

Memo

To: Charlie Cazier
From: Pat O’Mahony, Associate Planner; 910-341-0189
CC: File;
Date: 7/9/2021
Re: Raleigh Street Storage 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
Pat O’Mahony	Planning, Plan Review	No further comments
Richard Christensen	Engineering	Comments Attached
Chris Walker	Fire	No further comments
Mitesh Baxi	Traffic Engineering	Comments Attached
Bill McDow	Transportation	No further comments

Pat O’Mahony- Planning – Attached

- No further comments

Engineering has reviewed the plans for the Raleigh Street Storage project submitted March 23, 2021 for TRC review and have the following comments:

Calculations

1. Provide curve number (CN) calculations showing how the pre-development and post-development curve numbers of 60 and 90, respectively, were reached. Provide a map identifying the soils that are on site and their respective hydrologic soil group. For the pre-development condition, the site must be considered woods in good condition.
2. Verify the weir length in the pond routing. Calculations appear to show a 3-foot long weir at elevation 97.00', but the detail on sheet C-3 shows it to be 4 feet in length.
3. Explain why is the outlet pipe not included in the routing analysis?
4. What is the TW elevation of 33.30'? All elevations used in the routing are in the 90's. Please explain.

Plans

- a. There is still some concern with the pond berm on the southwest side of the pond adjacent to the outfall. The top of bank internal to the pond is at 100'. There is not a 10' wide top of berm in this location. With the emergency spillway at 99.50' there doesn't appear to be enough of a berm to contain the stormwater in the emergency spillway during the larger storms. The NCDEQ stormwater design manual provides the following:
The height of an embankment dam must consider freeboard and compensation for settlement. The basin's freeboard should be a minimum of 1 foot above the elevation of the highest stage calculated based on the 100-year storm.
With the 100-yr wsel at 99.11', there isn't enough freeboard provided. Should the outlet structure get blocked during the 50-yr, the wsel gets to 99.65'. It would seem that the narrow berm may provide a way for water to circumvent the emergency spillway over time.

Please call or email if there are any questions. Thank you.

*Project Name: **RALEIGH STREET STORAGE***
*Formal TRC #2 Date: **06.17.2021***
*Reviewer Name: **Mitesh Baxi***
*Reviewer Department/Division: **PDT/Traffic Engineering***

TECHNICAL STANDARDS:

1. Plan shows pavement markings for the crosswalk from public sidewalk into the site at the driveway. Revise to remove pavement markings within the public ROW while keeping the connectivity for the sidewalk.

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