Engineering has reviewed the plans for the Howard RV Center project submitted July 24, 2019 and have the following comments:

Pond Calculations

- 1. Recheck the Average Depth Calculation. It appears the perimeter of the entire permanent pool was used instead of just the perimeter of the main pool.
- 2. Average Depth used to determine SA/DA ratio cannot be rounded up, only down. You calculated an average depth of 4.39 feet, yet 4.5 feet was used. Either use the average depth calculated or round down to the nearest 0.5 foot.
- 3. Verify that the drawdown for the 1.5" storage volume is between 2 to 5 days and the temporary pool volume drawdown time is less than 5 days.

Wet Pond Supplement

4. Any changes to the calculations need to be reflected in the Supplement.

Plans

- 5. Provide the 10' maintenance access and 5' landscape zone around the pond per the technical standards.
- 6. Provide a landscape plan for the pond per SD 15-16.
- 7. Market Street Public Sidewalk: The owner can either install the sidewalk now or submit a payment-in-lieu. PIL is the better option. That way all the proposed NCDOT right-of-way improvements are constructed together. Less room for error with PIL.
- 8. The existing asphalt within the right-of-way should be removed with this project, before NCDOT constructs its improvements. See attachment.
- 9. Make sure the pond outflow is flowing to an appropriate outfall. City GIS shows a ditch and a combination of pipes in the rear of the property. Make sure the outfall pipe is draining to the ditch. See attachment.
- 10. Need drainage area maps for the wet pond and swales.
- 11. The driveway location does not meet the technical standard for the 75' property line offset along a major thoroughfare. Please meet the requirement or submit a written variance request that addresses why the technical standard cannot be satisfied.

Please submit one complete set of plans, calculations and all other supporting documentation to Engineering for additional review. Please call or email if there are any questions. Thank you.



