

**To:** Richard Collier, McKim & Creed  
**From:** Brian Chambers, Senior Planner; 910.342.2782  
**CC:** File;  
**Date:** 12/30/2021  
**Re:** Center Point TRC Rev 2

The following is a list of comments for review from planning regarding the project. Please provide your corrections as listed below. A staff summary of comments:

Staff	Department	Notes
Brian Chambers	Planning, Plan Review	Comments below
Eric Seidel	Engineering	Comments attached
Chris Walker	Fire	Comments attached
Mitesh Baxi	Traffic Engineering	Comments attached
Bill McDow	Transportation	Comments below

#### Planning Review

Brian Chambers, [brian.chambers@wilmingtonnc.gov](mailto:brian.chambers@wilmingtonnc.gov), 910.342.2782

#### Comments:

- Confirm compliance with Landscape & Streetscape Plan, Condition #6 (CD-5-917-M320). We may need to discuss how best to demonstrate, narrative and/or illustration. *Previous comment*
- Provide building elevations that show compliance with UMX standards and Condition #8 (CD-5-917-M320). *Previous comment*
- Confirm compliance with Condition #11 (CD-5-917-M320). *Provide updates as needed.*
- Provide building heights in site data table. *Please provide for all structures.*
- Provide number of stories and square-feet per floor for all buildings. *Response indicates this information is in a table on CS-100 but I do not see it.*
- Provide bicycle parking calculations and location on plan set. *Previous comment*
- Provide confirmation from City Arborist that the 60" Oak is diseased/dying thus not requiring mitigation.
- Provide exceptional design narrative to achieve the proposed impervious coverage (72.3%) within Watershed Resource Protection area. *Previous comment*

#### Transportation Planning (Bill McDow):

1. Please provide (Clearly label) crosswalks and markings on Street A and Street B. The Roundabout, Signalized Intersections and Stop Signs and Stop Bars have curb ramps, however, the crosswalks and markings appear to be missing.

2. If mid block curb ramps are present, please mark the pedestrian crosswalks and markings.

3. No Further Comments.

Project Name: Center Point  
Response Date: 12/22/2021  
Reviewer: Eric Seidel, PE  
Department: Engineering – Plan Review Section

**Plans:**

1. Forward Wetland & Stream disturbance permits to City Engineering once received/completed. It looks as though only a Jurisdiction Determination (JD) was submitted with the latest submittal.
2. Please provide documentation concerning the timeline for the construction of Drysdale Drive Extension. The City needs to confirm Drysdale will be completed to a level, in which, accessibility will not be an issue prior to release of any building Certifications of Occupancies. We would welcome a meeting, with all involved parties, to work through any outstanding timeframe issues and potential conditional approvals for construction release.
3. *Identify Vegetative Buffer on Site / Grading plans with all proposed BUA encroachments clearly labeled. Provide pervious material type with labels and references to details. If permeable materials are proposed to be pervious concrete, asphalt, and/or pavers they will have to meet DEQ MDC requirements to qualify as pervious. Provide MDC calculations. Repeat Comment. Also, label all stream pedestrian crossings as pervious.*
4. Show proposed 20' public drainage easement from reconfigured stream top of bank. Update label to read "20' Public Drainage Easement from Stream Reconfiguration Top of Bank / Enhancements".
5. Provide Stream Culvert Head / End Wall structural drawings when completed. CS-504 provide elevation data on culvert section such as invert, top...ect. CU-701 provide stream culvert on profile. Also include inverts on grading / drainage plan. I was having trouble determining the amount of cover over the culvert and whether the proposed waterline could make the crossing on top of the culvert.
6. *CG-103: Assure the buildings (with FFE 25.50') along Drysdale Drive Extension are adequately setback from the proposed stormwater outfall located within the right-of-way. Coordination with NCDOT is needed to alleviate any concern for maintenance and/or foundation encroachment onto the pipe. Please identify the size of piping on the plans. Repeat Comment.*
7. CS-102: Check a few dimensions along Street A. Such as the 53.50' and 8.21' dimension labels.
8. CS-504: Street A Section: Doesn't proposed sidewalk extend all the way to the Right-of-way on both sides? I did not see anywhere on plan view where it was 7'. Please update.
9. CS-504 Calypso Drive Section: Provide an additional section without the parallel parking and with the two plaza strips.

10. CS-504 Street B Section: Show 5' sidewalk within pedestrian access easement outside of right-of-way. Please label access easement on the Site Plan Sheet CS-101. Also, provide an additional cross section closer to the intersection showing the 5 travel & turn lanes.
11. *Grading Plan – provide rip-rap symbol and reference to detail for each FES outlet. Repeat Comment.*
12. CS-504 – Pervious Paver Detail: Provide washed stone depth. Clarify on the site plan if different sections of permeable pavers will have different base stone depths, based on MDC calculations. Will the underdrain section be used? If so, please label on plan view accordingly. If not, please remove detail to avoid any confusion.
13. Per our meeting, it is my understanding additional design information, for SCM's 4, 8, & 9, is needed from Contech. Please update the plans when this information is received.
14. Consider adding a version of the Drainage Area Map DA-2 to the construction set while adding notes to CM-100 instructing the contractor to tie all roof drain connections to SCMs per the DA Map. Without the DA map I do not see how the contractor will know where the runoff is supposed to go. Will the Contech design designate where the roof drains will tie into the system?
15. CG-503: Adjust FES 4-2 from SCM 4-1 based on updated Contech Design.
16. CU-702: Can the outfalls from SCM 4 & 8 adequately cross the proposed Calypso Drive Storm system? Please show on profile.
17. CN-509: Provide labels on Filterra units stating what inlet configurations are proposed for catching runoff from the street with detail reference to sheet CN-510. Also show roof drain connection and/or label for Filterra catching roof runoff.

**Operation & Maintenance Agreement:**

18. *Provide Filterra Operation & Maintenance Agreement.* I did not see it in the latest submittal I apologize if I missed it.

**Calculations:**

19. Provide pervious paver calculations, meeting DEQ MDC, for impervious credit reduction. Please include pervious paver supplements with the next submittal.
20. Provide Filterra Supplements using the DEQ EZ Form.
21. Provide SCM/Pond Routing Reports which shows stage storage, orifice, & weir information.

**Narrative:**

22. The Routing Summary Table was cutoff at the 10-yr event. Please update.

Project Name: **Center Point**

TRC REVISION Date: DEC 3, 2021

Reviewer Name: Chris Walker

Reviewer Department/Division: Fire

Please address the following:

- A hydrant must be within 150' of the FDC. The FDC located on the rear of the Parking Deck B does not appear to meet the code requirement.
- The type of Building Construction according to the International Building Code must be present on the plans. (Preferably the site data table) The table on sheets CS-100 does not reflect the IBC construction type, it just list the entire range.

Project Name: **CENTERPOINT**

Formal TRC #2 Date: **12.20.2021**

Reviewer Name: **Mitesh Baxi**

Reviewer Department/Division: **PDT/Traffic Engineering**

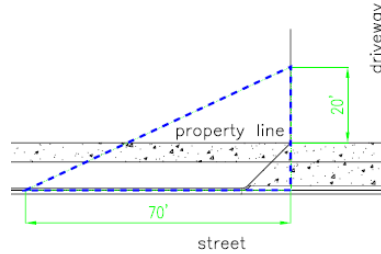
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#### **TECHNICAL STANDARDS – NEW ROADS:**

1. Please identify the exact boundary for private and public ROW on the plans.
2. All private streets shall be designed and constructed to meet or exceed the public street standards as specified by the [city's] Technical Standards and Specifications Manual. [[Sec.18-495 \(C\) CofW LDC](#)]
3. Detectable warning domes shall be installed for wheelchair ramps at corner of all the streets as per ADA standards.
4. **STREETLIGHTS:**
  - Streetlights are required to be installed on all the ROWs in accordance with City Street Lighting policy. A standard street lighting layout, with the minimum required street lighting standards in accordance with City streetlighting policy, will be provided by City once the boundary for public/private ROWs are identified on the plans and we receive a photometric analysis for the streetlights arrangement for roundabouts.
5. **ROUNDBABOUTS:** Response letter from applicant indicates that roundabout detail drawings are under development. All the comments per previous review are still applicable. Additionally, consider below factors while configuring.
  - Provide details for proposed roundabouts on Cavalier Dr/Calypto Dr and Street A/Street B.
  - Clearly identify by pavement markings if the roundabouts are single or multi-lane configuration. Consider the circular lane width for single lane roundabout.
  - Raised splitter island with pedestrian refuge island at all the roundabout legs.
  - The driveway off a roundabout should be designed with the same geometrics of a roundabout leg having a splitter island and deflection to reinforce proper traffic direction.
  - The design of the central island is defined primarily by the requirement to achieve speed reduction for passenger cars. The proposed central island diameter shall provide adequate deflection to achieve slow entry speeds and consistent speeds through the roundabout.
  - Provide the vehicle turning movements for roundabout at Cavalier Dr/Calypto Dr.
  - We will reserve further comments till roundabout details are received.
6. **SIGNAGE AND PAVEMENT MARKINGS:**
  - Provide a separate sheet for signage and pavement marking plans for all the proposed roundabouts and ROWs showing all proposed traffic control signs, lane configuration, street name signs, and related pavement markings locations and types. Expect further comments.
  - Pavement markings for the parallel parking off Calypso Dr are not required and shall not be installed. This will allow the maximum use of spaces based on various types of vehicles.
  - Crosswalk pavement markings across the driveways off Street B are not required and shall not be installed.
  - Crosswalk pavement markings for the roundabout shall be special emphasis crosswalk having parallel bars with traversing lines.
  - Crosswalk pavement markings at the intersection of Street A and Calypso Dr are not required and shall not be installed.

#### **TECHNICAL STANDARDS – DRIVEWAY/STREET ACCESS:**

7. Show and apply the City's 20'x70' sight distance triangle at each driveway on the site plan and landscaping plan as per an image below. [Sec.18-529(c) (3) CofW LDC] [Sec. 18-812 CofW LDC]. [Sec. 18-667 Figure 18-667 CofW Updated LDC: Vision clearance].



**SIGHT DISTANCE TRIANGLE FOR ANY STREET/DRIVEWAY INTERSECTIONS WITH THOROUGHFARES**  
 Eastwood Rd and Military Cutoff Rd are major thoroughfares [Chap VII (C) (2) (a) of CofW Tech Stds]. In accordance with the City Code, sight distances along thoroughfares must be calculated in compliance with the AASHTO requirements. [Chap VII (C) (1) of CofW Tech Stds] [Sec.18-556 CofW LDC] [Sec. 18-667 CofW Updated LDC]. Please revise to show an appropriate sight distance triangle at the street intersections of Calypso Dr and Street A with major thoroughfares. Show AASHTO sight distances in addition to 20'x70' SDT for any driveways accessing major thoroughfare.

**TECHNICAL STANDARDS – PARKING:**

8. Angled parking spaces must meet minimum requirements for parking from City Technical Standard, [Chapter VII, Table 6, page 7-19 CofW TSSM]. Please demonstrate the successful maneuvering of the largest vehicle expected for these spaces with the proposed dimensions.
9. The first angled parking space north of the roundabout on Street A, is too close to the proposed crosswalk. Revise to ensure the crosswalk is not blocked while backing from this space.
10. Provide appropriate signage to restrict parking for drop off spaces. Clarify the reason for providing a drop-off zone [MUTCD].
11. A traffic regulatory signage shall be installed to restrict the traffic approaching one-way driveway off Street B. [MUTCD]
12. A stop sign and stop bar are too far from the potential crosswalk at the driveway accessing southern retail off Street B.
13. Provide a turning movement analysis of fire truck, trash truck and any trailer/s that are expected to access these streets and parking facilities.
14. An allowance for a 2.5' vehicle overhang must be considered for all the perpendicular parking spaces to avoid damage to the handicap signs. [Chapter VII, Detail SD 3-07 & SD 15-13 CofWTSSM] [Page 7-20 of CofWTSSM]. Alternatively install wheel stops.
15. Detectable warning domes shall be installed at the transition of pedestrian aisle to drive aisle/accessible aisle.

Please let me know if you have any questions or if I can be of further assistance.