



P.O. BOX 1167
21 JEFFREY DRIVE
SOUTH WINDSOR, CT 06074
PHONE: 860.291.8755
FAX: 860.291.8757
www.designprofessionalsinc.com

CIVIL & TRAFFIC ENGINEERS / LAND SURVEYORS / PLANNERS / LANDSCAPE ARCHITECTS
Serving Connecticut, Massachusetts, & Rhode Island

March 11, 2019

Michele R. Lipe, Director of Planning
Town of South Windsor
1540 Sullivan Avenue
South Windsor CT 06074

Re: Response to Review
Comments Dated: March 6, 2019
App 19-12P, Educational Playcare Center
742 Ellington Road, South Windsor CT

Dear Mrs. Lipe:

The submitted plans included changes made to satisfy your review comments dated March 8, 2019. For ease of your review, your initial comments are in *italics*, followed by our response in **bold** is included below.

1. *Site line easement should be provided along the front of the site.* **Plans are revised to include a Sight Line Easement.**
2. *What are the aesthetics of the detention basin along the site frontage?* **The detention basin will be planted with a seed mix that contains a variety of grasses, sedges, and flowering plants that will provide food and habitat for wildlife. Due to the nature of the soils promoting infiltration, the basin is expected to be dry between storm events.**
3. *Is it possible to leave the existing vegetation (possible a wall rather than regrading) in the buffer are rather than taking down trees to replant trees? It would result in less disturbance of the land and impact on the neighbors.* **A retaining wall would still require disturbance of trees behind the wall to accommodate construction equipment and possibly underground geogrid. The existing trees are deciduous while the proposed buffer plantings are evergreen, meeting the requirements of the buffer regulations.**
4. *Section 7.4.1 8 requires day cares that are separate building be screened from adjoining sites to the standards established in paragraph 6.2.4.B.2 Buffer Standards and Design. Screening may be located within the required yards. Can you demonstrate compliance with his section?* **Plans have been revised to include buffer plantings along the westerly property line.**

5. *The dumpster abuts a residential zone. Can arrangements be made to have trash picked up during normal working hours?* **Yes, trash will be picked up during normal working hours outside of peak on-site traffic times.**
6. *Can arrangements be made to have the lighting level reduced during hours the business is not in operation?* **Yes, the lighting will dim to 30% after operating hours and have motion detection for full light level.**
7. *Will children be brought to the site by school buses? If so, will the buses enter the site or drop off along Ellington Road.* **Yes, some children will arrive by school bus. The pick-up/drop-off location is yet to be determined by the bus company. School buses can safely navigate the site with pick-up/drop-off in front of the building.**
8. *Has a sidewalk been considered along the Ellington Road frontage? Are there bus stops in the general area or businesses employees may want to work to?* **Additional sidewalk has been added to the plans for pedestrian access from the southerly corner of the property. Sidewalk to the northeast corner is infeasible due to challenging topography and a culvert crossing.**
9. *Residents have expressed concerns with traffic backup in front of the proposed drive during peak hours. Please see item 12 of the engineering comments related to this question.* **Refer to David Spear for response.**

Jeff Doolittle, Town Engineer's comments dated March 6, 2019

1. *The many areas of neighbor encroachment on this site where there is wood, fencing, metal, debris, etc should be cleaned up and removed.* **The Applicant has discussed the encroachments with the affected parties.**
2. *What is the double line in the middle of the entrance drive? I am not sure a double yellow centerline is warranted in a private driveway.* **A double yellow line is desired to indicate two-direction traffic with no-passing and to indicate entering traffic should turn to the right to facilitate one-way traffic flow desired by Town Staff.**
3. *A detail should be provided for the 5' split rail with black chain link fence around the west playground area. This is an unusual fence description and I am not sure what it will look like or how it will work.* **Please see the attached photo for fence detail.**
4. *Is the artificial turf in some play areas pervious to let stormwater drain through it? Underdrains are shown from these areas, but the detail makes it look impervious.* **Artificial turf is permeable, and the underlying foam is perforated to allow infiltration.**
5. *I suggest a sight line easement be placed across the front of this property looking left (east) from the driveway to make sure this needed sight line onto Ellington Road is maintained and not obstructed.* **Plans are revised to include a Sight Line Easement.**
6. *The plans and Stormwater Management Report show that the water level in the detention basin will fill up over the inlet flow line elevation of 66 and into the drainage*

pipes in the parking lot to CB2, CB3 and possibly YD-6 during storms from less than a 10 yr event to a 100 yr event. This is not a good design and will lead to maintenance problems and a shorter life for the storm drainage system. The detention basin needs to be modified so water does not back up in to the drainage pipes for up to a 10 yr and possibly a 25 yr storm. The forebay spillway and inlets openings to the outlet structure should be lowered. The top of the outlet structure should be lowered to elevation 69.0.

We have modified the pipe configuration and lowered the forebay spillway to alleviate your concerns. The outlet structure in the detention basin is set at the 100-year flood elevation as appropriate to our design. We have provided additional HGL analysis for all storms to show that minor flooding will only occur at the 100-year storm event.

7. *The Stormwater Management Report needs to be revised. In addition to revisions to the detention basin, complete back-up calculations should be provided for all storm events in Appendix B, The Storm Sewer Tabulation in Appendix D does not seem to match the drainage pipes shown on the site plan and I did not see any calculations for the proposed underground detention chambers. Minor modification has been made to the detention basin, lowering the elevation of the forebay spillway. Complete summary reports (previously provided only for the 2-year storm) are provided for all storms in the Revised Stormwater Management Report. We have updated the storm sewer analysis to show the actual pipe lengths.*
8. *Why is the sewer and storm pipe crossing proposed to be encased in concrete? I do not think this is necessary and will make it impossible to do any maintenance on these pipe sections in the future. Provide concrete support blocks for the upper (sewer) pipe on both sides of the storm pipe and fill around them with compacted crushed stone. The detail has been modified per the comment.*
9. *The CB and DB outlet structure should be specified to have galvanized top frames and grates. The CB detail refers to CONNDOT Standard sheet HW-507-08 for Frame and Grate requirements, which indicate that frame and grates shall be galvanized. The Outlet Control Structure detail has edited to refer to the same CB detail.*
10. *The landscape plan shows large Norway Spruce Trees and Arborvitae right next to the proposed underground detention chambers. There needs to be more space (10-20 feet) between the large trees and detention chambers. The trees closest to the underground chambers have been adjusted to provide more separation.*
11. *Show a detail for underdrains under the playground wood chip and artificial turf surfaces. Underdrains are proposed to be located around the perimeter of the playgrounds.*
12. *I have 3 questions about the Traffic Study.*
 - A. *Were short peak traffic times (10-15 min) for drop off and pick up considered with the impacts at these times? Refer to David Spear for response.*
 - B. *The proposed driveway is about 170-175 feet from the intersection of Ellington Road and Pleasant Valley Road. In Attachment 7, it appears the westbound que*

length on Ellington Road at Pleasant Valley Road is longer than this. The Am Peak Hr Background summary shows 231.6 feet and long lines of traffic heading westbound have been observed here. How will traffic get in and out of this facility with long westbound que lengths on Ellington Road? ? **Refer to David Spear for response.**

- C. *In Attachment 7 there are 2 different summaries for the Am Peak Hr Combined analysis and no summary for the PM Peak Hr Combined. These need to be clarified and a summary provided for the PM Peak Hr Combined traffic movements. ?* **Refer to David Spear for response.**

13. *WPCA review and approval is needed for this application.* **WPCA application will be made upon PZC approval.**

Please contact us with any questions.

Sincerely,
DESIGN PROFESSIONALS, INC.

Suzanne Choate, P.E.
Senior Project Manager

SPC/spc

Enclosure

Cc: Harry Freeman, Educational Playcare