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 FUEL ISLAND CANOPY_____
Address: __283 NC RTE 87 CAMERON, N.C._____
Zip Code __28326__
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	lpilons@windstream.net
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:** Select one

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		4614 SQ. FT	
Basement		0	
TOTAL		4614 SQ. FT	

ALLOWABLE AREA

Primary Occupancy Classification(s): Mercantile Select one 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

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

_____ + _____ + ... = _____ ≤ 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]
ONE	CANOPY	4614	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* = 100 [F/P – 0.25] x 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. 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	RATING PROVIDED (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 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/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	TOTAL # OF PARKING SPACES PROVIDED	# OF ACCESSIBLE SPACES PROVIDED REGULAR WITH 5' ACCESS AISLE	# OF ACCESSIBLE SPACES PROVIDED VAN SPACES WITH 132" ACCESS AISLE	# OF ACCESSIBLE SPACES PROVIDED VAN SPACES WITH 8' ACCESS AISLE	TOTAL # ACCESSIBLE PROVIDED
TOTAL						

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATERCLOSETS MALE	WATERCLOSETS FEMALE	WATERCLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS /TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS 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 ____20____ psf
Mezzanine ____N/A____ psf
Floor ____N/A____ psf

Ground Snow Load: _____10___ psf

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

SEISMIC DESIGN CATEGORY: B
Provide the following Seismic Design Parameters:
Occupancy Category (Table 1604.5) II
Spectral Response Acceleration S_S = 0.21 %g S_1 = 0.095 %g

Site Classification (ASCE 7) D
Data Source: Field Test
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) 2500 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

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.
APPROVED
Limited building only review
Permit holder responsible for full compliance with the code
03/25/2021
Harnett COUNTY NORTH CAROLINA

LAWRENCE R. PILON/ PROFESSIONAL ENGINEER
51 MAPLEVIEW DRIVE/PENNELLVILLE, NY 13132
(315) 668-0039

McGEE CORPORATION
12701 East Independence Blvd. P.O. Box 1375
Matthews, NC 28106-1375
Phone: (704) 882-1500
Watts: (800) 526-5589

PR. JOB NO. 59914 | FINAL JOB NO. 59914 | DRAWING NO. AB059914

SHEETZ INC
283 NC 87
CAMERON, NC 28326 (HARNETT)

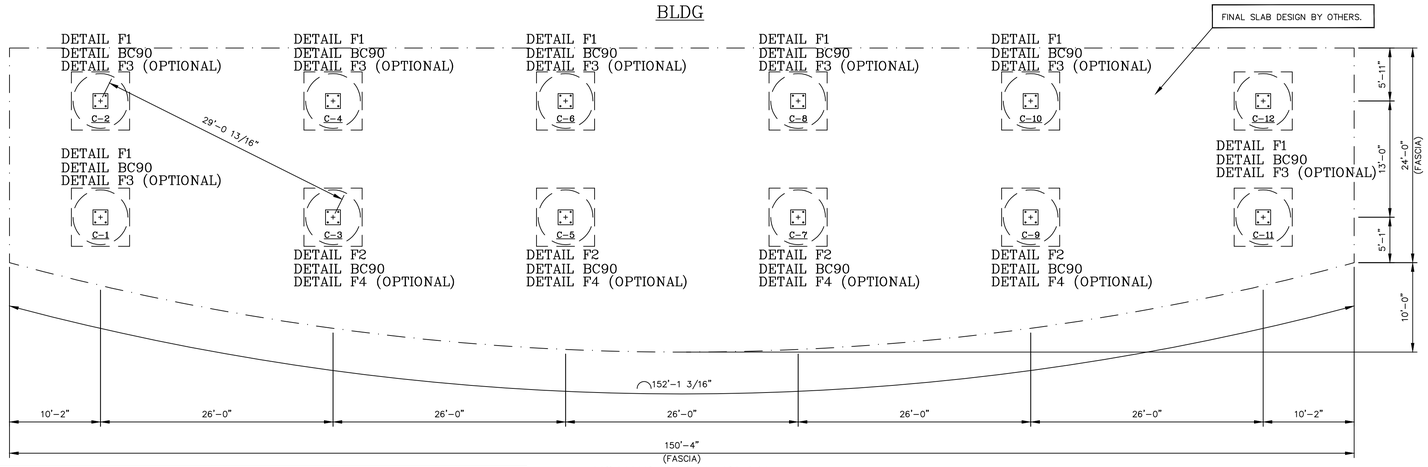
SCALE: NTS | IN ACCORDANCE WITH REV. LETTER: _____ | DRAWN BY: JWG | CHK'D BY:
DATE: 2/2/21

METAL CANOPY 34'-0" x 150'-4"

APPENDIX B | SHEET NO. 1 OF 1

NORTH CAROLINA PROFESSIONAL SEAL 022186 ENGINEER LAWRENCE R. PILON
59914 2/5/21

CAD FILE NO./PLOT SCALE
1/8"=1'-0"
59914



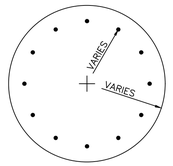
FOUNDATION PLAN

ALL DIAGONAL DIMENSIONS SHOWN ARE GIVEN TO CL OF COLUMN

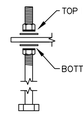
FOOTING SIZES		
SOIL BEARING	DETAIL F1/F3	DETAIL F2/F4
1500	4'-0" SQ x 5'-0" DEEP or 5'-0"ø x 5'-0" DEEP	6'-0" SQ x 5'-0" DEEP or 6'-0"ø x 5'-0" DEEP
2000	4'-0" SQ x 5'-0" DEEP or 4'-0"ø x 5'-0" DEEP	5'-0" SQ x 5'-0" DEEP or 6'-0"ø x 5'-0" DEEP
2500	4'-0" SQ x 4'-6" DEEP or 4'-0"ø x 5'-0" DEEP	5'-0" SQ x 5'-0" DEEP or 5'-0"ø x 5'-0" DEEP
3000	4'-0" SQ x 4'-0" DEEP or 4'-0"ø x 5'-0" DEEP	5'-0" SQ x 5'-0" DEEP or 5'-0"ø x 5'-0" DEEP

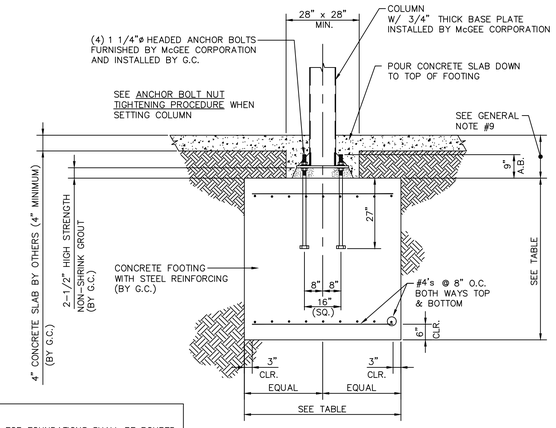
NOTES:
1.) REBAR DETAILS:
SQUARE PIER FOOTINGS: #4 BARS @ 8" C-C EACH WAY- TWO LAYERS (TOP AND BOTTOM)
ROUND PIER FOOTINGS: 4' DIAMETER - (8) #6 VERTICAL BARS EQ. SPACED ON 36" DIAMETER CIRCLE. #4 ROUND TIES @ 12" C-C MAX SPACING
ROUND PIER FOOTINGS: 5' DIAMETER - (12) #6 VERTICAL BARS EQ. SPACED ON 48" DIAMETER CIRCLE. #4 ROUND TIES @ 12" C-C MAX SPACING
ROUND PIER FOOTINGS: 6' DIAMETER - (18) #6 VERTICAL BARS EQ. SPACED ON 60" DIAMETER CIRCLE. #4 ROUND TIES @ 12" C-C MAX SPACING

FOOTING REBAR NOTE:
REBAR MATS / CAGES TO BE CONSTRUCTED WITH TIES PER ACI REQUIREMENTS. WELDING OF REBAR MATS / CAGES IS NOT ALLOWABLE WITHOUT APPROVAL FROM ENGINEER OF RECORD.



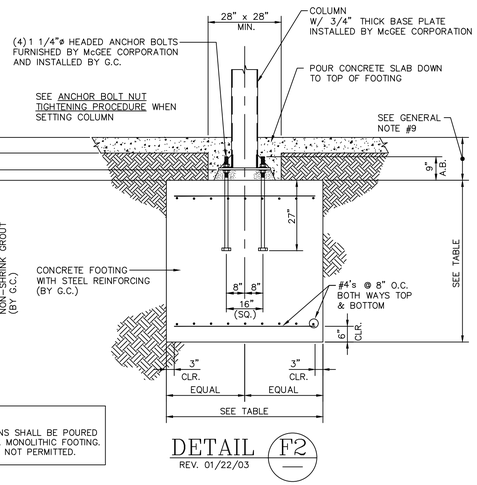
ANCHOR BOLT NUT TIGHTENING PROCEDURE:
SET AND PLUMB THE COLUMN, PER AISC ERECTION PROVISIONS, WITH DOUBLE NUTS ON THE REQUIRED NUMBER OF ANCHOR BOLTS. THE BOTTOM NUT SHALL HAVE A FLAT WASHER BETWEEN THE BOTTOM OF BASEPLATE AND THE TOP OF THE NUT. THE TOP NUT SHALL HAVE A WASHER BETWEEN THE TOP OF BASEPLATE AND THE BOTTOM OF THE NUT. AFTER THE COLUMN IS SET AND PLUMB, TIGHTEN THE TOP NUT TO A SNUG TIGHT CONDITION WITH TOP OF THE BASEPLATE (FULL EFFORT OF A MAN ON A WRENCH).





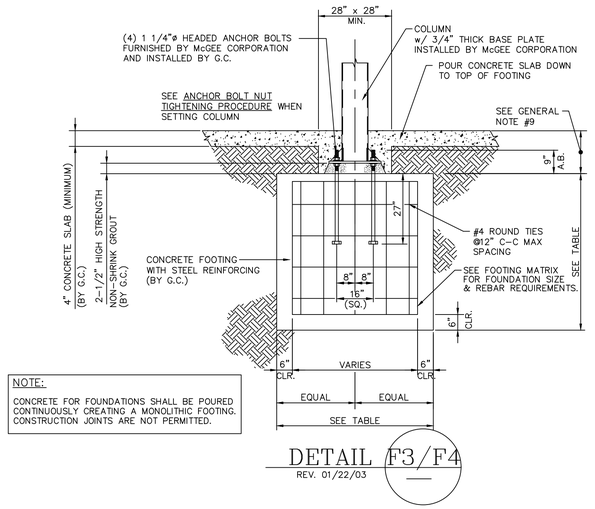
NOTE:
CONCRETE FOR FOUNDATIONS SHALL BE POURED CONTINUOUSLY CREATING A MONOLITHIC FOOTING. CONSTRUCTION JOINTS ARE NOT PERMITTED.

DETAIL F1
REV. 01/22/03



NOTE:
CONCRETE FOR FOUNDATIONS SHALL BE POURED CONTINUOUSLY CREATING A MONOLITHIC FOOTING. CONSTRUCTION JOINTS ARE NOT PERMITTED.

DETAIL F2
REV. 01/22/03



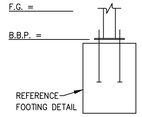
NOTE:
CONCRETE FOR FOUNDATIONS SHALL BE POURED CONTINUOUSLY CREATING A MONOLITHIC FOOTING. CONSTRUCTION JOINTS ARE NOT PERMITTED.

DETAIL F3/F4
REV. 01/22/03

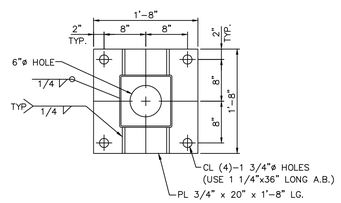
LEGEND

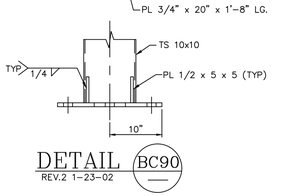
F.G. = FINISHED GRADE (DRIVE SLAB AT COL.)
F.F. = FINISHED FLOOR
B.B.P. = BOTTOM OF BASE PLATE
T.O.I. = TOP OF ISLAND
T.O.F. = TOP OF FOOTING

HIGH POINT UNDER CANOPY _____
TOP OF BUILDING _____



COLUMN NO.	FINISH GRADE	BOTTOM OF BASEPLATE
C-1	F.G. = 0"	B.B.P. = TBD
C-2	F.G. = 0"	B.B.P. = TBD
C-3	F.G. = 0"	B.B.P. = TBD
C-4	F.G. = 0"	B.B.P. = TBD
C-5	F.G. = 0"	B.B.P. = TBD
C-6	F.G. = 0"	B.B.P. = TBD
C-7	F.G. = 0"	B.B.P. = TBD
C-8	F.G. = 0"	B.B.P. = TBD
C-9	F.G. = 0"	B.B.P. = TBD
C-10	F.G. = 0"	B.B.P. = TBD
C-11	F.G. = 0"	B.B.P. = TBD
C-12	F.G. = 0"	B.B.P. = TBD





DETAIL BC90
REV.2 1-23-02

SITE CONDITIONS / REQUIREMENTS

1.) PROVIDE A DRIVE ACCESSIBLE AREA TO WITHIN 15'-0" FROM THE EDGE OF CANOPY FASCIA IN ORDER TO UNLOAD MATERIALS AND PERFORM WORK.

2.) FILL ALL OPEN TANK HOLES AND TRENCHES WITHIN 15'-0" FROM THE EDGE OF CANOPY FASCIA FROM THE TIME THAT THE STRUCTURE ARRIVES AND UNTIL ERECTION IS COMPLETE.

3.) THE JOB SITE MUST BE GRADED LEVEL WITH NO SWELLS, DITCHES, OR TOPOGRAPHICAL IRREGULARITIES WITHIN 15'-0" FROM THE EDGE OF CANOPY FASCIA. ANY CONCRETE POURED PRIOR TO McGEE'S ARRIVAL MUST HAVE HAD AMPLE TIME TO CURE AND BE ABLE TO SUPPORT THE WEIGHT OF McGEE'S TRAILERS AND CRANES.

4.) THE JOB SITE MUST BE DRY ENOUGH FOR McGEE'S VEHICLES AND PERSONNEL TO PERFORM WORK. IF NECESSARY THE GENERAL CONTRACTOR SHOULD LAY GRAVEL IN EXCESSIVELY MUDDY AREAS TO ENSURE ADEQUATE WORK CONDITIONS.

5.) POURED CONCRETE PAVING UNDER THE CANOPY TO BE EXCLUSIVELY FOR WORK SPACE AND STORAGE OF MATERIALS.

6.) REMOVE ALL OVERHEAD OBSTRUCTIONS.

7.) FORM, SET, AND POUR FOUNDATIONS PER McGEE'S SITE SPECIFIC APPROVED FOUNDATION PLAN. ALL FORMS SHALL BE REMOVED PRIOR TO McGEE'S ARRIVAL. ALL THREADS SHALL BE FREE FROM DEBRIS AND DUST AND SHALL BE ACCESSIBLE.

8.) INSTALL ALL ANCHOR BOLTS W/ NUTS. SET AT PROPER ELEVATIONS WITH NO MORE THAN 1/4" TOLERANCE.

9.) PROVIDE TEMPORARY POWER SOURCE (110 VOLTS) WITHIN 100 FEET OF THE STRUCTURE FOR INSTALLERS USE.

10.) OBTAIN ALL REQUIRED PERMITS FROM LOCAL AUTHORITIES AND ARRANGE ALL LOCAL INSPECTIONS.

11.) VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. ANY DEVIATIONS FROM THESE DRAWINGS DUE TO FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER FOR MODIFICATIONS.

PLEASE REVIEW ALL DRAWINGS, SIGN AND RETURN FOR FABRICATION OF CANOPY

CANOPY SIZE	☐ APPROVED AS SUBMITTED ☐ APPROVED WITH NOTED CHANGES
COLUMN SPACING	☐ APPROVED AS SUBMITTED ☐ APPROVED WITH NOTED CHANGES
CLEARANCE	☐ APPROVED AS SUBMITTED ☐ APPROVED WITH NOTED CHANGES
SIGNAGE	☐ NUMBER APPROVED AS SUBMITTED ☐ LAYOUT APPROVED AS SUBMITTED ☐ APPROVED WITH NOTED CHANGES
DECALS	☐ APPROVED AS SUBMITTED ☐ APPROVED WITH NOTED CHANGES
LIGHTS	☐ NUMBER APPROVED AS SUBMITTED ☐ LAYOUT APPROVED AS SUBMITTED ☐ APPROVED WITH NOTED CHANGES

ELEVATION FORMS FORWARDED TO GENERAL CONTRACTOR ☐

APPROVED BY: _____

DATE: _____

NOTE: SIGNED SALES ORDER, APPROVAL DRAWINGS, AND A COMPLETED ELEVATION FORM MUST BE RECEIVED AT LEAST 3 WEEKS PRIOR TO DELIVERY OF ANY CANOPY MATERIALS.

REQUESTED DELIVERY DATE: _____

GENERAL NOTES:

1) ERECTION OF STEEL STRUCTURE SHALL BE PERFORMED PER ALL AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) ERECTION PROVISIONS.
2) ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", (ACI 318-14). ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI AND A MINIMUM UNIT WEIGHT OF 145 PCF. REINFORCING STEEL SHALL BE NEW BILLET STEEL DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.
3) STRUCTURAL STEEL SHALL CONFORM TO:
Wide Flange Beams - ASTM A992, Grade 50, Fy = 50 KSI
Structural Angle and Channel - ASTM A36, Fy = 36 KSI
Structural Plate - ASTM A572, Grade 50, Fy = 50 KSI
Structural Tubing - ASTM A500, Grade B, Fy = 46 KSI
Structural Pipe - ASTM A500, Grade B, Fy = 42 KSI
4) LIGHT GAUGE COLD FORMED SHAPES SHALL CONFORM TO ASTM A653 AND ASTM C-955. ALL MEMBERS SHALL BE FORMED FROM MATERIAL HAVING A 50 KSI MINIMUM YIELD STRENGTH.
5) BOLTS SHALL CONFORM TO ASTM A325 FOR STRUCTURAL STEEL CONNECTIONS. BOLTS SHALL BE TIGHTENED TO SNUG TIGHT PER AISC & RCSC SPECIFICATIONS.
6) MINIMUM REQUIRED SOIL BEARING PRESSURE OF 2500 PSF Per Geotech Report 1-20-0483-EA SHALL BE PROVIDED BY THE OWNER.
7) DESIGN CRITERIA- 2018 NC BUILDING CODE (2015 IBC W/ NC AMENDMENTS)
Roof Live Load = 20 PSF
Roof Snow Load (ASCE 7-10):
Ground Snow Load- Pg = 10 PSF
Flat Roof Snow Load- Pf = 10 PSF
Snow Exposure Factor- Ce = 1.0
Snow Importance Factor- I_s = 1.0 (Risk Category II)
Thermal Factor- Ct= 1.2
Wind Load (ASCE 7-10) :
Ultimate Wind Speed (3-Sec. Gust) - V = 120 MPH
Lateral = 25 PSF (0.6 W FOR ASD)
Uplift = 20 PSF (0.6 W FOR ASD)
Wind Importance Factor- I_w = 1.0 (Risk Category II)
Wind Exposure - 'B'
Internal Pressure Coefficients - GCpi = 0.00 (Open Bldg.)
SEISMIC LOAD : (ASCE 7-10)
Seismic Importance Factor - Ie= 1.00 (Risk Category II)
Risk Category- II
Mapped MCEr Response Accelerations At Short Periods - S_s = 0.21 g - Fa = 1.6
Mapped MCEr Response Accelerations At 1-Sec. Period - S1 = 0.095g - Fv = 2.4
Site Class - D Per Geotech Report
Design Spectral Response Acceleration At Short Periods - S_{DS} =0.224g
Design Spectral Response Acceleration At 1-Sec. Period - S_{D1} =0.152g
SEISMIC DESIGN CATEGORY - C

BASIC SEISMIC - FORCE - RESISTING SYSTEM - INVERTED PENDULUM SYSTEM
CANTILEVERED COLUMN SYSTEM
Response Modification Coefficient - R = 2
System Overstrength Factor - Ω0 = 2
Deflection Amplification Factor - Cd = 2

SEISMIC RESPONSE COEFFICIENT - Cs = 0.086

SEISMIC BASE SHEAR - V = 0.9 KIPS / COL

ANALYSIS - EQUIVALENT LATERAL FORCE PROCEDURE

8) ASTM F1554 GR. 55 (Fy = 55 KSI) HEADED ANCHOR RODS & WOOD TEMPLATES SHALL BE FURNISHED BY McGEE CORP.
9) CANOPY FOUNDATION INSTALLATION: CONTRACTOR SHALL DETERMINE WHICH FINISHED GRADE ELEVATION AT EACH CANOPY COLUMN IS THE LOWEST AND ESTABLISH ALL FOUNDATION LOCATIONS IN RELATION TO THAT ELEVATION. CONTRACTOR MUST VERIFY FUEL CONTAINMENT BOX SIZE AND LOCATION TO ENSURE FOUNDATION DOES NOT INTERFERE WITH BOX INSTALLATION. TOP OF FOUNDATION DEPTH MAY BE GREATER THAN BUT NOT LESS THAN 12" BELOW THE PREVIOUSLY DETERMINED LOWEST FINISHED GRADE ELEVATION.
10) STRUCTURAL AND MISCELLANEOUS STEEL SUBJECTED TO EXTERIOR EXPOSURE HAS BEEN PRIMED COATED ONLY. FIELD TOUCH-UP, FINISH PAINTING AND MAINTENANCE ARE THE RESPONSIBILITY OF THE OWNER.
11) FOUNDATIONS (WHERE SHOWN) HAVE BEEN SIZED FOR GIVEN LOADS AND ALLOWABLE SOIL PRESSURE. THEIR DESIGN ASSUMES THAT THERE ARE NO BURIED TANKS OR OTHER NEARBY OBSTRUCTIONS THAT WOULD BE DETRIMENTAL TO THEIR PROPER FUNCTION. THE ENGINEER OF RECORD SHALL BE NOTIFIED PRIOR TO CONSTRUCTION OF FOUNDATIONS FOR THE RESOLUTION OF ANY CONFLICT. WHERE FOUNDATION DETAIL IS NOT SHOWN McGEE CORPORATION AND THEIR ENGINEERS TAKE NO RESPONSIBILITY FOR FOUNDATION DESIGN.
12) ALL WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH LATEST AWS SPECIFICATIONS, USING E70XX ELECTRODES. ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER.
13) CANOPY USE GROUP "M" / CONSTRUCTION TYPE II-B

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Watts: (800) 526-5589

PR. JOB NO.	FINAL JOB NO.	DRAWING NO.
	59914	P059914

SHEETZ INC
283 NC 87
CAMERON, NC 28326 (HARNETT)

SCALE: 1/8"=1'-0"	IN ACCORDANCE WITH REV. LETTER: _____	DRAWN BY: JWG
DATE: 2/2/21		CHK'D BY:

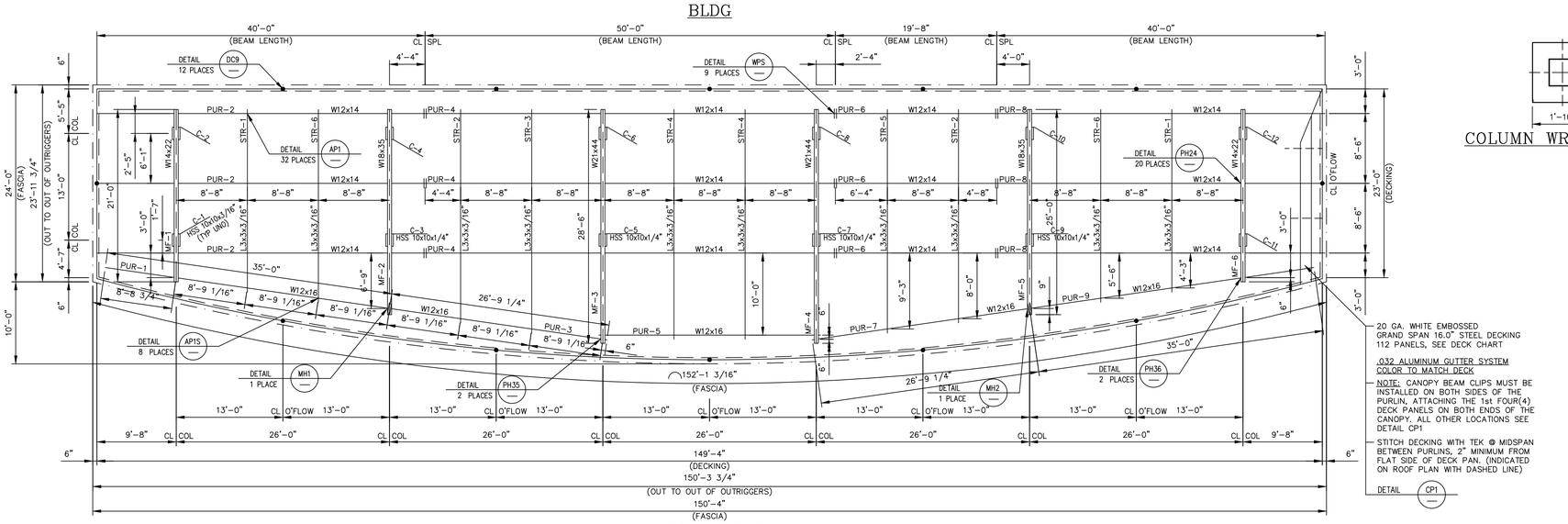
METAL CANOPY 34'-0" x 150'-4"

FOUNDATION PLAN

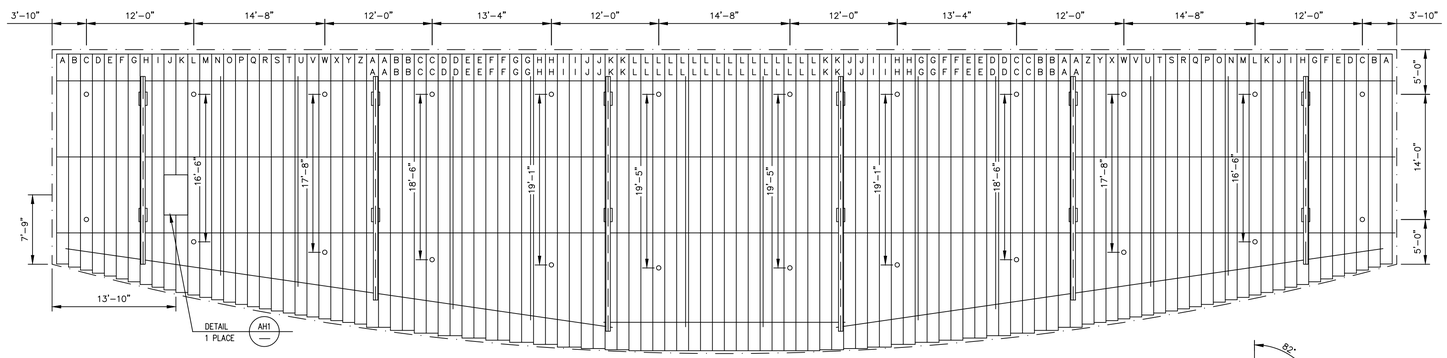
SHEET NO. 1 OF 3

NORTH CAROLINA PROFESSIONAL SEAL 022186 ENGINEER LAWRENCE R PILON
59914 2/5/21

CAD FILE NO./PLOT SCALE
1/8"=1'-0"
59914



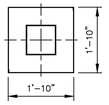
CANOPY ROOF PLAN

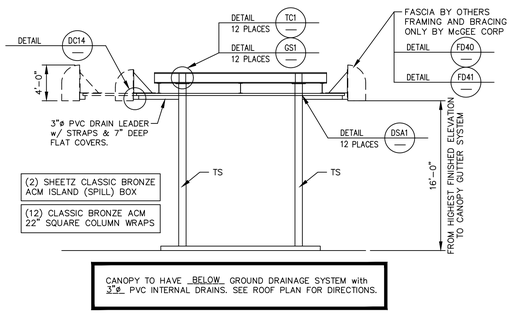


CANOPY LIGHT LAYOUT

INSTALL (24) LIGHT FIXTURES, SUPPLIED & WIRED BY OTHERS

COLUMN WRAP DETAIL





MAIN FRAME DETAIL

DECK CHART			BUNDLES
PANEL	QTY	LENGTH	
A	2	23'-5 11/16" (281.69)	#1 = (14) A,B,C,D,E,F,G, H,I,J,K,L,M,N
B	2	23'-9 7/8" (285.88)	
C	2	24'-2" (290.00)	
D	2	24'-6" (294.00)	#2 = (14) O,P,Q,R,S,T,U,V, W,X,Y,Z,(2)AA
E	2	24'-9 15/16" (297.94)	
F	2	25'-1 13/16" (301.81)	
G	2	25'-5 9/16" (305.56)	#3 = (14) (2)BB,(2)CC,(2)DD, (2)EE,(2)FF,(2)GG,(2)HH
H	2	25'-9 1/4" (309.25)	
I	2	26'-0 7/8" (312.88)	
J	2	26'-4 7/16" (316.44)	#4 = (14) (2)II,(2)JJ, (2)KK,(8)LL
K	2	26'-7 7/8" (319.88)	
L	2	26'-11 1/4" (323.25)	
M	2	27'-2 9/16" (326.56)	#5 = (14) (8)LL,(2)KK, (2)JJ,(2)II
N	2	27'-5 13/16" (329.81)	
O	2	27'-8 15/16" (332.94)	
P	2	28'-0" (336.00)	#6 = (14) (2)HH,(2)GG,(2)FF,(2)EE, (2)DD,(2)CC,(2)BB
Q	2	28'-3" (339.00)	
R	2	28'-5 15/16" (341.94)	
S	2	28'-8 3/4" (344.75)	#7 = (14) (2)AA,Z,Y,X,W, V,U,T,S,R,Q,P,O
T	2	28'-11 1/2" (347.50)	
U	2	29'-2 3/16" (350.19)	
V	2	29'-4 3/4" (352.75)	#8 = (14) N,M,L,K,J,I,H, G,F,E,D,C,B,A
W	2	29'-7 5/16" (355.31)	
X	2	29'-9 3/4" (357.75)	
Y	2	30'-0 1/8" (360.13)	
Z	2	30'-2 3/8" (362.38)	
AA	4	30'-6 3/4" (366.75)	
BB	4	30'-10 13/16" (370.81)	
CC	4	31'-2 1/2" (374.50)	
DD	4	31'-5 15/16" (377.94)	
EE	4	31'-9 1/8" (381.13)	
FF	4	31'-11 15/16" (383.94)	
GG	4	32'-2 3/4" (386.75)	
HH	4	32'-5 5/8" (389.63)	
II	4	32'-9 3/16" (393.19)	
JJ	4	32'-11 1/8" (395.13)	
KK	4	33'-0 13/16" (396.81)	
LL	16	33'-2 1/8" (398.13)	

ANCHOR BOLT SHIPPING REQUIREMENTS

ANCHOR BOLT USE	BOLT DESCRIPTION	QUANTITY
BC90-BASE PLATE (12 PLACES)	1 1/4" x 36" LONG HEX HEADED ANCHOR BOLTS	48

HARDWARE LIST BREAK-DOWN (REFERENCE ONLY)

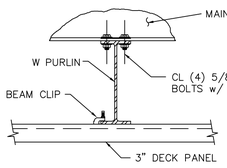
ITEM USE (# OF PLACES FOR CHECKING ONLY)	DESCRIPTION	QUANTITY
TC1-TOP PLATE (12 PLACES)	5/8" x 2-1/2" BOLTS w/ NUTS	48
WPS-BEAM SPLICE (9 PLACES)	5/8" x 2-1/2" BOLTS w/ NUTS	54
WPS-BEAM SPLICE (9 PLACES)	6x10x1/2" PLATE	9
PH24-CONNECTION (20 PLACES)	5/8" x 2-1/2" BOLTS w/ NUTS	80
PH35-CONNECTION (2 PLACES)	5/8" x 2-1/2" BOLTS w/ NUTS	8
PH36-CONNECTION (2 PLACES)	5/8" x 2-1/2" BOLTS w/ NUTS	8
MH1-CONNECTION (1 PLACE)	5/8" x 2-1/2" BOLTS w/ NUTS	4
MH2-CONNECTION (1 PLACE)	5/8" x 2-1/2" BOLTS w/ NUTS	4
AP1-CONNECTION (32 PLACES)	5/8" x 2-1/2" BOLTS w/ NUTS	32
AP1S-CONNECTION (8 PLACES)	5/8" x 2-1/2" BOLTS w/ NUTS	8

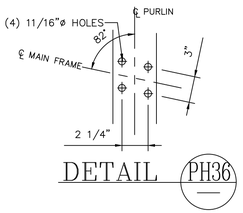
CANOPY SHIPPING STEEL HARDWARE MANIFEST

QUANTITY	DESCRIPTION	QUANTITY SHIPPED	PULLED BY	CHECKED BY	TRAILER #	LOADED BY
246	5/8" x 2-1/2" BOLTS w/ NUTS					
9	(WPS) 6x10x1/2" PLATE					

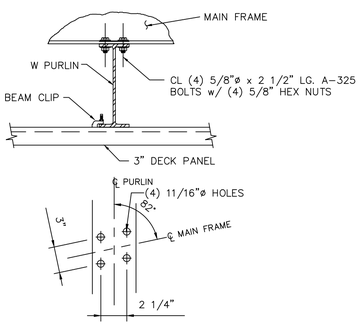
CANOPY SHIPPING MANIFEST

QUANTITY	DESCRIPTION	TOP PLATE	BASE PLATE	PLATE DRAINS	W/S & CONDUIT	VENT
1	MF-1 W14x22 (21'-0")					
1	MF-2 W18x35 (25'-0")					
1	MF-3 W21x44 (28'-6")					
1	MF-4 W21x44 (28'-6")					
1	MF-5 W18x35 (25'-0")					
1	MF-6 W14x22 (21'-0")					
1	PUR-1 W12x16 (34'-11 7/8")					
3	PUR-2 W12x14 (39'-11 7/8")					
1	PUR-3 W12x16 (26'-9 1/8")					
3	PUR-4 W12x14 (49'-11 3/4")					
1	PUR-5 W12x16 (27'-0")					
3	PUR-6 W12x14 (19'-7 3/4")					
1	PUR-7 W12x16 (26'-9 1/8")					
3	PUR-8 W12x14 (39'-11 7/8")					
1	PUR-9 W12x16 (34'-11 7/8")					
2	STR-1 L3x3x3/16" (22'-3")					
2	STR-2 L3x3x3/16" (26'-0")					
1	STR-3 L3x3x3/16" (27'-3")					
2	STR-4 L3x3x3/16" (28'-0")					
1	STR-5 L3x3x3/16" (27'-3")					
2	STR-6 L3x3x3/16" (23'-6")					
8	COL 1,2,4,6,8,10,11,12, HSS 10x10x3/16"					
4	COL 3,5,7,9, HSS 10x10x1/4"					
114	SIDE 2x2 STEEL OUTRIGGERS @ 32" O.C.					
20	END 2x2 STEEL OUTRIGGERS @ 32" O.C.					
18	2"x2"x1/8"x20'-0 LONG ANGLE (PERIMETER ANGLE)					
8	2"x2"x1/8" ANGLE x 6'-0" LONG BRACE					
25	2"x2"x1/8" ANGLE x 3'-3" LONG BRACE					
13	2"x2"x1/8" ANGLE x 5'-0" LONG BRACE					
1-LOT	HARDWARE					

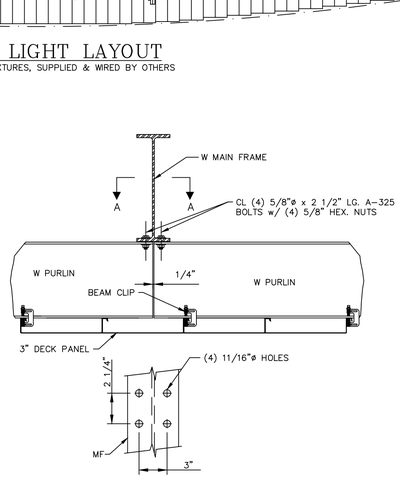




DETAIL PH36



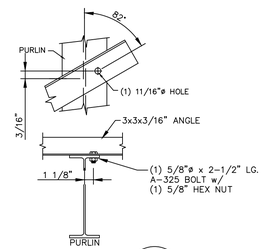
DETAIL PH35



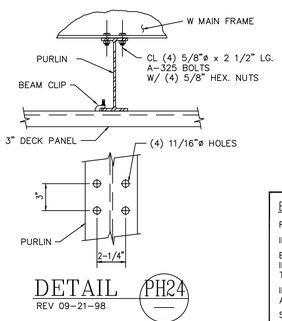
SECTION A-A

DETAIL MH1

03/28/07

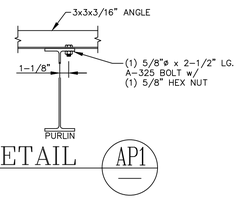


DETAIL AP1S



DETAIL PH24

REV 09-21-98



DETAIL AP1

ERECTION NOTES:

REVIEW PLANS & DETAILS PRIOR TO INSTALLATION.

INSTALL BEAMS ACCORDING TO MARKED END #'S ON ROOF PLAN.

BEAM OVERHANG IS 4" LONGER ON RIGHT HAND END OF CANOPY. IF APPLICABLE, SAME APPLIES FOR BEAM OVERHANG AT TEE. THIS IS TO ALLOW FOR DECK PANEL GROWTH.

INSTALL DECK PANELS FROM LEFT TO RIGHT ON MAIN CANOPY , IF APPLICABLE SAME APPLIES FOR TEE.

SEE ROOF PLAN FOR PROPER SLOPE AND HOW SLOPE IS ACQUIRED.

SEE FASCIA DETAILS WHICH ALSO REFERS BACK TO GENERAL NOTES FOR OUTRIGGER SPACINGS.

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PR. JOB NO.	FINAL JOB NO.	DRAWING NO.
	59914	P059914A

SHEETZ INC
283 NC 87
CAMERON, NC 28326 (HARNETT)

SCALE:	1/8"=1'-0"	IN ACCORDANCE WITH REV. LETTER:		DRAWN BY:	JWG
DATE:	2/2/21			CHK'D BY:	

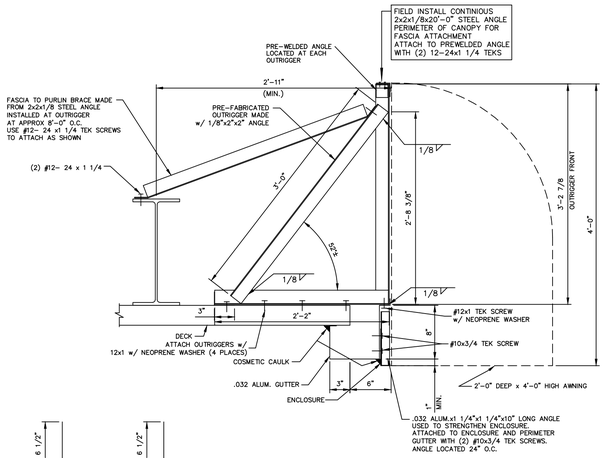
METAL CANOPY 34'-0" x 150'-4"

ROOF PLAN & DETAILS

SHEET NO. 2 OF 3

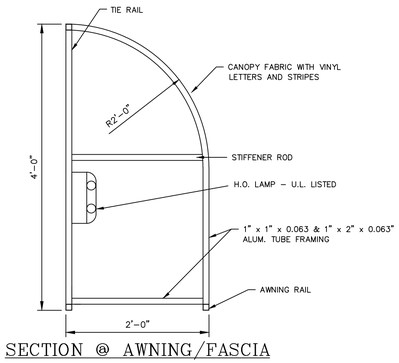
NORTH CAROLINA PROFESSIONAL SEAL 022186 ENGINEER LAWRENCE R. PILON 59914 3/5/21

CAD FILE NO./PLOT SCALE
1/8"=1'-0"
59914

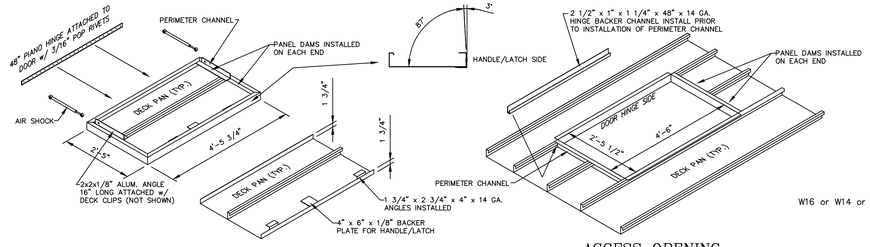


DETAIL FD40 — REV. 05-31-19 — SHEET2 SIDE

NOTE: INSTALL OUTRIGGERS APPROX. 32" O.C. AROUND PERIMETER OF CANOPY

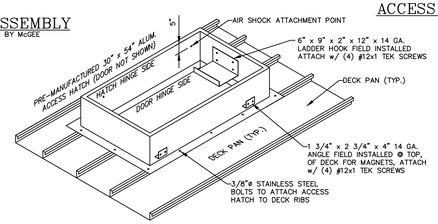


SECTION @ AWNING/FASCIA



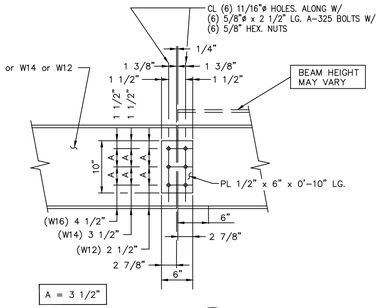
DOOR ASSEMBLY
PRE-MADE BY McGEE

ACCESS OPENING

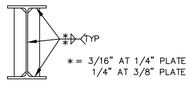


HATCH ASSEMBLY

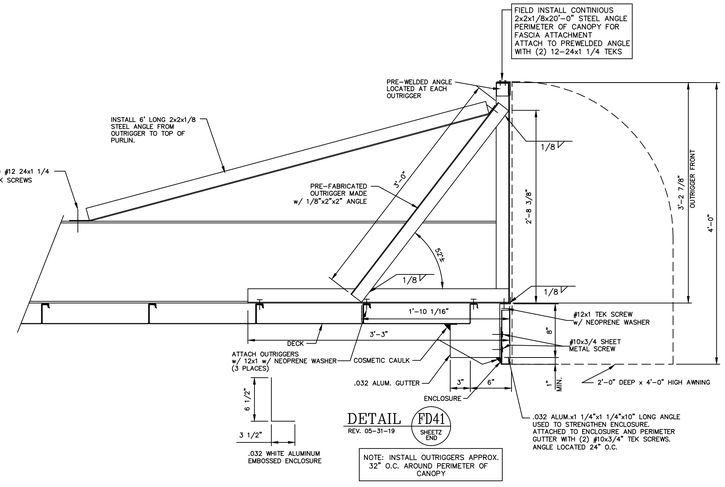
DETAIL AH1



DETAIL WPS — REV.4 11/09/00 — 3-BOLTS

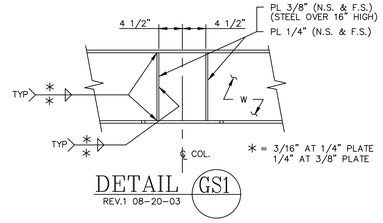


STD STIFFENER WELD DETAIL

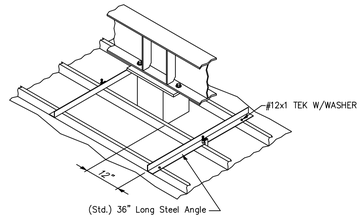


DETAIL FD41 — REV. 05-31-19 — SHEET2 END

NOTE: INSTALL OUTRIGGERS APPROX. 32" O.C. AROUND PERIMETER OF CANOPY



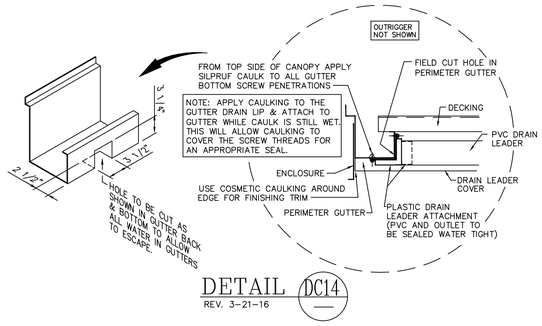
DETAIL GS1 — REV.1 08-20-03



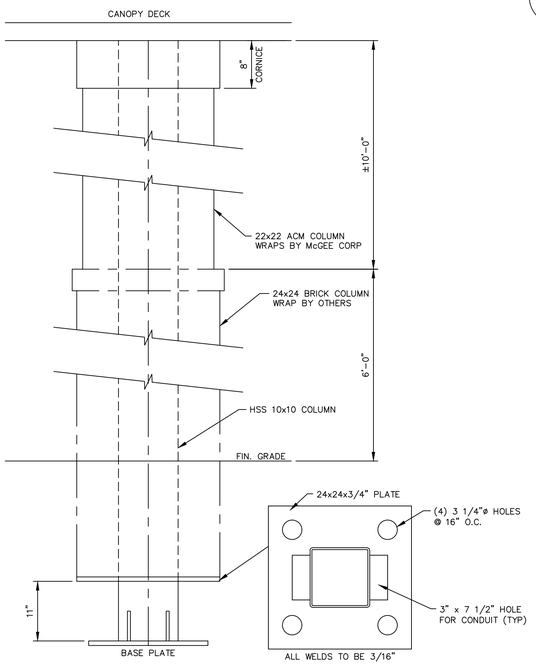
Step 1 Attach a support bracket on each side of the column to support the cut rib of deck. Keep bracket at least 12" away from column to allow room to seal around column. (Typ. all columns)

Step 2 Use McGee beam clip and TEK screws as shown to secure and support.

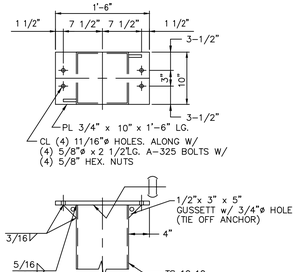
DETAIL DSA1



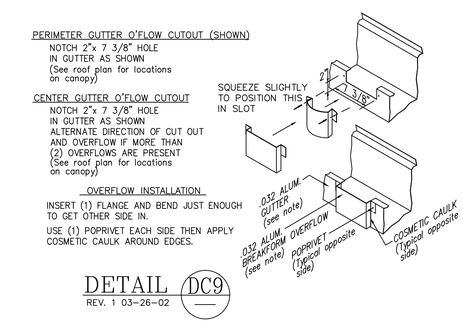
DETAIL DC14 — REV. 3-21-16



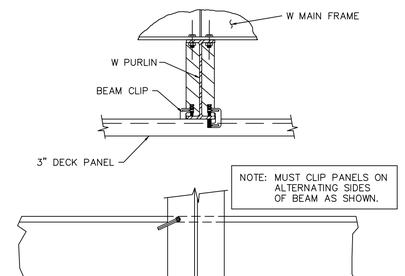
COLUMN WRAP DETAIL

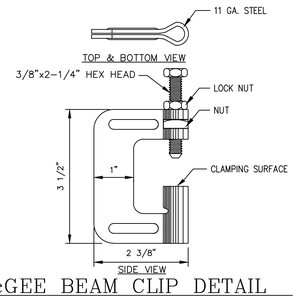


DETAIL TC1 — REV.3 11-11-98

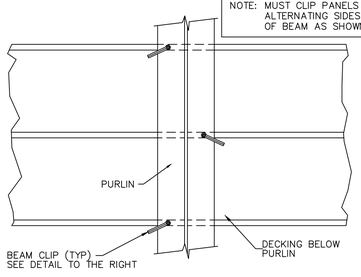


DETAIL DC9 — REV. 1 03-26-02





NOTE: MUST CLIP PANELS ON ALTERNATING SIDES OF BEAM AS SHOWN.



McGEE BEAM CLIP DETAIL

MATERIAL–
BOLT: 3/8" – 16 CLASS 3A X 2.25" STEEL FULLY THREADED HX HD M/S WITH CUP POINT. SAE J429, GR 8 W/ MIN TENSILE STRENGTH OF 150 KSI, CASE HARDENED & HEAT TREATED TO MIN/MAX MID-RADIUS CORE HARDNESS OF HRC 33-39. ZINC PLATED PER ASTM B695 WITH CLASS 55 COATING.
CLIP BODY MATERIAL: 11ga (0.115") ASTM A653 FS TYPE B (A526 CQ) (GALVANIZED G90) (MIN YIELD STRENGTH = 36 ksi)
NUTS: 3/8-16 3B HEX HEAD NUT AND SQUARE NUT PER SAE J995 GR 8 W/ MIN TENSILE STRENGTH OF 150 KSI, HEAT TREATED TO MIN/MAX HARDNESS OF HRC 33-39. ZINC PLATED PER ASTM B695 WITH CLASS 55 COATING.
PERFORMANCE TESTING PER ASTM F606/F606M -16 – "STANDARD TEST METHODS FOR DETERMINING MECHANICAL PROPERTIES OF EXTERNALLY AND INTERNALLY THREADED FASTENERS, WASHERS, DIRECT TENSION INDICATORS AND RIVETS"

DETAIL CP1 — REV 11-19-20

McGEE BEAM CLIP INSTALLATION PROCEDURE: SET BEAM CLIP WITH BOLT ON TOP OF BEAM FLANGE AND CLAMPING SURFACE UNDER DECK RIB. PUSH CLIP AGAINST DECK AND BEAM FLANGE WITH BOLT AS FAR ONTO BEAM FLANGE AS POSSIBLE. WHILE KEEPING BEAM CLIP VERTICAL, TURN BOLT TO SNUG TIGHT WITHOUT BURROWING INTO STEEL BEAM FLANGE. THEN PROCEED TO TURN BOLT 3/4 TURN (270°). TIGHTEN LOCK NUT MAKING SURE THAT BEAM CLIP REMAINS IN POSITION.

CAD FILE NO./PLOT SCALE
1/8"=1'-0"
59914

LAWRENCE R. PILON/ PROFESSIONAL ENGINEER
51 MAPLEVIEW DRIVE/PENNELLVILLE, NY 13132
(315) 668-0039

McGEE CORPORATION
12701 East Independence Blvd. P.O. Box 1375
Matthews, NC 28106-1375
Phone: (704) 882-1500
Watts: (800) 526-5589

PR. JOB NO.	FINAL JOB NO.	DRAWING NO.
	59914	P059914B

SHEETZ INC
283 NC 87
CAMERON, NC 28326 (HARNETT)

SCALE: NTS	IN ACCORDANCE WITH REV. LETTER:	DRAWN BY: JWG
DATE: 2/2/21		CHK'D BY:

METAL CANOPY 34'-0" x 150'-4"
MISC. DETAILS

SHEET NO. 3 OF. 3

NORTH CAROLINA PROFESSIONAL SEAL 022186 ENGINEER LAWRENCE R. PILON
59914 3/5/21