

MEMORANDUM

Date: 10/31/2023
To: Michael Elabarger
From: Jacqueline Thompson, PE
Subject: The Learning Center Rolesville
SDP 23-07, 1st Submittal
Town of Rolesville, NC

This memo summarizes the review of site plan documents submitted by Kimley Horn Engineering Company dated 09/29/2023 (received 10/06/2023).

Sheet C0.0 Cover Sheet:

1. Please update the Project Number now that one has been provided to SDP23-07
2. Please provide a storm calculation package that includes drainage areas, erosion control calculations, culvert calculations for 25-year storm event, drainage area maps, and all other associated calculations required to review this submittal.

Sheet C1.0 Existing Conditions:

3. Please Show the ROW for Brown circle on this plan set Typ.
4. Please verify and label the existing waterline size inside Old Rogers Road ROW.
5. Is there an existing culvert underneath the gravel drive presently at the entrance off Old Roger's Road? If so, please add it to the demolition sheet.
6. Please verify and label the existing waterline size inside South Main Street ROW.
7. Please verify and label any stand-alone trees onsite that will need to be demolished as a part of this construction project.
8. Verify a potential sewer service located in this area for the adjacent sonic parcel and any easements that would be associated with this service.
 - a. Please use NCDOT ped ramp details and types for reference.
9. Please verify and update the existing vegetation/tree lines shown on the existing conditions sheet and update them as needed.
10. IMAPS shows that there is currently a septic tank permitted on site. Provide documentation that septic tank and leach field have been remediated/abandoned or let us know how you are planning to manage the on-site septic system. Please add location to the existing condition sheet.

Sheet C2.0 Site Plan:

11. Provide site distance triangles at Old Rogers Road intersection.
12. Please provide NCDOT standard radii of 30 feet at ROW connection.
13. Please provide a stop bar and stop sign as required at site intersections.

14. Site details include Curb stops but not bollards. Please revise details or plans accordingly.
15. Landing at ADA ramp must be ADA compliant with clear space and access requirements.
16. The bollard is located at the gate entrance. Please revise and update location as required.
17. Please dimension ADA compliant spaces and reference the detail associated with them.
18. Dumpster area requires heavy duty concrete. Please update to match your legend for heavy duty concrete and provide a detail for the enclosure.
19. Please label a typical radius for the site.
20. Provide a shared access easement between the two parcels.
21. Please correct the typo in note 9 for Wake County Construction Sequence.
22. Please provide the drive aisle centerline with B&D for circulation through the site.
23. Please Show Monument/sign easement for proposed sign locations.
24. Town Planner and Town Engineer to discuss lack/required improvement for Old Rogers Road along frontage of property. (curb/storm/sidewalk) Accessible route dead ends and forces crossing South Main Street.
25. Many of the items represented in the legend are not represented in the site plan in the same capacity. Please update for clarity.
26. Service Route accessibilities:
 - a. Please define fire truck route for site protection
 - b. FDC required within maximum allowable distance from hydrant.
 - c. Sanitation service route for dumpster, Does the Min. radius allow access. Provide a truck exhibit when using radii of 20 feet or less.
 - d. Label Radii when they are not typical.

Sheet C3.0 Grading Plan:

27. The existing ditch along Old Rogers Road has drainage concerns after reviewing existing contours. This will need to be revised with the construction of your project.
28. The proposed culvert at entrance appears to only have one foot of cover on the pipe at the back of curb. Given this pipe will need to be 18" Minimum per NCDOT and will not work with proposed grade. Please label culvert size, material, and inverts associated with it.
29. Please Provide Rip Rap dissipator pads at outfall pipes.
30. The culvert downstream of your pond and any other downstream culverts may need to be upsized due to increased flows. Please provide needed calculations in these areas.
31. Please grade in the proposed pond and show it tying into existing grade.
32. Please clarify if this proposed storm is going through or under the proposed retaining wall.
33. The area I have highlighted appears to be draining off your site. Please revise your drainage to capture and treat this drainage area.
34. Please grade ADA space to design standards and provide spot grades for compliance review.
35. Provide top of wall and bottom of wall elevations for all retaining walls proposed on site.
36. Storm tying into NDOT drainage system will need to be reviewed by NCDOT ADN Hydraulic Division for flow rate being added into their existing system.
37. Please freeze off the storm from adjacent parcel shown on this plan sheet.
38. Please provide an access and maintenance easement connecting to the ROW for the proposed SCM.
39. Town of Rolesville will require the roof to be collect and treated by the onsite pond. Please show how the roof drains will be collected and routed to the pond on your grading plan.
40. Many of the items represented in the legend are not represented in the site plan in the same capacity. Please update for clarity.
41. Storm drainage pipe invert and structures to be I.D. in plan view. Adding a storm chart is an option.
42. Please submit a storm calculations package to review for complete review comments to be done.

Sheet C4.0 Utility Plan:

43. Please freeze off the storm from adjacent parcel shown on this plan sheet.
44. Service Route accessibilities:
 - a. Please define fire truck route for site protection
 - b. FDC required within maximum allowable distance from hydrant.
 - c. Sanitation service route for dumpster, Does the Min. radius allow access. Provide a truck exhibit when using radii of 20 feet or less.
 - d. Label Radii when they are not typical.
45. COR to comment on FDC for Building.
46. Please verify existing utilities entering the site from Old Rogers Road ROW and how they exit the site.
47. Please label all meters to include size and type of meter.
48. Verify and add waterline size for all water lines surrounding the site.
49. Please change gate valve connection to tapping sleeve & valve connection for connection to South Main Street water line.
50. Please identify the section of road that will need to be cut and repaired to install connection to water line.
51. Septic to be tied into and existing force main will need to be approved by the COR.
52. ADD LAPP PROJECT Proposed overlay. Contact TOR for PDF's
53. Revise double label for the building setback.

Sheet C5.0 Erosion Control Plan Phase 1:

54. Sediment is not being managed with a Temporary Basin in phase 1. Suggest adding diversion ditch and basin to phase one for erosion control.
55. There is a low point at the cross-access point labeled. How will any erosion getting to this point be managed and not allowed to flow off site.
56. Remove Gravel Drive label as there is no Gravel Drive shown on this site.
57. Construction Entrance is shown on top of existing pavement of adjacent parcel. Please Revise.
58. Please freeze off the storm from adjacent parcel shown on this plan sheet.
59. All clearing is shown in Phase 2 and will need to be done then when the basin is installed. No erosion control basin is shown on this phase. Please revise the construction sequence to match plans.

Sheet C5.1 Erosion Control Plan Phase 2:

60. Please provide Sediment inlet protection on all neighboring structures and pipes that sediment could reach from site work.
61. Will the pond be acting as a temporary erosion control basin. Please provide the supporting Calculations to support this.

Sheet C8.0 Site Details:

62. Wheel stops are shown in the details, but bollards are shown in the plan. Please revise either plans or details accordingly.

Sheet C8.1 Site Details:

63. Verify Curb and Gutter details versus NCDOT standards.
64. Verify that the town allows painted striping.

Sheet C8.0 Sanitary Sewer Details:

65. Please use the COR standard details when available for Sanitary Sewer and Waterlines.

Sheet L1.0 Landscape Plan:

66. Please verify proposed trees will not be in proposed ditch line.
67. Please verify and update the existing vegetation/tree lines shown and update them as needed.

