



March 3, 2021

Town of Nags Head
5401 South Croatan Highway
Nags Head, NC, 27959

ATTN: Michael Zehner, Planning & Development Director

RE: West Coastal Way (Fourth Street unimproved right-of-way)

Dear Michael:

Please find the attached design drawings for improvements to West Coastal Way (Fourth St) which have been revised to address comments received in your email dated 2/9/2021. The following summarizes the comments and resulting revisions made to the plans.

General

- *For your letter, please revise, addressing it to the Board of Commissioners, or to Greg Sparks, Interim Town Manager, on the Board's behalf. You are asking them to allow the improvements to be made to the ROW.*

Response: A letter to the Board of Commissioners is also provided within this package.

- *The street in the Coastal Villas subdivision will be named W. Coastal Way. I would suggest noting the street name as "W. Coastal Way (fka Fourth Street)".*

Response: The street name has been changed as requested.

- *For the six lots, please also show the address numbers. These should be 122, 124, and 126 for the lots on the west side, north to south, and 117, 119, and 121 for the lots on the east side, north to south.*

Response: The address numbers have been added as requested.

- *If this were a subdivision, street lights would be required with a "suggested separation of three hundred (300) feet and maximum separation of five hundred (500) feet, including at least one light at each intersection or street bend of sixty (60) degrees or more. Installation shall be on the street right-of-way." Coastal Villas has a light at the far southern end, so it is recommended that lights be installed at the street bend, and near the intersection with 158. Coastal Villas has spec'd the following lights.*

Response: The owner of the existing lots does not desire to have street lights installed within this existing unimproved subdivision. The adjacent post office has 5 lights mounted to the northern wall that emit light horizontally (non-cutoff). Given the elevation of the post office and the

anticipated elevation of the dwellings that will be built on these lots, there will likely be significant glare within the dwellings and additional light is not desired.

Engineering

- *As depicted, approximately 50% of the existing Fourth St. "paper street" is 60' in width with the remaining portion 40' in width. Sec. 36-4, Streets, Sidewalks and other Public Places provides requirements addressing each width individually and does not speak to a case where a variable right-of-way width exists along a subdivision length. In accordance with the Code, a 24' min. pavement width is required on the 60' wide right-of-way section and reduced to a 20' wide section within the 40' wide right-of-way section. This is not ideal but I do not see where the Code allows for flexibility on this. As such the roadway will need to be redesigned.*

Response: The roadway width for the portion of 60' wide R/W has been adjusted to provide 24' of pavement.

- *The roadway connection from Coastal Villas is 24' in width; to reduce to a 20' width, use a 20' taper length.*

Response: The roadway width within the north end of this 40' wide R/W has been adjusted to transition from 20' to 24' of pavement over 20'.

- *The Subcollector Street Detail Section shown on Sheet C702 indicates a 6" to 3" aggregate base course shoulder. Based upon the proposed pavement section, this should be an 8" to 5" as per the second detail diagram under Environmental and Subcollector Streets in Sec. 36-4, Streets, Sidewalks and other Public Places. This shall be revised.*

Response: The shoulder thickness has been revised to reflect 8" to 5" of aggregate base course.

- *Fourth St. Intersection Inset on Sheet C701 indicates a radius of 30'. The side street intersection diagram indicates a radius of 25' with a 2'-6" curb & gutter NCDOT Std. 846.01. This shall be revised.*

Response: The radius has been revised to the 25' town standard and 2'-6" curb and gutter has been added.

- *The only requirement related to stormwater is the field investigation of the seasonal high water table. Section 36-4 (c)(2) indicates the following "In the flat low lying areas of the town, where the seasonal high water table is within a few feet of the ground surface, the finished centerline elevation of the street surface shall be a minimum of 1½ feet above the general natural ground surface. Will need this information to see if this provision applies and to ensure there is adequate separation from the water table to the proposed bottom of the swales.*

Response: Initial soil borings indicated a ESHWT of approximately 5.5' msl. Recent extended periods of rainfall has resulting in temporary ponding on the site to an elevation of approximately 6.5 msl. The revised profile has held the road at a minimum elevation of 8.5 and the swale low point is 6.6 msl.

Fire

- *I have concerns over the 2" water line connection. Originally, the Coastal Villas plan discussed connection to this possible line to increase water flow. The 2" line will not do anything for the flow. It also seems that section 10.69 of our town code requires a 6" main.*

Response: The waterline has been revised to the minimum 6" diameter. It is suggested that the portion of waterline that is being relocated and increased to a 6" along the north side of this subdivision is redundant with the 6" line that is now being looped through West Coastal Way and therefore unnecessary.

Public Works

- *These have been relayed previously, with communication in the emails below. In short, the line within 4th Street must be 6". As indicated, we would be open to elimination of the 6" line from Fourth to the highway along the south end of Coastal Villas and through the easement; however, we cannot relieve any obligation from the summary judgement.*

Response: The waterline has been revised to the minimum 6" diameter. It is unclear if or how the summary judgement can be revised to reflect the proposed condition to eliminate the redundant line.

- *The waterline proposed needs to be increased in size to 6" to meet the minimum waterline construction standards. Additionally the plans do not indicate the location of the new water services to the six undeveloped lots.*

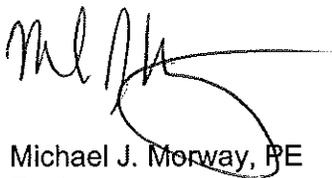
Response: The waterline has been revised to the minimum 6" diameter and the 6 new services have been included.

- *If feasible, we would suggest that consideration be given to installing a cross fitting (instead of two tees) in the east-west water line extension to provide service to the respective developments. If this is possible, Cathleen should just reach out to discuss how to modify the development plans for Coastal Villas.*

Response: Due to the different right of way widths between Coastal Villas (60') and the existing Fourth Street (40'), it is not practical to maintain the 19' offset within the more narrow right-of-way as it would be located beneath the water services. However, we have moved the new waterline to the west side of West Coastal Way / Fourth Street to maintain consistency with the Coastal Villas.

As always, I appreciate your cooperation with the review of these right of way improvements. Once the Board of Commissioners grants permission to install these improvements, we will move forward with the NCDOT street access and NCDEQ Public Water Supply applications, both of which will require the Towns signatures. If you have any questions or need any additional information, please feel free to contact me.

Sincerely,



Michael J. Morway, PE
Engineer

cc: File 08416A
Ann-Cabell Baum
Ricky Brake, Barnhill Contracting Co.
Alfred Norman

enc: C701 Roadway Plan (dated 3/1/2020)
C702 Roadway & Waterline Details (dated 3/1/2021)