ENGINEER COMMENT SUMMARY – 1/15/26

FROM: Alex Klose, P.E., Deputy Public Works Director & Acting Town Engineer
DATE: November 19, 2025
RE: Parkers Place Multi-Family Development, East Lyme, CT

1. The applicant should confirm that the site water quality volume will be treated for the first 1.3 inches of rain fall, not 1 inch, which is the revised criteria published by CT DEEP. That narrative in Part II.B of the Coastal Site Plan Review application indicates that treatment of the 1" WQV has been provided.

   Response. Calculations for Water Quality Volume are included in Appendix B of the Stormwater Management Report and confirm that the WQV was calculated based on a 1.3" rainfall event (90th percentile) in accordance with the 2023 SQM.

2. A separate detailed operation and maintenance plan should be included that clearly outlines maintenance responsibilities for all site features including the elements of the stormwater management system as a condition of approval.

   Response. Comment noted. An O&M Plan will be submitted for review and approval.

3. Considering drainage area PR01-SW, which is the largest area and the area that gets routed to the detention pond, the applicant's engineer needs to revise the time of concentration (Tc) of the proposed condition. The flow path they indicate does not represent the actual condition of the drainage area flowing to the detention pond and is stated as longer than in the existing condition for the same area, which is almost never the case. The flow path indicated also will not likely make it to the stormwater pond. The applicant can either revise the Tc to better represent the entire area flowing into the basin (more conservative) or create two separate sub-catchment area from the PR-01SW drainage area; one that flows into the basin, and one that flows onto the southerly property without being routed to the basin. I would recommend creating two separate sub-catchments, since in the applicant's engineer's current model, they are not accounting for runoff from the northwest of the site; which I note is proposed to be routed southerly by the proposed grading so this would be irrelevant in analyzing the peak flow for the area not being directed to the pond.

   Response. Subareas have been added to the model to separate the area draining to the detention basin (PR-01SW-SUB-A) from the area bypassing the basin (PR-01SW-SUB-B). Flow paths and times of concentration have been calculated within each subarea.

4. Considering the swale that is proposed in drainage area PR-03S, and given the size of the area, it is unlikely that 150' of sheet flow will be obtained. Similar to the comment on Tc above for the area PR-01-SW it is very unusual that the Tc is longer in the developed condition without drastically changing the size of the drainage area or reducing the impervious area and lowering the overall curve number, neither of which occurs. The Tc in the PR-03S should be revised to better reflect the proposed conditions (of a driveway and grass where woods exist today).

   Response. The entrance drive has been revised to provide direct access to a new pedestrian crossing. Grading and drainage have also been revised. As part of the changes a rain garden has been added to fully retain the WQV and attenuate peak flow rates

up to the 25-year storm. The updated model incorporates these changes along with confirmation of the flow path and time of concentration.

5. Unless required by the model, there is no reason to provide runoff calculations/reporting for the site junction "PR-SITE" which would indicate the runoff conditions without using detention/retention, as detention/retention will be required.

   Response. The PR-SITE junction is one of the first steps in the sequence of modeling to understand the impact of the proposed development on peak flows and volumes. Detention is then designed and incorporated into the model from that initial step. The Hydrology Studio output in Appendix B includes all hydrograph results. To address this comment Table 2 in the report has been revised to remove comparison to the PR-SITE junction hydrograph.

6. There appears to be 2x 9" orifices modeled in the outlet control structure for the pond, but I do not see them called out on the grading & drainage plan. Please provide a detail for the outlet control structure.

   Response. The 2x9" orifices shown in the report are not active in the model. The outlet structure labels on the grading and drainage plan were corrected on Sheet 3 of the submitted plan set. Any orifices not included in the active model have been removed from the model and report to avoid confusion. Please note that the orifice configuration in the revised plan set has been revised based on the updated hydrologic modeling.

7. The report is missing the pond reports for events other than the 1-year storm. Please provide the pond report for all storm events modeled.

   Response. The Pond Report is only provided once in the report to show the input data associated with stage-storage, stage-discharge, and drawdown. The hydrographs for each storm are provided in Appendix B for each storm event (1 through 100-year).

8. The applicant should propose a pedestrian road crossing in a location with adequate stopping site distance. If adequate sight distance is available, I recommend crossing in the location, and construction accessible ramps, where the existing sidewalk along the eastern side of Park Place transitions to a monolithic "no parking" zone (roadway narrows at the S-curve) minimizing the travel distance and possible obstructions.

   Response. The entrance drive and sidewalk have been revised to show direct connection to a pedestrian crossing at the southeast corner of the site.

9. The applicant's engineer should verify that the flow path for emergency conditions (greater than the 100-year storm) or in the case of a breach of the surface basin, will not cause downstream flooding of the neighboring properties to the south and southwest.

   Response. The detention basin and outlet structure have been designed to accommodate flows and volumes for the 1-year through 100-year storms without flow over the riprap emergency weir. Should water surface elevations reach the emergency overflow weir, flow will discharge through the proposed preformed scour hole and riprap level spreader located at the existing low point along the southwest

property line. Flow from the low point continues onto the rear yard of the property at 53 West Main Street and into a large depression. Inundation limits within the depression to extend to the west onto the properties at 55R and 57 West Main Street. Discharge (if any) flows either southwest or southeast ultimately connecting to DOT drainage systems.

10. What happens if the stormwater network does not have enough hydraulic capacity? The hydrology model assumes full capture of the 100-year storm into the proposed infiltration chambers, however, if restricted (by the 15" HDPE pipe entering the system) is there enough on-site ponding to ensure flooding off property will not be exacerbated? This should be made clear at the lowest catch basin. I recommend the applicant's engineer provide a hydraulic model of the storm network, with tailwater conditions of the basin.

    Response. An analysis of the stormwater collection system has been performed with a tailwater elevation of 28.15, which matches the low level weir of the proposed outlet structure. The collection system conveys a 10-year storm event with pipes flowing partially full. The 25-year storm was also modeled and the system continues to perform with pipes flowing partially full.

    Localized ponding will occur at the low points in the driveway at basins 202, 203, 205 & 206. As a check, a 100-year storm was modeled, including a review of gutter flow (with bypass) and ponding at inlets. The maximum ponding depth at the sag inlets is less than 6", which would be retained on site within the pavement limits.

11. I recommend using 4' deep sump catch basins throughout the site to aid in the regular maintenance of the stormwater system.

    Response. 4' deep sumps are proposed for the basins along the southerly and westerly curb line of the main driveway.

12. It should be noted in the approval explicitly that the Town will not be responsible for curb-side refuse collection at this site, plowing, or any other maintenance activities for the private drive serving the site. The applicant should indicate any proposed dumpster locations and provide vehicle turning movements.

    Response. Comment noted.

13. As a condition of approval I recommend that the engineer of record certify that the stormwater management system has been constructed according to the design/plans along with the as-built, to include all sub-surface drainage structures installed, prior to any certificates of occupancy for the site.

    Response. Drainage Note #4 requires certification of the drainage system.