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MEMORANDUM

Date: 09/01/2023
To: Michael Elabarger
From: Jacqueline Thompson, PE
Subject: Reserve at Mitchel Mill
PSP 23-02, 1st Submittal
Town of Rolesville, NC

This memo summarizes the review of the Preliminary Subdivision Plat submitted by Strong Rock Engineering Group, dated 08/01/23 (received 08/06/23).

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 plat and have been identified separately than comments directly related to the Site Plan submittal comments.

Sheet C-1.0:

0. Update the submittal name and number to the correct one: PSP-23-03.
1. Add contact information for Owner/Applicant/Consultants/Property Owner and the FIRM Map Panel number for this site.
2. Confirm parcel information. According to iMAPS, there is only one pin for this property, not two, and the acreage varies from what is currently shown in the Site Information.
3. Correct the location address (5109 not 5019).
4. Break down setbacks for each zoning and make sure they match LDO Article 3.1.2. (RM, SF, and TH)
5. Confirm the proposed lots. What is currently shown does not match MA 22-06.
6. The sheet index needs to be updated to reflect the sheets included. Currently the sheet numbering shows 63 sheets, not 35. Please check and revise sheet numbering and the sheet index accordingly.
 - a. Please provide the following sheets with future submittals:
 - Signed sealed survey/TOPO
 - Site Details
 - Typical Street Sections

- b. Confirm what utility improvements will be required along Jonesville Road and Mitchell Mill Road. Will these be separate plans or included in future submittals?

Sheet C-3.0:

7. Please add curve information for existing adjoiners or master boundary.
8. Please add symbol(s) for survey monuments/irons to your legend.
9. Label all ROW widths.
 - a. This comment applies to all sheets.
10. Add bearing and distance for line segment in the SE corner.

Sheet C-4.0:

11. Construction entrances appear to affect more than the trees marked as demo. Check all trees that need to be removed are included in this plan.
12. Please include wetland impacts in the demolition plan.
 - a. Labeling the wetland impacts also applies to all other sheets.

Sheet C-5.0:

13. Per the LDO, Section 9.2.1.B.5.c, the minimum distance between intersections that cannot be aligned is 200 feet. Please review and revise.
14. Following NCDOT's minimum design criteria, minimum centerline radii are as follows:
 - a. Local Roads: 230'
 - b. Collector Roads: 310'
 - c. Please review and revise accordingly.
15. When revising the street layouts due to the comments above, please take note that the minimum intersection angle is 60 degrees per LDO Section 9.2.1.B.5.C.
16. Please review hatching for the flood zones; they are very similar in the legend and hard to differentiate.
17. Show setback table or reference cover. (LDO Article 3.1.2)
18. Show ADA ramps at intersections.
19. Show buffers for the commercial lot.
20. Please confirm the intent for the curb and gutter. The legend calls out standard curb everywhere. Will curb type be adjusted for the townhome area? Will there be any mountable curb?

Sheet C-5.1:

21. Label and dimension all buffers.
 - a. This comment applies to all sheets.
22. Confirm the access easement between Lot 146 to the Community Garden. People will have to walk into Lot 146 to access Community Garden?
 - a. The house on Lot 146 does not appear to be constructible and/or meet the minimum depth requirements of the LDO. Clarify intent and/or revise accordingly.

23. Town of Rolesville uses the terminology “side path”.
 - a. Side paths should continue to pedestrian ramps and crosswalks.
24. The SCM access easement has a wall in the middle of it, and the easement is inside an existing sewer easement on site. Please review and revise accordingly.
25. The retaining wall geogrid will be on private lots along this pond. Please review and revise accordingly.
 - a. Will there be a wall easement?
 - b. This comment applies to all retaining walls on various sheets.

Sheet C-5.2:

26. Label the zone that the typical driveway placement is for.
 - a. Include any details to show driveway placement for corner or side entry lots.
27. The buffer will stop on each side of easements. Please revise the linework accordingly.
28. The greenway easement is on private lots; Please confirm intent.
29. Extend ROW to the property line. All roadways should be constructed to the property line for future connections.
 - a. This comment applies to all dead-end roads on various sheets.

Sheet C-5.3:

30. Please clarify the linework shown at the top of page. They appear to be easement lines, but there are duplicates and they are crossing private lots.
31. The private drainage easement is connected to an SCM maintenance easement. Confirm why this is being made private.
32. Review and revise the SCM access easement; it is currently crossing private lots.
33. Confirm lots meet the minimum width requirements in the LDO and are therefore buildable. Review and revise.
 - a. This comment applies to all lots and therefore multiple sheets.
34. Please label any road improvements on Gro-Peg Road, including buffers.

Sheet C-5.4:

35. SCM embankment cannot be in CORPUD easement. Please Revise.
36. Please confirm and label side setbacks.
 - a. This comment applies to all sheets.
37. Please confirm which side these lots are getting access from.

Sheet C-5.5:

38. The plan set mentions Town Home Development Design is subject to TA-23-05 but this Text Amendment has not been published yet. Either confirm with Town when publishing will occur or consider adding notes to clarify the intent for this project.
 - a. If this is a note just for reviewers, it should be removed from final plans.

39. LDO states a minimum of 30' between Townhomes and this is not met throughout the site. Review and revise.
40. Please confirm what the walk extending off the end of Mews 'H' will connect to.
41. Please confirm what the 18' and 9' dimensions shown on Mews 'E' are defining; also, the 9' dimension on the end of Mews 'H'.
42. There is excess pavement included throughout the Townhomes area that appear to have no purpose of benefit to the site. Please explain or remove these areas.
43. Parking at the end of Mews 'U' does not allow for backing out of the spot onto the travel way. Please review and revise.
44. Please label whether the Mews will be private or public.
45. The radius at the intersection of Mews 'X' and Mews 'W' does not meet the requirement for fire access.

Sheet C-5.6:

46. The hammerhead areas will not be sufficient for firetruck turnaround. Please confirm the intent and provide dimensions.
47. Please add a label for the future commercial section.

Sheet C-5.7:

48. Based on the number of crosswalks shown, it is highly recommended to review and revise to reduce the amount of mid-block crossings. All mid-block crossings will require signage in addition to striping.
49. Impervious pavement is currently shown in the stream buffer. Review and revise.

Sheet C-5.8:

50. Impervious materials are not allowed inside stream buffers. What will be the plan for material or crossings for the MUP in this area.
51. Walls are shown inside access easements, and this will prohibit access to the pond. Please revise the plan set.

Sheet C-6.0:

52. Confirm the following waterline sizes:
 - 12" for Road I & J Corridors
 - Waterline for Jonesville Rd.
 - Mitchell Mill Rd.

Sheet C-6.1:

53. Please revise to show a waterline connection to Jonesville Rd. The current design has two blow offs and no connection to water. Please include the size of the waterline and the proposed material.
54. Please correct the typo for the northern blow off assembly note.
 - a. This comment also applies to the blow off assembly notes on all other Utility Plan sheets.

Sheet C6.3:

- 55. The waterline will not be able to bend around this cul-de-sac as proposed. Consider ending it straight in to save on pipe and fittings as well.
- 56. FES and pipe will need to extend through and past the wall for constructability.

Sheet C-6.4:

- 57. This SCM is inside of the existing sewer easement for CORPUD, and this will not be allowed. Please revise going forward.

Sheet C-6.5:

- 58. Please add "existing" to the dry pond label to differentiate the pond from proposed SCM's.

Sheet C-6.6:

- 59. Drainage Easement is needed on the pipe outside of ROW.
- 60. Water and sewer connections, as well as hydrants, will need to be provided to the future commercial lot.
 - a. This comment also applies to Sheet C-6.7.
- 61. If the intent is that street and utilities are to be connected to and extended in the future, utilities need to be extended to the property line.

Sheet C-6.8:

- 62. The waterline on street A will need to connect to the waterline in Mitchell Mill Rd. Update labels to match the new condition.
- 63. Please show the waterline along Mitchell Mill Rd. and include size and material label.

Sheet C-7.3:

- 64. Review the retaining wall on the west side of the site. There is a length that is less than half a foot tall and may not be necessary.

Sheet C-7.7:

- 65. Review SCM #3's size and design. The SCM does not seem to be big enough size to get a forebay and main pool into the SCM.

Sheet C-8.0 (35 of 35):

- 66. Page 35 Preservation Plan is blank. Remove if not needed.

Sheet C-8.0 (35 of 63):

- 67. Please review and correct page numbering. Prior to this page, the page numbering was XX of 35. This sheet now shows a duplicate 35 of 63 sheets, and the last sheet in the plan set is 62 of 63.
- 68. A sentence about installing diversion ditches is repeated in notes 1 & 2 of the Stage 1 Specific Sequence. Please review and revise.
- 69. Notes refer to the Town of Knightdale instead of the Town of Rolesville. Please correct.

Sheet C-8.1:

- 70. Construction entrances appear to affect more than the trees marked as demo. Check all trees that need to be removed are included in this plan.
- 71. Review the site and add tree protection.

Sheet C-8.9:

- 72. Confirm when the construction of the retaining walls will occur. Are they required in Phase 1 of soil and erosion control for construction of the SBs?

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:

Sheet C-5.2:

- A. Provide retaining wall details or label as designed by others for clarification.

Sheet C-6.0:

- B. Storm Drainage package review will be required during CDs and should include 10-year storm, gutter spread, pre-post maps, impervious maps, and Inlet DA maps. For any culverts, we will also review the 25-year storm.

Sheet C-6.9:

- C. With the CD set, street and utility profiles will be required. Please make sure to include the following labels:
 - a. Minimum cover over pipe
 - b. Minimum separation between crossing pipes
 - c. Pipe sizes, lengths, and slope
 - d. Manhole labels including rim and inverts
 - e. Existing ground and proposed ground
 - f. Vertical curve lengths shall be in increments of 50'
 - g. K values and maximum street grades shall be defined by terrain classification per NCDOT Subdivision Roads Minimum Construction Standards

Sheet C-7.1:

- D. In efforts to collect drainage onsite for stormwater management, consider adding rear yard swales.
 - a. Roof drainage will also need collected and managed.
 - i. This comment applies to several areas and several sheets.

Overall project:

Will this subdivision be phased? If yes, think through phasing for not only streets and lot development, but also utilities and drainage/stormwater management. A phasing plan should be included, and phase lines should be reflected on all sheets so site improvements and utilities can be confirmed for constructability.