

August 11, 2016

Mr. Josh Edmondson, CZO
Town of Emerald Isle
Planning and Inspections
7500 Emerald Drive
Emerald Isle, North Carolina 28594

Subject: Egret Landing Shopping Center

Dear Mr. Edmondson:

We have received and reviewed the letter of comments from the August 3, 2016 TRC meeting concerning Egret Landing Shopping Center as well as the NC Department of Transportation TIA and site plan review letter dated August 8, 2016. The attached Site Plan Submittal Package has been revised accordingly and we offer the *italicized* responses to the comments below.

The following are comments from Town Planning Staff:

Stormwater Comments

1. Provide information showing the bottom of the infiltration device will be a minimum of 2 ft. above the seasonal high water table.

The Soils Report prepared by Environmental and Soil Service, Inc. dated December 7, 2015 is attached. The seasonal high water table was determined to be approximately 82" below the existing surface. On the north side of Crew Drive the existing ground elevation is approximately 12', therefore, the seasonal high water table is approximately elevation 5.2' and the bottom of the infiltration device will be 7.85'. On the south side of Crew Drive the existing ground elevation is approximately 13', therefore, the seasonal high water table is approximately 6.2' and the bottom of the infiltration device will be 8.35'.

2. Volume in excess of the treatment volume, as determined from the design storm, shall bypass the device

The volume in excess of the treatment volume will bypass the system through an overflow weir in the outlet structure.

3. Volume in excess of the treatment volume, as determined from the design storm, shall be evenly distributed across a minimum 30 feet long vegetated filter strip

The existing vegetation along the south side of the canal will remain undisturbed and will serve as the minimum 30 foot long vegetated filter strip. The volume in excess of the treatment volume will be discharged to an appropriately sized energy dissipater and be evenly distributed across the vegetated filter strip.

4. The storage volume must completely draw down to the seasonally high water table under seasonally high water conditions within 5 days

Calculations are attached to show that the storage volume will completely draw down to the seasonally high water table under seasonally high water conditions within 5 days

Site Plan Comments

- 1. Submit lighting plan.**
Site Lighting Plan is attached.
- 2. Submit color swatches for exterior building colors**
Color swatches will be submitted under separate cover.

Police Department Comments:

- 1. Ensure landscaping and plantings in the truck delivery turn in and back area do not affect visibility for the truck and through traffic**
The size and spacing of the selected materials for the landscaping and plantings in the truck delivery turn in and back area will not affect the visibility of the trucks or through traffic.

Fire Department Comments:

- 1. Ensure through access of the site during construction**
Construction will be phased to accommodate access through the site during construction
- 2. For convenience and logistic purposes see about moving the riser room to the south east corner of the building**
The riser room has been relocated to the southeast corner of the building.
- 3. Move hydrant on outparcel to the west by 60 feet**
The hydrant on the outparcel has been shifted 60 feet to the west.
- 4. The riser room final placement will determine a couple of other potential feature moves like the backflow device**
The backflow device will be installed in the riser room. The Fire Department Connection will be installed at the end of the Truck turn in and back up area.
- 5. Assign the truck turn in and back up area as a fire lane**
The truck turn lane has been labeled as a No Parking zone / Fire Lane. "No Parking / Fire Lane" signs have also been added to the plan.
- 6. Show the asphalt as standard duty along the travel ways**
The asphalt pavement label has been revised indicate "Standard Duty".

Bogue Banks Water Corporation:

- 1. Will need a point of service valve in front of back flow**
The backflow device has been relocated to be inside the Fire Riser Room. The point of service valve will be located at the water main in the drive isle adjacent to the riser room and is indicated on the plan.
- 2. Will need 10 ft. easements for water lines from hydrants back to the right of way at Emerald Landing Dr.**
A 10 ft easement has been added over the public water mains.
- 3. If these are, considered hydrant extensions no State permit will be required**
Since we are installing new public mains to create a looped system, they will be permitted with NCDEQ.

The following are comments from NC Department of Transportation:

North Carolina Department of Transportation TIA Recommendations:

1. **In as much as the Town has requested a TIP project to convert the existing signalized intersections on NC58 to roundabouts, based on our evaluation, we recommend that a roundabout be constructed at the Mallard Drive intersection with NC58 rather than installing a signal. The roundabout would be a single lane design with dual lane approaches for the east, west, and southbound approaches.**

The proposed signal will be replaced with a roundabout, which will be coordinated and reviewed with the Town of Emerald Isle and NCDOT through the Street & Driveway Access Permit process to achieve an appropriate configuration for the efficient and safe vehicle and pedestrian operation of the roundabout.

2. **The cross-section on Mallard / Emerald Landing Drive may need to be revised to complement the roundabout.**

The cross section of Mallard Drive will be revised to complement the roundabout during the design of the roundabout.

3. **The TIA indicates the intersection of Crew Drive with Mallard / Emerald Landing Drive was analyzed with Mallard and Emerald Landing having stop condition and Crew Drive as free flow. The site plan indicates an all way stop proposed at this location. The site plan also shows three northbound approach lanes on Mallard Drive that would have stop control, which would be difficult for motorists to manage. Based on this, we recommend that Mallard Dr. / Emerald Landing Dr. be given the free flow condition and that Crew Drive have a stop condition. An option may be to use a three way stop with traffic exiting Emerald Landing having stop control as well.**

The site plan has been revised to indicate a three way stop intersection with Mallard Drive having a free flow condition.

North Carolina Department of Transportation Site Plan Comments:

1. **It appears that Mallard Drive extends northward from NC58 to Crew Drive. Emerald Landing Drive is the section north of Crew Drive.**

The Street Names on the plan have been revised accordingly.

2. **Suggest that the overflow parking lot be designed to provide for internal circulation. This could facilitate the removal of the middle driveway and utilize only two driveway connections to Crew Drive.**

Circulation patterns as shown on the plan are necessary to maintain the required parking ratio for the proposed building and to facilitate pedestrian and vehicle operational patterns that provide the tenant and its customers the best function based on operational history from multiple stores in multiple states.

3. **The proposed sidewalk along the east side of Mallard Drive should be constructed at the same offset from the property line southward from the right turn lane and continue straight to connection to the NC58 sidewalk.**

The sidewalk has been shifted to maintain the same offset along Emerald Landing Drive and Mallard Drive.

- 4. The proposed radius in the northeast corner of the Crew Drive intersection with Emerald Landing Drive should form a continuous radius and connect to the existing C&G on Emerald Landing Drive. A dual directional ADA WCR should be provided in this radius. The proposed ADA ramp in the southeast corner should also be dual direction, and the C&G in the southwest corner should be wiped down for future dual direction WCR. There appears to be a drop inlet in the southeast corner, how is this going to be handled?**

The radius in the northeast corner of the intersection of Crew Drive and Emerald Landing Drive has been revised to form a continuous radius that connects to the existing C&G on Emerald Landing Drive. A dual directional ADA WCR has been provided at the northeast and southeast corner of the intersection. The curb head in the Southwest corner will be wiped down to provide for a future dual direction WCR. The drop inlet will be converted to a storm manhole and a new catch basin will be installed in the southeast curb line.

- 5. Need to end the proposed 24 inch C&G along Mallard Drive at the NC58 R/W line.**

The curb and gutter along Mallard Drive has been revised to end at the NC 58 R/W line.

- 6. Wheel chair ramps need to be provide at all locations where sidewalk crosses driveways.**

Wheel chair ramps have been provided at all locations where sidewalk crosses driveways.

- 7. Sidewalk is shown along the north side of the overflow parking lot. Suggest that the west end of the sidewalk be extended at least to the property line of outparcel preferably to Mallard Drive.**

Sidewalk has been extended to the property line of the outparcel and will be extended to Mallard Drive with the development of the outparcel.

- 8. Two ramps are shown in the southwest corner of the grocery store at the western driveway connection to Crew Drive. Suggest that just one dual direction ADA WCR is constructed in the radius and that the proposed crosswalk across Crew Drive be shifted west to this location.**

A dual ADA WCR has been added in the southwest corner of the grocery store driveway connection and the crosswalk has been shifted accordingly.

- 9. It would be desirable for there to be an internal cross connection between the outparcel and the overflow parking lot. A possible location would be along the southern end of these areas.**

Rather than provide that connection at this point in a potentially incorrect location, the inter-connection is desired and will be provided when the site-specific development plan is prepared for the outparcel.

- 10. The cart corral on the east side of the eastern driveway into the overflow parking area extends close to Crew Drive. Suggest that the angle of the corral be reduced to be more parallel to the adjacent parking stall.**

The cart corral has been rotated to be parallel to the adjacent parking stalls.

- 11. Crew Drive transitions from a 30 ft. B-B width on the west side of the truck dock to 45.5 ft. width at the eastern property line. Suggest that the width remain at 30 ft. and shift from south to north to better align with the service isle along the frontage of the adjacent shopping center. Also suggest that the sidewalk along the north side of Crew Drive in this area be extended eastward to tie into radius of adjacent property drive across from the sidewalk along the adjacent building frontage.**

In its current-day condition, Crew Drive has a 20' approximate typical width and the road widens to approximately 45.5' at its connection with the adjacent shopping center. The new configuration of Crew Drive will provide a 30' width and the road will widen to 45.5' to maintain the width of the existing connection with the parking lot of the adjacent shopping center. The proposed configuration facilitates internal delivery truck traffic as well as through truck traffic, and as shown on the plan, pavement striping will be installed to guide vehicles as they travel through the site to the adjacent shopping center.

We are unable to add sidewalk to tie into the radius of the adjacent property drive across from the sidewalk along the adjacent building frontage as we do not own that property. If desired, the adjacent property owner could install these improvements.

We appreciate the opportunity to provide the comment responses. Should you have any questions or need additional information, please do not hesitate to contact me.

With best regards,
Ark Consulting Group, PLLC

Bryan Fagundus, P.E.
Principal

Attachments

Cc: Austin Williams, Crosland Southeast