

**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: SHEETZ 32x127 FUEL ISLAND CANOPY
Address: NEW MARKET BLVD & CHESTNUT DR, BOONE, N.C.
Zip Code: 28607
Owner/Authorized Agent: _____ Phone # (____) _____ E-Mail _____
Owned By: Private
Code Enforcement Jurisdiction: Select one

CONTACT:

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural				()	
Civil				()	
Electrical				()	
Fire Alarm				()	
Plumbing				()	
Mechanical				()	
Sprinkler-Standpipe				()	
Structural	Lawrence R. Pilon, PE	Lawrence R. Pilon	022186	(315) 668-0039	larrypilon.pe@gmail.com
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
2018 NC EXISTING BUILDING CODE: Select one Select one Select one
CONSTRUCTED: (date) _____ **CURRENT OCCUPANCY(S)** (Ch. 3): _____
RENOVATED: (date) _____ **PROPOSED OCCUPANCY(S)** (Ch. 3): _____
OCCUPANCY CATEGORY (Table 1604.5): **Current:** N/A **Proposed:** IJ

BASIC BUILDING DATA
Construction Type: II-B
Sprinklers: No Select one
Standpipes: No
Primary Fire District: No Flood Hazard Area: Select one
Special Inspections Required: Select one

Gross Building Area Table

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor		0	
2nd Floor		0	
Mezzanine		0	
1st Floor		4064 SQ. FT	
Basement		0	
TOTAL		4064 SQ. FT	

ALLOWABLE AREA

Primary Occupancy Classification(s): Mercantile Select one Select one Select one Select one
Accessory Occupancy Classification(s): _____
Incidental Uses (Table 509): _____
Special Uses (Chapter 4 – List Code Sections): _____
Special Provisions: (Chapter 5 – List Code Sections): _____
Mixed Occupancy: Select one Separation: Select one Exception: _____

Select one
 $\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$
 $\frac{4064/12500}{4064/12500} + \frac{0}{4064/12500} = 0.33 \leq 1.00$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 ⁴ AREA INCREASE ^{1,5}	(C) AREA FOR FRONTAGE INCREASE ^{1,5}	(D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2,3}
ONE	CANOPY	4064	12,500	N/A	N/A

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 = Minimum width of public way = _____ (W)
e. Percent of frontage increase $I_f = 100 [(F/P) - 0.25] \times W/30 =$ _____ (%)
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)	55	20'	503
Building Height in Stories (Table 504.4)	4	STORIES ONE	503

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 (W/REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses						
Bearing Walls						
Exterior						
North						
East						
West						
South						
Interior						
Nonbearing Walls and Partitions						
Exterior walls						
North						

	East	West	South	Interior walls and partitions	Floor Construction	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/Fire Barrier Separation	Party/Fire Wall Separation	Smoke Barrier Separation	Smoke Partition	Tenant Dwelling Unit/Sleeping Unit Separation	Incidental Use Separation	

* Indicate 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 SHOWN ON PLANS (%)

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: Select one
Exit Signs: Select one
Fire Alarm: Select one
Smoke Detection Systems: Select one
Carbon Monoxide Detection: Select one

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)

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 REQUIRED	PROVIDED	# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
			REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE / 8' ACCESS AISLE	
TOTAL					

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE	WATER CLOSETS			URINALS			LAVATORIES			SHOWERS	DRINKING FOUNTAINS	
	MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX	/TUBS	REGULAR	ACCESSIBLE
SPACE	EXIST'G											
	NEW											
	REQ'D											

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: Select one

Exempt Building: Select one Provide code or statutory reference: _____

Climate Zone: Select one

Method of Compliance: Select one
(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:

Importance Factors: Wind (I_w) 1.0
Snow (I_s) 1.0
Seismic (I_e) 1.0

Live Loads: Roof 25 psf
Mezzanine N/A psf
Floor N/A psf

Ground Snow Load: 20 psf

Wind Load: Basic Wind Speed 120 mph (Ultimate ASCE-7-10)
Exposure Category B

SEISMIC DESIGN CATEGORY: C
Provide the following Seismic Design Parameters:
Occupancy Category (Table 1604.5) II
Spectral Response Acceleration S_s = 0.259 %g S₁ = 0.097 %g
Site Classification (ASCE 7) D
Data Source: Presumptive
Basic structural system Inverted Pendulum
Analysis Procedure: Equivalent Lateral Force
Architectural, Mechanical, Components anchored? Yes

LATERAL DESIGN CONTROL: Wind
SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) 1500 psf
Pile size, type, and capacity _____

**2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)**

MECHANICAL SUMMARY

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: _____

**2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)**

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Select one

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

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PERMIT SET 8/10/23

PR. JOB NO. 63611	FINAL JOB NO. 63611	DRAWING NO. AB063611
MCGEE CORPORATION 12701 East Independence Blvd., P.O. Box 1375 Matthews, NC 28106-1375 Phone: (704) 882-1500 Watts: (800) 528-5589		
SHEETZ INC NEW MARKET BLVD & CHESTNUT DR BOONE, NC 28607 (WATAGUA)	SCALE: NTS DATE: 8/9/23	IN ACCORDANCE WITH REV. LETTER: DRAWN BY: JWG CHK'D BY:
These prints are the property of McGee Corp. Reproduction or reuse is prohibited without written permission.	TRUSS CANOPY 32'-0" x 126'-11" APPENDIX B	SHEET NO. 1 OF 1