

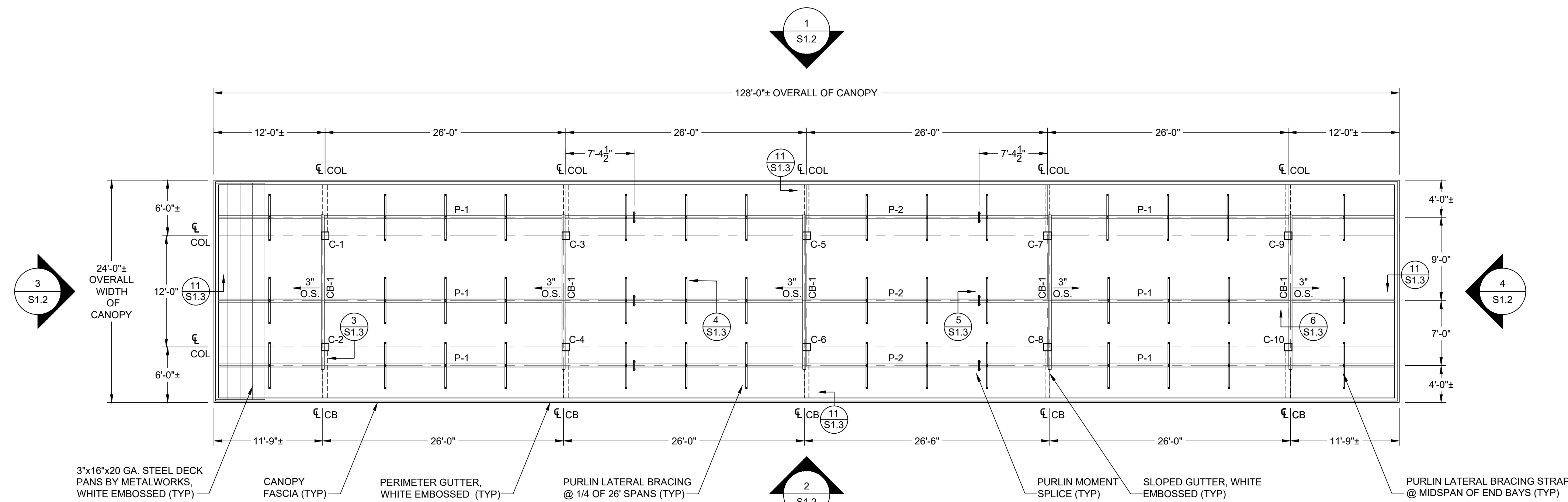
LEGEND			SCALE	DATE	BY
PART #	SIZE	QUANTITY	AS NOTED	REV	DESCRIPTION
C-1	10"x10"x1/4"	1			
C-2	10"x10"x1/4"	1			
C-3	10"x10"x1/4"	1			
C-4	10"x10"x1/4"	1			
C-5	10"x10"x1/4"	1			
C-6	10"x10"x1/4"	1			
C-7	10"x10"x1/4"	1			
C-8	10"x10"x1/4"	1			
C-9	10"x10"x1/4"	1			
C-10	10"x10"x1/4"	1			
CB-1	W8X10#	5			
P-1	W10X12#	6			
P-2	W10X12#	3			

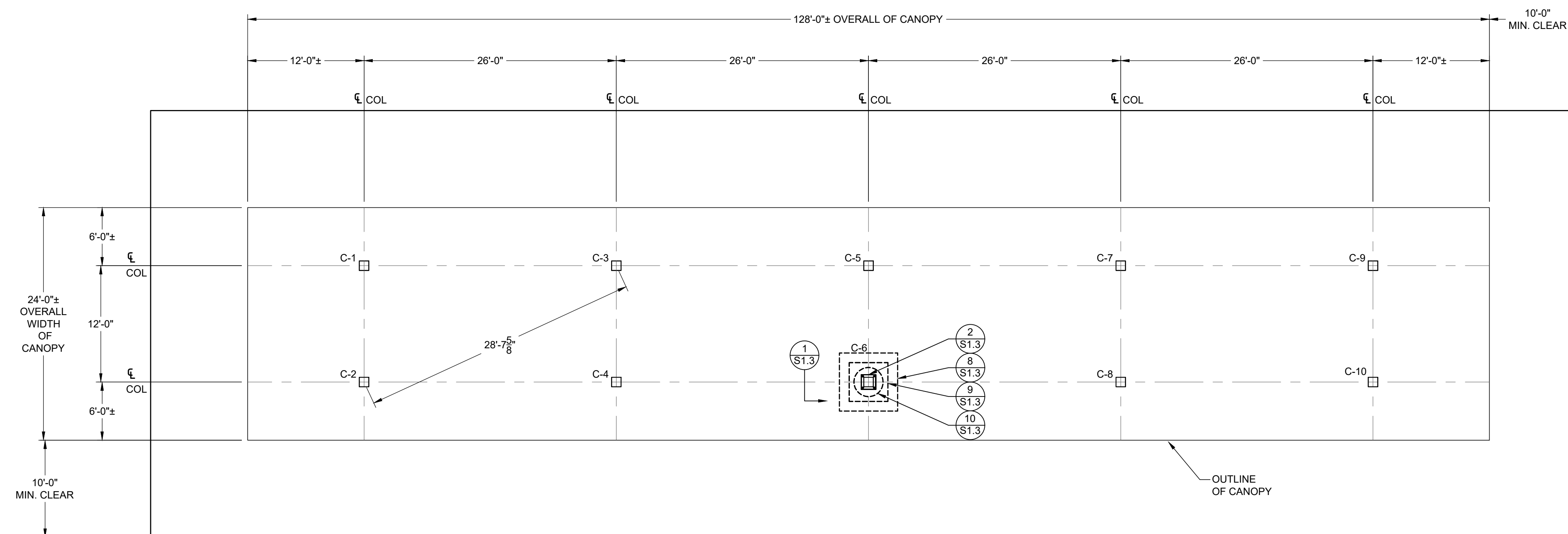
SHEET NOTES			SCALE	DATE	BY
			AS NOTED	REV	DESCRIPTION
<p>ALL CONDUITS INSIDE COLUMNS WILL REQUIRE A 3"X3" INSPECTION HOLE TO BE SHOP CUT AND LOCATED WITH ITS CENTERLINE AT THE TOP OF THE SEAL OFF ALL COLUMNS, WITH OR WITHOUT CONDUITS, WILL HAVE A STANDARD ARNING COVERPLATE INSTALLED AT THE SAME ELEVATION. TOUCH-UP PRIMER AT THE INSPECTION HOLE OPENING AFTER SHOP CUTS HAVE BEEN COMPLETED.</p>					

SHEET NOTES			SCALE	DATE	BY
			AS NOTED	REV	DESCRIPTION
<p>THIS IS THE SEAL OF THE ENGINEER OF RECORD. ANY CHANGES TO THE DESIGN OR CONSTRUCTION OF THE PROJECT MUST BE APPROVED BY THE ENGINEER OF RECORD. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR THE CONSTRUCTION OF THE PROJECT OR THE QUALITY OF THE WORKMANSHIP. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR THE CONSTRUCTION OF THE PROJECT OR THE QUALITY OF THE WORKMANSHIP.</p>					



# 1 CANOPY FRAMING PLAN

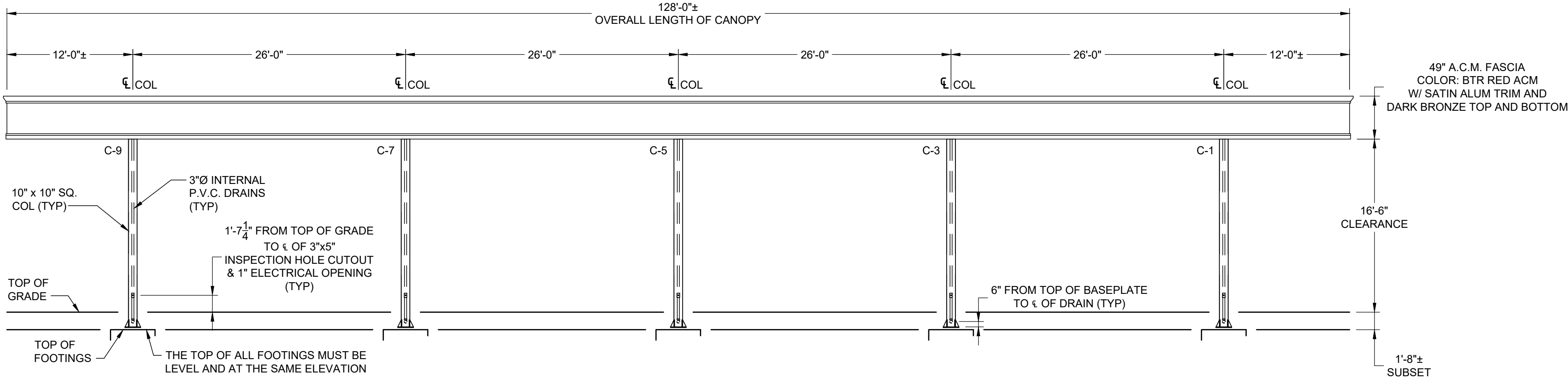


## 2 CANOPY FOUNDATION PLAN

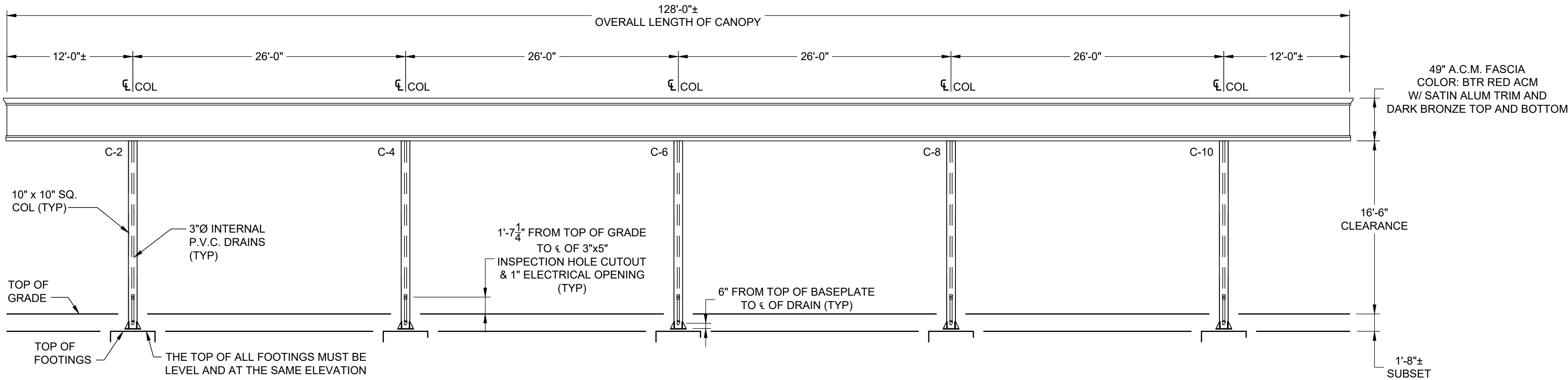
OWNER OR GC TO PROVIDE CONCRETE OR ASPHALT  
UNDER CANOPY INCLUDING NO LESS THAN 10'-0" OF  
CONCRETE AROUND PERIMETER OF THIS STRUCTURE  
(AS REQUIRED BY OSHA REGULATION 29 CFR 1926.451)

COLUMNS WITH VENT LINES WILL REQUIRE RED INSPECTION HOLE COVERS

COLUMNS WITH VENT LINES WILL REQUIRE RED INSPECTION HOLE COVERS

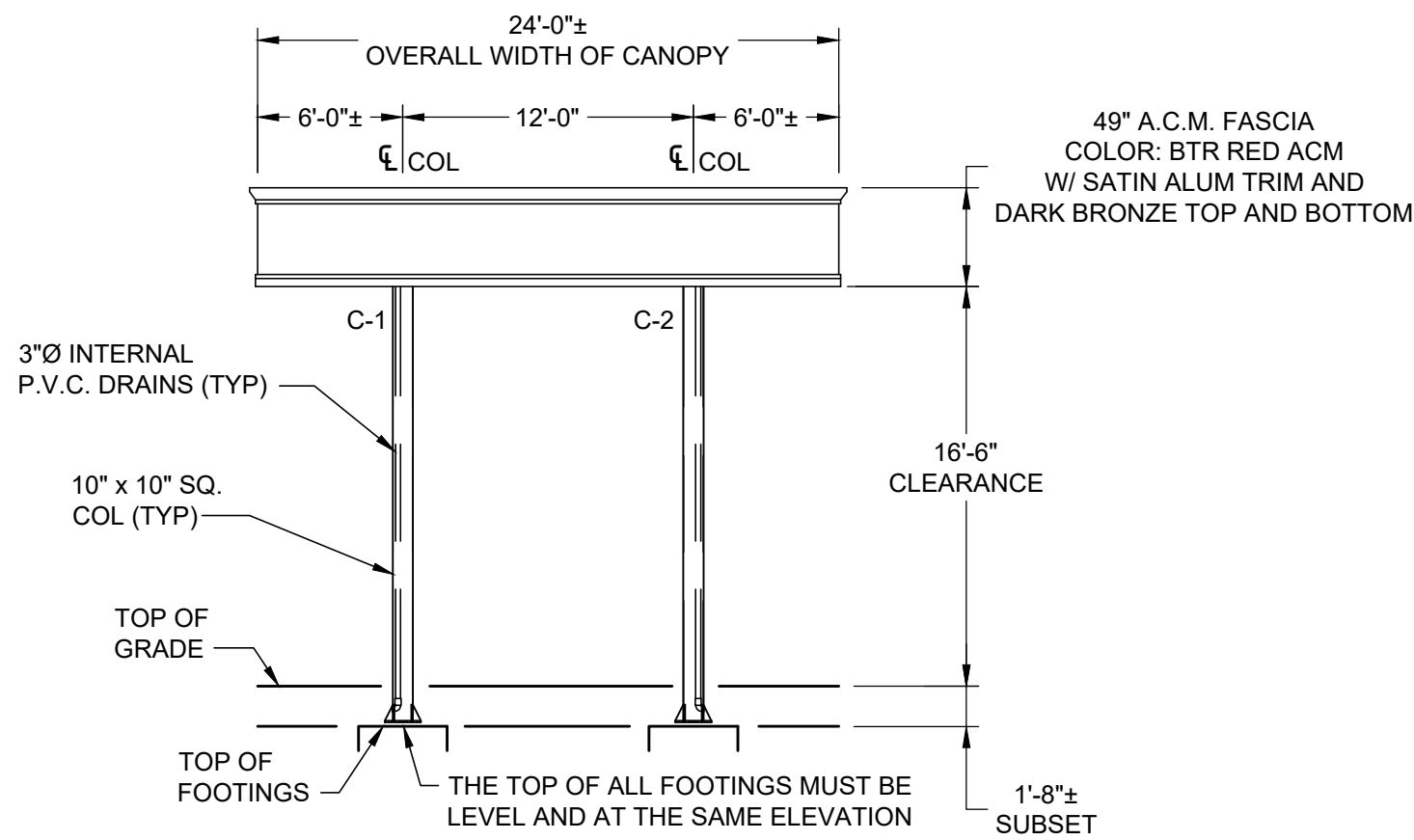


1 NORTH ELEVATION  
SCALE: 1/8" = 1'-0"

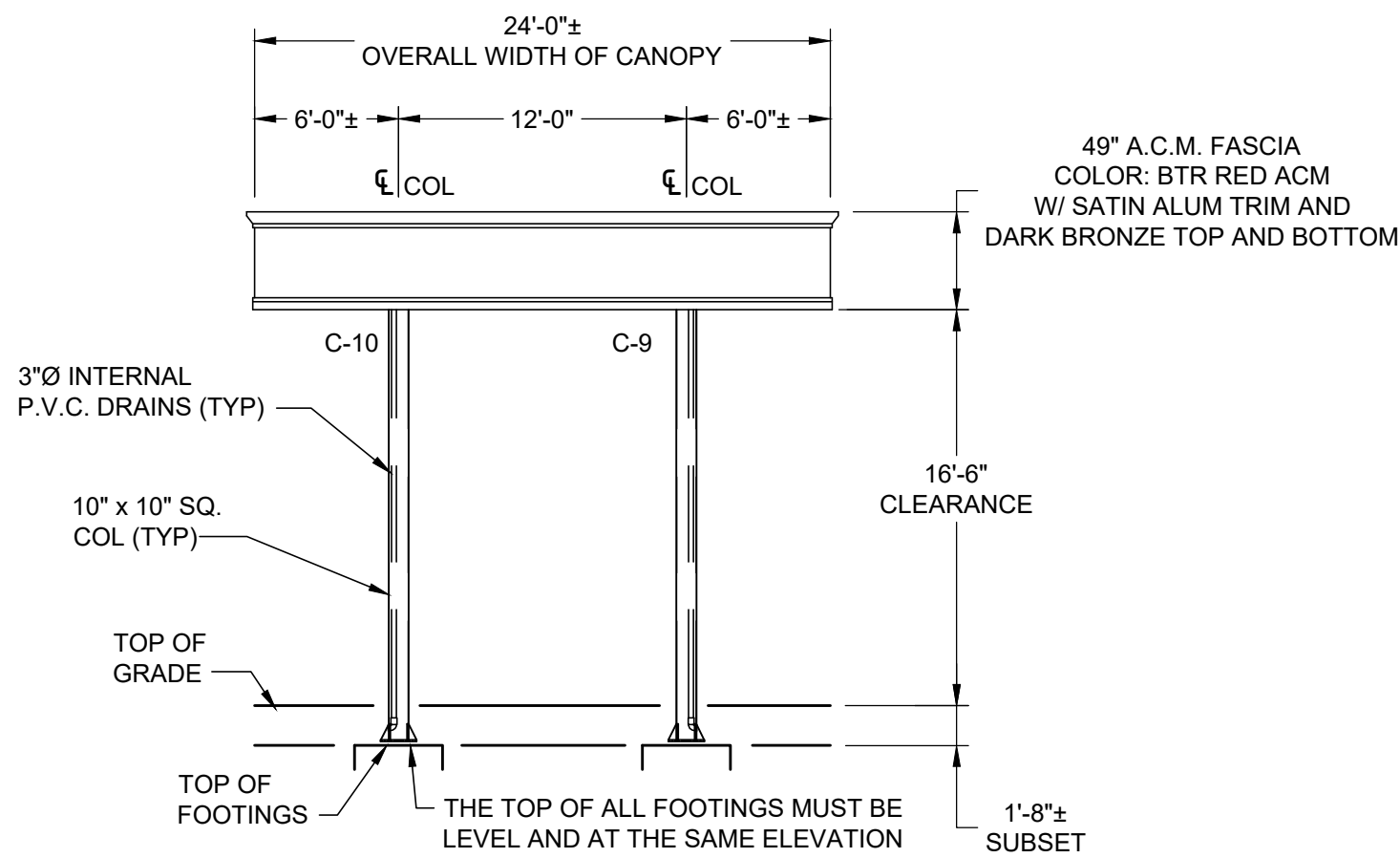


2 SOUTH ELEVATION  
SCALE: 1/8" = 1'-0"

**SHEET NOTES**  
ALL CONDUITS INSIDE COLUMNS WILL REQUIRE A 3"x5" INSPECTION HOLE TO BE SHOP CUT AND LOCATED WITH ITS CENTERLINE AT THE TOP OF THE SEAL OFF. ALL COLUMNS, WITH OR WITHOUT CONDUITS, WILL HAVE A STANDARD ARNING COVERPLATE INSTALLED AT THE SAME ELEVATION. TOUCH-UP PRIMER AT THE INSPECTION HOLE OPENING AFTER SHOP CUTS HAVE BEEN COMPLETED.



3 WEST ELEVATION  
SCALE: 1/8" = 1'-0"



4 EAST ELEVATION  
SCALE: 1/8" = 1'-0"

BY	DATE	DESCRIPTION	REV	AS NOTED	SCALE	DATE	DRAWN BY	CHECKED BY	ARNING #
				08/02/2022	1/8" = 1'-0"	08/02/2022	G. WILLIAMS	SCISHIFK	19367-DO

This is the seal of the professional engineer who is the author of the design. It is the responsibility of the engineer to ensure that the design complies with the applicable codes and standards. The seal is the property of the engineer and shall not be used for any other purpose without the written consent of the engineer.

STATE OF IOWA  
PROFESSIONAL ENGINEER  
NUMBER  
E-2001006052  
AUG 05 2022

ARCHITECTURAL  
ENGINEERING  
FACILITY COMPANY  
P.L.L.C.

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FACILITY COMPANY  
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CUSTOMER	BOB SELBY CASEY'S GENERAL STORES 3305 SE DELAWARE AVE ANKENY, IA 50021
24'-0" X 128'-0" (10) COLUMN CANOPY	CANOPY LOCATION CASEY'S (GAS CANOPY) LEE'S SUMMIT, MO
CANOPY ELEVATIONS	

19367

S1.2

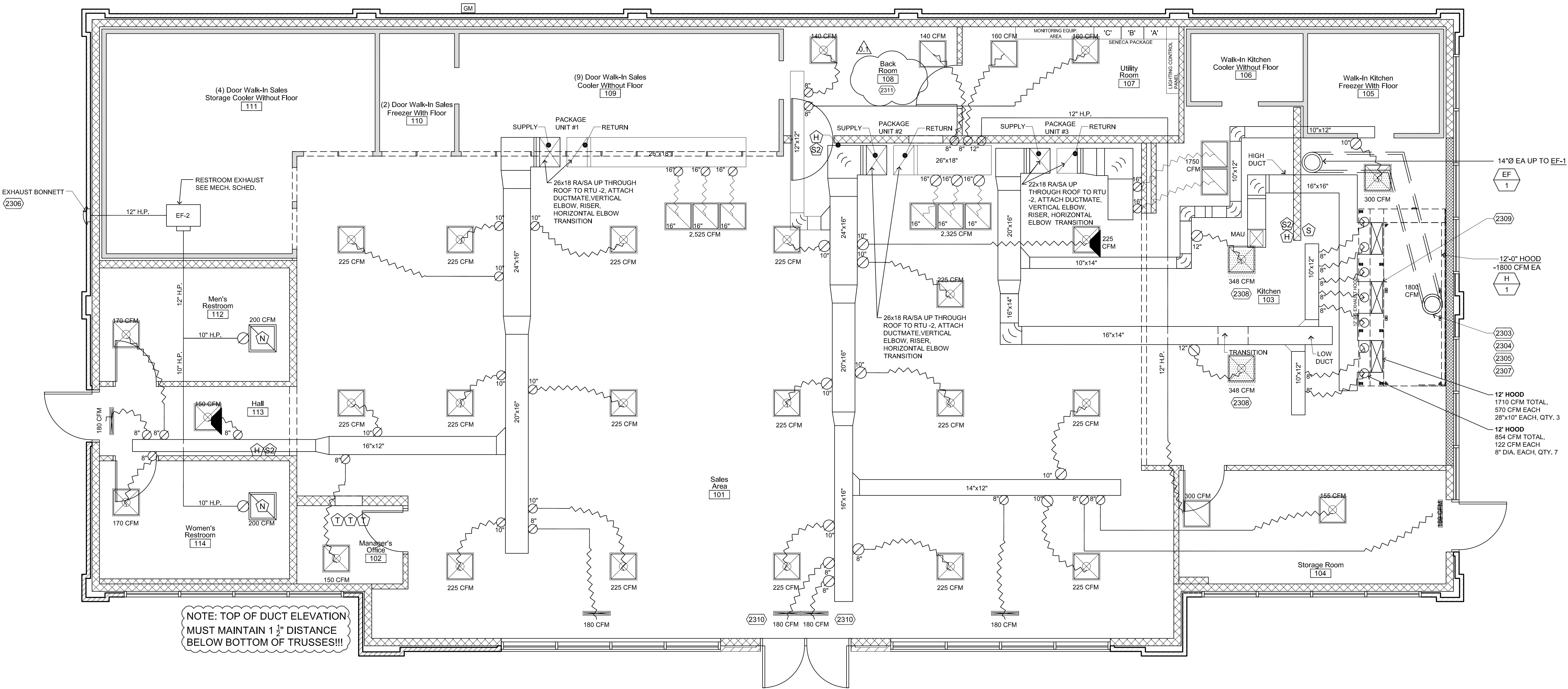
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# 1 HVAC Equipment and Duct Plan

1/4"=1'-0"

## General Construction Notes

- COORDINATE ALL SUPPLY AND RETURN AIR GRILLES W/ ELECTRICAL AND OTHER CEILING MOUNTED DEVICES. SEE REFLECTED CEILING PLAN
- ALL DIFFUSER RUNS TO BE INSULATED FLEX DUCT. SIZE AS NOTED. SEE NOTE 12 BELOW.
- ALL ELECTRICAL BY OTHERS
- HANG ALL DUCT WORK & EQUIPMENT PER IMC CODE.
- WALK-IN COOLER AND FREEZER WALK-IN TO BE ASSEMBLED AS PER MANUFACTURERS SPECS. (NOT INCLUDED IN THESE PLANS)
- CEILING DIFFUSERS TO BE LOCATED IN ONE TILE AREA. RE: REFLECTED CEILING PLAN A-111 FOR LOCATIONS.
- ALL DRAIN LINES TO BE 7/8" ACR COPPER.
- ALL DUCT WORK TO MEET SMACNA STANDARDS AND NOT LIGHTER THAN 24 GA. METAL.
- REFERENCE SHEETS QR-602 FOR HVAC CONTROL WIRING.
- ALL DUCT WORK TO BE INSULATED ON EXTERIOR R-8 OR GREATER .
- NO FLEX OVER 6' IN LENGTH
- HVAC TO COORDINATE & PROVIDE PENETRATIONS TO HOOD SYSTEM AS REQUIRED.
- ALL FRESH AIR INTAKES SHALL BE A MINIMUM OF 10' AWAY OR 3' BELOW ANY EXHAUST OUTLET OR PLUMBING VENT
- THIRD PARTY SHALL BALANCE AIR FLOW AS SHOWN ON CONSTRUCTION DOCUMENTS. FIELD REPORTS SHALL INDICATE DEFICIENCIES PREVENTING PROPER TESTING, ADJUSTING AND BALANCING OF SYSTEM AND EQUIPMENT TO ACHIEVE SPECIFIED PERFORMANCE. FURNISH REPORTS TO CASEY'S HVAC/R SUPERVISOR AND ENGINEERING IN APPROVED FORMAT.

## Symbols Legend

- 2"x2" DIFFUSER LOCATION TYP.
- 2"x2" PERFORATED DIFFUSER TYP.
- 2"x2" RETURN AIR DIFFUSER TYP.
- RESTROOM EXHAUST FAN / 10" HARD PIPE
- SLOTTED DIFFUSER TYP. (LEAVE 2-2" EXTRA CROSS TEE'S FOR SLOTTED DIFFUSERS)
- 2"x2" DIFFUSER WITH DIVERTER INSTALLED
- DAMPER (ALL SUPPLY AND RETURN LINES TO HAVE DAMPERS)
- TURNING VANES
- HARD PIPE DUCT
- FLEX DUCT
- HVAC THERMOSTAT - 72" A.F.F.
- DRYER EXHAUST
- VENTILATION EXHAUST
- HVAC DOAS COMBO STAT - 60" A.F.F.
- HVAC HUMIDISTAT - 60" A.F.F.
- SENSOR -60" A.F.F.
- \*ALL HEIGHTS LISTED ARE FROM BOTTOM OF UNITS U.N.O.
- HOOD
- RHEEM - 72" A.F.F.

## Kitchen Exhaust Hood Notes

MANUFACTURER: CAPTIVEAIRE; TYPE 1, UL APPROVED 12' EXHAUST HOOD.

## Keyed Construction Notes

### DIVISION 23 - HEATING, VENTILATING AND AIR CONDITIONING

- HOOD LIGHTING TO BE CONNECTED INTO APPROPRIATE WALL SWITCH.
- EXHAUST HOODS: 12 FT HOOD SECTIONS S/S 16 GAUGE. HOODS PROVIDED UNDER NATIONAL ACCOUNT
- EXHAUST FAN THRU ROOF SEE M-401 FOR SCHEDULE.
- EXHAUST FAN THRU EXTERIOR WALL SEE M-401 FOR SCHEDULE
- EXHAUST DUCT PROVIDED BY HOOD MANUFACTURER
- ALL DIFFUSERS WITHIN 10'-0" OF AN EXHAUST HOOD SHALL BE A PERFORATED STYLE DIFFUSER.
- MAU DUCT TO HOOD MUST ENTER HOOD ABOVE SUPPLY AIR TO HOOD
- 2" SLOT LINEAR DIFFUSER WITH LOUVER POINTED DOWN

- GAS DETECTION SYSTEM TO BE PROVIDE FOR BEVERAGE DISPENSING EQUIPMENT EXCEEDING 100 POUNDS OF LIQUID CO2. GAS DETECTION TO COMPLY 2018 IFCC.

### U4 (2021) GAS - HVAC PACKAGE UNIT SCHEDULE

Unit Name	Manufacturer and Model Number	Equipment Notes	Unit CFM	OSA CFM	ESP	Blower			EER	SEER <sup>1</sup>	Cooling Capacity		Heating Capacity				Electrical					Operating Weight	
						HP	BHP or Watts	RPM		IEER <sup>2</sup>	Nominal Tons	MBH	Heat Source	Input		Output		Volts	Phase	FLA/RLA	MCA	MOP	LBS
													Gas or Electric	MBH	KW	MBH	KW			Amps	Amps	Amps	(less curbs)
Package Unit # 1	Rheem - RGEDZT090ACG20BDALK3	Sales Area	2800		0.7	3.0	1280.100	786	11	14.6 <sup>2</sup>	7.5	98.5	Natural	205	166.1	208-230	3Ø		44	60	1185		
Package Unit # 2	Rheem - RGEDZT090ACG20BDALK3	Sales Area	3200		0.7	3.0	1280.100	786	11	14.6 <sup>2</sup>	7.5	98.5	Natural	205	166.1	208-230	3Ø		44	60	1185		
Package Unit # 3	Rheem - RGECDR060ACU12BDALH3	Kitchen Area	1850		0.8	1.0	1105.700	1063	11.2	14 <sup>1</sup>	5	63.5	Natural	120	97.2	208-230	3Ø		34	45	583		
MAU	CaptiveAire - A1-D.250-15D-MPU A/C Condensing Unit	One Unit	1710		0.4	3.0	1.060	1939		14 <sup>1</sup>	3	36.0	Natural	200.74	184.7	208-230	3Ø		22.8	30	1256		

### U4 (2021) GAS - AIR BALANCE SCHEDULE

Unit Name	Unit Description	Manufacturer and Model Number	Supply Air		Return Air		Outside Air		Exhaust Air		Air Balance	
			CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
Package Unit # 1	Sales Area HVAC Unit	HVAC Package Unit Schedule	2800	2525	275							
Package Unit # 2	Sales Area HVAC Unit	HVAC Package Unit Schedule	3200	2925	275							
Package Unit # 3	Kitchen Area HVAC Unit	HVAC Package Unit Schedule	1850	1750	100							
MAU	Kitchen Hood Make-up Air Unit	HVAC Package Unit Schedule	1710		1710							
EF - 1	12 Foot Hood Fan	CaptiveAire - DU8SHFA				1800		1800				
EF - 2	Restroom Exhaust Fan**	CaptiveAire - SIF11DD				400		400				
Totals			9560	7200	2360	2200	2200	160	160			

### EXHAUST HOOD OPERATION SUMMARY

Equipment Name	Equipment Description	Cooking Equipment Status					
		Off		Warm-up and Cool-down		Normal Operation	
		CFM	Percent	CFM	Percent	CFM	Percent
Exhaust Hood 1	12 Foot Hood	0	0	360	20	1440 to 1800	80 to 100
Make-up Air Unit	MAU	0	0	0	0	1370 to 1710	80 to 100



**SCHEMMER**  
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1044 North 115th Street, Suite 300  
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COA Number  
CA0696

PROJECT: CASEY'S GENERAL STORE  
M0-150 & ARBORIDGE DR  
LEE'S SUMMIT, MO  
2023 - U4 - V.01

PROJECT NUMBER:  
07164,057  
DRAWN BY: ANK  
CHECKED BY: JEK

PUBLISHED: 10/18/2023  
REVISION: 01/24/2024

DRAWING INFORMATION:  
MECHANICAL  
PLAN

M-101