



August 9, 2017

**MECHANICAL
ELECTRICAL
PLUMBING**

**LIGHTHOUSE
ENGINEERING**

400 W. MORGAN ST.
SUITE 100
RALEIGH, NC 27603

P 919.835.9781
F 919.835.9754

STRATEGIC ALLIANCE

**SABER
ENGINEERING**

CHARLOTTE, NC

Ms. Dena Spiro-Penna
J Davis Architects
510 S. Wilmington Street
Raleigh, NC 27601

RE: Nantucket Condominiums – 700 Building
Cary, NC
JDA-1608

Dear Dena,

Our responses to the comments from the Town of Cary dated July 5, 2017, are as follows:

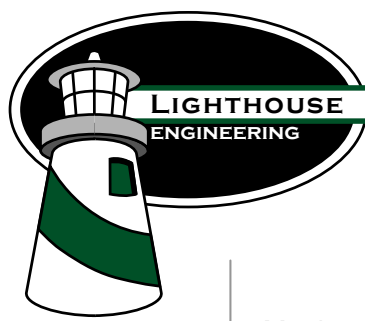
Electrical: **Approved:** Regina Williams (919) 469-4386 regina.singleton-williams@townofcary.org

Three services on the building, two meter centers with 800 amp mains, 240 v, one house service, 208 v. Provide placarding for the services.

1. All work shall comply with art. 230(NEC).
Response: Refer to General Notes on sheet E0.01 for NEC compliance.
2. Dwelling units shall comply with sec. 210.52, 406.12(NEC).
Response: Refer to General Note 21 on sheet E0.01.
3. Provide job specific grounding detail for the project.
Response: Job specific grounding detail added. See sheet E3.00.
4. All grounding shall comply with art. 250 (NEC).
Response: Refer to General Note 6 on sheet E0.01.
5. The inspector shall see all connections prior to concrete being poured.
Response: Coordinate with G.C. and E.C.
6. All electrical equipment shall be approved, labeled and listed by a NC approved testing agency.
Response: All electrical equipment conforms to the standards of the Underwriter's Laboratory, INC. Refer to General Note 2 on sheet E0.01.
7. All work shall comply with the 2014 National Electrical Code with NC amendments and the Electrical Code Official on site.
Response: General Note 1 on sheet E0.01 has been updated to reflect this.
8. Establish and maintain electrical safety at all times on the project site.
Response: Coordinate site safety with E.C.
9. All work shall comply with the 2012 NC State Energy Conservation Code.
Response: Refer to Lighting Systems section on sheet E0.01 for further information.

Fire Alarm: **Rejected:** Michael Boone (919) 469-4313

1. Please evaluate fire alarm coverage in the parking garage to ensure the 95cd provide proper coverage in accordance with NFPA 72. Also, contact the fire alarm contractor to verify availability of the 60cd devices.
Response: FA coverage in the parking garage has been updated to ensure coverage.
2. Visible notification devices within the sleeping areas will need to be 110cd/177cd devices based on mounting height.
Response: Our interpretation is that sleeping areas do not require visible notification.
3. Ensure the requirements for 520hz low frequency sounder bases are provided within the units
Response: Low frequency devices are specified per Detail 1, Note 11 on sheet FA0.01.



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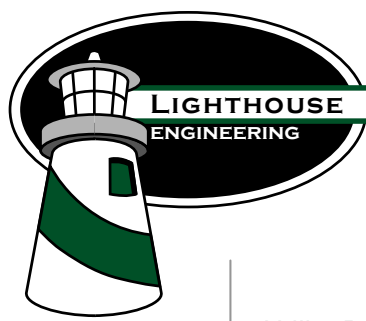
CHARLOTTE, NC

Mechanical: **Approved:** Charles "Chuck" Ruffin (919) 469-4334 charles.ruffin@townofcary.org

1. Permit approved for multi-level condominium project with Type-B fire dampers in the air handler of each condo unit.
Response: Fire Dampers called out
2. Each corridor shall be conditioned with a single AHU.
Response: Noted
3. All condensate shall drain to the outside.
Response: Condensate routed to storm line
4. All floor/ceiling assembly duct penetrations shall be protected by radiation dampers.
Response: Ceiling Pen. Protected by radiation dampers
5. All mechanical work illustrated on these proposed documents must comply with the current edition of the NC Mechanical Code, NC Fuel Gas Code, NC Energy Conservation Code and any other applicable code, regulations or ordinances.
Response: Noted

Plumbing: **Approved:** Rodger Hamrick (919) 380-2138 rodger.hamrick@townofcary.org

1. All work must comply to the current edition of the NC State Plumbing Code and must meet the current ADA requirements of the ICC ANSI 117.1. Standard.
Response: Work to comply with all applicable local jurisdictional requirements.
2. Where the flood level rims for plumbing fixtures are below the elevation of the manhole cover of the next upstream manhole in the public sewer, such fixtures shall be protected by a backwater valve.
Response: Backwater valves to be installed if necessary. Current design shows plumbing fixtures above required elevation.
3. A means of controlling increased pressure caused by thermal expansion shall be provided where required in accordance with Sections 607.3.1 and 607.3.2.
Response: Noted
4. Pressure-reducing valve. For water service system sizes up to 2 inches a device for controlling pressure shall be installed where, because of thermal expansion, the pressure on the downstream side of a pressure-reducing valve exceeds the pressure-reducing valve setting.
Response: Pressure reducing valves to be installed where applicable.
5. 607.3.2 Backflow prevention device or check valve. Where a backflow prevention device, check valve or other device is installed on a water supply system utilizing storage water heating equipment such that thermal expansion causes an increase in pressure, a device for controlling pressure shall be installed.
Response: Backflow preventers are installed at each building. See civil for details.
6. All floor drains require trap primers or hose bibbs.
Response: Detail 1 on sheet P0.02 states trap primer/hose bib to be provided where FD are installed.
7. The waste from an automatic clothes washer shall connect to a vertical drain of not less than 2" in diameter, or a horizontal drain of not less than 3" in diameter. The 2" inch trap in the waste connection may be used as a cleanout for both the 2" and the 3"
Response: 3" vertical piping is shown on the riser diagrams for all automatic washer boxes.
8. Water system requires a pressure reducing valves
Response: Noted.
9. RPZ is located in basement/garage riser room. The RPZ shall be certified by a certified technician. Paperwork must be on site at time of inspection.
Response: Noted



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Utility Pre-Treatment: **Rejected:** Don Johnson (919) 414-8052 don.johnson@townofcary.org

1. If the project is to include hydraulically operated elevator(s), and the sump pump or drain is proposed to connect to sanitary sewer, an oil/water separator with a hydraulic capacity equaling at least 1.5 times the elevator(s) hydraulic fluid capacity will be required. Please provide elevator type and model with response.

Response: The elevator (Schindler 3300) is a non-hydraulic elevator and therefore the oil/water separator is not required.

Respectfully,
Lighthouse Engineering,

Paul Scott, PE