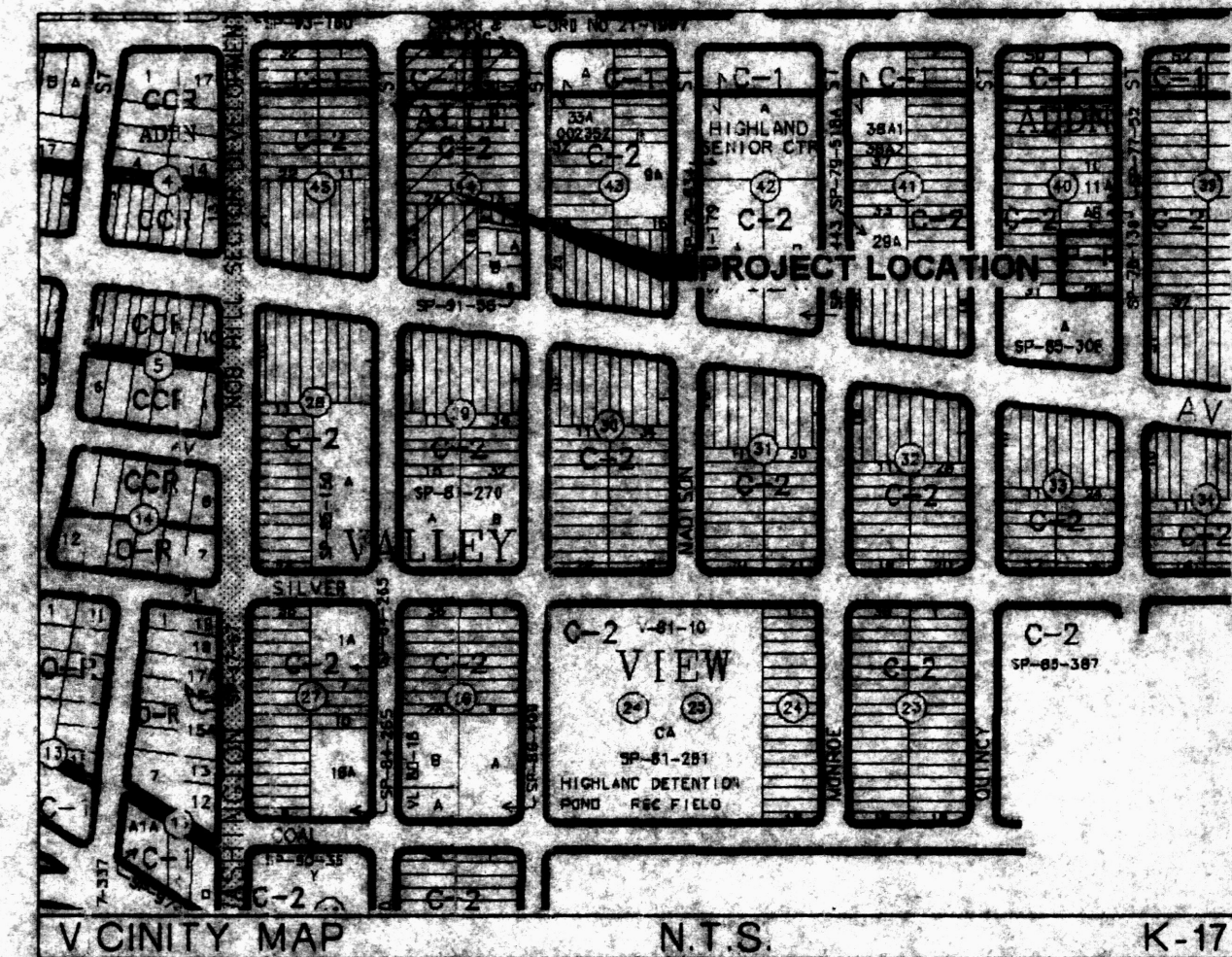




Drainage Narrative

THE AMERICAN INN REDEVELOPMENT, CEILO AT COPPER AVENUE IS LOCATED IN THE HILL AREA OF ALBUQUERQUE, OCCUPYING ONE HALF OF THE BLOCK BOUNDED BY CENTRAL AVENUE NE, JEFFERSON STREET NE, COPPER AVENUE NE AND ADAMS STREET SE. THE SITE IS PRESENTLY THE LOCATION OF THE AMERICAN INN. THE PROPOSED DEVELOPMENT CONSISTS OF REPLACING THE EXISTING BUILDING WITH MULTIFAMILY LOFT AND TOWN HOMES. THE SITE CURRENTLY SLOPES TO THE WEST AND NORTHWEST.

THE PROPOSED GRADING AND DRAINAGE PLAN PROVIDES DISCHARGE OF ALL DEVELOPED FLOWS ONTO ADAMS STREET AND COPPER AVENUE. THE DISCHARGE WILL OCCUR AT TWO LOCATIONS, ON ADAMS STREET AND ON COPPER STREET. THE EXISTING RUNOFF IS 4.75 CFS WHEREAS THE RUNOFF FOR THE PROPOSED CONDITION IS 4.38 CFS.

THE PROJECT SITE IS LOCATED IN FLOOD HAZARD ZONE X. THE PROPOSED BUILDING FINISH FLOORS WILL BE CONSTRUCTED ABOVE THE FLOOD ZONE ELEVATION. THE LOCALIZED STREET FLOODING IN COPPER AND CENTRAL AVENUE DOES NOT IMPACT THE PROJECT SITE. COPPER AVENUE IS A FULLY DEVELOPED CITY STREET WITH CURB AND GUTTER. RUNOFF WILL BE HARVESTED INTO LANDSCAPED AREAS AND THE EXCESS RUNOFF WILL BE RELEASED ONTO THE STREETS AS MENTIONED ABOVE.

THE AREA FOR BASIN 'A' IS CURRENTLY OCCUPIED BY BUILDING AND PARKING AREA. THE PROPOSED USE FOR THIS AREA IS A COMBINATION OF COMMERCIAL BUILDING WITH LOFTS AND AN UNDERGROUND PARKING GARAGE.

Legal Description

LOTS EIGHTEEN (18) THRU TWENTY-FOUR (24), BLOCK 44, VALLEY VIEW ADDITION, SECTION 23, TOWNSHIP 10 NORTH, RANGE 3 EAST, BERNALILLO COUNTY, NEW MEXICO AS THE SAME IS FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, FILED SEPTEMBER 11, 1911, IN BOOK D1, PAGE 32.

UPC

1017-057-311-239-432-09

Drainage Calculations

Hydrology Calculations
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): 3.85

Cielo at Copper
Entire site

2/13/2007

Treatment Area	A	B	C	D
Excess Precipitation Factors	0.63	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" (Pavement & Roofs)	7.01	0.17	0.68	
Type "C" (Unpaved Roadway)	0.00	0.20	0.00	
Type "B" (Irrigated Lawns)	0.00	0.20	0.15	
Type "A" (Undeveloped)	0.00	0.43	0.00	

Total (Acres): 1.01 1.01 1.01

Excess Precipitation(in): 2.12 0.99 1.92

Volume (100), cf: 7780.25 3616.35 7042.93
Volume (10), cf: 5212.77 2422.95 4718.78
Volume (100, 10 day), cf: 13682.14 3816.35 12037.81
Q (100), cfs: 4.75 2.58 4.38
Q (10), cfs: 3.18 1.73 2.94

Hydrology Calculations
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): 3.85

Cielo at Copper
Basin A

2/13/2007

Treatment Area	A	B	C	D
Excess Precipitation Factors	0.63	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" (Pavement & Roofs)	0.81	0.14	0.68	
Type "C" (Unpaved Roadway)	0.00	0.16	0.00	
Type "B" (Irrigated Lawns)	0.00	0.16	0.12	
Type "A" (Undeveloped)	0.00	0.35	0.00	

Total (Acres): 0.81 0.81 0.81

Excess Precipitation(in): 2.12 0.99 1.92

Volume (100), cf: 6221.89 2892.01 5530.33
Volume (10), cf: 4168.67 1937.04 3772.32
Volume (100, 10 day), cf: 10917.00 2892.01 8620.42
Q (100), cfs: 3.80 2.05 3.61
Q (10), cfs: 2.55 1.38 2.35

Hydrology Calculations
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): 3.85

Cielo at Copper
Basin B

2/13/2007

Treatment Area	A	B	C	D
Excess Precipitation Factors	0.63	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" (Pavement & Roofs)	0.09	0.02	0.09	
Type "C" (Unpaved Roadway)	0.00	0.02	0.00	
Type "B" (Irrigated Lawns)	0.00	0.02	0.00	
Type "A" (Undeveloped)	0.00	0.04	0.00	

Total (Acres): 0.09 0.09 0.09

Excess Precipitation(in): 2.12 0.99 2.12

Volume (100), cf: 683.37 317.64 683.37
Volume (10), cf: 457.86 212.82 457.86
Volume (100, 10 day), cf: 1198.12 317.64 1198.12
Q (100), cfs: 0.42 0.23 0.42
Q (10), cfs: 0.28 0.15 0.28

Hydrology Calculations
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): 3.85

Cielo at Copper
Basin C

2/13/2007

Treatment Area	A	B	C	D
Excess Precipitation Factors	0.63	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" (Pavement & Roofs)	0.32	0.05	0.32	
Type "C" (Unpaved Roadway)	0.00	0.06	0.00	
Type "B" (Irrigated Lawns)	0.00	0.06	0.00	
Type "A" (Undeveloped)	0.00	0.14	0.00	

Total (Acres): 0.32 0.32 0.32

Excess Precipitation(in): 2.12 0.99 2.12

Volume (100), cf: 2462.59 1144.64 2462.59
Volume (10), cf: 1648.94 766.91 1648.94
Volume (100, 10 day), cf: 4321.15 1144.64 4321.15
Q (100), cfs: 1.50 0.82 1.50
Q (10), cfs: 1.01 0.55 1.01

Hydrology Calculations
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): 3.85

Cielo at Copper
Basin D

2/13/2007

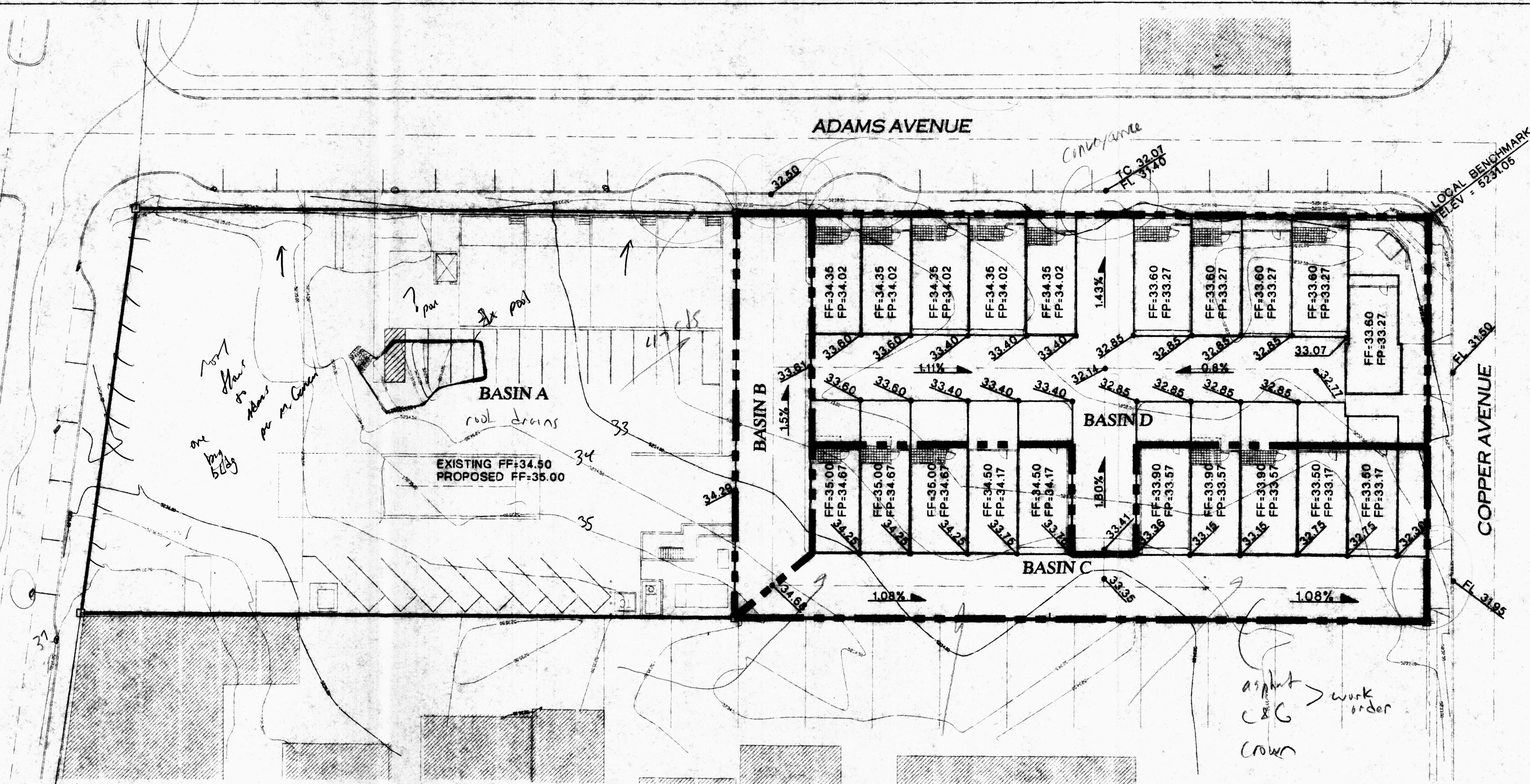
Treatment Area	A	B	C	D
Excess Precipitation Factors	0.63	0.78	1.13	2.12
Peak Discharge Factors	1.56	2.28	3.14	4.70

Land Treatment Area	Acres	Existing	Allowable	Proposed
Type "D" (Pavement & Roofs)	0.47	0.08	0.40	
Type "C" (Unpaved Roadway)	0.00	0.09	0.00	
Type "B" (Irrigated Lawns)	0.00	0.09	0.07	
Type "A" (Undeveloped)	0.00	0.20	0.00	

Total (Acres): 0.47 0.47 0.47

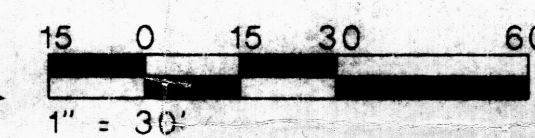
Excess Precipitation(in): 2.12 0.99 1.92

Volume (100), cf: 3609.24 1677.61 3268.74
Volume (10), cf: 2418.19 1124.00 2190.08
Volume (100, 10 day), cf: 6333.19 1677.61 5586.13
Q (100), cfs: 2.20 1.20 2.03
Q (10), cfs: 1.48 0.80 1.36



MASTER GRADING PLAN

SCALE: 1" = 30'



Legend

- 5030 — EXISTING CONTOUR
- 5030 — NEW CONTOUR
- 30.11 NEW SPOT ELEVATION
- FP FINISH PAD ELEVATION
- FF FINISH FLOOR ELEVATION
- TC TOP OF CURB
- FL FLOW LINE
- DRAINAGE BASIN BOUNDARY

Benchmark

PROJECT BENCHMARK
ACS MONUMENT "5-K17A"
X = 395,645.50
Y = 1,484,196.72
ELEV = 5219.539 NAVD 1929.

LOCAL BENCHMARK
SOUTHWEST CORNER OF PROPERTY BEING
A SET REBAR.

ELEV = 5231.05

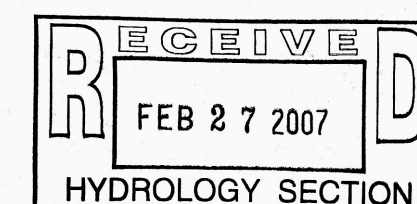
Engineer's Statement

I, THE ENGINEER OF RECORD, CERTIFY THAT I HAVE PERSONALLY VISITED THE SITE AND THE EXISTING GRADES AND CONTOURS DEPICTED ON THIS PLAN MATCH WHAT PRESENTLY EXISTS AT THIS LOCATION.

MARTIN J. GARCIA, NMPE #11767.

Keyed Notes

- ?1. TRANSITION FROM MOUNTABLE CURB TO STANDARD CURB.



ABQ
Engineering,
Inc.

Engineers - Planners
Construction Services
6730 Academy Rd NE, Suite 130
Albuquerque, NM 87109
505-255-7802 FAX 505-255-7802
ABQ NO. 28229

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: CEILO AT COPPER
MASTER GRADING PLAN

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. K-17 SHEET 4 OF 4