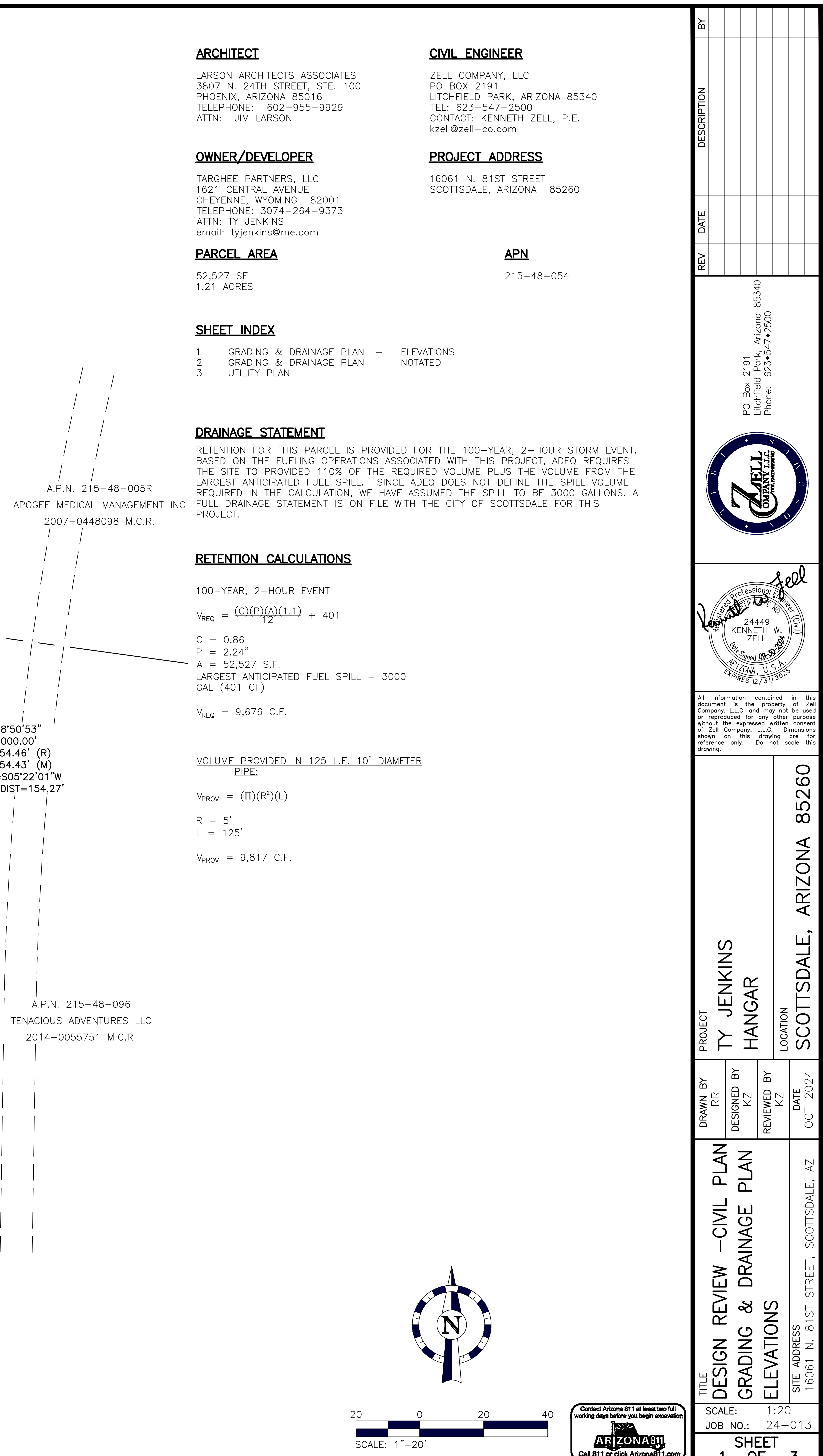
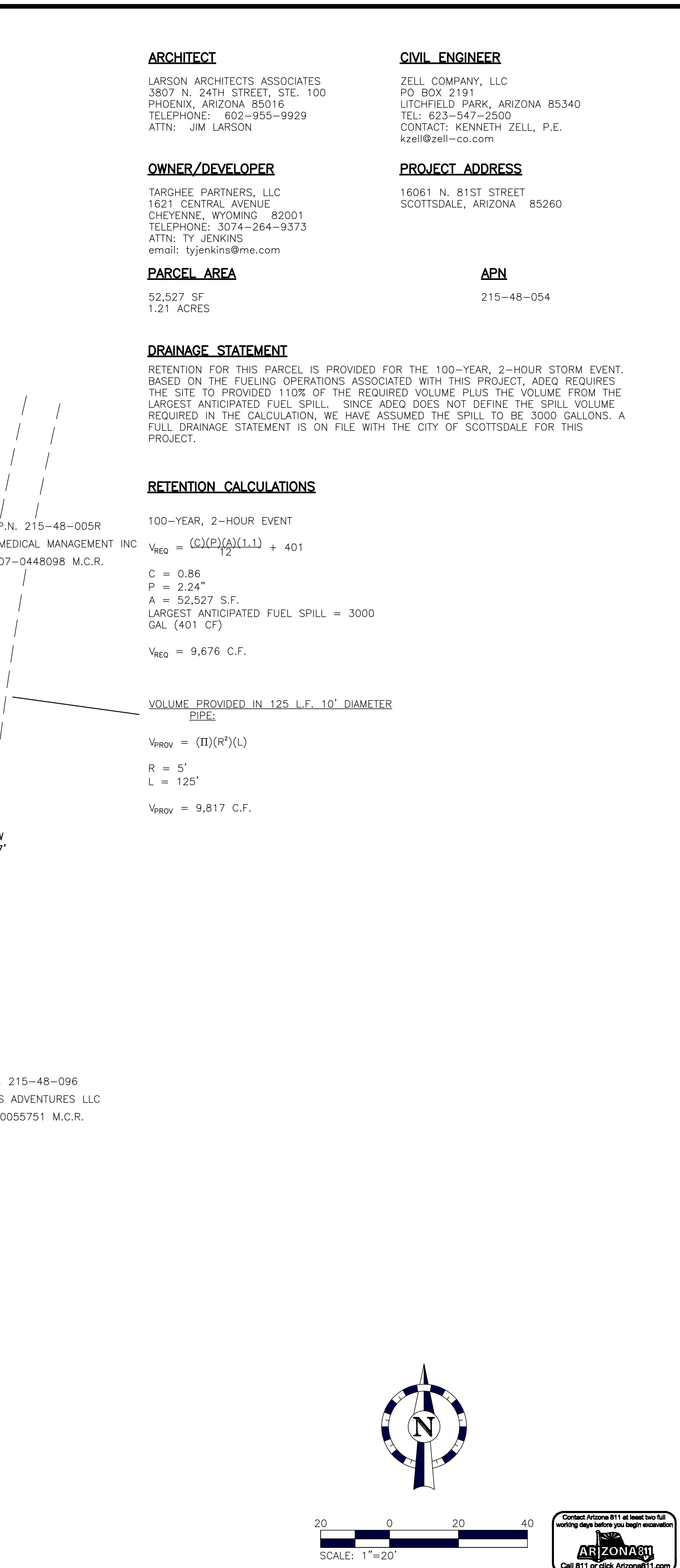




Plot Date/Time: 9/28/2024 1:56 PM Layout Name: 01-DR CG
Full File Path: T:\draft_users\cad01-drafting\24-013 Ty Jenkins Hangar\24-013.dwg



CIVIL ENGINEER

ZELL COMPANY, LLC
PO BOX 2191
LITCHFIELD PARK, ARIZONA 85340
TEL: 623-547-2500
CONTACT: KENNETH ZELL, P.E.
kzell@zell-co.com

PROJECT ADDRESS

16061 N. 81ST STREET
SCOTTSDALE, ARIZONA 85260

APN

215-48-054

RETENTION FOR THIS PARCEL IS PROVIDED FOR THE 100-YEAR, 2-HOUR STORM EVENT. BASED ON THE FUELING OPERATIONS ASSOCIATED WITH THIS PROJECT, ADEQ REQUIRES THE SITE TO PROVIDE 110% OF THE REQUIRED VOLUME PLUS THE VOLUME FROM THE LARGEST ANTICIPATED FUEL SPILL. SINCE ADEQ DOES NOT DEFINE THE SPILL VOLUME REQUIRED IN THE CALCULATION, WE HAVE ASSUMED THE SPILL TO BE 3000 GALLONS. A FULL DRAINAGE STATEMENT IS ON FILE WITH THE CITY OF SCOTTSDALE FOR THIS PROJECT.

100-YEAR, 2-HOUR EVENT

$$V_{REQ} = \frac{(C)(P)(A)(1.1)}{12} + 401$$

C = 0.86
P = 2.24

$$A = 52,5$$

LARGEST ANTICIPA

GAL (401 CF)

$$V_{REQ} = 9,676 \text{ C.F.}$$

VOLUME PROVIDED IN 125 L.F. 10' DIAMETER PIPE:

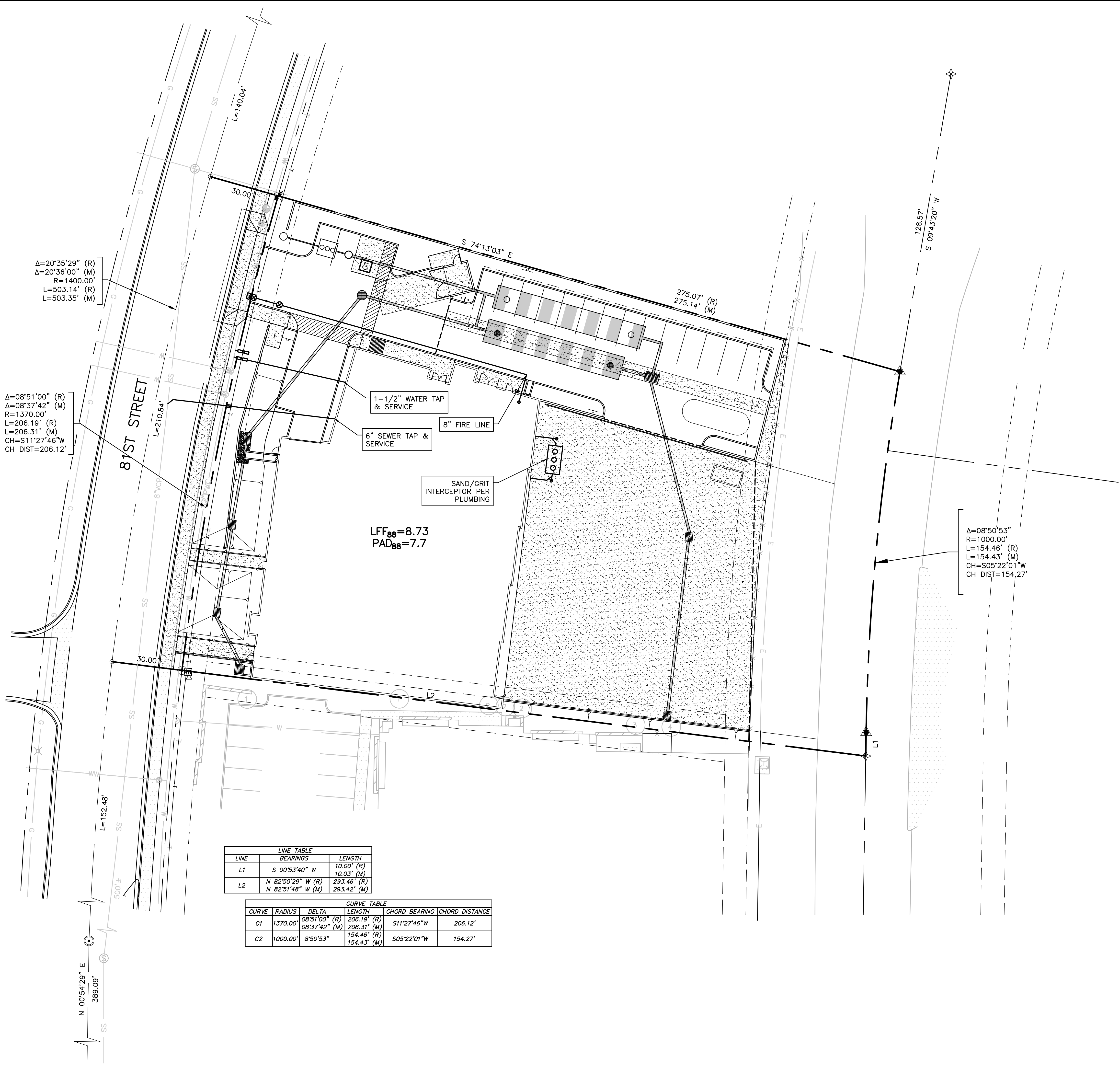
$$V_{\text{PROV}} = (\Pi)(R^2)(L)$$

$$R = 5'$$

$$L = 125'$$

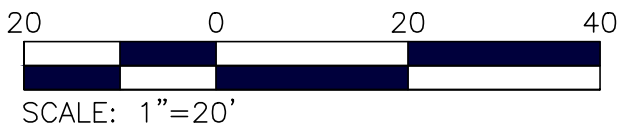
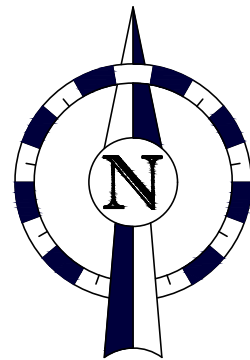
$$V_{\text{PROV}} = 9,817 \text{ C.F.}$$

Layout Name: 02-DR CG



LINE TABLE		
LINE	BEARINGS	LENGTH
L1	S 00°53'40" W	10.00' (R) 10.03' (M)
L2	N 82°50'29" W (R) N 82°51'48" W (M)	293.46' (R) 293.42' (M)

CURVE TABLE					
CURVE	RADIUS	DELTA	LENGTH	CHORD BEARING	CHORD DISTANCE
C1	1370.00'	08°51'00" (R) 08°37'42" (M)	206.19' (R) 206.31' (M)	S11°27'46"W	206.12'
C2	1000.00'	8°50'53"	154.46' (R) 154.43' (M)	S05°22'01"W	154.27'



PROJECT		TY JENKINS HANGAR		LOCATION	
DRAWN BY		DESIGNED BY		DATE	
RR		K.Z.		OCT 2024	
REVIEWED BY		REVIEWED BY		DATE	
K.Z.		K.Z.		OCT 2024	
TITLE		DESIGN REVIEW - CIVIL PLAN		SITE ADDRESS	
CONCEPTUAL		UTILITY PLAN		16061 N. 81ST STREET, SCOTTSDALE, AZ	
SCALE:		1:20		JOB NO.:	
24-013		SHEET		3	
3		OF		3	
REV		DATE		DESCRIPTION	
BY		DATE		DESCRIPTION	
P.O. Box 2191 Scottsdale, Arizona 85260 Phone: 602-347-2500		24449 KENNETH W. ZELL Registered Professional Engineer No. 24449 Expires 12/31/2025		ZELL COMPANY, L.L.C. P.L.L.C.	