APPENDIX B
2018 BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

(EXCEPT ONE AND TWO-FAMILYWELLINGS AND TOWNHOUSE)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: _____

Address: _____ Zip Code: _____

Owner/Authorized Agent: _____ Phone #: (___)___-___ E-Mail: _____

Owned 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 feet high				(___)___-___	
Other				(___)___-___	

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

2018 NC BUILDING CODE: ☐ New Building ☐ Addition ☐ Shell/Core ☐ Phased Construction--Shell Core ☐ 1st Time Interior Completions

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

CONSTRUCTED: (date)_____ ORIGINAL USE(S) (CHAP 3) – _____

RENOVATED: (date)_____ PROPOSED USE(S) (CHAP 3) – _____

OCCUPANCY CATEGORY: (date)_____ Current: – _____ Proposed: – _____

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 ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D

Standpipes: ☐ No Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry

Primary Fire District: ☐ No ☐ Yes Flood Hazard Area: ☐ No ☐ Yes

Special Inspections Required: ☐ No ☐ Yes

GROSS BUILDING AREA TABLE

Floor	Existing (sq ft)	New (sq ft)	Subtotal
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor			
Basement			
TOTAL			

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 ☐ I-2 ☐ I-3 ☐ A-4 ☐ I-4

I-3 Condition ☐ 1 ☐ 2

I-2 Condition ☐ 1 ☐ 2

I-1 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

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): _____

This separation is not excempt as a Nonseparated Use (see exceptions).

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

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

Mixed Occupancy: ☐ No ☐ Yes Separation: _____ Hr. Exception: _____

☐ Non Separated Use (508.3)

☐ Separated Use (508.4)--See below for area calculations for each story, the are 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.

Select one

$$\frac{\text{ACTUAL AREA OF OCCUPANCY A}}{\text{ALLOWABLE AREA OF OCCUPANCY A}} + \frac{\text{ACTUAL AREA OF OCCUPANCY B}}{\text{ALLOWABLE AREA OF OCCUPANCY B}} \leq 1$$

_____ + _____ + ... = _____ < 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 [4] AREA	(C) AREA FOR FRONTAGE INCREASE [1, 5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED [2, 3]

[1] Frontage area increases from Section 506.2 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=Minimun width of public way = _____ (W)

[2] Unlimited area applicable under conditions of Section 507.

[3] Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).

[4] The maximum area of parking garages must comply with 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.

[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)			
Building Height in Stories (Table 503.4)			

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (feet)	RATING REQUIRED	RATING PROVIDED (w/ _____ REDUCTION) *	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural frame, including columns, girders, trusses							
Bearing Walls							
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing walls and partitions							
Exterior							
North							
East							
West							
South							
Interior walls and partitions							
Floor construction including supporting beams and joists							
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof construction including supporting beams and joists							
Roof Ceiling Assembly							
Columns Supporting Roof							
Shaft Enclosures – Exit							
Shaft Enclosures – Other							
Corridor Separation							
Occupancy Separation							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINE	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

LIFE SAFETY REQUIREMENTS

Emergency Lighting: ☐ No ☐ Yes

Exit Signs: ☐ No ☐ Yes

Fire Alarm: ☐ No ☐ Yes

Smoke Detection Systems: ☐ No ☐ Yes

Carbon Monoxide Detection: ☐ No ☐ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Saftey 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 assumend property lines (705.8)
☐ Occupancy types 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 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 accomodate 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 amount of delay (1010.1.9.7)
☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
☐ Location of doors with 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 exception or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS

(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING

(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		TOTAL # OF ACCESSIBLE PARKING SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	
TOTAL						

PLUMBING FIXTURE REQUIREMENTS

USE	WATERCLOSETS			URINALS	LAVATORIES			SHOWERS/ TUBS	DRINKING FOUNTAINS	
	Male	Female	Unisex		Male	Female	Unisex		Regular	Accessible
SPACE										

SPECIAL APPROVALS:

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, 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: ☐ (If checked, the remainder of this section is not applicable)

Exempt Building: ☐ Provide code statuatory reference: _____

Climate Zone: ☐ 3A ☐ 4A ☐ 5A

Method of Compliance:

Energy Code: ☐ Performance ☐ Prescriptive

ASHRAE 90.1: ☐ Performance ☐ Prescriptive

Other ☐ Performance (specify source) _____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
- Description of assembly: _____
- U-Value of total assembly: _____
- R-Value of insualtion: _____
- 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/verticle requirement: _____
- Slab heated: _____

STRUCTURAL DESIGN

(PROVIDE ON SHEET 1 OR 2 OF THE STRUCTURAL SHEETS)

DESIGN LOADS

Importance Factors: Wind (I_w) _____ Snow (I_s) _____ Seismic (I_E) _____

Live Loads: Roof _____ psf; Mezzanine _____ psf; Floor _____ psf

Ground Snow Loads: _____ psf

Wind Loads: Basic Wind Speed _____ mph (ASCE-7) Exposure Category _____

SEISMIC DESIGN CATEGORY ☐ A ☐ B ☐ C ☐ D

Provide the following Seismic Design parameters:

Occupancy category (Table 1604.5) ☐ I ☐ II ☐ III ☐ IV

Spectral Response Acceleration S_s _____ %g S_1 _____ %g

Site Classification (ASCE 7) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F

Data Source: ☐ Field Test ☐ Presumptive ☐ Historical Data

Basic Structural System (Check One)

☐ Bearing Wall ☐ Dual w/ Special Moment Frame

☐ Building Frame ☐ Dual w/ Intermediate R/C or Special Steel

☐ Moment Frame ☐ Inverted Pendullum

Analysis Proceedure ☐ 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

Presumtive Bearing Capacity _____ psf

Pile size, type, and capacity _____