

MEMORANDUM

Date: October 4th, 2023
To: Michael Elabarger
From: Jacqueline Thompson, PE
Subject: 4502 Vineyard Farm Commercial
SDP-23-06, Version 1
Town of Rolesville, NC

This memo summarizes the review of the Site Development Plan submitted by Gettle Engineering and Design, PLLC, dated 08-28-23 (received 09/06/2023).

Sheet C0:

1. To ensure that full information of the site is provided, please include the following items within the Site Data table.
 - a. Proposed use
 - b. FEMA Map #
 - c. Corner lot setback requirements
2. Please include the required handicap parking spaces in the parking summary. Based on the 56 parking spaces, a minimum of 3 accessible parking spaces will be required.
3. The sheet index is not complete; please order sheets SL1 and SL2 as ordered in the set. Additionally, add sheets A1.1 and A3.1 to sheet index.
4. Provide the date of the first submittal of this site plan.

Sheet C1:

5. According to the iMaps GIS site, property labels are incorrect, please verify property owners/developers. Additionally, provide the pin # for each property.
 - a. This comment applies to all subsequent sheets in which properties labels are shown.
6. Indicate through a legend or label if the pipe along Vineyard Pine Lane is to be removed or protected.
7. To adequately distinguish between existing features to remain and existing features to be demolished, please provide labels to each feature or a legend specifying demolition plans.
8. Verify buffer requirements (Type 3 specified, from property line of adjacent to lot line). Please verify the buffer vs. street requirements with Rolesville Planning.
9. The existing 18" RCP, adjacent to Jonesville Road, will require an easement, please provide on plans.

10. Please label the structures on the east side of the site, and identify if it is to be demolished or protected.
11. Property labels are incorrect, please verify property owners/developers on the *Raleigh imaps* GIS site. Additionally, provide pin # for each property.
 - a. This comment applies to all sheets in which property labels are shown.
12. Clarify what is being done with the trees on the south side of the site. Plan sheets indicate that they are to be removed; please label or provide a legend on the demolition plans.
13. Clarify what the line on the southeast side of the site are pointing to; if they are property lines, please include property information for these adjacent properties.
14. In the next submittal all sheets should be plotted to 24"x36" to properly display dimensions and scaling, or scaling should be adjusted accordingly to paper size.

Sheet C2:

15. Please review the pedestrian ramp design and layout to confirm constructability and ability to meet ADA compliance.
16. The proposed location for the bike rack would not provide adequate space for pedestrians to walk between stored bikes and building doors. Consider revising to another location.
17. The driveway entrance connects to an existing ROW; minimum NCDOT radii requirements (30') will need to be met.
18. Please turn off all unused labels to provide clarity throughout plans.
19. The building location is within the sign easement; the sign easement will need to be amended.
20. Please clarify if any proposed improvements are being made to the sidewalk. If not, distinguish between proposed and existing conditions. For example, this can be done by using light gray vs. black.
 - a. This comment applies to multiple sheets.
21. Specify the material to be used for the patio, walk, parking, and drive areas using a legend or labeling.
22. In reference to the Disability Rights parking guidance, the 56 spaces proposed would require 3 spaces to be accessible, only 2 are shown on the site plan. Please revise accordingly.
23. The Type 2 buffer being proposed is within the drainage easement; this easement must be kept accessible for storm drainage maintenance. Refer to Rolesville LDO for buffers adjacent to easements. Additionally, buffer dimensions will need to be labeled and extents displayed on the site plan.
24. Corner lot requirements will require 25' setback, reference LDO table 3.2.3. Additionally concrete will not be permitted within the buffer. A street buffer will be needed along the frontage road, to be coordinated with Rolesville planner. Please see LDO section 6.2.2.1 for buffer requirements.
25. Please revise the location of the property label for legibility; currently it is overlapping with a unit label on the left side of the site.
26. Please review and revise the loading area and parking configuration. It appears there may not be adequate space to exist a parking space directly behind the loading area if a truck is parked there.

- a. Please clarify the loading area dimensions.
27. There is no turnaround space provided for multiple parking spaces; please review the parking layout and provide access in and out of all parking spaces.
28. The radius provided does not comply with fire access requirements; provide exhibit illustrating the proposed access route.
29. Based on handicap ramp location, the dumpster doors must be kept closed otherwise accessible access will be cut off; coordinate with the owner on how this status will be maintained.
30. Provide a dumpster exhibit depicting how dimensions and radius will allow for a garbage truck entering the area to collect dumpsters. The dimensions provided would not allow for ease of access.
31. Specify the retaining wall type and label "retaining wall by others" if not being designed.

Sheet C3

32. To confirm ADA compliance and proper tie ins, please provide spot elevations at radii and existing walk where pedestrian ramps are proposed.
33. The proposed JB #4 appears to be installed directly over an existing pipe; please clarify if this structure is to connect to existing pipe or if pipe is to be removed/system being revised.
34. Please clarify if the proposed drainage system from JB #4 to the existing concrete junction box is to be a bypass for the existing system.
35. The minimum pipe size to be used is 15" RCP; please adjust all pipe sizes accordingly.
36. The building plans place all the roof drains on the West and North Side of the building. Please display the drainage through the building/clarify how roof drainage is being collected.
37. The storm package will need to include calculations for the Concrete Flume; calculations to include: HGL's, gutter spread, and Rip Rap sizing.
38. Please correct the label that is referencing the Sump but pointing to a pipe, on the north side of the underground detention.
39. Confirm the angle between the pipes and structures and verify that the angle is constructable; specifically at the Sump Manhole.
40. Due to the existing storm drainage system being located within the property, an easement will need to be provided. This is shown in purple.
41. Please include top and bottom wall elevations.
42. There appears to be a Sanitary Sewer easement called out, please display the easement location around pipe and the correlated dimensions.
43. Include and display the 20' easement surrounding the storm drainage pipes and NC DOT road drainage outlet.
44. To provide clarity place the BMP leader in the proper location; ensure labels on plans match storm package labels.
45. The additional flow added from the proposed storm drainage will need to be added to the existing storm drainage calculations. Provide these additional calculations within the next storm package submittal, to ensure proper pipe and structure sizing.

46. Verify if the additional flow into the existing drainage will result in additional rip rap, include rip rap calculations within storm package.

Sheet C4

47. Please include the sanitary and water profiles with the next submittal.
48. The FDC must be within 100' of hose lay from the hydrant. Due to the lack of scale in the document, a review of the FDC and Hydrant spacing cannot be confirmed. Please review spacing requirements.
49. Based on proposed usage of building the grease trap size provided may not be adequate. (Minimum 1000 gal./restaurant unit) Please get grease trap size approval by FOG COR during building permitting, adjust plans accordingly.
50. To properly service the sanitary system, the cleanout locations will need to be adjusted based on flow direction.
51. Verify if there is an existing waterline along frontage road, if there is no waterline present a waterline extension will be required for improvement in order to loop the mainline.
52. The spacing of the fire hydrant must not exceed 300'. A fire hydrant may need to be added to conform with requirements, please get COR approval of spacing.
53. Based on the valves at the intersection verify if there are any existing hydrants along the potential waterline.

Sheet C5

54. The proposed location of trees and building are currently located within the sign easement, please adjust locations.
55. The 6' high opaque fence labeled in landscape plan sheet should be included in the site plan.
56. Trees are currently located in concrete please relocate, when relocating take into consideration location of existing storm sewer and easement.
57. Plantings cannot be placed within 20' storm easement, adjust planting/buffer location. This easement will have an impact on buffer start and planting.

Sheet D1

58. The following details will need to be included in next submittal.
 - a. All utility details
 - b. Traffic rated cleanout
 - c. Trenching and backflow dimensions
 - d. Backflow
 - e. Meter and box
 - f. FDC
 - g. Asphalt paving patch

Sheet D2

59. The following details will need to be included in the next submittal.
 - a. Pipe bedding
 - b. Roof drain connections

Sheet EC1

60. Wake County to approve all erosion control plans.
61. Inlet protection will need to be provided on all inlets adjacent to the site throughout the entirety of the project.
 - a. This comment will apply to all subsequent erosion control sheets.
62. The line types and hatching displayed within the legend should correlate to the line types used in the plan view.
 - a. This comment applies to all sheets.
63. Silt fence will need to be extended to border the entire site, throughout the entirety of the project. This comment applies to all subsequent erosion control sheets.

Sheet EC2

64. The limits of disturbance must be extended to include the hatched areas indicating removal.

Sheet EC3

65. Inlet protection will be needed all inlets across site until the site is stabilized.

HGL Report:

Page 1:

1. To evaluate if the additional flow can be adequately contained within the system, please add HGL Calculations and profiles for structures from JB #4 to the existing storm drainage outfall.
2. To properly review HGL results, the ditch drainage swale behind curb and the road drainage must be included in calculations.

Page 3:

3. Please clean up the plan view to avoid overlapping labels so the network can correlate with the plans and be legible.

Page 7:

4. Provide stationing on the plan set and use the structure names in the storm sewer profile. Current labeling is inconsistent between plans and reports.
5. In order to properly model the system, the proper grades and lengths of pipes must be used. Correct within plans or within model.
 - a. This applies to subsequent sheets of the HGL report.

Page 10:

6. Wake County is to approve the existing pipe sizing with the addition of the Wallbrook development drainage area.

7. Reviewing the contours and curb and gutter, it is advised to review the drainage area going to the catch basin, unclear how that water would be draining to basin.
8. The contour 368 does not work with the proposed grading throughout dumpster area, please verify elevations.

Stormwater Permit Analysis:

Page 10:

1. Please outline and specify the site location on the soil map to clarify which soils are represented on site.

Page 35:

2. Please include proposed contours and labels to allow for proper evaluation of post-development drainage.

Erosion Control Calculations:

1. Based on erosion control sheets a sediment basin is being proposed, the erosion control calculation report will need to include all calculations included for a sediment basin.