2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (EXCEPT 1 AND 2 FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project: New Hanover County Government Center
Address: Government Center Drive, Wilmington, NC Zip Code: 28403
Owner / Agent: Brian Eckel Phone #: (910) 344-1001 Email: brian@capefearcommercial.com
Owned By: ☐ City/County ■ Private ☐ State
Code Enforcement Jurisdiction: ☐ City: ■ County: New Hanover ☐ State

CONTACT: Laura Miller

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #
Architectural	LS3P Associates, Ltd.	Laura Miller	9888	(910) 790-9901
Civil	SEPI Engineering	Mark Arcuri	24419	(910) 523-5715
Electrical	Newcomb-Boyd	A. Smurygina	44840	(919) 783-8990
Fire Alarm	Newcomb-Boyd	A. Smurygina	44840	(919) 783-8990
Plumbing	Newcomb-Boyd	Paul Kitchens	43322	(919) 783-8965
Mechanical	Newcomb-Boyd	Paul Kitchens	43322	(919) 783-8965
Sprinkler-Standpipe	Newcomb-Boyd	Paul Kitchens	43322	(919) 783-8965
Structural	Citadel Contractors, Inc.	Chris Jackson	036852	(919) 362-5122
Retaining Walls>5' High				
Other	Mihaly Land Designs	Josh Mihaly		(910) 392-4355

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

2018 NC BUILDING CODE: ■ New Building ☐ Addition ☐ 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: ■ N/A ☐ Prescriptive ☐ Repair ☐ Chapter 14
Alteration: ☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use

CONSTRUCTED: (date) N/A **CURRENT OCCUPANCY(S)** (Ch. 3): N/A
RENOVATED: (date) N/A **PROPOSED OCCUPANCY(S)** (Ch. 3): N/A

RISK CATEGORY (Table 1604.5): **Current:** ☐ N/A ☐ I ☐ II ☐ III ☐ IV
Proposed: ☐ N/A ☐ I ■ II ☐ III ☐ IV

BASIC BUILDING DATA
Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
☐ 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

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
4th Floor		26,636	26,636
3rd Floor		26,636	26,636
2nd Floor		41,464	41,464
Mezzanine			
1st Floor		41,856	41,856
TOTAL		136,592	136,592

ALLOWABLE AREA

Primary Occupancy Classification(s):

Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business ■ B
Educational ☐ E
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): N/A
Incidental Uses (Table 509): N/A
Special Uses (Chapter 4 - List Code Sections): N/A
Special Provisions (Chapter 5 - List Code Sections): N/A
Mixed Occupancy: ☐ No ■ Yes Separation: 1 Hr. Exception: N/A

☐ 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 suchthat 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.

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

_____ + _____ = ____ + ____ = ____ ≤ 1

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR FRONTAGE INCREASE[1,5]	(E) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]
1	B	41,856	69,000	N/A	69,000
2	B	41,464	69,000	N/A	69,000
3	B	26,636	69,000	N/A	69,000
4	B	26,636	69,000	N/A	69,000

[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. N/A (F).
b. Total Building Perimeter = N/A (P)
c. Ratio (F/P) = N/A (F/P)
d. W = Minimum width of public way = N/A (W)
e. Percent of frontage increase I = 100[F/P - 0.25 x W / 30 = N/A (%)
[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 open parking garages must comply with Table 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)	75'	67'-8"	
Building Height in Stories (Table 504.4)	4	4	

[1]Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING** REQ'D	RATING** PROVIDED (w/ * Reduct.)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENE-TRATION	DESIGN # FOR RATED JOINTS
Structural Frame, Including Columns, Girders, Trusses		0	0				
Bearing Walls							
Exterior	>30'	0	0				
North							
East							
West							
South							
Interior							
Nonbearing Walls and Partitions							
Exterior Walls	>30'	0	0				
North							
East							
West							
South							
Interior Walls							
Floor Construction, Including Supporting Beams and Joists		0	0				
Floor Ceiling Assembly							
Columns Supporting Floors		0	0				
Roof Construction, Including Supporting Beams and Joists		0	0				
Roof Ceiling Assembly							
Columns Supporting Roof		0	0				
Shaft Enclosures - Elev.		2	2	A-005	U415		
Shaft Enclosures - Other		2	2	A-006	U419		
Corridor Separation		1	2	A-006	U419		
Occupancy / Fire Barrier Separation		1	1	A-006	U419		
Party / Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant / Dwelling / Unit / Sleeping Unit Separation							
Incidental Use Separation							

* Indicates section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL AREA SHOWN ON PLANS (%)
>30'	(UP, S)	No Limit	

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 #: G-101, G-102, G-103

■ 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 and code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE PARKING (SECTION 1106)

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

SEE CIVIL PLANS

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

	LEVEL	WATERCLOSETS MALE	WATERCLOSETS FEMALE	WATERCLOSETS UNI SEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNI SEX	SHOWERS /TUBS	DRINKING FNTNS. REG.	DRINKING FNTNS. ACCESS.
01	PROVIDED	7	17	3	6	8	8	3	10	1*	1*
	REQ'D	10	15	1		7	7	1	0	3	3
02	PROVIDED	4	8	0	4	5	5	0	0	2	2
	REQ'D	6	8	0		7	7	0	0	2	2
03	PROVIDED	2	4	0	2	3	3	0	0	1	1
	REQ'D	4	4	0		3	3	0	0	1	1
04	PROVIDED	2	4	1	2	3	3	1	1	1	1
	REQ'D	4	4	0		3	3	0	0	1	1

SPECIAL APPROVALS
Special Approval: (Local Jurisdiction, Department of Insurance, OCS, DPI, DHHS, ICC, etc., Describe Below
New Hanover County Inspections

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 (remainder of this section is not applicable)
Exempt Building: ■ No ☐ Yes:
Climate Zone: ☐ N/A ■ 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: Rigid insulation over metal deck Rigid insulation over concrete & metal deck
U-Value of total assembly:
R-Value in each assembly: R-25ci R-25ci
U-Value of skylight:
Total percentage of skylights in each assembly: n/a
Exterior Walls (each assembly)
Description of assembly: Tilt-up Concrete Panels EIFS over metal stud wall framing
U-Value of total assembly:
R-Value of insulation: R-7.6ci R-13 + R-7.5ci
Openings (windows or doors with glazing): % of above grade walls
U-Value of assembly: U-0.45
Solar heat gain coefficient:
Projection Factor:
Door U-Values: Entrance: U-0.77, Opaque: U-0.70
Walls below grade (each assembly)
Description of assembly: n/a
U-Value of total assembly:
R-Value of insulation:
Floors over unconditioned space (each assembly)
Description of assembly: n/a
U-Value of total assembly:
R-Value of insulation:
Floor slabs on grade (each assembly)
Description of assembly: Concrete slab on grade, unheated.
U-Value of total assembly:
R-Value of insulation: NR = No requirement.
Horizontal/Vertical requirement:
Slab Heated:

STRUCTURAL DESIGN: SEE STRUCTURAL SHEET #: S0.1

MECHANICAL DESIGN: SEE MECHANICAL SHEET #: M-001

ELECTRICAL DESIGN: SEE ELECTRICAL SHEET #: E-001

CAPE FEAR FD STONEWATER

LS3P

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NOT FOR CONSTRUCTION

NHC Goverment Center 7702-190810

NEW HANOVER COUNTY GOVERNMENT CENTER

GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403

LS3P PROJECT: 7702.190810

Δ	DATE	DESCRIPTION
A	2020.12.22	ADDENDUM #1

SHEET NAME:
APPENDIX B

ORIG SUBMISSION: 2020.12.22
CURRENT: 2020.12.22
ADDENDUM #1

SHEET:
G-002

GMP SET

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