2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: ________________________________________________________________
Address: ________________________________________________________________ Zip Code ________
Owner/Authorized Agent: Phone # (_____) _____ - _______ E-Mail __________________

Owner By: ☐ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City_________ ☐ County_________ ☐ State

CONTACT:

DESIGNER FIRM NAME LICENSE # TELEPHONE # E-MAIL
Architectural _____________________________________________________________
Civil ________________________________________________________________
Electrical ______________________________________________________________
Fire Alarm ______________________________________________________________
Plumbing ________________________________________________________________
Mechanical ______________________________________________________________
Sprinkler-Standpipe ______________________________________________________
Structural ______________________________________________________________
Retaining Walls >5’ High ____________________________________________________
Other _________________________________________________________________

(“Other” should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: ☐ New Building ☐ Addition ☐ Renovation
☐ 1st Time Interior Completion
☐ Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements
☐ Phased Construction - Shell/Core- Contact the local inspection jurisdiction for possible additional procedures and requirements

2018 NC EXISTING BUILDING CODE: EXISTING: ☐ Prescriptive ☐ Repair ☐ Chapter 14
Alteration: ☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use

CONSTRUCTED: (date) __________ CURRENT OCCUPANCY(S) (Ch. 3): ______________
RENOVATED: (date) __________ PROPOSED OCCUPANCY(S) (Ch. 3): ______________

RISK CATEGORY (Table 1604.5): Current: ☐ I ☐ II ☐ III ☐ IV
Proposed: ☐ I ☐ II ☐ III ☐ IV

BASIC BUILDING DATA
Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A (check all that apply)
☐ I-B ☐ II-B ☐ III-B ☐ V-B
Sprinklers: ☐ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☐ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☐ No ☐ Yes Flood Hazard Area: ☐ No ☐ Yes
Special Inspections Required: ☐ No ☐ Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)
## Gross Building Area Table

<table>
<thead>
<tr>
<th>FLOOR</th>
<th>EXISTING (SQ FT)</th>
<th>NEW (SQ FT)</th>
<th>SUB-TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Floor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd Floor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mezzanine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Floor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basement</td>
<td></td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ALLOWABLE AREA

**Primary Occupancy Classification(s):**

- Assembly: 
  - A-1
  - A-2
  - A-3
  - A-4
  - A-5
- Business: 
- Educational: 
- Factory: 
  - F-1 Moderate
  - F-2 Low
- Hazardous: 
  - H-1 Detonate
  - H-2 Deflagrate
  - H-3 Combust
  - H-4 Health
  - H-5 HPM
- Institutional: 
  - I-1 Condition
    - 1
    - 2
  - I-2 Condition
    - 1
    - 2
  - I-3 Condition
    - 1
    - 2
    - 3
    - 4
    - 5
  - I-4
- Mercantile: 
- Residential: 
  - R-1
  - R-2
  - R-3
  - R-4
- Storage: 
  - S-1 Moderate
  - S-2 Low
  - High-piled
- Parking Garage: 
  - Open
  - Enclosed
  - Repair Garage
- Utility and Miscellaneous: 

**Accessory Occupancy Classification(s):**

**Incidental Uses (Table 509):**

**Special Uses (Chapter 4 – List Code Sections):**

**Special Provisions (Chapter 5 – List Code Sections):**

**Mixed Occupancy:** 
- Yes
  - Separation: _____ Hr.
  - Exception: _____________________

- Non-Separated Use (508.3) - The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

- Separated Use (508.4) - See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

\[
\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1
\]

\[
\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} + \ldots = \ldots \leq 1.00
\]
<table>
<thead>
<tr>
<th>STORY NO.</th>
<th>DESCRIPTION AND USE</th>
<th>TABLE 506.24 AREA FOR FRONTAGE INCREASE1,5</th>
<th>ALLOWABLE AREA PER STORY OR UNLIMITED2,3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

1 Frontage area increases from Section 506.3 are computed thus:
   a. Perimeter which fronts a public way or open space having 20 feet minimum width = _______ (F)
   b. Total Building Perimeter = ________ (P)
   c. Ratio (F/P) = __________ (F/P)
   d. W = Minimum width of public way = ________ (W)
   e. Percent of frontage increase \( I_f = 100\left(\frac{F}{P} - 0.25\right) \times \frac{W}{30} = ________ \) (%)

2 Unlimited area applicable under conditions of Section 507.
3 Maximum Building Area = total number of stories in the building x D (maximum3 stories) (506.2).
4 The maximum area of open parking garages must comply with Table 406.5.4.
5 Frontage increase is based on the unsprinklered area value in Table 506.2.

### ALLOWABLE HEIGHT

<table>
<thead>
<tr>
<th>Building Height in Feet (Table 504.3) 2</th>
<th>ALLOWABLE</th>
<th>SHOWN ON PLANS</th>
<th>CODE REFERENCE 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Height in Stories (Table 504.4) 3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Provide code reference if the “Shown on Plans” quantity is not based on Table 504.3 or 504.4.
2 The maximum height of air traffic control towers must comply with Table 412.3.1.
3 The maximum height of open parking garages must comply with Table 406.5.4.
## FIRE PROTECTION REQUIREMENTS

<table>
<thead>
<tr>
<th>BUILDING ELEMENT</th>
<th>FIRE SEPARATION DISTANCE (FEET)</th>
<th>RATING Req’d</th>
<th>PROVIDED (W/_________* REDUCTION)</th>
<th>DETAIL # AND SHEET #</th>
<th>DESIGN # FOR RATED ASSEMBLY</th>
<th>SHEET # FOR RATED PENETRATION</th>
<th>SHEET # FOR RATED JOINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural Frame, including columns, girders, trusses</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Bearing Walls</td>
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<tr>
<td>Exterior</td>
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<td>East</td>
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<td>West</td>
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<tr>
<td>Interior</td>
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</tr>
<tr>
<td>Nonbearing Walls and Partitions</td>
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<tr>
<td>Exterior walls</td>
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<tr>
<td>North</td>
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<td>Interior walls and partitions</td>
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<td>Floor Construction</td>
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<tr>
<td>Including supporting beams and joists</td>
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<td>Floor Ceiling Assembly</td>
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<td>Columns Supporting Floors</td>
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<tr>
<td>Roof Construction, including supporting beams and joists</td>
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<tr>
<td>Columns Supporting Roof</td>
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<td>Shaft Enclosures - Exit</td>
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<td>Shaft Enclosures - Other</td>
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<td>Occupancy/Fire Barrier Separation</td>
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<td>Party/Fire Wall Separation</td>
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<td>Smoke Barrier Separation</td>
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<td>Smoke Partition</td>
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<tr>
<td>Tenant/Dwelling Unit/ Sleeping Unit Separation</td>
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<td>Incidental Use Separation</td>
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</tbody>
</table>

* Indicate section number permitting reduction
PERCENTAGE OF WALL OPENING CALCULATIONS

<table>
<thead>
<tr>
<th>Fire Separation Distance (Feet) from Property Lines</th>
<th>Degree of Openings Protection (Table 705.8)</th>
<th>Allowable Area (%)</th>
<th>Actual Shown on Plans (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:  
- ☐ No  ☐ Yes
Exit Signs:  
- ☐ No  ☐ Yes
Fire Alarm:  
- ☐ No  ☐ Yes
Smoke Detection Systems:  
- ☐ No  ☐ Yes  ☐ Partial ______
Carbon Monoxide Detection:  
- ☐ No  ☐ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: _________________

☐ Fire and/or smoke rated wall locations (Chapter 7)
☐ Assumed and real property line locations (if not on the site plan)
☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
☐ Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
☐ Occupant loads for each area
☐ Exit access travel distances (1017)
☐ Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
☐ Dead end lengths (1020.4)
☐ Clear exit widths for each exit door
☐ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
☐ Actual occupant load for each exit door
☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
☐ Location of doors with panic hardware (1010.1.10)
☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
☐ Location of doors equipped with hold-open devices
☐ Location of emergency escape windows (1030)
☐ The square footage of each fire area (202)
☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
☐ Note any code exceptions or table notes that may have been utilized regarding the items above
# ACCESSIBLE DWELLING UNITS

(SECTION 1107)

<table>
<thead>
<tr>
<th>TOTAL Units</th>
<th>ACCESSIBLE Units Required</th>
<th>ACCESSIBLE Units Provided</th>
<th>TYPE A Units Required</th>
<th>TYPE A Units Provided</th>
<th>TYPE B Units Required</th>
<th>TYPE B Units Provided</th>
<th>TOTAL ACCESSIBLE Units Provided</th>
</tr>
</thead>
</table>

# ACCESSIBLE PARKING

(SECTION 1106)

<table>
<thead>
<tr>
<th>LOT OR PARKING AREA</th>
<th>TOTAL # OF PARKING SPACES</th>
<th># OF ACCESSIBLE SPACES PROVIDED</th>
<th>TOTAL # ACCESSIBLE PROVIDED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>REQUIRED</td>
<td>REGULAR WITH 5' ACCESS Aisle</td>
<td>VAN SPACES WITH 132&quot; ACCESS AISLE</td>
</tr>
<tr>
<td></td>
<td>PROVIDED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

# PLUMBING FIXTURE REQUIREMENTS

(TABLE 2902.1)

<table>
<thead>
<tr>
<th>USE</th>
<th>WATERCLOSETS</th>
<th>URINALS</th>
<th>LAVATORIES</th>
<th>SHOWERS</th>
<th>DRINKING FOUNTAINS</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>FEMALE</td>
<td>UNISEX</td>
<td>MALE</td>
<td>FEMALE</td>
</tr>
<tr>
<td>SPACE</td>
<td>EXIST’G</td>
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<tr>
<td></td>
<td>REQ’D</td>
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</tbody>
</table>

# SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)
ENERGY SUMMARY

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: □ No □ Yes (The remainder of this section is not applicable)

Exempt Building: □ No □ Yes (Provide code or statutory reference): ______________________

Climate Zone: □ 3A □ 4A □ 5A

Method of Compliance: Energy Code □ Performance □ Prescriptive

ASHRAE 90.1 □ Performance □ Prescriptive

(If “Other” specify source here) ______________________

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)

Description of assembly: ______________________
U-Value of total assembly: __________
R-Value of insulation: __________
Skylights in each assembly: __________
U-Value of skylight: __________
total square footage of skylights in each assembly: __________

Exterior Walls (each assembly)

Description of assembly: ______________________
U-Value of total assembly: __________
R-Value of insulation: __________
Openings (windows or doors with glazing)

U-Value of assembly: __________
Solar heat gain coefficient: __________
projection factor: __________
Door R-Values: __________

Walls below grade (each assembly)

Description of assembly: ______________________
U-Value of total assembly: __________
R-Value of insulation: __________

Floors over unconditioned space (each assembly)

Description of assembly: ______________________
U-Value of total assembly: __________
R-Value of insulation: __________

Floors slab on grade

Description of assembly: ______________________
U-Value of total assembly: __________
R-Value of insulation: __________
Horizontal/vertical requirement: __________
slab heated: __________
**2018 APPENDIX B**

**BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS**

**STRUCTURAL DESIGN**

*(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)*

**DESIGN LOADS:**

<table>
<thead>
<tr>
<th>Importance Factors:</th>
<th>Snow ($I_S$)</th>
<th>Seismic ($I_E$)</th>
</tr>
</thead>
</table>

| Live Loads:         | Roof         | __________ psf  |
|                     | Mezzanine    | __________ psf  |
|                     | Floor        | __________ psf  |

| Ground Snow Load:   | __________ psf |

| Wind Load:          | Ultimate Wind Speed | __________ mph (ASCE-7) |
|                     | Exposure Category   | __________ |

**SEISMIC DESIGN CATEGORY:**

- [ ] A
- [ ] B
- [ ] C
- [ ] D

Provide the following Seismic Design Parameters:

<table>
<thead>
<tr>
<th>Risk Category (Table 1604.5)</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectral Response Acceleration</td>
<td>$S_S$</td>
<td>______%g</td>
<td>$S_I$</td>
<td>______%g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Site Classification (ASCE 7)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Source:</td>
<td>Field Test</td>
<td>Presumptive</td>
<td>Historical Data</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Basic structural system**

- [ ] Bearing Wall
- [ ] Building Frame
- [ ] Dual w/Special Moment Frame
- [ ] Moment Frame
- [ ] Dual w/Intermediate R/C or Special Steel
- [ ] Inverted Pendulum
- [ ] ________

**Analysis Procedure:**

- [ ] Simplified
- [ ] Equivalent Lateral Force
- [ ] Dynamic

**Architectural, Mechanical, Components anchored?**

- [ ] Yes
- [ ] No

**LATERAL DESIGN CONTROL:**

- [ ] Earthquake
- [ ] Wind

**SOIL BEARING CAPACITIES:**

- Field Test (provide copy of test report) __________ psf
- Presumptive Bearing capacity __________ psf
- Pile size, type, and capacity __________
MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
winter dry bulb: __________
summer dry bulb: __________

Interior design conditions
winter dry bulb: __________
summer dry bulb: __________
relative humidity: __________

Building heating load: __________
Building cooling load: __________

Mechanical Spacing Conditioning System
Unitary
description of unit: __________
heating efficiency: __________
cooling efficiency: __________
size category of unit: __________
Boiler
Size category. If oversized, state reason.: __________
Chiller
Size category. If oversized, state reason.: __________

List equipment efficiencies: __________
ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code  ☐ Performance  ☐ Prescriptive
                        ASHRAE 90.1  ☐ Performance  ☐ Prescriptive

Lighting schedule (each fixture type)
- lamp type required in fixture
- number of lamps in fixture
- ballast type used in the fixture
- number of ballasts in fixture
- total wattage per fixture
- total interior wattage specified vs. allowed (whole building or space by space)
- total exterior wattage specified vs. allowed

Additional Efficiency Package Options
(When using the 2018 NCECC; not required for ASHRAE 90.1)
☐ C406.2 More Efficient HVAC Equipment Performance
☐ C406.3 Reduced Lighting Power Density
☐ C406.4 Enhanced Digital Lighting Controls
☐ C406.5 On-Site Renewable Energy
☐ C406.6 Dedicated Outdoor Air System
☐ C406.7 Reduced Energy Use in Service Water Heating