

## MEMORANDUM

Date: August 29, 2024  
To: Michael Elabarger  
From: Jacqueline Thompson, PE  
Subject: Harris Creek Farms  
PSP-24-05, 1st Submittal  
Town of Rolesville, NC

This memo summarizes the review of Preliminary Plat submitted by QuanTech Engineering, dated 07/30/2024 (received 08/02/2024).

We recognize some of the comments are related to the construction drawings and not necessarily a preliminary plat, however we believe it is prudent to provide these comments early in the process; these comments are not required for approval of the Preliminary Plat and have been identified separately than comments directly related to the Preliminary Plat submittal comments.

### Sheet 1:

1. Consider moving the General Notes to another sheet so the cover sheet is not so crowded.
2. Update the submittal number to "PSP-24-05". Include the original submittal date below this as well. All revision dates can be included in the title block table.
3. Change "MAP AMENDMENT (CONDITIONAL REZONING) FOR" to "PRELIMINARY PLAT FOR".
4. Update the title block to "PSP-24-05" for all sheets.
5. Add the watershed to the Site Data Table.
6. Fill in the data for Tree Coverage Summary.
7. Please identify the Universal Drive 20' easement on the plans.
8. See the Sidewalk Easement note number 10: This (PIN) number isn't identified on the Site Plan. Please confirm.
9. Consider moving the Site Specific Notes to another sheet so the cover sheet is not so crowded.
10. Confirm cul-de-sac radii (Site Specific Note 5).
11. Note 4 under the Site Specific Notes, indicates that streets shall be 20' wide asphalt pavement but the street cross section shows 22' wide. Revise accordingly.
12. Please review all notes; several are not applicable for this project.
13. Fix the sheet number overlap in the lower right corner of the title block.

### Sheet 2:

14. Add existing property information for the project parcel.
15. Label the existing water main size. Show and label any existing hydrants.
  - a. Confirm the existence of water along Jonesville Road; City of Raleigh stated this does not exist.
16. Fill in the wetland and stream delineation information or delete the information.
17. Please remove the soil survey information from this sheet to make existing conditions (topography and wetlands limits) easier to follow.
18. Add any and all demolition notes to this sheet or add an additional demolition plan with any required demolition labeled.
19. Add Use and Zoning for each property in the Adjacent Properties table.
20. Change the legend from "EXISTING FLOOD PLAIN" to "100 YEAR FLOOD PLAIN".
21. The Town prefers black and white plans. Please consider removing the color.

### Sheet 3:

22. Please clarify if the future roadway improvements along Jonesville Road will be part of these plans or submitted separately.
23. Fix the leader to point to the mail kiosk near SCM #3.
24. Add "PASSIVE" to the site plan legend.
25. Make the passive open space hatch something other than solid gray; it is similar to the pavement hatch on the roads and can cause confusion.
26. Add dimensions to the typical lot layout for typical setbacks, lot dimensions, etc.
27. Add sidewalk and associated hatch pattern to the site plan legend and on all site plan sheets. Add relevant existing conditions legend items to these sheets as well.

### Sheet 5:

28. It is our understanding the east-west segment of the greenway, on the south side of the project site, will be a public greenway. If so, a 50' easement will be required per LDO Section 6.2.1.J.2.

### Sheet 6:

29. The storm drainage easement encroaches into the property at Lot 91. Consider shifting it to the southwest so it covers the greenway and does not encroach into property.
30. It is hard to read all the text over the sidewalk hatch. Consider relocating the text or masking the text.
31. Label the curb radii at all intersections.
32. Dimension the parking at all applicable locations.
33. Label all existing linework at the intersection of Gideon Drive and Universal Drive, to make it clear pavement edge vs ROW, etc.
34. Please label and clarify what the lines that cross the 2 existing lots at the intersection of Gideon Drive and Street C.

Sheet 7:

35. There appears to be existing gravel shown on the plans in the upper right corner of the plan view. Please freeze or remove if applicable, or adjust accordingly.
36. Label all cul-de-sac radii. Confirm it meets the minimum for fire requirements.
  - a. This comment applies to all site sheets.

Sheet 8:

37. Label all retaining walls "BY OTHERS" and reference the note on Sheet 12.
38. Please provide additional information for future roadway improvements of Jonesville Road to understand the Street A connection.
  - a. Details can be worked out during CDs, but please clarify what improvements are being proposed at Jonesville Road.
39. The SCM easement overlaps the pedestrian bridge. Adjust accordingly to provide access and maintenance to the SCM.
40. The drainage easements encroach into building area for Lots 11 & 12, and Lots 13 & 14. Consider revisions to not limit buildable area.

Sheet 10:

41. The minimum street centerline radius shall meet NCDOT Subdivision requirements based on terrain; the minimum centerline radius is 230' for local subdivision roads.
42. The Town Standards Engineering Manual requires valley curb on local residential streets and standard curb on residential collector streets. Please clarify the typical sections.
43. The Town Standards Engineering Manual calls for residential collector roads to be 15' lanes with a 34' F-F width. Define the collector vs. residential for these sections. Not all roads will be collectors.

Sheet 11:

44. Confirm if additional EC measures are needed or that all appropriate EC measures are provided at the wetlands.
45. While Wake County will provide final approval of the EC plans, it is recommended to break out these sheets like is done with the site plan and grading plan to provide more detail. Missing items include: limits of disturbance, proposed contours; dimensions and/or details for EC measures; grading for sed basins. Some of this will be required during CDs.

Sheet 12:

46. Note 7 of the Stormwater Notes references Durham; adjust accordingly.

Sheet 15:

47. Show the grading for SCM #1 and the access.
48. Show the grading for the parking lot. Show the spaces and confirm ADA accessibility.
49. Confirm all grading does not exceed 3:1 slope throughout the grading plans.
50. Confirm the grades where there will be driveways are buildable and do not exceed maximum slopes.

Sheet 16:

51. The proposed grading encroaches into the adjacent property on the east, north of Lot 16. Please adjust accordingly.
52. Show the grading for SCM #2.

Sheet 17:

53. Due to the conservation efforts with the buffer along Lots 1- 7, the grading and drainage easement are limiting these lots. Consider grading within the buffer and shifting the drainage easement west to maximize the build-able area.
54. Grading is occurring within the buffer north of the cul-de-sac of Street E; if the intent is to conserve the buffer area, please adjust. Otherwise adjust the buffer labeling.
55. The building pads are not graded in; confirm that the grading will allow for them with adequate drainage.
56. Show the grading for the bio-retention pond.
57. The drainage pipe between Lot 11 & 12 does not discharge into an SCM or bioretention pond. Confirm how this water is being treated.
58. Adjust the grading so it does not encroach into wetlands, or confirm that permitting for wetland disturbance is occurring.

Sheet 22:

59. Consider extending the water to the intersection of Gideon Drive and Universal Drive for future water connections and possible improvements of Universal Drive. By ending the water line where it currently is proposed, any future improvements would require Gideon Drive to be torn up and redone.

Sheet 27:

60. Remove the "existing" tree line. If the black line is the proposed tree line, that should stay. If not, delete that one as well. If existing trees are to remain, show tree protection fencing.
  - a. Tree protection fencing should also be shown on the erosion control sheets.
61. Delete the repeated text in the Landscaping Notes.
62. Consider adding horizontal lines to make the Planting Calculations table easier to follow.
63. Update "Canopy Tree" to "Tree" in the Landscaping Plan Legend to be consistent within the plans.
64. Add open space (active and passive) hatching to the Landscaping Plan Legend.
65. Add water and sewer services to this plan sheet to check for interference with plantings.
66. Confirm if there are power lines on site; show if there are.

Sheet 28:

67. For erosion control details, please use Wake County Details.

### Construction Drawings:

Please consider the following for CDs; These comments are shown as green in the markups and are not required for approval of the preliminary plat:

- A. Note the greenway trail material on the site plans.
- B. During CDs, please provide details of how the Gideon Drive connection will be made.
- C. Confirm the pedestrian ramps align with the sidewalk and crosswalks.
- D. Provide a signing and striping plan.
- E. With the CD submittal, include appropriate details including but not limited to details of greenway, curb ramp, curb drainage transition (rolled curb to standard curb), and driveway apron.
- F. Include pavement design in road section details.
- G. The greenway connection near SCM #1 has a very steep greenway access. Grading plans for the greenways will be required during CDs. Ensure the greenway section fits within the easement. Per the Standard Engineering Manual, a 10' greenway with 2' shoulders and 3:1 grading is required for public greenways and recommended for private greenways.