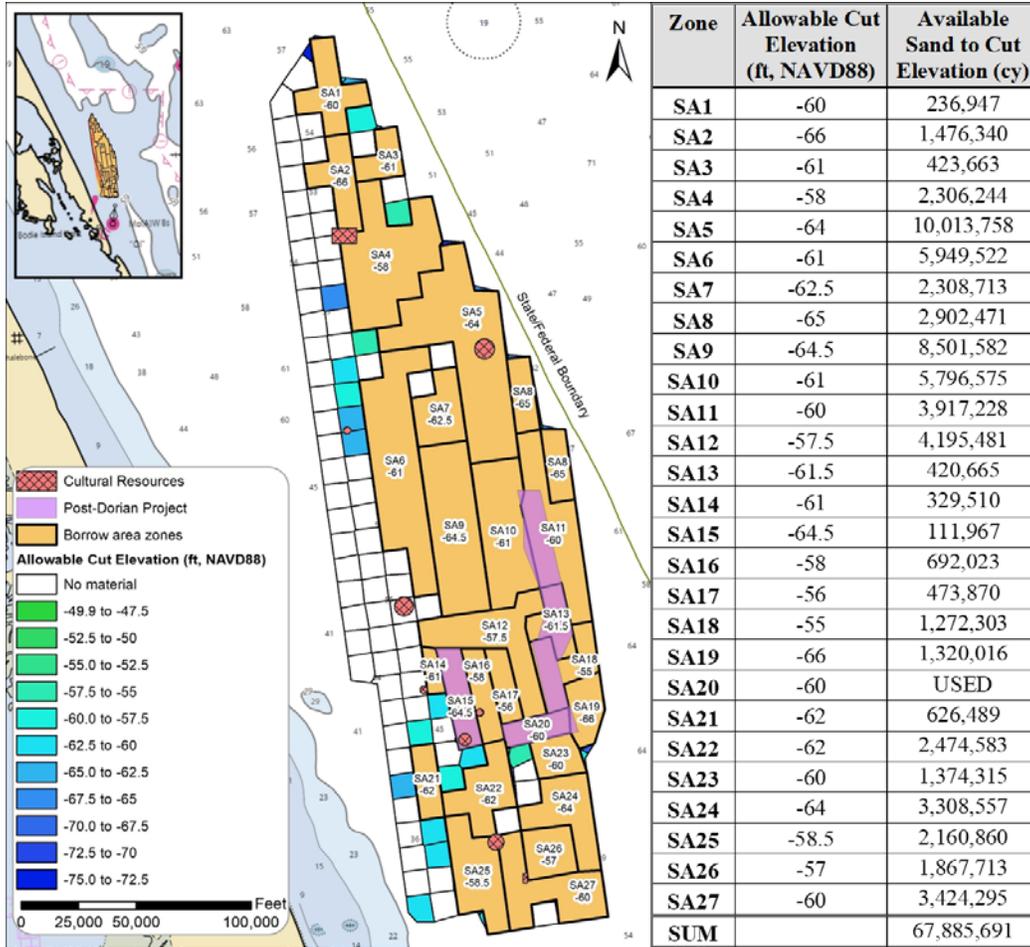


Figure 5-2: Borrow Area Sub-Zones and Corresponding Maximum Dredge Cut Elevations



6. Funding

Previous beach nourishment projects conducted by the Town have been funded using a combination of local (Town and County) and State grant funds. In addition, post-storm damage restoration of sand loss has been funded by FEMA. The Town typically secures municipal bonds to pay for its portion of the cost at the time of construction, and the bonds are then paid back throughout the life of the project.

The Town has developed Municipal Service Districts to levy additional property taxes to provide funding for beach nourishment. The funding plans recognize that the benefits of beach nourishment extend beyond the immediate oceanfront, and the MSD boundaries and rates take this into account. Beach nourishment maintains the beach as a key piece of the Town's infrastructure. A well-maintained beach not only provides protection to properties throughout the Town but also results in increased property values.

In addition to these Town funds, Dare County maintains a Beach Nourishment Fund which has historically supported the Town's beach renourishment projects. A 2 percent portion of the County's 6 percent Occupancy Tax is allocated to this fund. This fund is restricted by legislation to be used for the placement of sand from other sources, planting of vegetation and building of structures that are in conformity with the North Carolina Coastal Area Management Act (CAMA), e.g. dunes and sand fencing, for the purpose of widening the beach to benefit public recreational use and to mitigate damage and erosion from storms to inland property.

The State's CSDM Fund program accepts applications for grant funding by local governments to support beach nourishment, dune construction, or other projects that mitigate or remediate coastal storm damage to the ocean beach and dune systems of the State. Local cost share of at least one non-State dollar for every dollar from the fund is required.

For post-storm repairs of beach nourishment projects, FEMA has provided funding under the Category G Public Assistance program for Permanent Work - Engineered Beaches. Documentation of losses of beach sand, vegetation, and sand fencing is necessary to obtain approvals for the FEMA Category G funding.



7. References

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Ogburn, C., 2011. Town of Nags Head Beach Monitoring and Maintenance Plan, Dare County, North Carolina. August 2011. Adpoted by the Town of Nags Head Board of Commissioners August 25, 2011. 6p.

U.S. Census Bureau, 2022. American Community Survey 5-year estimates. Retrieved from Census Reporter Profile page for Nags Head, NC <<http://censusreporter.org/profiles/16000US3745880-nags-head-nc/>>





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AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM J.2.

Update on Construction of the Public Services Facility

Prepared by

Brittany Phillips, Deputy Town Clerk

Reviewed by

Brittany Phillips

Carolyn Morris

Andy Garman

Staff Comments/Recommendation

N/A

Specific Action Requested

This item is provided for Board information and update.

Summary

At the November 6, 2024 Board of Commissioners meeting, Town Manager Andy Garman, along with Town Engineer David Ryan, will present an update on the construction progress of the new Public Services Facility.

Attachments

None



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM J.3.

Consideration of Acceptance of a North Carolina Land & Water Fund Grant to Place Conservation Easements on Town-Owned Properties (parcels 026404001, 006114000, and 005946000) Surrounding the Fresh Pond and in Nags Head Woods

Prepared by

Andy Garman, Town Manager

Reviewed by

Andy Garman
Carolyn Morris
Amy Miller

Staff Comments/Recommendation

Staff recommends that the Board accept the offer from the NC Land & Water Fund for a grant award of \$4 million and authorize the Town Manager to execute the contract with the North Carolina Land and Water Fund to place conservation easements on parcels 026404001, 006114000, and 005946000.

Specific Action Requested

This item is provided for Board review and approval.

Summary

In the Spring of 2023, Town staff met with the Nature Conservancy (TNC) to discuss the possibility of placing a conservation easement on the property surrounding the Fresh Pond (see attached property map). This is a 285-acre tract of land owned by the Town of Nags Head which primarily serves as watershed protection for the Fresh Pond. It also forms a portion of the Nags Head Woods Nature Preserve. The Town of Nags Head and the Nature Conservancy have a lease agreement for a portion of the property which has been in place since 1985. This assigns management responsibility to the Nature Conservancy. A portion of the TNC trail system runs through this property. The Town also maintains a police shooting range on the property as well as wellfield road, which provides water infrastructure behind several of the Town's westside neighborhoods. These areas are outside of the lease agreement with TNC. The Board is aware that the Town owns several other properties in Nags Head Woods including a 376-acre tract owned jointly with the Nature Conservancy. These properties have been placed in conservation, except for the Town-owned tract surrounding the Fresh Pond and two other properties, which are also shown on the attached map.

For many years, the Town and the Nature Conservancy have worked jointly to preserve Nags Head Woods by acquiring properties either separately and/or jointly and placing them under the management control of TNC (see attached map). During our meeting last Spring, TNC staff explained that the Town could apply for funding from the North Carolina Land and Water Fund to purchase the development rights for the Town-owned properties not previously placed in conservation. This was discussed with the Nags Head Board in June of 2023 at which time the Board expressed an interest in exploring this process.

Over the last year, staff has continued this process, developing mapping, obtaining an appraisal, and working with TNC and Land & Water Fund staff to prepare information for the application. In April of 2024, the Board of

Commissioners adopted a resolution supporting conservation easements being placed on three parcels which would protect the Nags Head Woods Natural Area. Based on an appraised value of \$9 million, the original grant request was for \$4,621,984, which included a 50% match with the Town of Nags Head, for the development rights on the properties as well as transaction costs such as appraisal, survey, legal, etc. In October, the NCLWF awarded the Town a grant for \$4,000,000 which covered the transaction costs and the development rights on these three parcels. The NCLWF Board capped all acquisition grants at \$4,000,000. Therefore, we were awarded the highest grant amount possible for the current cycle. It should be noted that the Town will retain the rights to a portion of the property surrounding the Fresh Pond, to include the shooting range, the Fresh Pond and immediate bordering lands, and wellfield road. This area is depicted on the attached map showing the properties that were included as part of the grant application.

Next Steps:

A second appraisal will need to be done; this is for all grants over \$500,000, to confirm the fair market value of the development rights. The estimated protection acreage is approximately 260.5, broken out as: Conservation easement parcel 026404001-248.5 acres, parcel 006114000 (closer to Jockey's Ridge)-7.7 acres, parcel 005946000 (further from Jockey's Ridge)-4.3 acres. This will be confirmed once a survey is completed. The NCLWF is also requiring a boundary survey for the parcel that is currently under conservation (NCLWF grant 2000B-006). When they conducted monitoring of this parcel during their site visit, they noted the markings were not clear. The NCLWF will reimburse the Town for professional fees after they are incurred, and any necessary budget amendments will be brought forward at that time. The final grant award above transaction costs will be made once the easements are recorded. The remaining funds can be used at the Board's discretion.

The tracts will be managed and monitored by the Nature Conservancy as part of Nags Head Woods Ecological Preserve. Reserved management rights include prescribed burning, maintenance of hiking trails, and transmission line right of way as well as removal of invasive species with herbicides and pesticides when necessary. The reserved rights fall within the standard terms of the NCLWF Conservation Easements. The site will continue to provide community passive recreation and urban archery through the Nags Head Woods Deer Management Program. The three easements will be held by the State and will be recorded on each of the three properties.

The request is to authorize the Town Manager to execute the contract with NCLWF for the conservation easements on parcels 026404001, 006114000, and 005946000. This would also allow staff to work with the Town attorney on the easements to be recorded, which will be presented to the Board for final approval. The contract should be available by the beginning of 2025, and the timeline is generally 2-3 years to record the easement.

Attachments

1. 11 J3 LWF Grant Award Letter
2. 11 J3 NH Woods Protection Map
3. 11 J3 Conservation Easement Map

From: [Amy Miller](#)
To: [Andy Garman](#)
Subject: Fwd: NCLWF Application Funded: 2024-024 - Nags Head - Municipal Tracts - Nags Head Woods Ecological Preserve
Date: Monday, October 14, 2024 8:19:00 AM
Attachments: [image001.png](#)

Sent from my iPhone

Begin forwarded message:

From: "Summer, Will" <will.summer@dncr.nc.gov>
Date: October 14, 2024 at 8:05:36 AM EDT
To: Amy Miller <Amy.Miller@nagsheadnc.gov>
Cc: "Hartzler, Marissa" <Marissa.Hartzler@dncr.nc.gov>
Subject: **NCLWF Application Funded: 2024-024 - Nags Head - Municipal Tracts - Nags Head Woods Ecological Preserve**

Dear Amy,

Congratulations! I am writing on behalf of the NC Land and Water Fund (NCLWF) Board of Trustees to notify you that Town of Nags Head's project, 2024-024 - Nags Head - Municipal Tracts - Nags Head Woods Ecological Preserve, has been approved for funding. Grant funds in the amount of **\$4,000,000** will be available for the project.

You may find a full list of funded projects and provisionally funded projects at <https://nclwf.nc.gov/2024-nclwf-awards>

NCLWF staff will prepare and send to you a draft contract for your project soon (November-December). Reimbursements cannot be considered until after the contract has been signed by both the applicant and NCLWF, including Executive Director and Board Chair.

Note that any work completed after the 10/2/2024 that is part of your approved Scope of Work is eligible for reimbursement once a contract is signed by all parties.

Our partnership to safeguard our state's water supplies, natural heritage, military mission, and cultural and historic resources is critical to protect North Carolina's environment and economic vitality. Thank you for your hard work to help us accomplish our mission and reach these shared goals.

If you have any questions or need additional information, please contact your contract administrator, Marissa Hartzler, at marissa.hartzler@dncr.nc.gov or your field representative. And of course, if you have other questions and feedback, you are welcome to contact me at any time.

Sincerely,

Will Summer

Will Summer

Executive Director, North Carolina Land and Water Fund

Director, Division of Land and Water Stewardship

Please note that my email address has changed: will.summer@dncr.nc.gov

121 W. Jones St, Raleigh, NC 27603 | 1651 Mail Service Center, Raleigh, NC 27699-1651

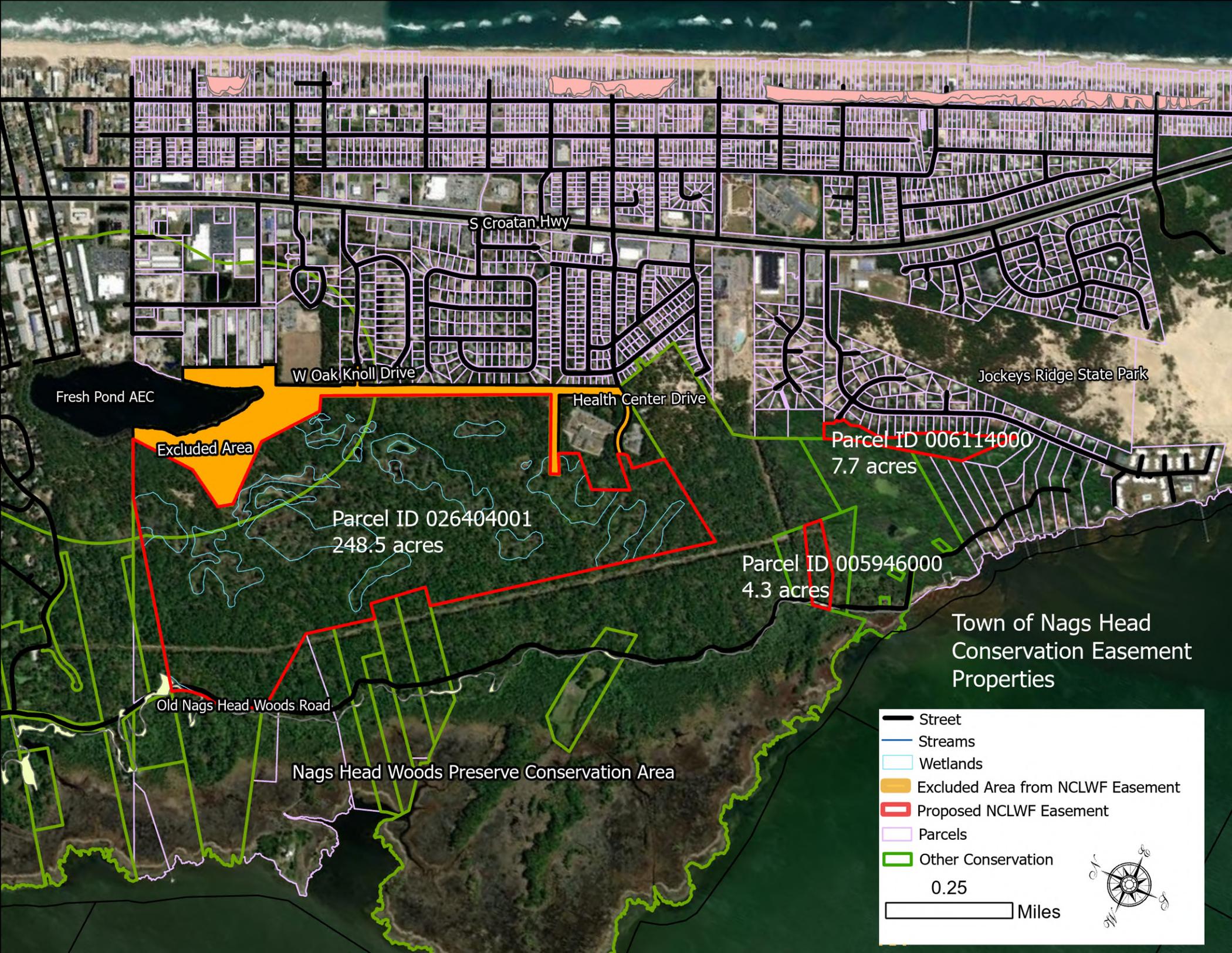
919 707 9489 *office*

nclwf.nc.gov



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Fresh Pond AEC

Excluded Area

Parcel ID 026404001
248.5 acres

Parcel ID 006114000
7.7 acres

Parcel ID 005946000
4.3 acres

Nags Head Woods Preserve Conservation Area

Town of Nags Head
Conservation Easement
Properties

Old Nags Head Woods Road

S Croatan Hwy

W Oak Knoll Drive

Health Center Drive

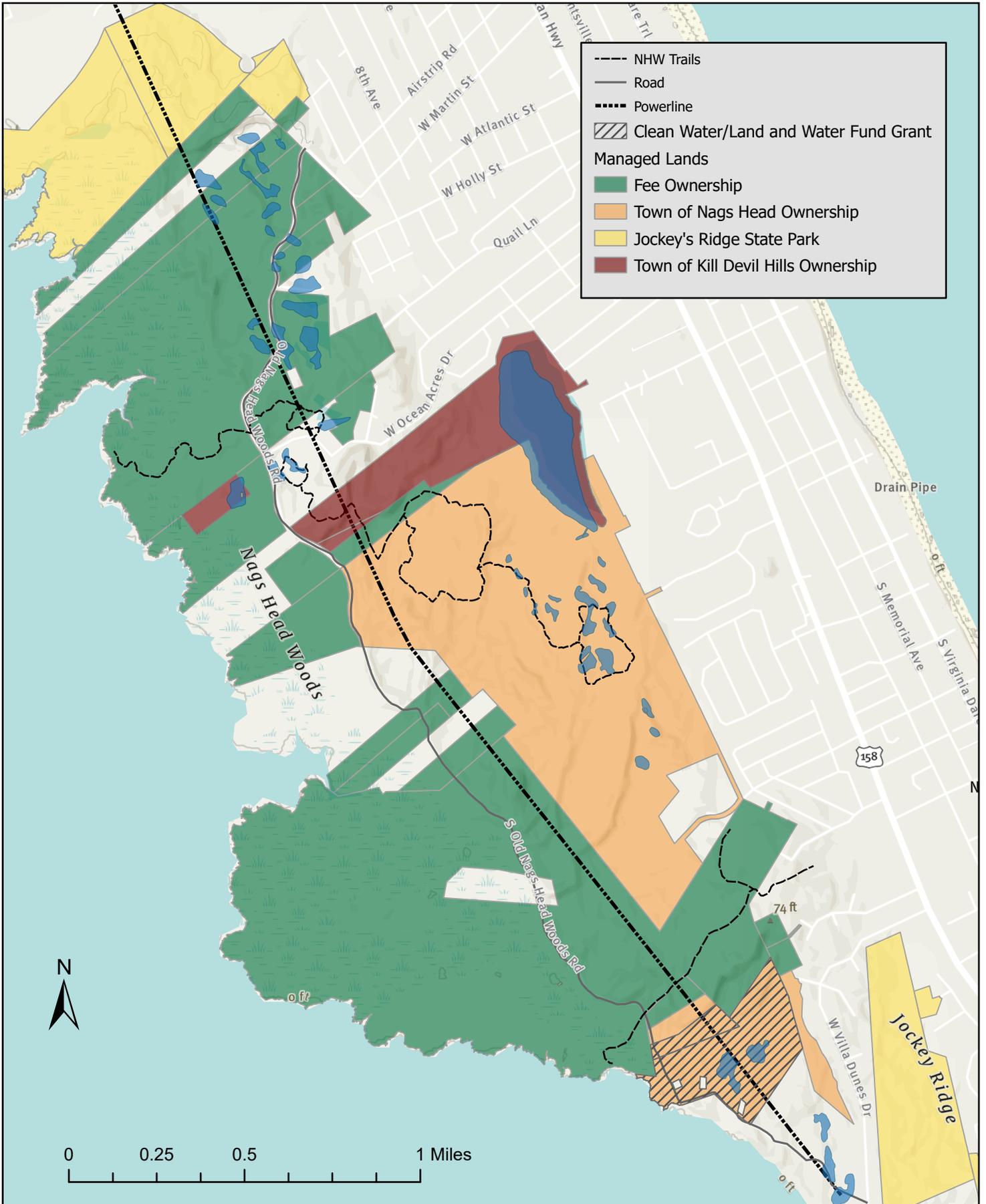
Jockeys Ridge State Park

-  Street
-  Streams
-  Wetlands
-  Excluded Area from NCLWF Easement
-  Proposed NCLWF Easement
-  Parcels
-  Other Conservation

0.25
Miles



Nags Head Woods





AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM L.1.

Discussion of Appointment Process to Fill Vacant Board of Commissioners Seat

Prepared by

Brittany Phillips, Deputy Town Clerk

Reviewed by

Brittany Phillips
Carolyn Morris
Andy Garman

Staff Comments/Recommendation

Attached is draft application which could be used to solicit candidates.

Specific Action Requested

This item is provided for Board discussion of process to appoint a new commissioner.

Summary

At the November 6th Board of Commissioners meeting, Board members will discuss the process for appointing a new commissioner to fill the seat left vacant by the resignation of Comr. Kevin Brinkley.

For this vacancy, the Board of Commissioners appointee would serve through the November 2025 election. A successor would be elected in November 2025 and would serve the remainder of Comr. Brinkley's term which ends with the November 2027 election.

Attachments

1. 11 L1 DRAFT APPLICATION BOC Appointment

How have you been engaged with the Town of Nags Head? Briefly summarize your experience working with the Nags Head Community.

Briefly describe some of the issues that are important to you. This may include your perspective on challenges the town is facing.

Why do you think you would be a good fit as a member of the Nags Head Board of Commissioners?

Additional Comments: (Feel free to attach additional relevant information you would like to be considered.)

I certify that the facts contained in this application are true and correct to the best of my knowledge and belief. I further understand that upon submitting this application to the Town of Nags Head, this application, and all information on it, is considered a public record under North Carolina law.

(Signature) (Date Signed)



AGENDA ITEM SUMMARY

Town of Nags Head Board of Commissioners

REGULAR SESSION: November 6, 2024

AGENDA ITEM M.1.

Request for Closed Session to Consider the Unsealing of Various Closed Session Minutes Pursuant to GS 143-318.11(a)(1)

Prepared by

Carolyn Morris, Town Clerk

Reviewed by

Carolyn Morris

Carolyn Morris

Andy Garman

Staff Comments/Recommendation

Attorney Leidy has reviewed and determined the listed minutes can be considered for Board unsealing/opening.

Specific Action Requested

Request Board consideration of unsealing/opening various, previously approved, Closed Session minutes.

Summary

At the November 6th Board of Commissioners meeting, the Board will consider the opening/unsealing of various Closed Session minutes, pursuant to GS 143-318.11(a)(1). A detailed listing has been provided to the Board under separate cover.

Attachments

None