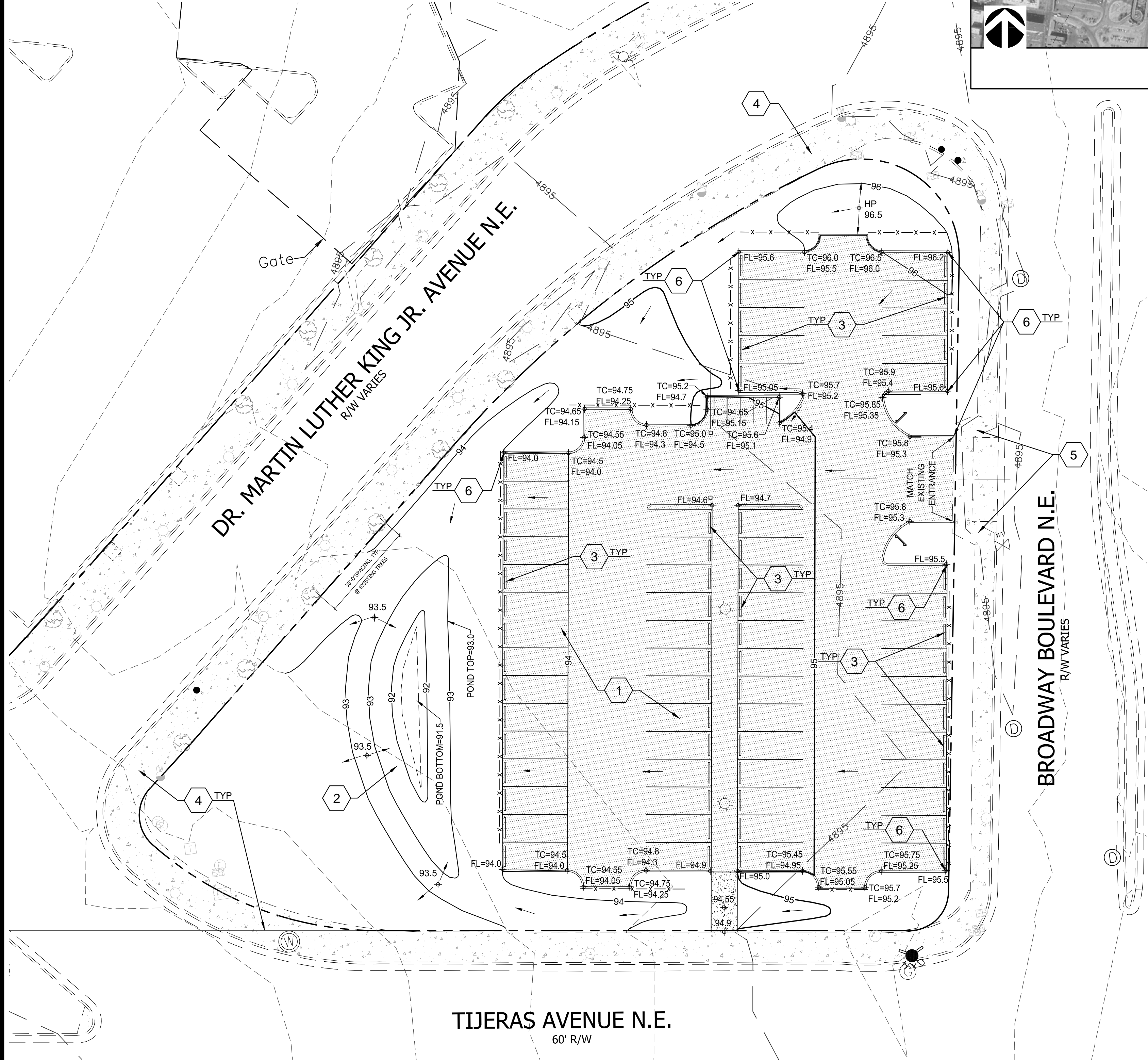
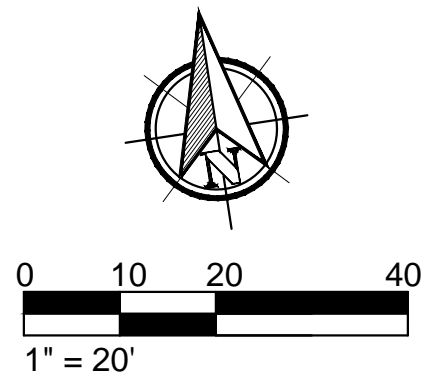


LAST MODIFIED: Jun 16, 2015 -- 1:28pm BY USER: Cloyd  
DRAWING LOCATION: C:\Users\Cloyd\Documents\2015\15-034\Grd\DWG NAME: 15-034-Grd.dwg



# 1 GRADING & DRAINAGE PLAN

Scale: 1" = 20'



## 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.

JAMES CRAIG HAGELGANTZ, NMPE #15559

## LEGEND

---	6510	---	EXISTING INDEX CONTOUR
---	6509	---	EXISTING INTERIM CONTOUR
---	10	---	NEW INDEX CONTOUR
---	09	---	NEW INTERIM CONTOUR
+	22.8		NEW SPOT ELEVATION

## DRAINAGE NARRATIVE

THIS SITE IS LOCATED AT THE INTERSECTIONS OF BROADWAY BLVD. NE, TIJERAS AVE NE, AND DR. MARTIN LUTHER KING JR. AVE. NE IN ALBUQUERQUE, NM AND CONTAINS APPROXIMATELY 0.92 ACRES. THE SITE IS CURRENTLY UNDEVELOPED WITH NO STRUCTURES. AVAILABLE RECORDS INDICATE THE SITE CURRENTLY DRAINS FROM EAST TO WEST FROM BROADWAY BLVD. NE TOWARDS THE INTERSECTION OF TIJERAS AVE. AND DR. MARTIN LUTHER KING JR. AVE. THIS SITE IS LOCATED ON FIRM MAP NO. 35002, PANEL 0334 WHICH INDICATES THE ENTIRE SITE IS LOCATED IN ZONE X, AND THAT NO PORTION OF THE SITE IS LOCATED WITHIN A 100 YEAR FLOOD PLAIN.

WITH THIS DEVELOPMENT, AN ADDITION OF A PARKING LOT, THE HISTORIC DRAINAGE PATTERNS WILL BE PRESERVED. THE ADDITION OF AN ONSITE PONDING AREA WILL CAPTURE AND MANAGE THE 90TH PERCENTILE STORM EVENT AND THE "FIRST FLUSH" RUNOFF PER COA DRAINAGE ORDINANCE (SEE CALCULATIONS)

## ONSITE DRAINAGE RETENTION

FIRST FLUSH STORAGE REQUIRED BY COA HYDROLOGY:

PROVIDE STORAGE FOR FIRST FLUSH RUNOFF PER SECTION 22 OF DPM TABLE A-6 USE 0.1 - 0.35 = 0.25 IN

FIRST FLUSH (IN) APPLIED OVER IMPERVIOUS AREAS (ACRES)  
THEREFORE 0.25/12 X 0.517 X 43560 = 469.2CF

FIRST FLUSH PONDING AREA REQD. = 469.2 CF < 1240 CF PROVIDED

## KEYED NOTES

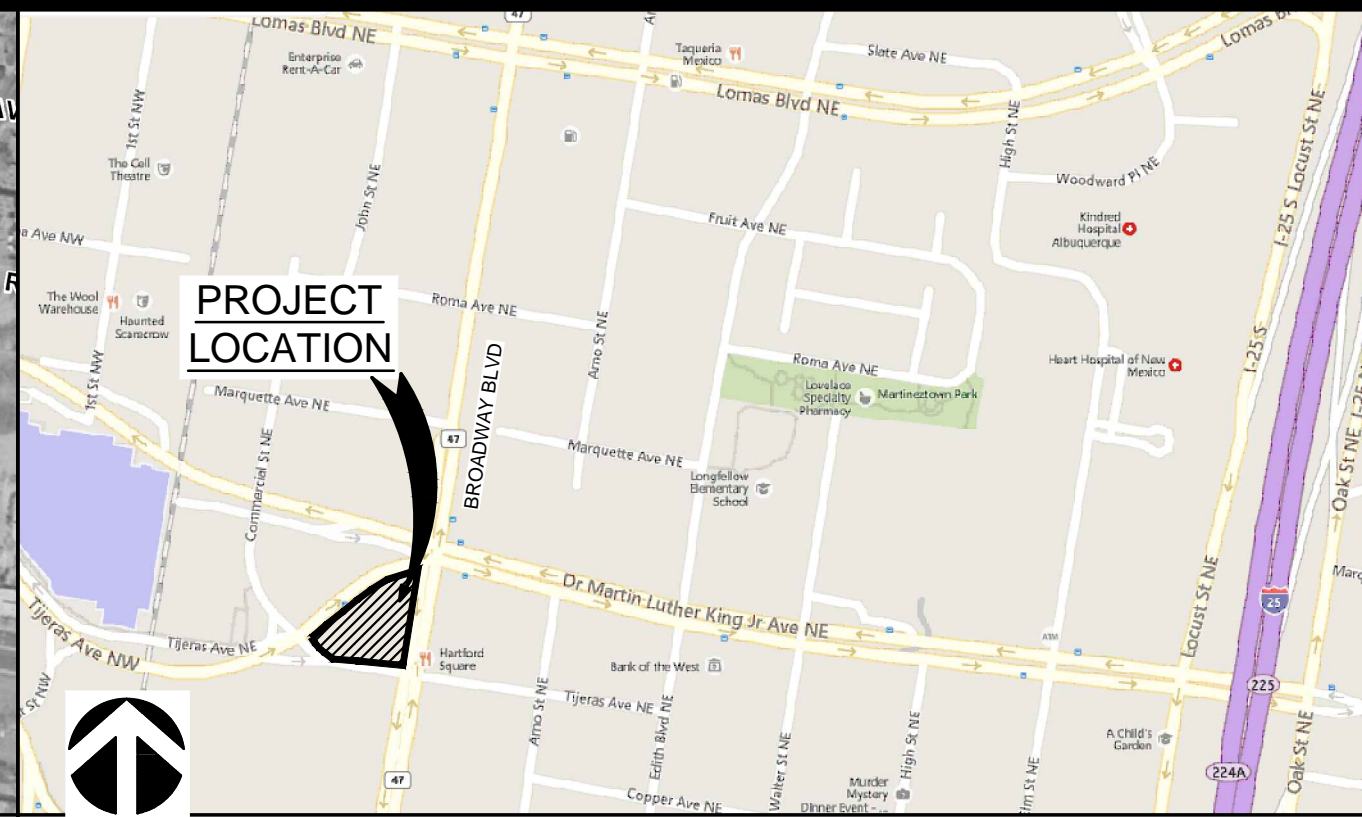
1. CONSTRUCT NEW PARKING AREA. SEE PAVEMENT SECTION, DETAIL 2, THIS SHEET. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
2. CONSTRUCT NEW DETENTION POND.
3. INSTALL WHEEL STOPS PER DETAIL 3, THIS SHEET.
4. EXISTING SIDEWALKS TO REMAIN.
5. EXISTING ENTRANCE TO REMAIN.
6. TAPER END OF CURB DOWN TO GRADE.

## NOTE

THE EXISTING GRADES DEPICTED ON THIS PLAN WERE TAKEN FROM AVAILABLE ONLINE INFORMATION, AND NOT THE RESULT OF AN ACTUAL FIELD SURVEY. THE CONTRACTOR SHALL FIELD VERIFY GRADES AND IMMEDIATELY NOTIFY THE ENGINEER IF DISCREPANCIES EXIST.



FIRM MAP  
SCALE: NONE

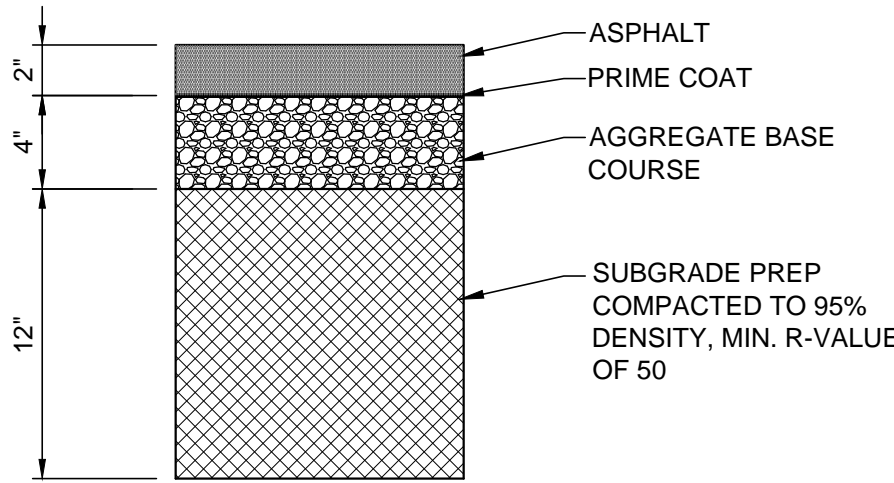


LOCATION MAP  
SCALE: NONE

## DRAINAGE CALCULATIONS

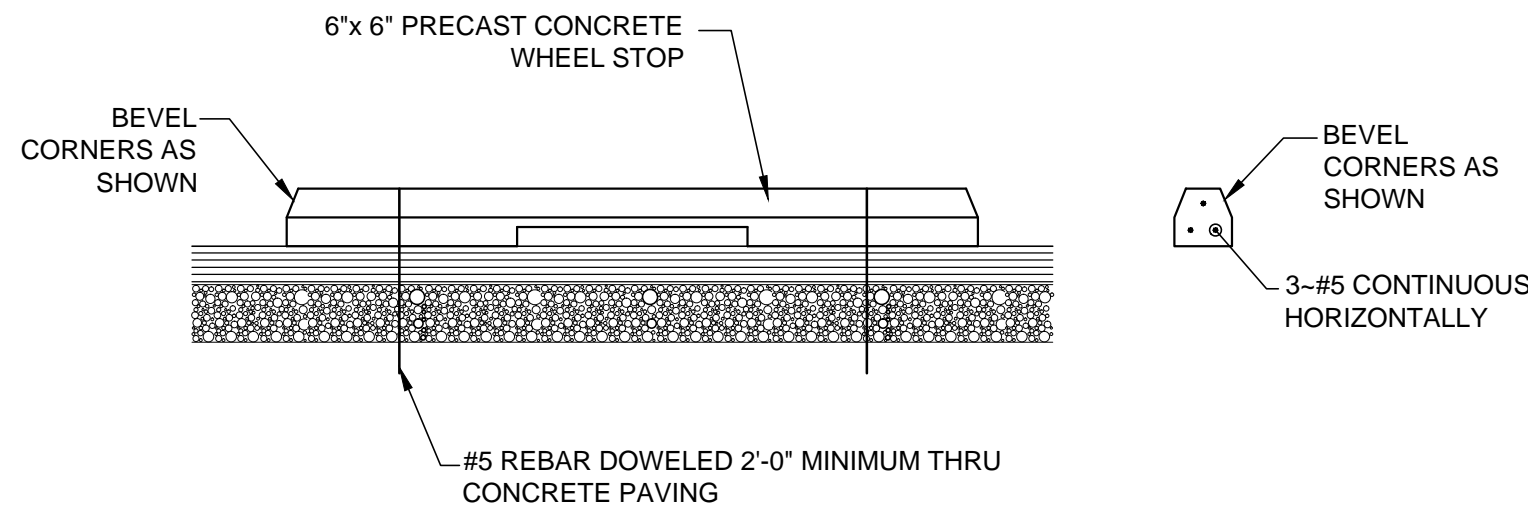
<b>Hydrology Calculations</b>				
DPM - Volume 2, October 2008				
Section 22.2 Hydrology				
Precipitation Zone	2			
100 Year Storm Depth, P (360)	2.35			
Treatment Area	A	B	C	D
Excess Precipitation Factors	0.53	0.78	1.13	2.12
Peak Discharge Factors	1.56	2.28	3.14	4.70
Land Treatment Area	Acres	Existing	Allowable	Proposed
Type "D" (Impervious, Roof, Drive way, Ect.)		0	0.16	0.51
Type "C" (Compacted Soil, Unpaved Parking)		0.92	0.18	0.41
Type "B" (Irrigated Lawns)		0	0.18	0.00
Type "A" (Undeveloped)		0	0.40	0.00
Total (Acres)		0.920	0.920	0.920
Excess Precipitation(in)		1.13	0.99	1.68
Volume (100), cf		3774	3291	5607
Volume (10), cf		2528	2205	3756
Q (100), cfs		2.89	2.34	3.68
Q (10), cfs		1.94	1.57	2.47
Ponding Volume Required ,cf = V(10)proposed-V(10)existing				1228

POND VOLUME PROVIDED  
1240 CF



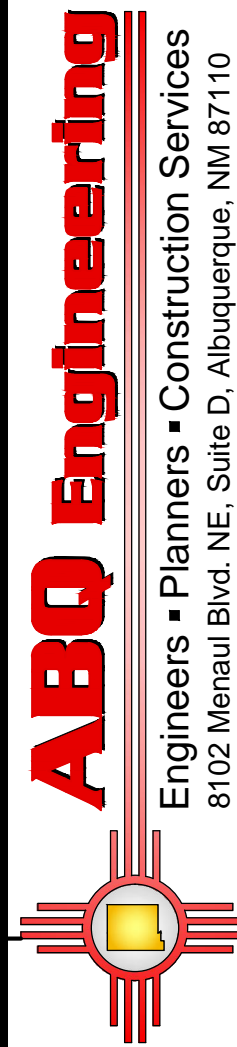
## 2 PAVEMENT SECTION

Scale: NTS



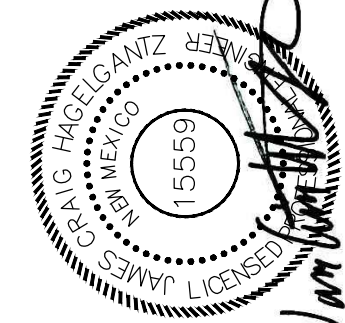
## 3 WHEEL STOP DETAIL

Scale: NTS



Engineers • Planners • Construction Services  
8102 Merit Blvd. NE, Suite D, Albuquerque, NM 87110  
tele: 505.255.7802 Proj. No.: 15-034 www.abqeng.com

REV. NO. REV. DATE DESCRIPTION



DO NOT SCALE DRAWINGS  
CONTRACTOR TO VERIFY ALL  
EXISTING CONDITIONS AND  
DIMENSIONS- NOTIFY  
ENGINEER/ARCHITECT OF ANY  
DISCREPANCIES PRIOR TO  
BEGINNING CONSTRUCTION

SPRINGER BUILDING  
121 TIJERAS NE  
ALBUQUERQUE, NEW MEXICO

DESIGNED BY: CAB PROJECT NO.: 15-034  
DRAWN BY: CAB DATE: APRIL 2015

SHEET TITLE

GRADING &  
DRAINAGE  
PLAN

SHEET NUMBER

C-101

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# CITY OF ALBUQUERQUE



June 29, 2015

Craig Hagelgantz, P.E.  
ABQ Engineering, Inc.  
8102 Menaul Blvd. NE Suite D  
Albuquerque, New Mexico 87112

**RE: Springer Building Parking Lot  
121 Tijeras Ave NE  
Grading and Drainage Plan  
Engineers Stamp Date 6/16/15 (K14D036)**

Dear Mr. Hagelgantz,

Based upon the information provided in your submittal received 6/29/15, this plan is approved for Grading Permit and Paving Permit.

Please attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology.

When completed please provide a copy of the as-build for our records.

PO Box 1293

If you have any questions, please contact me at 924-3695 or Rudy Rael at 924-3977.

Albuquerque

Sincerely,

New Mexico 87103

Rita Harmon, P.E.  
Senior Engineer, Hydrology  
Planning Department

[www.cabq.gov](http://www.cabq.gov)

RR/RH  
C: File