

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

May 10, 2019

Shawn Biazar
SBS Construction and Engineering, LLC
10209 Snowflake Ct. NW
Albuquerque, NM, 87114

**RE: DKG Roofing Inc.
7000 Huseman Place SW
Grading and Drainage Plan
Engineer's Stamp Date: 05/09/19
Hydrology File: M10D016J**

Dear Mr. Biazar:

PO Box 1293

Based upon the information provided in your submittal received 05/03/2019, the revised Grading and Drainage Plan is approved for Building Permit.

Albuquerque

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

NM 87103

Please provide Drainage Covenant per Chapter 17 of the DPM prior to Permanent Release of Occupancy for the first flush pond and retention pond. Please submit these to the 4th floor of Plaza de Sol. A \$25 fee for each will be required.

www.cabq.gov

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

Location
LOT 12, COOR-ARENAL INDUSTRIAL PARK SUBDIVISION, is located at 7000 Husemen Place, SW containing 0.9856 acre. See attached portion of Vicinity Map M-10-Z for exact location.

Purpose
The purpose of this drainage report is to present a grading and drainage solution for new buildings and improvement for LOT 12, COOR-ARENAL INDUSTRIAL PARK SUBDIVISION.

Existing Drainage Conditions
This lot is very flat and drains north into Husemen Place, SW and no other offsite flows enters this site. There are existing gravel on site and some grading has been done.

Proposed Conditions and On-Site Drainage Management Plan
We are proposing to retain all the developed flow. The total volume requirement under this condition is 10,178.64 CF. We are proposing a total of five ponds (A-E) with total volume provided of 11,832.68 CF wich includes the first flush volume requirement of 912.32 CF.

VOLUME CALCULATIONS FOR 10 DAY STORM
(UNDER PROPOSED CONDITIONS)

BASIN	AREA (SF)	AREA (AC)	AREA (MI ²)
ON-SITE	42,932.74	0.9856	0.001540

$$E = \frac{EA(AA) + EB(AB) + EC(AC) + ED(AD)}{AA + AB + AC + AD}$$

$$V-360 = E (AA + AB + AC + AD)$$

EA = 0.44
EB = 0.67
EC = 0.99
ED = 1.97

AA = 0.00%
AB = 25.00%
AC = 0.00%
AD = 75.00%

P-60 = 2.01
P-360 = 2.35
P-1440 = 2.75
P-10 Day = 3.95

E = 1.6450 IN
V-360 = 0.1351 AC-FT
AD = 0.7392 AC
V-10 DAY = 0.2337 AC-FT
V-10 DAY = 10,178.64 CF

V (REQUIRED) = 10,178.64 CF

PONDING VOLUME REQUIREMENTS (90TH PERCENTILE/FIRST FLUSH)

VOLUME REQUIRED = 0.34 INCHES x IMPERVIOUS AREA =
(0.34/12 x 32,199.55) = 912.32 CF

PONDING VOLUME CALCULATION

TOTAL POND AREA PROVIDED =
PONDING CALCULATIONS:

POND A:
AREA @ ELEV. 84.00 = 3196.00 SF
AREA @ ELEV. 83.50 = 7.07 SF
POND VOLUME=(3196.00+7.07)/2*0.50=800.77 CF

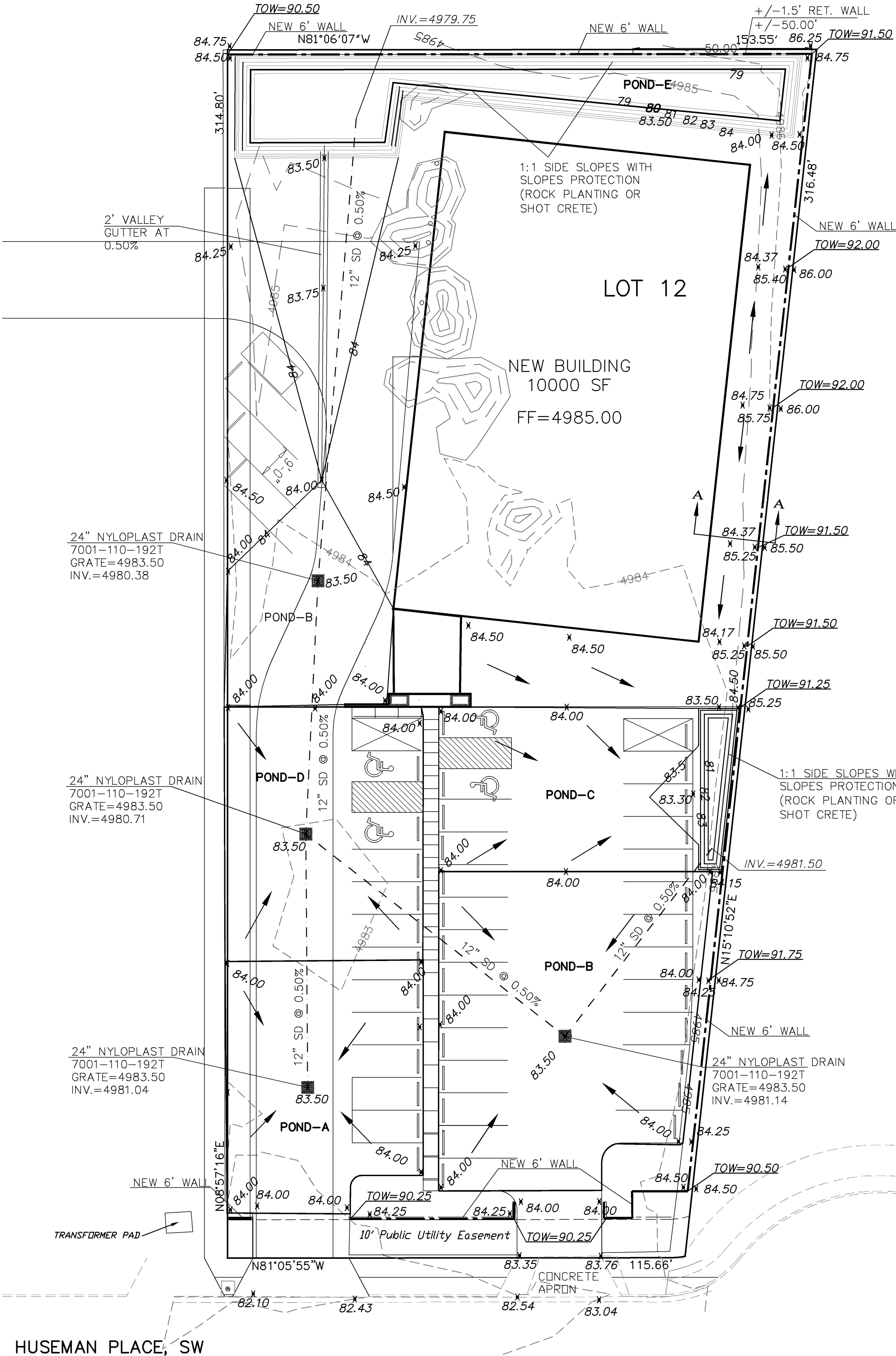
POND B:
AREA @ ELEV. 84.00 = 5310.09 SF
AREA @ ELEV. 83.50 = 7.07 SF
POND VOLUME=(5310.09+7.07)/2*0.0.50=1329.29 CF

POND C:
AREA @ ELEV. 84.00 = 3243.32 SF
AREA @ ELEV. 83.50 = 510.70 SF
AREA @ ELEV. 83.00 = 297.72 SF
AREA @ ELEV. 81.00 = 120.24 SF
POND VOLUME=(938.51+202.11+417.96)= 1558.57 CF

POND D:
AREA @ ELEV. 84.00 = 3417.78 SF
AREA @ ELEV. 83.50 = 7.07 SF
POND VOLUME=(3417.78+7.07)/2*0.50= 856.21 CF

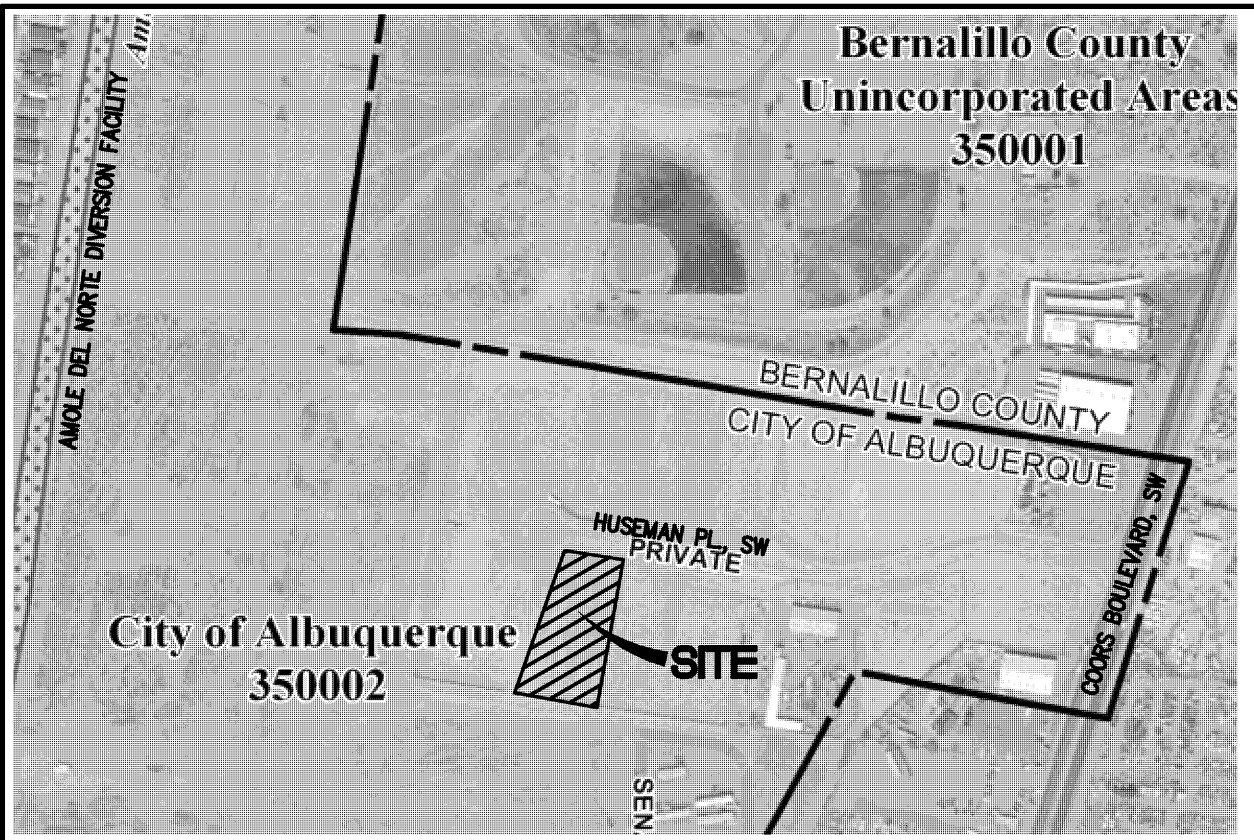
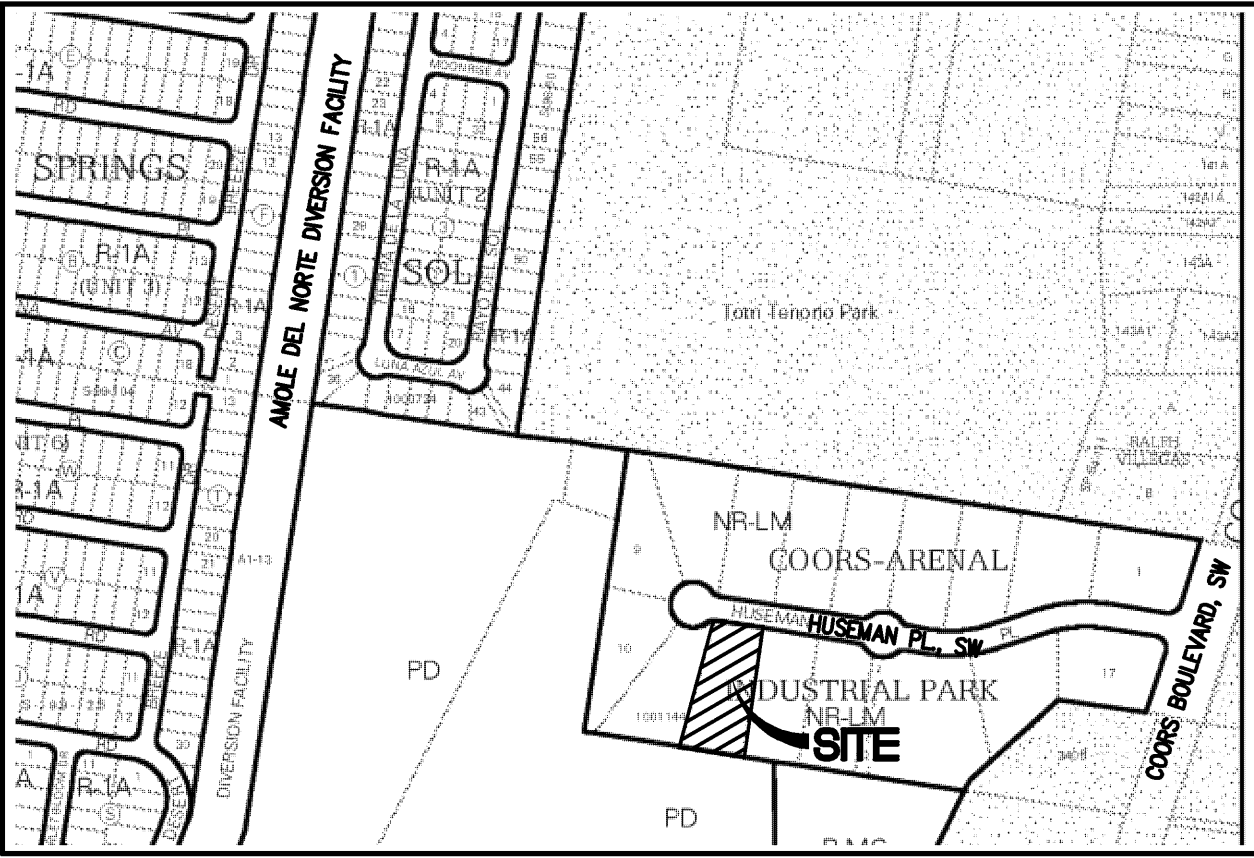
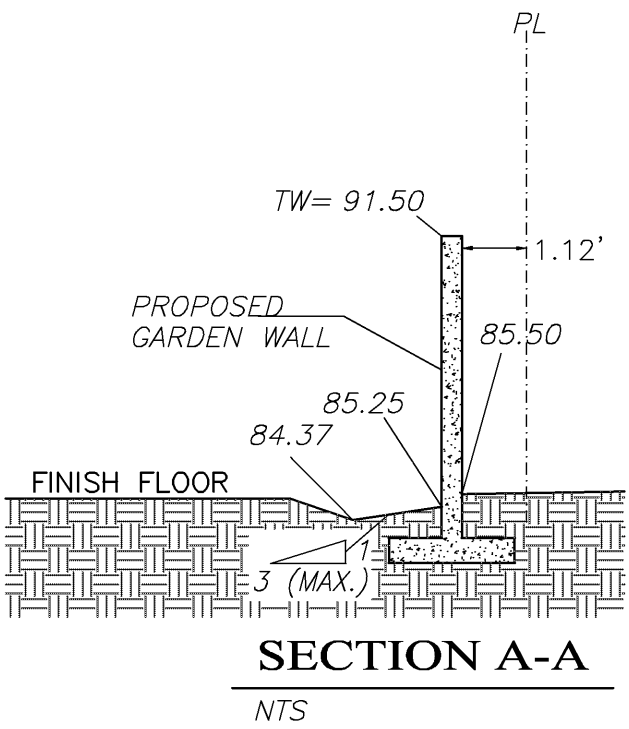
POND E:
AREA @ ELEV. 84.00 = 4344.91 SF
AREA @ ELEV. 83.50 = 1945.92 SF
AREA @ ELEV. 83.00 = 1784.68 SF
AREA @ ELEV. 79.00 = 1229.25 SF
POND VOLUME=(1572.71+932.65+4782.48)= 7287.84 CF

TOTAL PONDING VOLUME PROVIDED =
800.77 +1329.29 + 1558.57 + 856.21 + 7287.84 = 11,832.68 CF



GENERAL NOTES:

- 1: CONTOUR INTERVAL IS HALF (1.00) FOOT.
- 2: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CON-SIDERATIONS.
- 3: THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
- 4: SLOPES ARE AT 3:1 MAXIMUM UNLESS NOTED.
- 5: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 9_M11, HAVING AN ELEVATION OF 4957.54 FEET ABOVE SEA LEVEL.
- 6: ADD 4900 TO ALL PROPOSED SPOT ELEVATIONS.



LEGAL DESCRIPTION:

LOT 12, COOR-ARENAL INDUSTRIAL PARK SUBDIVISION
CONTAINING 0.9856 ACRE
ADDRESS: 7000 HUSEMAN PLACE, SW

LEGEND

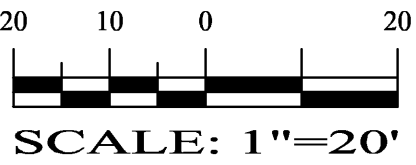
- BOUNDARY LINE
- EASEMENT LINE
- EXISTING SAS
- EXISTING SEWER
- EXISTING SD
- EXISTING STORM DRAIN
- EXISTING CURB & GUTTER
- PROPOSED WALL
- EXISTING SIDEWALK
- EXISTING FIRE HYDRANT
- EXISTING WATER SERVICE
- EXISTING DROP INLET

REZA AFAGHPUR
P.E. #11814
5-9-2019
LICENSED PROFESSIONAL ENGINEER

**SBS CONSTRUCTION
AND ENGINEERING, LLC**

10209 SNOWFLAKE CT., NW
ALBUQUERQUE, NEW MEXICO 87114
(505)899-5570

GRAPHIC SCALE



DKG ROOFING, INC
7000 HUSEMAN PLACE, SW
GRADING PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
201827-GD.DWG	SDR	10/29/2017	1