

1 FOUNDATION PLAN  
SCALE: 3/16" = 1'-0"

**NOTES:**

1. STEEL AND FOUNDATION DESIGN IS OUTSIDE OF THE SCOPE OF THIS DRAWING SET AND REPORT
2. FOUNDATION AND COLUMNS SHOWN HERE ARE FOR REFERENCE AND WILL VARY PER BUILDING

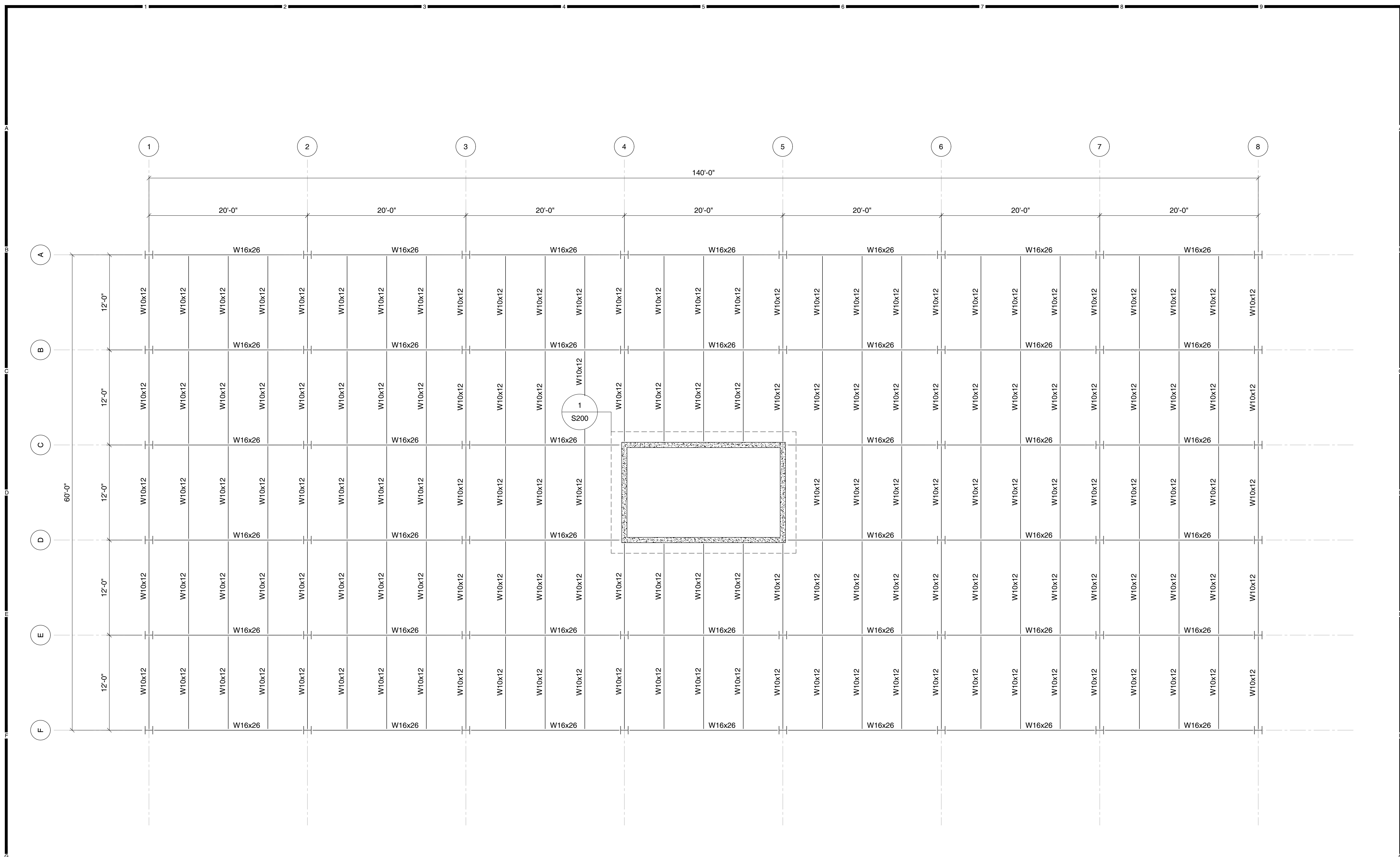
SEAL



DRAWN	ASK
CHECKED	MSR
DATE	04/16/2019
REVISIONS	

JOB NUMBER R & D  
S H E E T

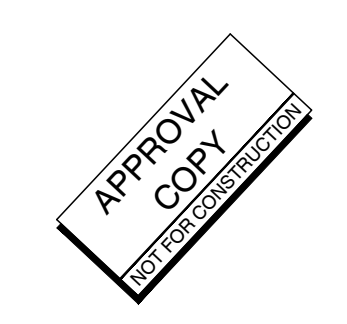
**S100**



**1 FLOOR 1 THROUGH ROOF FRAMING PLAN**  
SCALE: 3/16" = 1'-0"

- NOTES:**
1. STEEL AND SLAB DESIGN IS OUTSIDE OF THE SCOPE OF THIS DRAWING SET AND REPORT
  2. COLUMNS AND BEAMS SHOWN HERE ARE FOR REFERENCE AND WILL VARY PER BUILDING
  3. BUILDING IS DESIGNED WITH 3" SLAB AS DIAPHRAGM

SEAL



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S H E E T

**S101**

1) DESIGN CRITERIA

A. STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE FOLLOWING CODES AND CRITERIA:

- 2012 INTERNATIONAL BUILDING CODE
- ASCE 7-10, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
- ACI318-14, AMERICAN CONCRETE INSTITUTE

B. BUILDING CLASSIFICATION

- BUILDING OCCUPANCY CLASSIFICATION: B

C. DEAD LOADS

- STRUCTURE SELF WEIGHT
- 20 PSF FOR MISCELLANEOUS

D. LIVE LOADS

- ROOF = 20.0 PSF
- FLOOR = 100 PSF

E. WIND LOADS DESIGN CRITERIA

- DESIGN WIND SPEED,  $V_{ULT}$  = 115 MPH  
 NOMINAL WIND SPEED,  $V_{ASD}$  = 90 MPH  
 RISK CATEGORY = II  
 EXPOSURE CATEGORY = C  
 INTERNAL PRESSURE,  $GC_{pi}$  = +/- 0.18  
 VELOCITY PRESSURE,  $K_d$  = 0.85

F. SEISMIC DESIGN CRITERIA

- DESIGN CATEGORY = C  
 IMPORTANCE FACTOR,  $I_e$  = 1.00  
 MAPPED SPECTRAL RESPONSE ACCELERATION:  
 $S_s$  = 0.155 g  
 $S_1$  = 0.089 g  
 SITE CLASS = D  
 SPECTRAL RESPONSE COEFFICIENTS:  
 $S_{DS}$  = 0.165 g  
 $S_{D1}$  = 0.142 g  
 SEISMIC FORCE RESISTING SYSTEM:  
 ORDINARY REINFORCED CONCRETE SHEAR WALLS  
 $R$  = 3.00  
 $C_s$  = 0.0517  
 $V$  = 184 KIP  
 ANALYSIS PROCEDURE USED:  
 EQUIVALENT LATERAL FORCE

G. SNOW LOADS

- GROUND SNOW LOAD,  $P_g$  = 20.0 PSF  
 FLAT ROOF SNOW LOAD,  $P_f$  = 18.5 PSF  
 SNOW EXPOSURE FACTOR,  $C_e$  = 1.00  
 THERMAL FACTOR,  $C_t$  = 1.20

2) CAST IN PLACE CONCRETE

A. CONCRETE STRENGTH SHALL CONFORM TO:

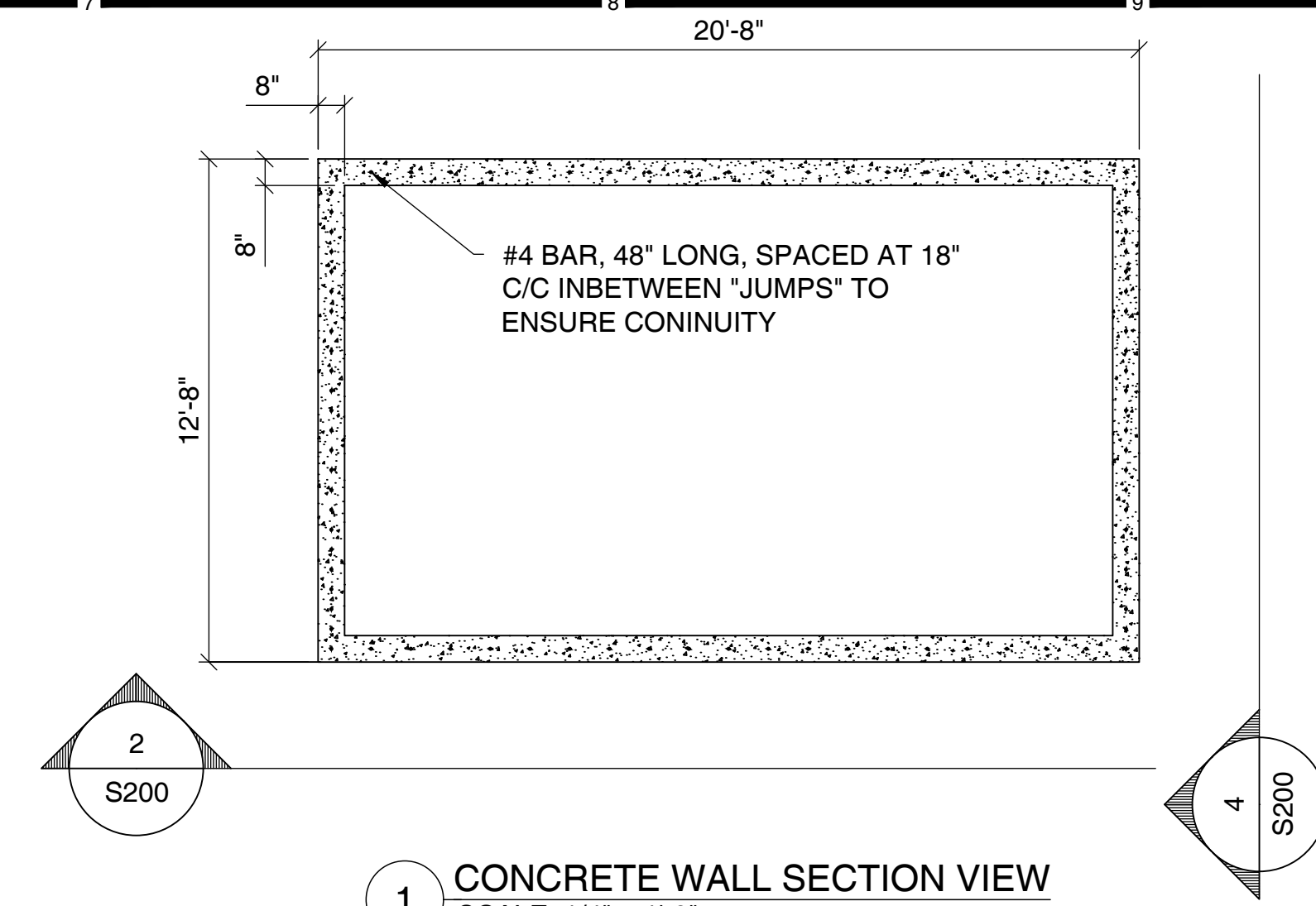
INTENDED USE	28-DAY STRENGTH (PSI)	MAX W/C RATIO	A/E	SLUMP
WALL	8000	0.5000	N/A	N/A
ELEVATED SLABS	4000	0.5000	N/A	N/A

B. STANDARD MIX PROPORTIONS (UNIT/YD<sup>3</sup>)

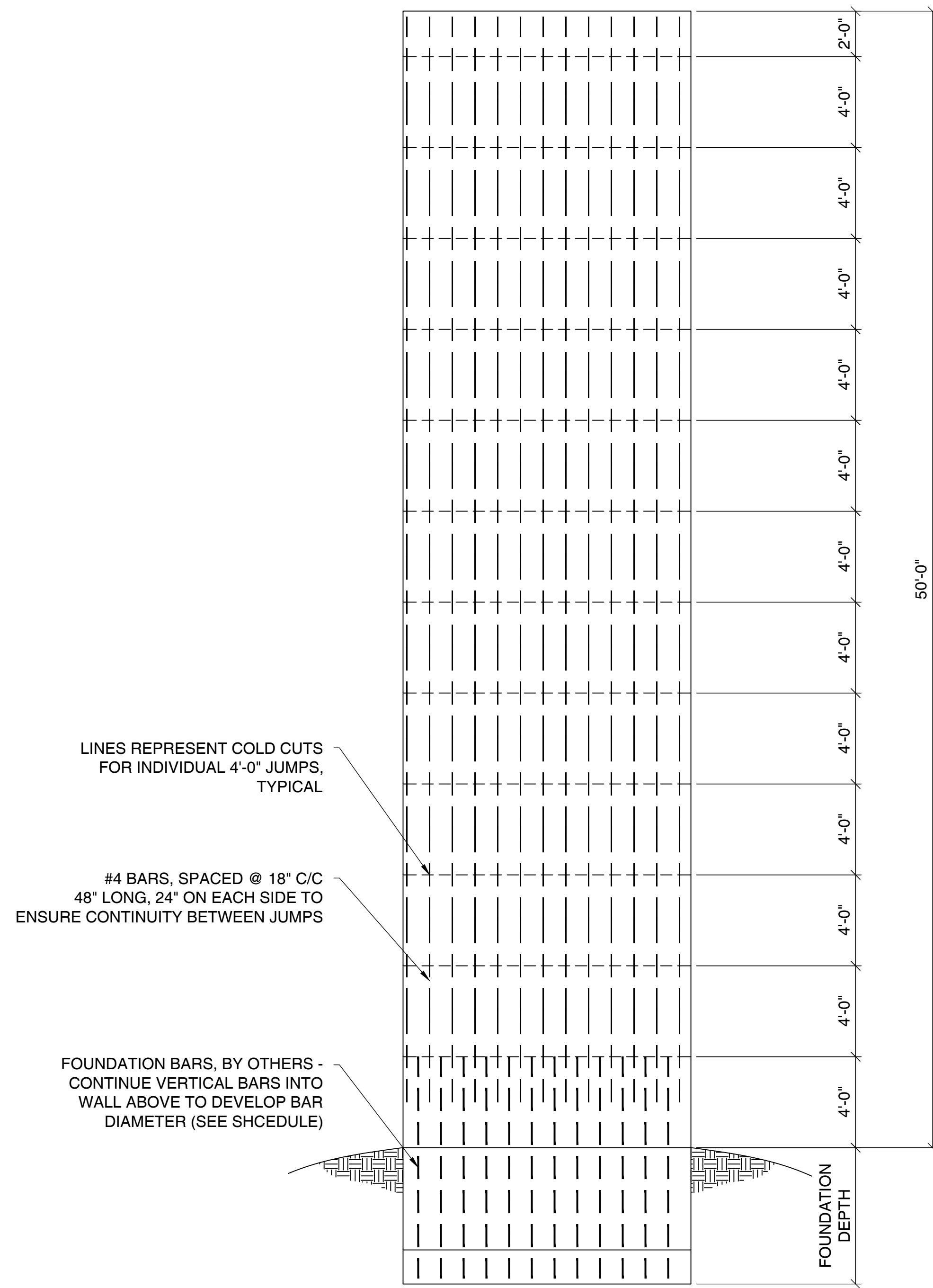
MIX PROPORTIONS	
INGREDIENT	WEIGHT
COARSE AGGREGATE (1/4" <math>\leq D </math> <math>< 1/2"</math>)	1250 LBS
SAND (NOT PASSING No. 4 SIEVE)	1400 LBS
TYPE III CEMENT POWDER	700 LBS
CEM-FIL FIBERGLASS	19 LBS
HEATED WATER (100° - 140°)	250 LBS (30 gal)
SikaSet NC (ACCELERATOR)	126 OZ
Sika ViscoCrete (WATER REDUCER)	60 OZ
Sika AEA (AIR ENTRAINER)	2 OZ

BAR DEVELOPMENT SCHEDULE	
BAR SIZE	DEVELOPMENT LENGTH
#4	14"
#5	17"
#6	21"
#7	30"
#8	34"
#8	38"
#10	43"

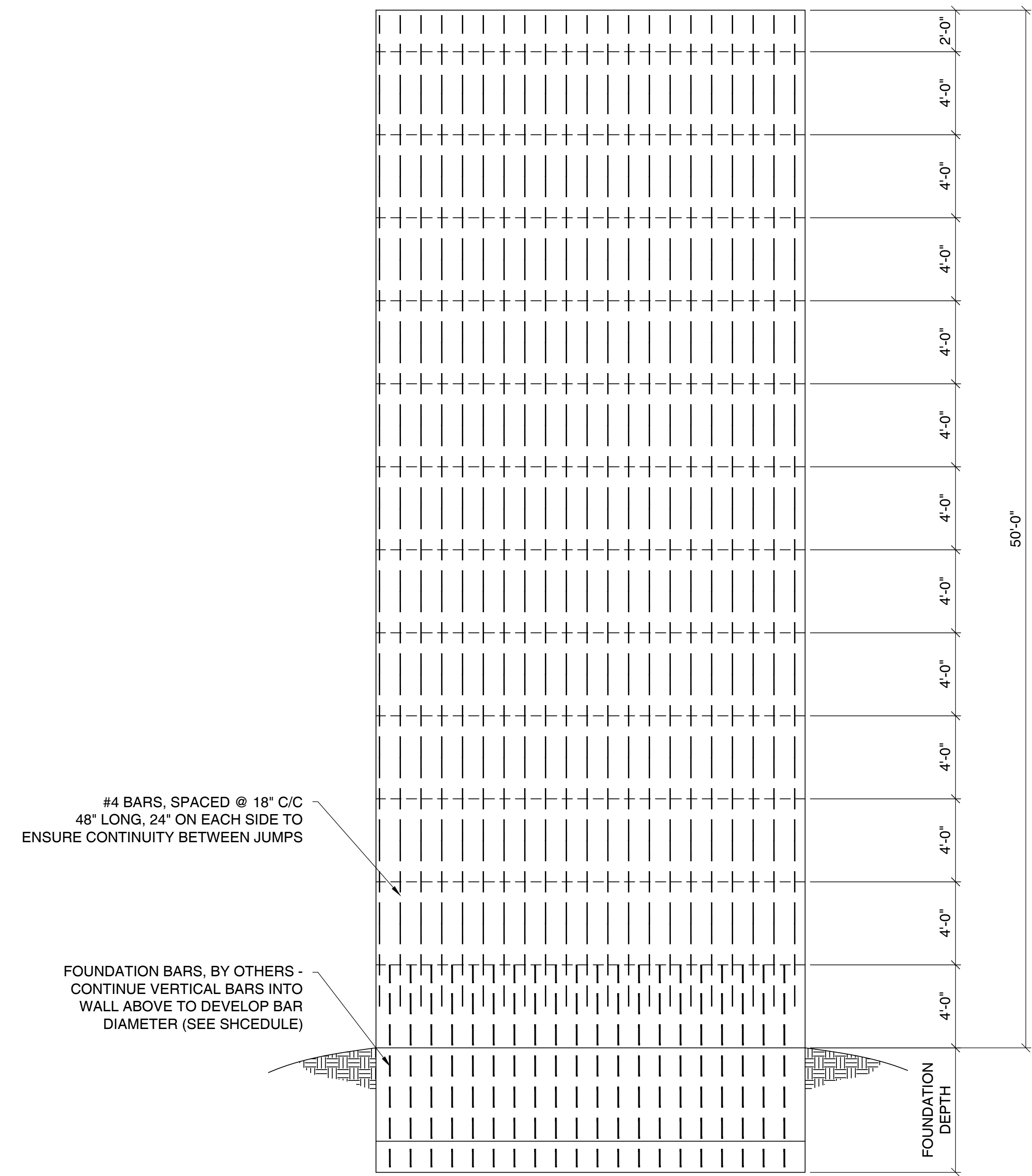
3 BAR DEVELOPMENT SCHEDULE  
SCALE: N/A



1 CONCRETE WALL SECTION VIEW  
SCALE: 1/4" = 1'-0"



4 CONCRETE WALL ELEVATION  
SCALE: 1/4" = 1'-0"



2 CONCRETE WALL ELEVATION  
SCALE: 1/4" = 1'-0"