Roof Wind Pressures for Positive & Negative Internal Pressure (+/- GCP1) - Parallel

All wind pressures include a load factor of 0.6

	1.1		2							d oo h
	-0.95	-4.22	0.34	0.180						Roof
	-3.11	-4.22	0.34	0.180						Roof
	-3.11	-4.22	0.34	0.180						Roof
	-7.42	-4.22	0.34	0.180						Roof
	-7.42	-4.22	0.34	0.180						Roof
	-7.42	-4.22	0.34	0.180						Roof
	-7.42	-4.22	0.34	0.180	-0.900		6.500		(7+)	Roof
ı		1 1 1 1 1 1		1						
Pressure Pp_max psf	Pressure Pn_max psf	Pressure Pp_min* psf	Pressure Pn_min* psf	GCP1		Cp_min		Start Dist ft	Var	Roof

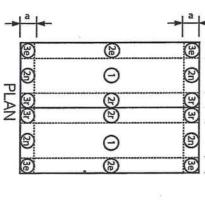
Notes Roof Pressures:
Start Dist = Start Dist from Windward Edge
Cp\_Max = Largest Coefficient Magnitude = Overhang = Largest Coefficient Magnitude = qh\*G\*Cp\_max - qip\*(+GCPi) = qh\*G\*Cp\_min - qip\*(+GCPi) ang X = Dir along Ridge Y = I Y = Dir Perpendcular Cp\_Min Pn\_max End Dist = min\* = qh\*G\*Cp max - qin\*(-GCpi)
qh\*G\*Cp\_min - qin\*(-GCPi)
ular to Ridge Z = Vertical End Dist from Windward Edge Smallest Coefficient Magnitude

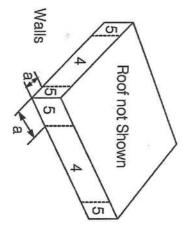
Pressures Acting TOWARD Surface The smaller uplift pressures due to Cp\_Min can become critical when wind is combined with roof live load or snow load; load combinations are given in ASCE 7

- Pressures Acting AWAY from Surface

Components and Cladding (C&C) Calculations per Ch 30 Part 1:

A - B A A - B A





3- SEPERATION BETWEEN GARAGE SHALL BE 5/8" SHEETROCK MIN.
4- DOOR SEPERATION GARAGE FROM LIVING AREA SHALL BE 1/2 HR FIRE RATED

ALL AREAS EXCEPT WHERE GFI RECEPTICALS ARE REQUIRED RECEPTICALS SHALL BE ARC FAULT

6- ELECTRICAL DESIGN BY ELECTRICAL CONTRACTOR

7- CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO BEGINNING

SMOKE DETECTORS SHALL BE WIRED TO ALARM SIMUTANIOUS WITH BATTERY BACKUP.

## 1-All construction shall comply with Florida Building Code 8th edition 2023.

**ULTIMATE WIND SPEED: 130** NOMINAL WIND SPEED: 108

WIND EXPOSURE CATEGORY:

30-0" TRANSVERSE 100'-0" LONGITUDINAL

SHEARWALLS

OLL ENGINEERING, INC

CONSULTING ENGINEE

O BOX 357577 PH (352) 231-3513
FX (352) 505-336

RISK CATEGORY II INTERNAL PRESSURE COEFFICIENT Gcpi= +/- 0.18

DESIGN PRESSURE PER FBC CHAPTER 16, INCLUDING ASCE 7-22 LOAD CALCULATIONS ROOF DEAD LOAD = 7.5 PSF ROOF LIVE LOAD =20 PSF FLOOR LIVE LOAD 40 PSF

TRUSS BEARING LOAD EACH END 5400LB MIN SOIL BEARING 2500 PSF

TRUSS UPLIFT @ POST 3600LBS

UMBIA COL

Complianc

Wood framing and fasteners to meet NDS-2018 requirements.

Fastener requirements: (1) All nails are Common galvanized; (2) all bolts are to be galvanized steel and include 2306.3.(#) FBC unless otherwise indicated. Note: fasteners exposed to the weather are to be treated for weather nuts and washers; and (3) all other hardware (Simpson, etc.) is to be installed according to manufacturer's specifications and recommendations. Nailing (size and number) shall satisfy Tables 2306.2.(1), 2306.3.(1) and resistance and compatible with the type of pressure treated wood used (connectors, nails, bolts, nuts and washers).

Concrete Construction Technology

1. Concrete work shall conform to "Building Code Requirements 101 Technology (ACI-301), Latest Edition.

2. Concrete mix shall conform to the following specifications. All concrete mixes shall contain a water-reducing admixture conforming to ASTM C-494. Air-entraining admixture shall contain a water-reducing admixture conforming to ASTM C-494. Air-entraining admixture shall contain a water-reducing admixture s

All concrete shall be cured for a minimum of 28 days. If forms for vertical surfaces a the curing period, spray surfaces with liquid membrane curing compound. ire removed prior to the end of

4 Reinforcing steel shall conform to ASTM A615, Grade 40 (Fy=40 ksi). Lap continuous bars for tension lap splice corner bars of same size and spacing as horizontal wall reinforcement. Cover for corn accordance with ACI-318, Paragraph 7.7. per ACI-318, unless otherwise noted. Provide ncrete reinforcing steel shall be

5 Welded wire fabric (WWF) shall conform to ASTM A185. Lap sheets two mesh spaces and wire tie adjacent sheets together securely. Cut alternate reinforcement at control joints.

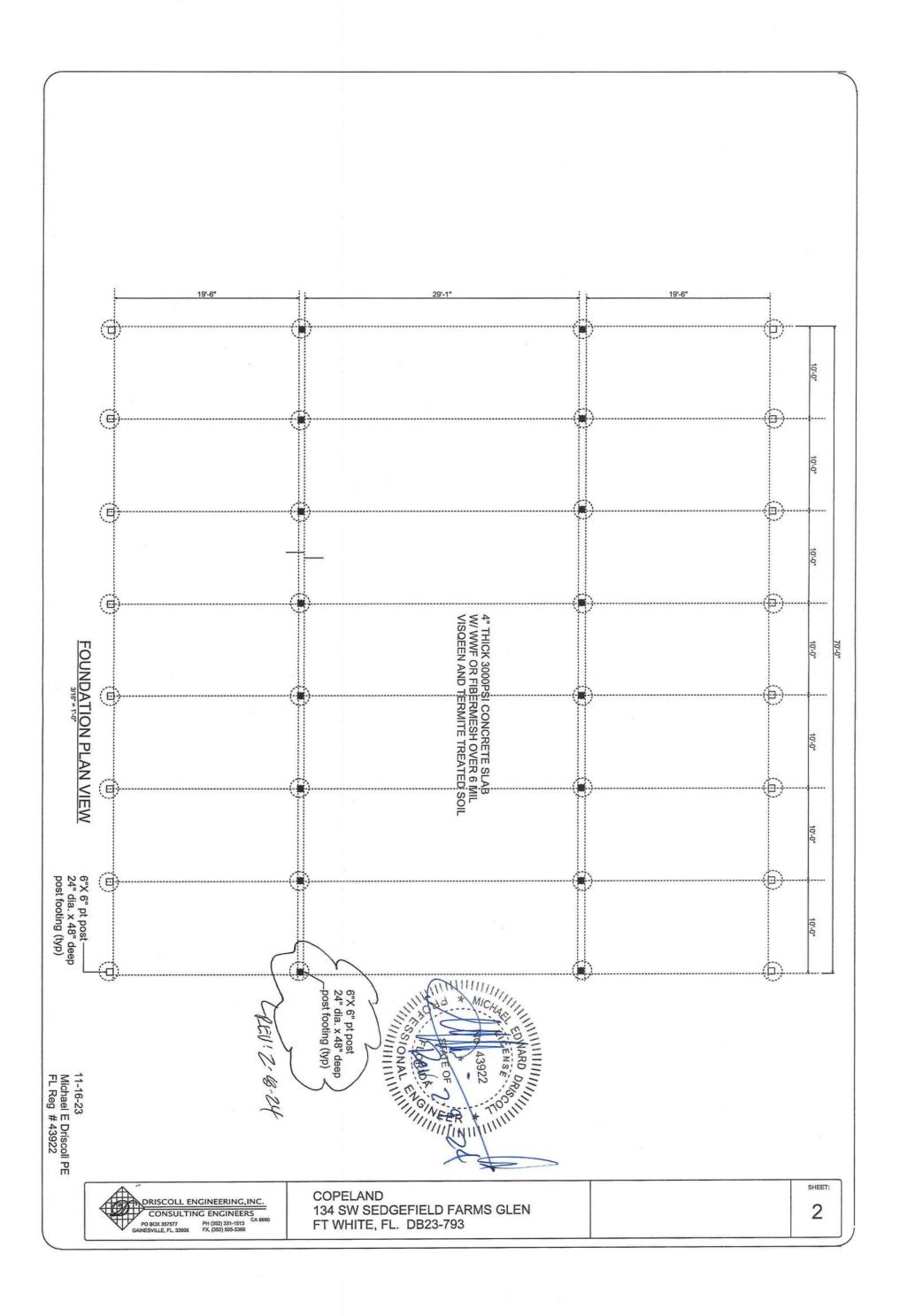
7.6 All slabs on grade shall have construction or control joints not to exceed 10' - 0" spacing, unless otherwise noted.

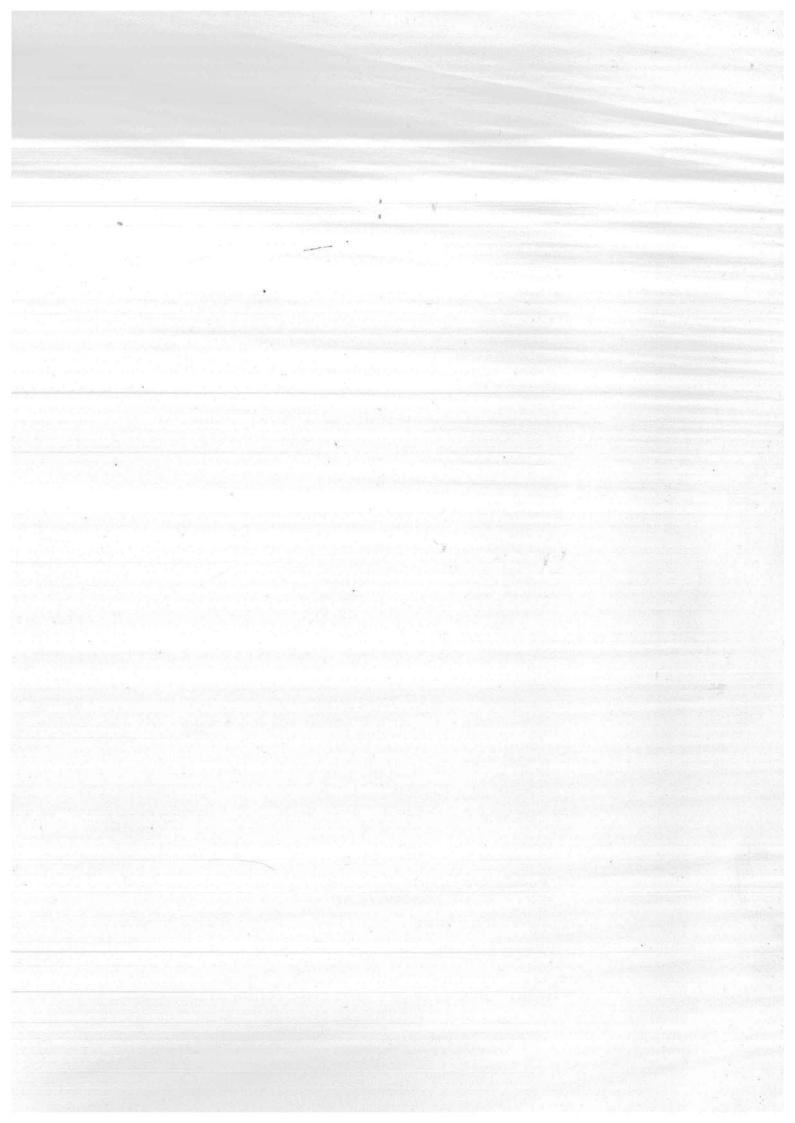
Electrical conduit and other pipes to be embedded in structural concrete floor slabs or walls shall be placed in accordance with the requirements of ACI-318, Paragraph 6.3.

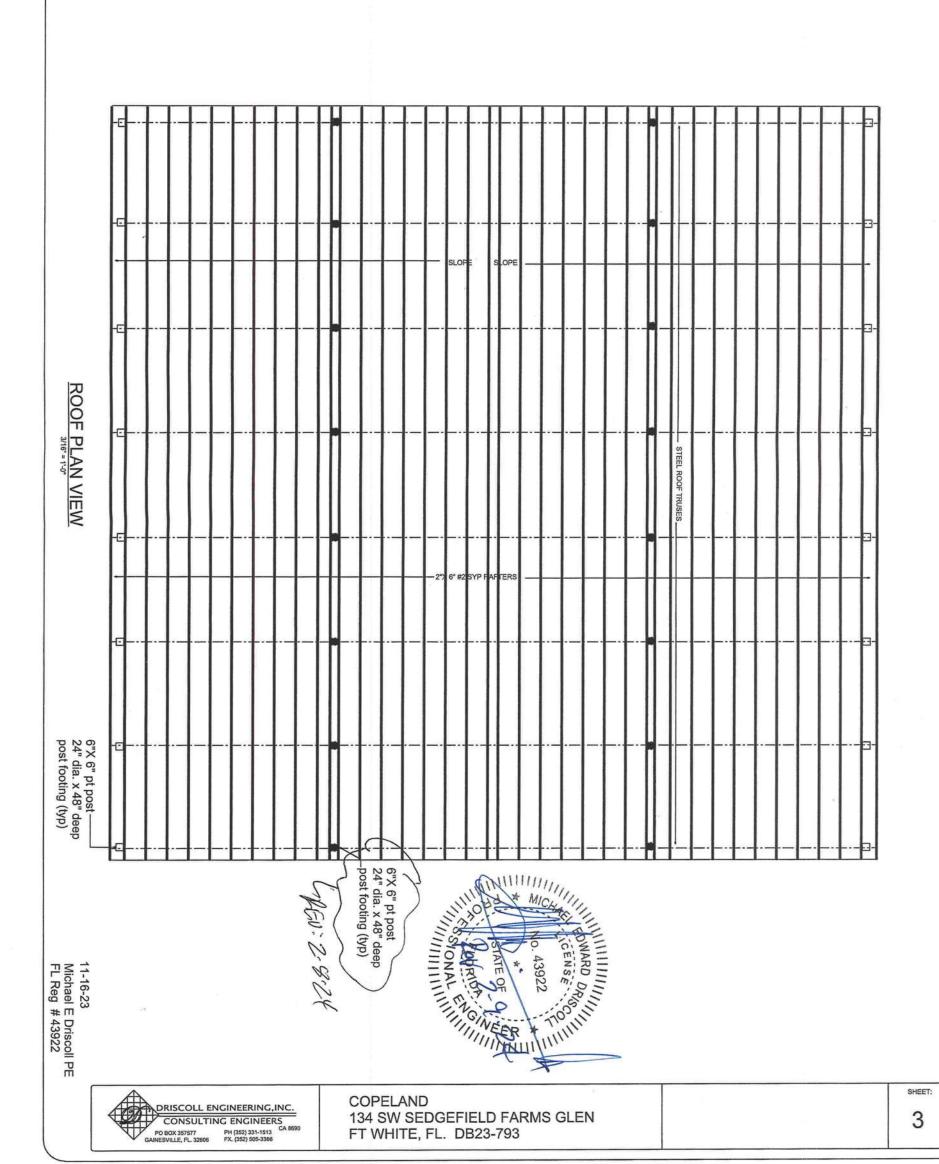
BARN AREA LIVING AREA OUNGE AREA 3500 490 000 000

Michael E Driscoll PE FL Reg #43922 11-16-23 rev: 2-8-24

COPELAND 134 SW SEDGEFIELD FARMS GLEN FT WHITE, FL. DB23-793

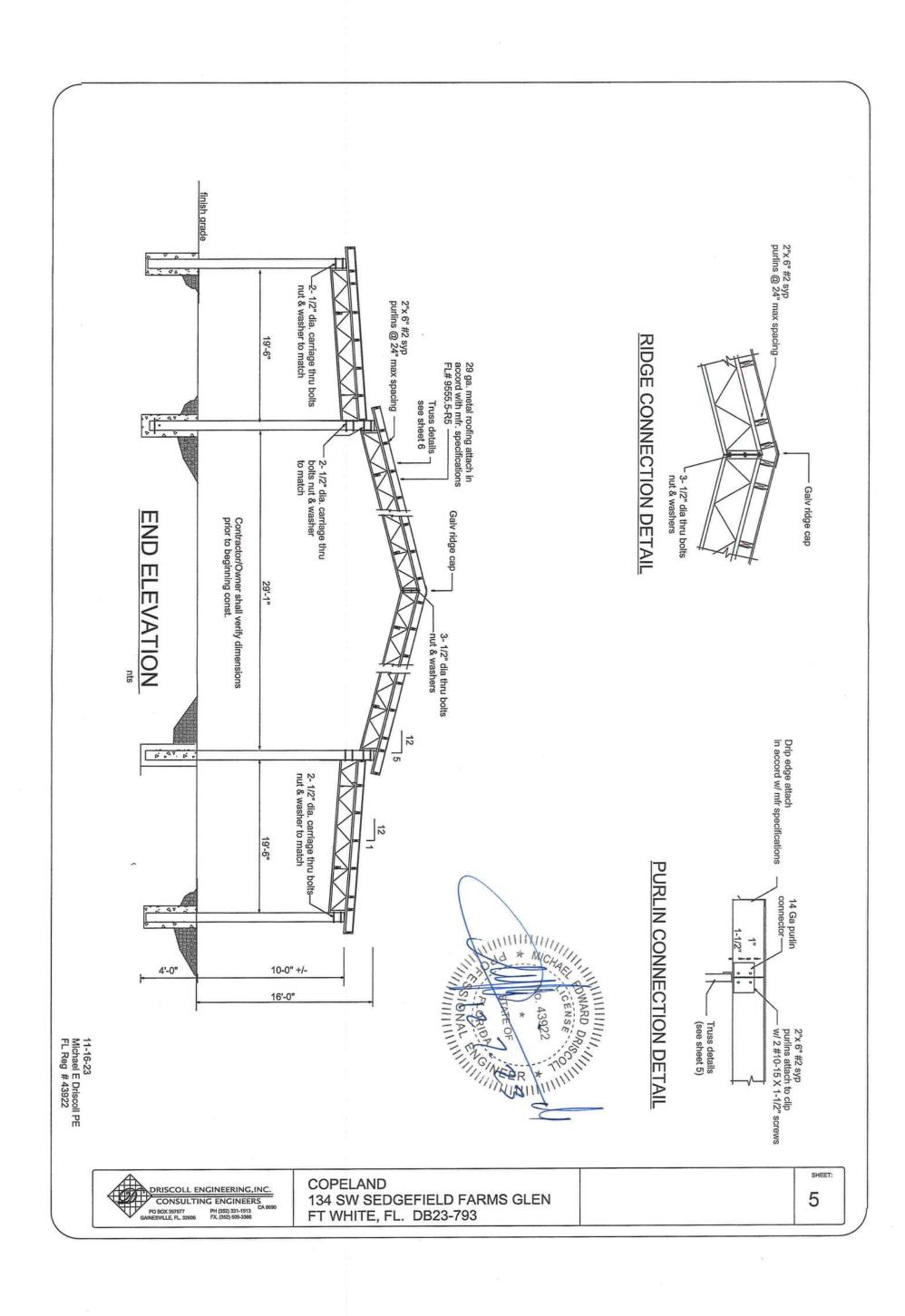


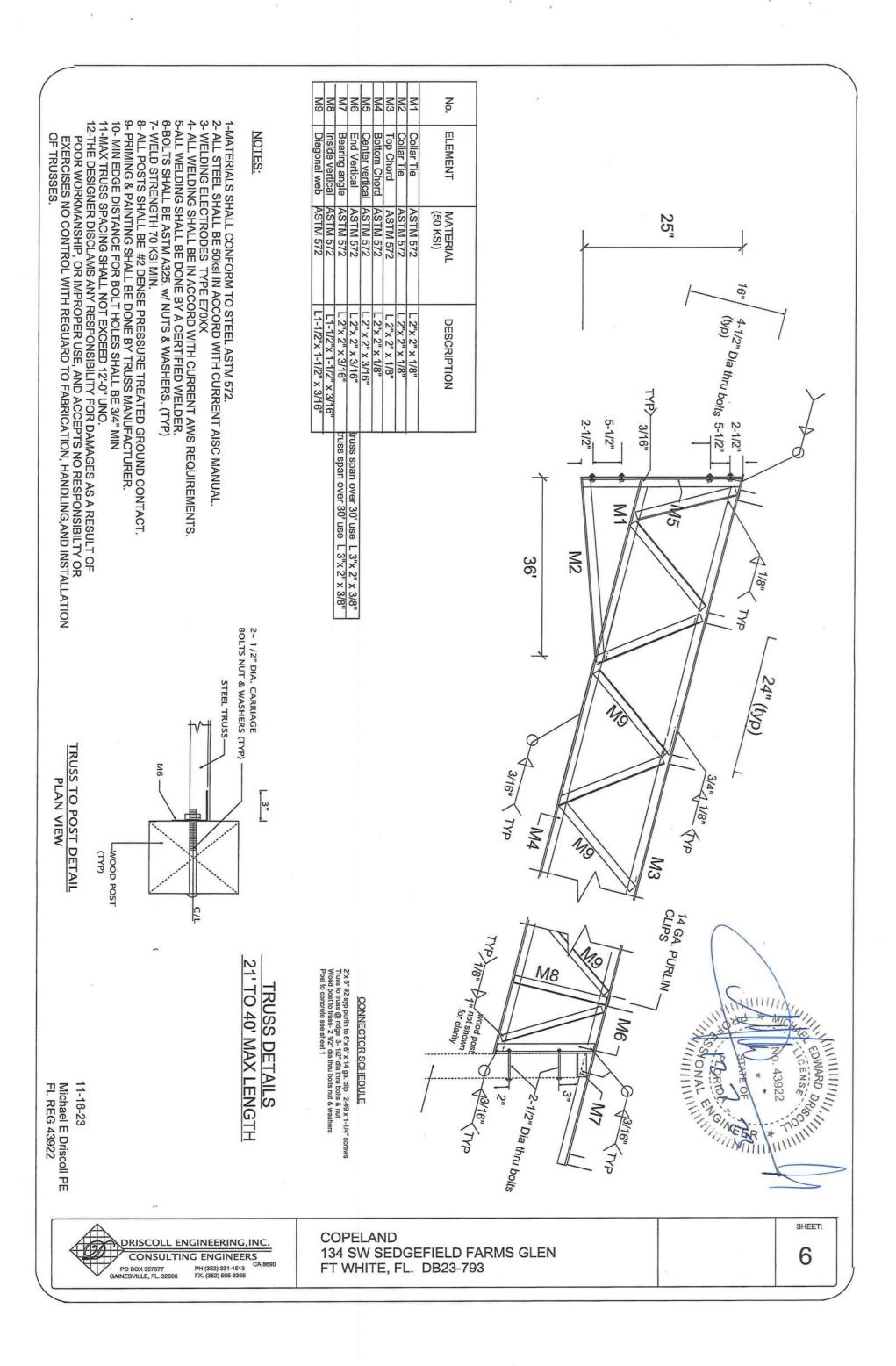


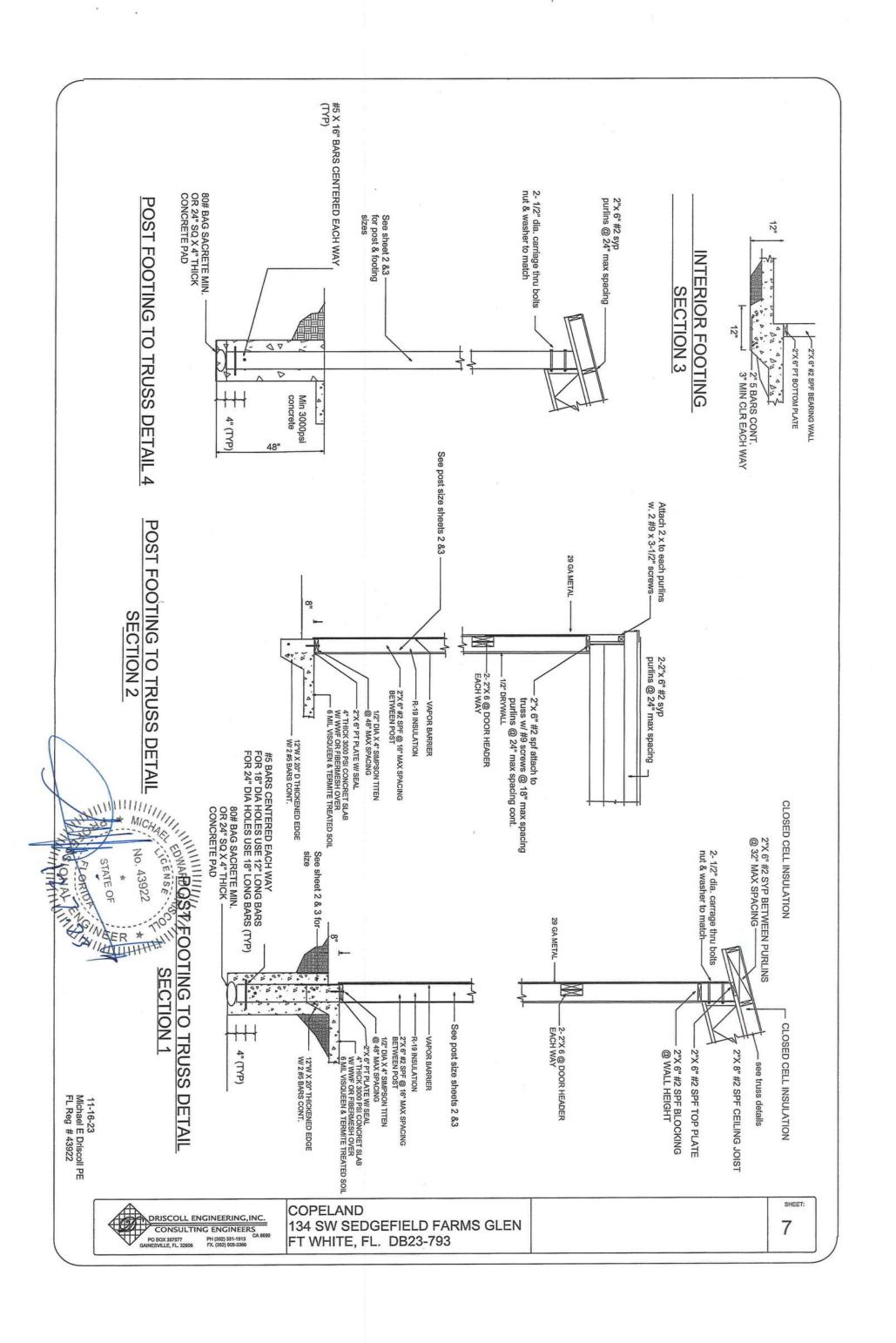


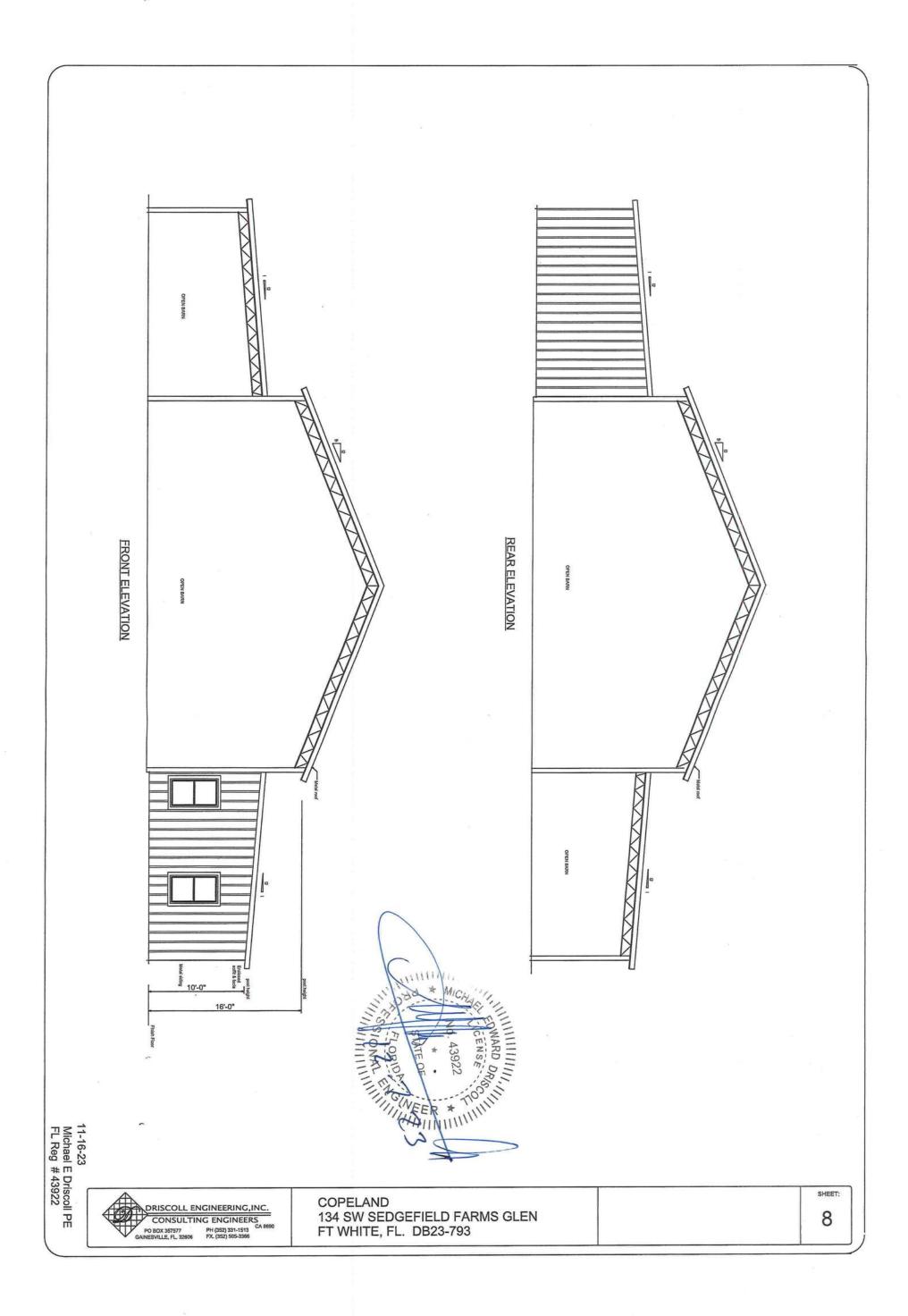
**FRONT** FLOOR PLAN VIEW 0 MAIN BARN 7'-0" 19'-8" 6"X 6" pt post —— 24" dia. x 48" deep post footing (typ) 8"X 8" pt post 24" dia. x 48" deep post footing (typ)— MICHARD OR STATE OF THE PARTY O 11-16-23 Michael E Driscoll PE FL Reg # 43922 SHEET: DRISCOLL ENGINEERING, INC.

CONSULTING ENGINEERS
PO BOX 357577
GANESVILE, FL 32606
PH (922) 331-1613
PH (923) 331-1613
PH (923) 331-1613 COPELAND 134 SW SEDGEFIELD FARMS GLEN 4 CONSULTING ENGINEERS FT WHITE, FL. DB23-793









RIGHT ELEVATION LEFT ELEVATION

> COPELAND 134 SW SEDGEFIELD FARMS GLEN FT WHITE, FL. DB23-793

SHEET:

9

11-16-23 Michael E Driscoll PE FL Reg # 43922

DRISCOLL ENGINEERING, INC.

CONSULTING ENGINEERS

PO BOX 357577 PH (382) 331-1513 CA 8690

FX. (382) 505-3366

