

8 April, 2025

To: Travis L. Crabtree

Re: Columbus County Sheriff's Office Addition Whiteville, NC

Comment Responses as follows:

1. Please provide a copy of the site geotechnical report per NC Building code, Section 1803.1

Response: Geotech not Required. Adjacent Building shows no evidence of settlement. Structural designed with presumptive Bearing capacity. Compaction to be tested during construction.

 Architects and engineers must have an original signature through each of their seals with a date, copies are not allowed per NC Board of Architecture rule 21 NCAC 02.0206. Civil and PME drawings were good.

Response: Signatures added

3. The following sheet was provided but not list in the drawing index. P7

Response: P-7 included in set

4. Page G-1 – A specific street address and zip code will be required for the project before approvals can be issued, as this impacts permitting issuance, utility (electric, gas, water), first responder response, supply deliveries, etc. NC Fire Code section 505.1 and Building Code 501.2.

Response: See Sheet G-1 in conformance as requested.

5. Page G-1 – Code enforcement jurisdiction to be identified.

Response: See Sheet G-1 in conformance as requested.

6. Page G-1 – Risk Category to be listed under the Proposed Risk Category. 2018 NC Building Code Table 1604.5

Response: See Sheet G-1 in conformance as requested.



7. Page G-1 – Basic Building Data, Special Inspections is required for this Project since it is a risk category IV. 2018 NC Building Code, section 1705.1.3 #2

Response: See Sheet G-1 and SK1.2 in conformance as requested.

8. Provide a schedule of special inspections. Refer to tables listed under section 1704 for further guidance regarding the layout of the schedule. Schedules are in table format and provide information regarding inspection frequency and referenced standards, the inspections to be performed and a list of individuals, approved agencies or firms retained for conducting such inspections.

Response: See Sheet SK1.2 in conformance as requested.

9. Page G-1- Gross Building Area Table, auto pack level is listed to be in the basement, but no square footage is listed. Believed to be a typo.

Response: See Sheet G-1 adjusted as requested.

- 10. Page G-1- structural Design, ground snow load to be included. Other blanks are needed to be filled in not found on page SK1.1.
- 11. Page G-1- structural Design, seismic design Category has two boxes checked. The addendum states only D should be checked.

Response: See Sheet G-1 in conformance as requested.

12. Page G-1- allowable Height table, the stories listed for occupancy groups S-1 and B are not correct in the Allowable column.

Response: See Sheet G-1 corrected,

13. Page G-1 Life Safety Section, Smoke Detection is Yes, however no detectors were located on Page FA2. Two duct detectors and one smoke alarm at the FACP were found. These few devices would not qualify as a smoke detection system but would qualify as Partial if an additional check box is to be added.

Response: See Sheet G-1 corrected.

14. Page G-1 Life Safety Section, Carbon Monoxide to be checked Yes, as detectors were located near each HVAC unit on page FA2.



Response: See Sheet G-1 corrected response.

15. Page G-1- Life Safety Section, Emergency responder radio coverage shall have radio coverage based on existing coverage levels of public safety communications system. Provide a written statement of how the path to compliance to achieve this safety feature will move forward to meet the needs of the jurisdiction. 2018 NC Fire Code, Section 510.

Response: An independent study will be provided by the owner and emergency services after the building is constructed.

16. Page G-1 Special Approvals, NC Department of Insurance to be listed. NCDOT may also be needed if any work at Hwy 74 is to be performed.

Response: See Sheet G-1 corrected section,

17. Page G-2 identify all doors that have panic hardware. 2018 NC Building Code section 1010.1.10

Response: See Sheet G-2. Panic Hardware identified.

 Page G-2- Provide Interior and exterior emergency lighting as well as exit signage for Training, Patrol and any applicable directional exit signs. 2018 NC Building and Fire Codes section 1008.3.2

Response: See Sheet G-2 Interior and exterior lighting/exit signage added

19. Page G-2- Additional exit and /or directional exit signs needed- hallway intersection from locker room, Detective Division and special Operations. 2018 NC Building and Fire Code section 1013.1

Response: See Sheet G-2 additional signage added.

20. Page G-2- the "travel lines" shown are not drawn correctly in Armory and detective division office areas: The Codes contemplates right angle (not 45 or 60 degree) turns since the former produces the most conservative (longest) Travel Distance To an Exit; please revise the plans accordingly. The same principle applies to the Common Path of Travel Lines. Page LS-1 shows them correctly.

Response: See Sheet G-2 in conformance as requested.



21. Page G-2- A dedicated fire extinguisher will be required in the Server Room. 2018 NC Fire Code Table 906.3(1)

Response: See Sheet G-2 in conformance as requested.

22. Page G-2- Travel distance to currently shown fire extinguishers exceed the 75- feet travel distance to the remote areas of the Gym, Special Operations and Patrol area offices. 2018 NC Fire Code section 906.1

Response: See Sheet G-2 in conformance.

23. Page G-2- Verify that the Gym will contain weight equipment to validate the 50 net occupancy calculation. If no equipment is in the scope, this room/ area will require 35 net allowance per person. 2018 NC Building Codes, section 1004.12

Response: See Sheet G-2 in conformance.

24. Page G-2- Multiple fire areas (4) have been identified as group A-3 with combined occupant load 373. Where multiple fire areas are identified and they share exit or exit access components and the combined occupant load is 300 or more, an automatic, an automatic sprinkler system is required. 2018 NC Building and fire code 903.2.1.7

Response: See Sheet G-2 changes to be in conformance. Additional Exit doors added. 50 combined occupant load is reduced.

25. Page G-1- Basic Building Data, an NFPA 13 fire Sprinkler system will be required for this project. 2018 Building and Fire Code, section 903.2.1.7

Response: See Sheet G-2 changes to be in conformance. (see response 24 above, fire Sprinkler not required)

26. Page G-2 and G-3 – UL Design detail U906 is shown for the 2-Hour rated wall design, however UL Design detail U904 is listed in the Fire Protection Requirements Table. These should match. If U904 is used, an appropriate detail will also be needed on Page G-3.

Response: See Sheet G-1 to reflect correct UL Detail.

27. Please provide canopy shop drawings (deck, beam and brace) with the structural connection details when available



Response: Canopy details will be part of PEMB Shop Drawings

28. Page G-2- Provide the diagonals for assembly areas with remote exit distances. 2018 NC Building and fire codes section 1007.1.1.1

Response: See Sheet G-2 for diagonals.

29. Page G-3- UL Design Detail U419 is only shown as 1hour fire rating in the drawing provided but the Fire Protection Requirements Table shows it as 2 hours. Please Confirm

Response: See Sheet G-3 to reflect correct UL Detail.

30. Civil drawings are missing a few key items including but not limited to: legend, property line(real and assumed) shown but not identified, water line size and type in Washington street (business 74), electrical underground and transformer locations, generator location, gas line and meter, fire hydrant locations in Washington Street, heavy-duty pavement location, heavy-duty pavement detail, ADA parking space detail and signage, etc.

AE Response: A legend has been added to sheet C1. Property lines are identified, waterline size & type is unknown along Washington Street, electrical items are identified to the extent possible, new generator is located, gas line and meters are identified to the extent possible, fire hydrant locations along Washington Street have been identified. Heavy- Duty pavement is not included with this project. The pavement sections are shown on Sheet C8. ADA parking details are shown on Sheet C8.

31. Page C-1-14 new parking spaces are being proposed. Each parking cluster must have ADA parking provided unless all the following exist: There is only entrance (public or restricted) into the building and the total number of parking spaces combined in the lot(s) are 25 or less. 40+ spaces are currently shown and 14 new are proposed to be added

AE Response: One (1) van accessible handicap space is now shown for the new parking area along with the associated aisle

32. The first accessible space in each parking facility cluster shall be identified as a van space per NC Building Code, Section 1106.5. This shall be located on the shortest accessible route of travel from accessible parking to the accessible entrance.

AE Response: One (1) van accessible handicap space is now shown for the new parking area along with the associated aisle



33. It is highly recommended that the first electric charging space should be located immediately adjacent to an AADA parking space in order to not discriminate against those with disabilities and have an electric vehicle. It should be sized for van accessibility; the second charging space should be standard (non-van) accessible space. Charging cable shall not obstruct the access aisle, accessible reach ranges apply, and accessible routes from parking charges to building apply

AE Response: No electric charging stations are included with this project.

34. Page A-1- note on the drawings to stencil rated walls every 15-30' minimum 2-inch lettering. Indicate the rating and purpose of the wall (ie. Firewall, fire barrier, fire partition, smoke barrier, smoke partition) 2018 NC Building Code, Section 703.7.

Response: See Sheet A-1 Noted.

35. Page A-1- Generator to be moved to correct location per addendum.

Response: See Sheet A-1 to reflect addendum.

36. Page A-1- South Facing Walls (Hall 132) of offices 129 and 130 are not fire rated via wall type 1E, which is inconsistent with the rest of the entire Hall 103 with wall type 1L.

Response: See Sheet A-1corrected.

37. Door numbers to be applied for the building.

Response: Legend added

38. Page A-3- All new interior finishes to comply with Chapter 8 of the 2018 NC Building and Fire Codes. Provide Class ratings on Finish schedule. 2018 Building code Table 803.11

Response: See Sheet A-3 Finish Schedule updated to reflect information.

39. Page A-5- Please provide signed sealed and dated designs of the pre-engineered metal building.

Response: These can be provided after Contract is Awarded during the normal shop drawing process

40. Page A-6- Detail 2, Wall types listed along Gym wall are inconsistent with Page A-1.

Response: See Sheet A-6 to reflect correction.



41. Page P-4 – Generator to be relocated per addendum 6. Provide gas line sizes.

BDG Response: Generator relocated on Sheet P4. Gas line sizes provided on riser on Sheet P6

42. Page P-6 – Natural gas riser to be corrected per addendum.

BDG Response: Gas Riser on P6 updated

43. The additional fire damper found on Page SK-M to be added to Page M2 at Locker Room 169 door.

BDG Response: Fire Damper added on sheet M2.

44. 45. Page E2 - Electrical panels that are located in other than dedicated electrical rooms (163). Can an electrical sheet note be added for the panel(s) to paint or tape an area in front of these panels to ensure the minimum required working clearances are maintained in the future? 2020 NC Electrical Code, article/table 110.26(A)(1) 2018 NC Fire Code section 605.3

BDG Response: Note added to sheet E3 indicating marking of required clearances.

45. 46. Page E2- Emergency lights needed in restrooms over 300 sf (Rooms 160, 170 & 171). NC Building Code, Section 1008.3.3 #5

BDG Response: Room 160 is a single occupancy office, Room 170 is 132 sqft, and Room 171 is 130 sqft. No emergency lights are required for these rooms. Emergency lighting was included in restrooms 116 and 117 but is not required.

46. 47. Page E2- Emergency lights needed in Entry 100. NC Building Code, Section 1008.3.2 #4

BDG Response: Emergency light added to Entry 100 on sheet E2

47. 48. Page E2 - Emergency lights needed in room 163 due to electrical equipment. NC Building Code, Section 1008.3.3 #1

BDG Response: Emergency light added to Mech 163 on sheet E2

48. 49. Page E2- Exit/Directional lights needed in Patrol 128, Hall 103 at intersection of Hall 172, Detective 159 and Special Ops 144. 2018 NC Building and Fire Codes, Section 1013.

BDG Response: Emergency lighting added to Rms 128, 144, 159 on sheet E2.



49. 50. Page E3 – Generator and Panel M to be relocated per addendums.

BDG Response: Sheet E3 updated to show new location for Generator and Panel M

50. 51. Page E4 - Circuit directories shall reference the 2020 NC Electric Code to include specific emergency and exit light circuits per 700.12 (f) and NC Fire Code 605.3.1. A note, an asterisk or EM (or similar) are acceptable identifiers for the circuits that serve these emergency circuits. If all of these applicable circuits are picked up by an emergency generator, then a note stating such on the circuit directory pages.

BDG Response: The generator is not an Emergency Generator, it is for Standby purposes only.

51. 52. Page E4-1 - Generator to be relocated per addendum.

BDG Response: Generator and Panels relocated on Riser.

52. 53. Page FA2 – General Fire Alarm Note #10, max height allowed is 48 inches for operable part of the manual pull station. 2018 NC Fire Code section 907.4.2.2 and NFPA 72 section 17.14.5

BDG Response: Note on FA2 updated to indicate 48" max height

53. 54. Page FA2 – Fire alarm remote annunciators will require protection at the panel, if they have control functions, Specification manual section 16721 – Fire Alarm Systems, Addressable – Part II, section 2.9, K. 2018 NC Fire Code section 907.4.1

BDG Response: Smoke detector added in the hall adjacent to Remote Annunciator Panel.

54. 55. Page FA2 – Visual fire alarm device required in Break Room 161 as it is a common use location. 2018 NC Fire Code section 907.5.2.3.1

BDG Response: Visual device added to break room on FA2

55. 56. Page FA2 – Notes near connecting corridor 100 imply a fire suppression system is being installed with an RPZ and tamper switches. Please confirm.

BDG Response: Incorrect notes removed from FA2

56. 57. Page FA2 – Minimum anticipated sound pressure levels to be produced by the notification devices shall be documented on the plans for acceptance testing purposes. NFPA 72 section 18.4.1.4.3



BDG Response: The Sound Levels are now required for the Shop Drawings.

57. 58. Page FA2 – Intersection of Hall 132 and Hall 103, the 15 cd visual device to be moved slightly south to cover hall 132 west end and meet the 15 feet from each end requirement. NFPA 72 section 18.5.5.5.5.

BDG Response: Visual Device moved to cover hall 132 on FA2

58. 59. A fire flow report is required for this project. A minimum of 3,000 gpm for 3 hours is needed per the 2018 NC Fire Code section 507.3. The flow must meet or exceed the requirements found in the 2018 NC Fire Code Appendix B, or ISO Fire Suppression Rating Schedule or NFPA 1142 or other approved method. If this flow is short of meeting these criteria, a letter from the AHJ will be required confirming they can protect this structure using other methods. A satisfactory flow test must be obtained during ordinary demand times that should provide at least a 25 percent or 10 psi drop in residual pressure for the total demand of expected flow for fire-fighting purposes. Pitot pressures less than 10 psi and above 30 psi should be avoided. Multiple hydrants (7-8) may need to be flowed simultaneously depending on the strength of the distribution system. 2013 NFPA 291, Chapter 4, Flow Testing

BDG Response: The building does not require a sprinkler system. Therefore a flow test is not required.

59. 60. Provide UL listings for generator and automatic transfer switch. Division 16 doesn't have any sections listed for these. Also impacted are exit and emergency light sections, Emergency responder radio systems, canopies and covered walkway sections.

BDG Response: The generator is not an Emergency Generator, it is for Standby purposes only.

60. 61. Specification manual section 16721 – Fire Alarm Systems, Addressable – Part I, section 1.5, D, 2 & 3, NFPA 72E and NFPA 72G have not been published since prior to 1993 when they were consolidated into NFPA 72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems. Additionally, section 3.5, E is impacted. Please update to current code.

BDG Response: Spec sections 16721 1.5.D and 3.5.E updated to remove obsolete references.





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