



October 1, 2024

**Town of Rolesville
502 Southdown Circle
Rolesville, NC 27571
919-554-6517**

**Comment Response Letter
Tidal Wave Auto Spa – SDP-23-08**

The following are responses to comments provided by Bolton & Menk on 09/13/2024 for the 4th site development plan review of the proposed Tidal Wave Auto Spa in Rolesville, NC

Cover Sheet

1. Repeat: Include SWM package with next submission. Report should include:
 - Pre and Post development drainage area maps
 - HGL calculations and graphs (10yr for closed systems, 25/50 year for those in sags based on classification); HGL shall be inside pipe
 - Gutter Spread Calculations
 - Outlet velocity identified
 - Rip rap calculations
 - Culvert calculations if applicable

Response: Velocity calculations are included as part of the "Storm Sewer Tabulation" in the Hydraflow storm sewers calculations. Gutter spread calculations are included as part of the "Inlet Report" in the storm sewer calculations. Rip rap apron calculations have been added to the report.

C3.1- Existing Conditions & Demolition Plan

2. Limits of disturbance previously shown on existing conditions and demolition sheet, continue to show limits of disturbance on sheet.

Response: Limits of disturbance added to the existing conditions and demolition sheet.

C4.1- Erosion Control Phase I

3. Update silt fence or label location based on updates to silt fence

Response: Silt fence labels updated to correct locations.

4. Drainage easement was previously labeled on erosion control sheets, continue to label drainage easement

Response: Drainage easement label added to C4.1.

5. Temp. construction easement was previously labeled on erosion control sheets, continue to label temp. construction easement

Response: Temporary construction easement label added to C4.1.

6. Disturbed area has been updated; acreage has remained the same. Verify and update disturbed acreage

Response: Disturbed acreage area updated.

C4.3 – Erosion Control Phase III

7. Disturbed area has been updated; acreage has remained the same. Verify and update disturbed acreage

Response: Disturbed acreage area updated.

8. Drainage easement was previously labeled on erosion control sheets, continue to label drainage easement

Response: Disturbed acreage area updated.

9. Temp. construction easement was previously labeled on erosion control sheets, continue to label temp. construction easement

Response: Drainage easement label added to C4.3.

C5.1 – Site Plan

10. Add label for new pedestrian striping

Response: Called out added to pedestrian striping referencing NCDOT standard detail.

11. Adjust pavement markings and striping based on the addition of pedestrian striping

Response: Label added to NCDOT curb ramp on C5.1.

12. Existing directional arrows are proposed to be removed and be replaced with the pedestrian crossing.

Response: Called out added to pedestrian striping referencing NCDOT standard detail.

C6.1 – Overall Grading and Drainage Plan

13. All storm pipes to have 2' minimum ground cover over top of pipe.

Response: Storm structure labels have been updated to correctly show pipe flow directions.

14. Update new ramp spot grade.

Response: All pipes have a min. slope of 0.5%.

15. Repeat: The grade in this area appears to be flat, causing concerns of how well the area will drain to structures A7 and A8. Adjust grades in this area to allow positive drainage to structures in order to route.

Response: 0.2' drop added to all storm structures

16. Any pipes used for detention should have O-ring connection. Label pipes and structures with O-ring connection as needed.

Response: SCM and underground detention outfalls updated to FES structures with rip rap aprons.

17. Update rip rap apron detail on sheet C8.3 to include new structure FES A1 This comment applies to all sheets.

Response: Rip rap detail table on C8.5 updated for the FES at storm structures A1 and A3.

18. Clarify material, previously labeled "GRCP", now only shown as Class IV

Response: All pipe materials have been updated. All pipes with more shallow cover under traffic bearing areas are to be Class IV GRCP. See note 9 under "Standard Drainage Plan Notes" for definition of GRCP.

19. Repeat: Clarify what GRCP is

Response: GRCP standard for "Gasketed reinforced concrete pipe". The gasket acts as leak prevention like an O-ring. See note under "Standard Drainage Plan Notes".

20. All pedestrian ramps to be ADA complaint. Please confirm longitudinal and cross slopes

Response: All pedestrian ramps cross slopes have been analyzed for ADA compliance.

C6.2 – Drainage Profiles

21. Repeat: clarify what GRCP is

Response: GRCP standard for "Gasketed reinforced concrete pipe". The gasket acts as leak prevention like an O-ring. All pipe has been called out as regular RCP with O-ring connection.

22. Update band elevations for EG and FG surfaces for new drainage profile

Response: Data bands on storm profiles have been updated to accurately show EG and FG elevations.

23. Provide 2' minimum cover over all storm pipes

Response: The storm system and bottom of pond have been lowered 1.25' to achieve min. 2' cover

24. Repeat: Label existing and proposed grades, typ.

Existing and finished grade labels and a legend has been added for more clarity

25. Clarify if this is the HGL? If so label as so. Include HGL calculations in storm package. Ensure HGL for the 10-year storm remains within storm pipes

Response: HGL labeled on two profiles and a legend has been added for more clarity. 10-year HGL remains in the storm pipes.

C8.5 – Construction Details

26. Update to include aprons for new structures, FES A1 and FES A3

Response: Rip rap detail table on C8.5 updated for the FES at storm structures A1 and A3.

SEAMON, WHITESIDE & ASSOCIATES, INC.

Tommie L. Little III, PE

Director