## CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

May 4, 2017

Martin Garcia, PE 1035 S. Bosque Loop Bosque Farms, NM, 87123

RE: Pontilux - 1301 Cuesta Abajo Ct NE

Grading and Drainage Plan

Stamp Date: 5/4/17

Hydrology File: D16D002H

Dear Mr. Garcia:

Based upon the information provided in your re-submittal received 5/3/2017, the Grading

Plan is approved for Grading Permit.

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

Albuquerque

PO Box 1293

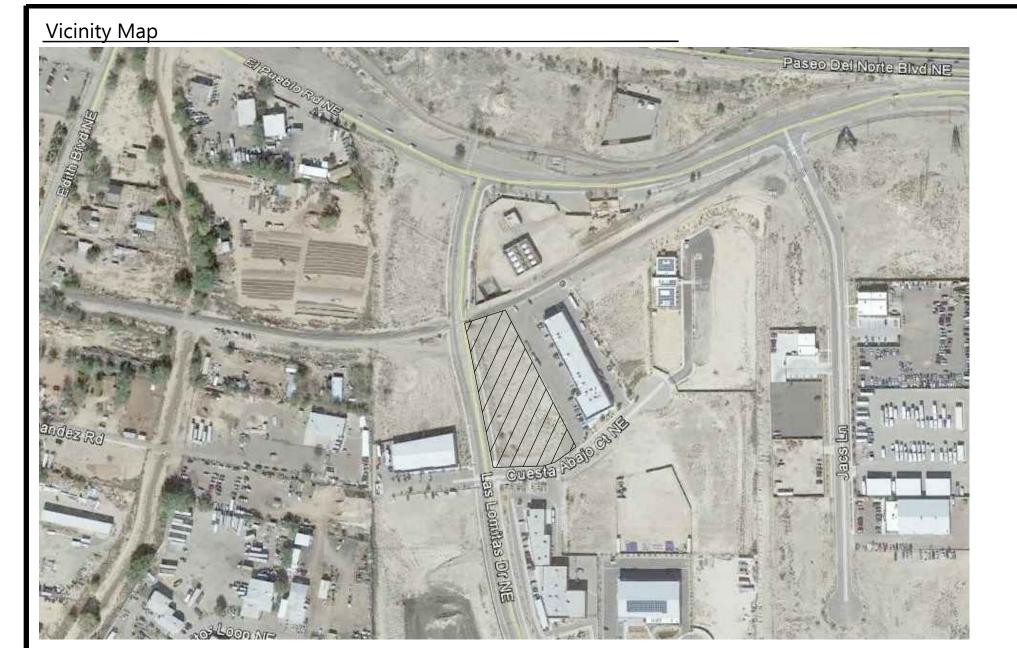
Sincerely,

NM 87103

Renee C. Brissett

www.cabq.gov

Reneé C. Brissette, P.E. Senior Engineer, Hydrology Planning Department



#### Drainage Narrative

THE PURPOSE OF THIS GRADING AND DRAINAGE PLAN LOCATED AT 1301 CUESTA ABAJO COURT N.E., ALBUQUERQUE, NM IS TO ACCOMMODATE A NEW WAREHOUSE AT THE SOUTH END OF THE LOT. THE LOT IS CURRENTLY UNIMPROVED AND IS BOUND TO THE NORTH BY AN EXISTING RAILROAD SPUR, TO THE EAST BY AN IMPROVED COMMERCIAL LOT, TO THE SOUTH BY CUESTA ABAJO COURT AND THE WEST BY LOS LOMITAS DRIVE.

THE SITE CURRENTLY FLOWS FROM THE NORTH TO SOUTH WITH A LOW POINT AT THE SOUTHWEST CORNER OF THE LOT WHERE THE MAJORITY OF THE RUN-OFF WILL BE DIRECTED THROUGH A CLEAR WATER POND LOCATED AT THE SOUTHWEST CORNER OF THE LOT, THEN DRAIN ONTO CUESTA ABAJO COURT AND INTO THE EXISTING STORM DRAIN. A SMALL PORTION OF THE DRAINAGE WILL FLOW DIRECTLY TO CUESTA ABAJO COURT AND INTO THE EXISTING STORM DRAIN.

A MASTER DRAINAGE PLAN DATED 1/18/05 WAS DEVELOPED FOR THIS TRACT WHICH IDENTIFIES THE MAXIMUM ALLOWABLE DISCHARGE ALLOWED IS 7.85 CFS. THE PROPOSED GRADING AND DRAINAGE PLAN AS SHOWN HEREON WILL GENERATE 5.95 CFS.

### **Drainage Calculations**

Hydrology Calculations

riy are regy care aranerie				
Date: November 11, 2003				
DPM - Section 22.2				
Volume 2, January 1993				
Precipitation Zone	2			
100 Year Storm Depth, P (360)	2.35			
100 year Storm Depth, P (10 day)	3.95			
Treatment Area	Α	В	С	D
Excess Precipitation Factors	0.53	0.78	1.13	2.12
Peak Discharge Factors	1.56	2.28	3.14	4.70
Land Treatment Area	Acres	Existing	Allowable	Proposed
Type "D" (Roof)		0.16	0.31	1.00
Type "C" (Unpaved Roadway)		0.00	0.36	0.00
Type "B" (Irrigated Lawns)		0.00	0.36	0.00
Type "A" (Undeveloped)		1.64	0.77	0.80
Total (Acres)		1.80	1.80	1.80
Excess Precipitaion(in)		0.67	0.99	1.41
Volume (100), cf		4386.49	6438.60	9234.72
Volume (10),cf		2938.95	4313.86	6187.26
Volume (100,10 day), cf		5315.77	6438.60	15042.72
Q (100), cfs		3.31	4.59	5.95
Q (10), cfs		2.22	3.07	3.99

### Project Benchmark

#### PROJECT BENCHMARK

THE PROJECT BENCHMARK FOR THIS SITE IS AN ACS BRASS MONUMENT STAMPED "13-D16"

N=1518996.001 E=1534181.325 ELEV=5073.471

#### THE LOCAL BENCHMARK

THE LOCAL BENCHMARK IS THE STORM DRAIN MANHOLE ON CUESTA ABAJO ROAD LOCATED AT THE DRIVEPAD

ELEV=5036.53

— <del>4</del> 805— —	EXISTING CONTOUR
	EXISTING EASEMENTS
SD.	EXISTING STORM DRAIN MANHOLE
	EXISTING STORM DRAIN INLET
<del></del> 05 <del></del>	NEW CONTOUR
$\sim$	WATER BLOCK/HIGH POINT
FF	FINISH FLOOR
TC	TOP OF CURB
FL	FLOW LINE
TS	TOP OF SIDEWALK
TG	TOP OF GRATE

### Pond Volume

AREA TREATMENT "D" = 43560 SF

IMPERVIOUS AREA ——— 0.10 x 43560 = 4356.0 SF

PONDING REQUIRED — 4356.0 x  $\frac{.34}{12}$  = 123.42 CF

 $\frac{\text{POND 1:}}{\text{A36.50}} = 584.11 \text{ SF}$ 

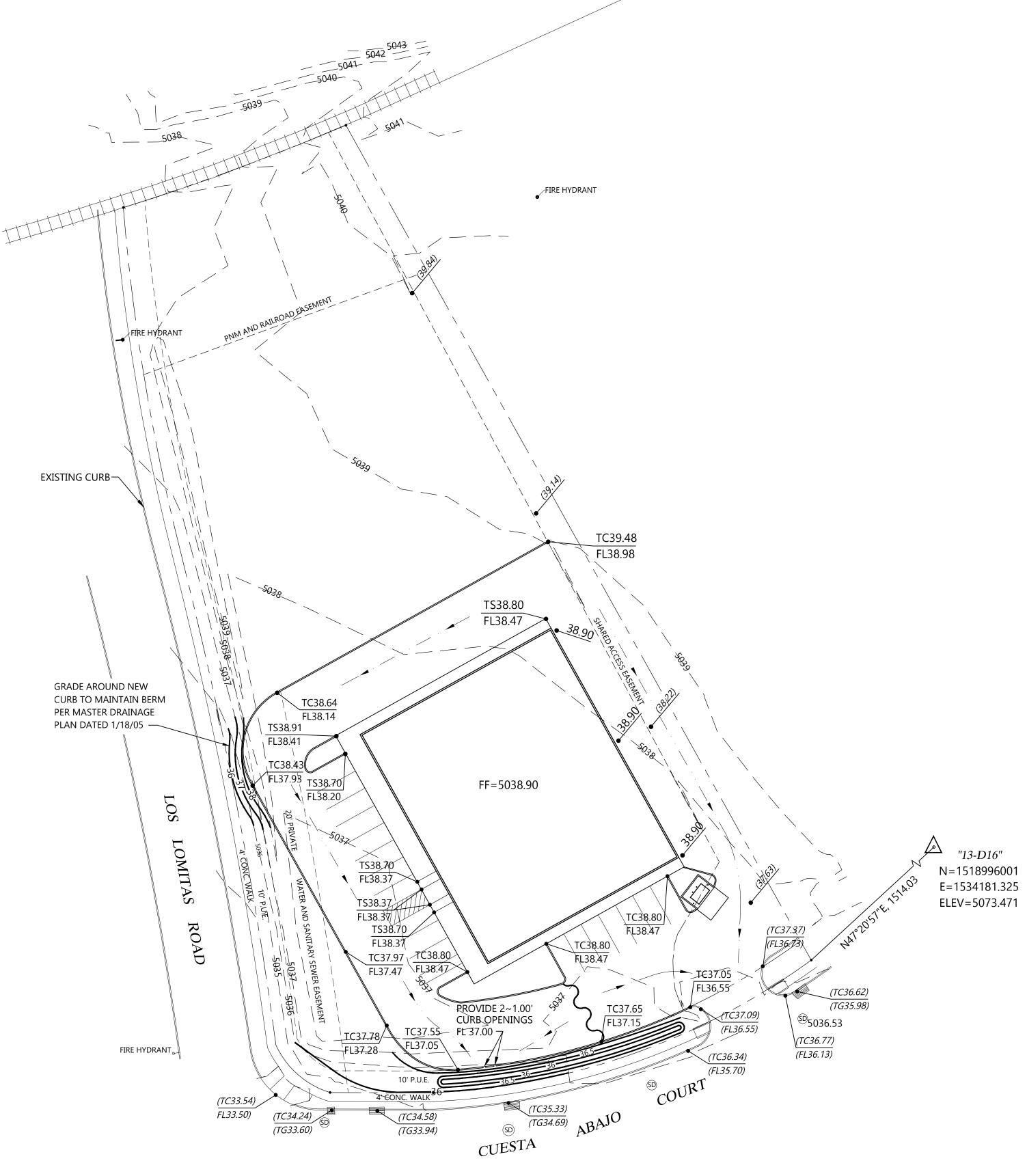
A36.00 = 234.31 SF

VOL 3 & 4:  $584.11 + 234.31 = \frac{818.42}{2} \times 0.5 = 204.60 \text{ CF}$ 

POND VOLUME PROVIDED: 204.60 CF

DEPTH OF WATER  $\frac{123.42}{204.60} = 0.6 \times 0.5 = 0.30$ 

WATER SURFACE ELEV = 5036.00 + .30 = 5036.30



# GRADING AND DRAINAGE PLAN

SCALE: 1" = 30'









				1035 S		
COMMENTS						
DATE						
NO.						
NZO-N-KEN						
16-054	5.4.2017	F PHILLIPS	M GARCIA	1" = 30'		
PROJECT NO.	DATE:	DRAWN BY:	CHECKED BY:	SCALE:		