SUMMARY OF IMPERVIOUS SURFACE CALCULATIONS BRIAR CHAPEL DEVELOPMENT May 9, 2018

OVERALL IMPERVIOUS SUMMARY

| Original Total Site Area | | 1,589.36 ac |
|--------------------------------------|-----------------|-----------------|
| Minus Dollar Property Tract | | 11.22 ac |
| NEW Total Site Area | | 1,578.14 ac |
| | TOTAL PHASE | TOTAL PHASE |
| | | IMPERVIOUS (AC) |
| | IMPERVIOUS (SF) | INPERVIOUS (AC) |
| Total Phase 2 | 230,840 | 5.30 ac |
| Total Phase 4 | 2,645,299 | 60.73 ac |
| Total Phase 5S | 167,420 | 3.84 ac |
| Total Phase 5N | 801,283 | 18.39 ac |
| Total Phase 6S | 821,992 | 18.87 ac |
| Total Phase 6N | 588,450 | 13.51 ac |
| Total Phase 7 | 1,099,106 | 25.23 ac |
| Total Phase 8 | 506,074 | 11.62 ac |
| Total Phase 9 | 576,704 | 13.24 ac |
| Total Phase 10 | 418,016 | 9.60 ac |
| Total Phase 11 | 797,859 | 18.32 ac |
| *Total Phase 12 | 1,020,971 | 23.44 ac |
| Total Phase 13 - Section 1 & 2 | 132,552 | 3.04 ac |
| *Total Phase 13 - Section 3 | 278,524 | 6.39 ac |
| *Total Phase 14 | 243,632 | 5.59 ac |
| Phase 15S | 677,761 | 15.56 ac |
| Phase 15N/Boulder Point Ext. | 339,676 | 7.80 ac |
| Phase 16S | 652,653 | 14.98 ac |
| Phase 16N | 340,864 | 7.83 ac |
| County Park | 76,314 | 1.75 ac |
| Margaret B Pollard Middle School | 318,823 | 7.32 ac |
| Woods Charter School | 180,911 | 4.15 ac |
| Water Tank Site | 13,755 | 0.32 ac |
| Water Treatment Plant | 38,590 | 0.89 ac |
| *County School Parcel (Planned) | 348,480 | 8.00 ac |
| BC SD North | 154,399 | 3.54 ac |
| BC Tennis Center (Sport Courts) | 122,625 | 2.82 ac |
| Andrews Store Connector | 41,968 | 0.96 ac |
| *BC Commercial - SD West | 990,555 | 22.74 ac |
| *BC Commercial - SD East | 869,458 | 19.96 ac |
| Catullo Run/Taylor Road Improvements | 25,883 | 0.59 ac |
| BC Parkway Gravel Rumble Strips | 2,505 | 0.06 ac |
| *County Fire/EMS Site (planned) | 38,502 | 0.88 ac |
| *Chapel in the Pines | 28,750 | 0.66 ac |
| Total Impervious | 15,591,194 | 357.92 |
| Total Impervious Percent | 22.68% | |

*Future development impervious area projections estimated based on early preliminary land planning efforts at date of submittal.



ENGINEERS SURVEYORS PLANNERS

May 11, 2018

Ms. Kimberly Tyson Chatham County Planning 80-A East Street Pittsboro, NC 27312-0146

Re: Briar Chapel Phase 16 North-Conditional Use Permit Stipulations

Dear:

The following are our responses to the Conditional Use Permit Stipulations for Briar Chapel Phase 16 North.

| | 1. | 0 | ust 18, 2018 urary 1, 2019 | |
|---------------------------------|----|---|--|--|
| | 2. | Land Use Intensity a. Overall Briar Chapel i. Gross land area (acres) for removal of Roberts tract) ii. Maximum impervious surface area iii. Maximum number of dwelling units | = 1,578 (Total updated = 24% = 2,650 | |
| Venture IV Building | | b. Phase 16 North Gross land area (acres) Impervious surface area (acres) Number of dwelling units Maximum impervious surface (relative to overall) *Cumulative impervious surface | = 23.92 = 7.83 = 62 = 0.49% = 22.68% | |
| Suite 500 1730 Varsity Drive | | *Cumulative percentage is based on actual phase design for phases platted prior to Phase 16 North and projected for future phases. | | |
| Raleigh, NC 27606 | 3. | Watershed Management a. Updated impervious surface calculations are included with this submittal. | | |
| 919.233.8091 | | | | |
| Fax 919.233.8031 | | | | |
| www.mckimcreed.com | | | | |

- 4. Stormwater Management
 - a. A Stormwater Management Plan has been designed by McKim & Creed, Inc. and approved by NCDEQ-DWQ. A certificate of completion stating that stormwater control measures were observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications and other supporting materials, will be submitted to NCDEQ-DWQ upon completion of the work. Also, impervious surface calculations are included with this submittal.
- 5. Commercial Use
 - a. Commercial use in not proposed in this phase.
- 6. Lighting Plan
 - a. Applicant shall place note on the final plat stating that all area lighting shall meet County standards and not adversely affect adjoining residential areas.
- 7. Utility and Access Easements
 - a. Utility and access easements have been shown on the approved construction documents.
- 8. Unity of Development
 - a. The residences projected for Phase 16 North will be consistent with those approved in the previous phases.
- 9. Permits
 - a. Applicable permits required for Preliminary Plat have been obtained and are included within this submittal.
- 10. Improvements
 - a. No off-site improvements are necessary for this phase.
- 11. Parking and off-street loading areas
 - a. Sidewalks are shown throughout this phase to provide for pedestrian and bicycle circulation.
- 12. Streets
 - a. Two (2) public roads are included in Phase 16 North.
- 13. Utilities
 - a. The proposed water main design was approved by Chatham County Public Utilities and NCDEQ Public Water Supply. The permits are included with this submittal.
 - b. The proposed sanitary sewer design for Phase 16 North was approved by NCDEQ-DWR and is included with this submittal. Also, the NCDEQ-DWR wastewater treatment/reclaimed water/spray irrigation permit is included with this submittal.



- 14. Public Facilities
 - a. The public facilities listed in the Conditional Use Permit are not proposed within this phase.
- 15. Landscaping/Screening
 - a. Not applicable in this phase.
- 16. Archaeological Survey
 - a. Based on the August 2006 report by ESI (entitled "An Intensive Cultural Resource Investigation: Briar Chapel, Chatham County, NC"), there are no cemeteries or structures eligible for the National Register within the project area of Phase 16 North nor any structures or cemeteries 50 years old or older.
- 17. Solid Waste Management Plan
 - a. A solid waste management plan has been previously submitted and no changes are proposed for this phase.
- 18. Detailed site plan
 - a. The detailed site plan included with this submittal conforms to the intent of the approved Briar Chapel Master Plan.
- 19. Stages
 - a. Phase 16 North will be constructed as a phase of the overall Briar Chapel development.
- 20. Moderate Income Housing
 - a. Requirements have been met. No further obligations are required.
- 21. Environment
 - a. This stipulation involves the Bennett Mountain area of the development. Phase 16 North is not located in or near the Bennett Mountain area.
- 22. Erosion Control
 - a. The approved erosion control plan and permit are included with this submittal.
- 23. Silt Control
 - a. Silt control is part of the approved erosion control plan. See response to Erosion Control above.



24. Items #24-#29 in the CUP Stipulation List

a. Items #24-#29 are duly noted.

If you have any questions during your review, please do not hesitate to call me at (919) 233-8091. Thank you for your assistance.

Sincerely, McKim & Creed, Inc.

Chris Seamster, PLA Project Manager

Cc: Mr. Lee Bowman

