COYOTE CONCRETE DRAINAGE REPORT

August 2024

PREPARED FOR:

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1. Executive Summary

This Drainage Report is intended to define the drainage strategy for the proposed Coyote Concrete development. This analysis follows the drainage guidelines as dictated by Chapter 6 of the City of Albuquerque's (COA) Development Process Manual (DPM). Results from this study emphasize that the proposed development will continue the drainage patterns of the existing undisturbed site by the total retention of all stormwater.

Analysis of the expected runoff for the undeveloped site suggests an existing historic stormwater flow of 12.5 cfs. Post-development runoff rates generated on-site are estimated at approximately 27.1 cfs. This additional flow will be handled by the construction of on-site private drainage facilities.

No public drainage facilities will be constructed as part of this development. The site will be graded to promote the free drainage of all stormwater to a series of on-site storm retention ponds. Trench drains along the bottom of these ponds will be constructed to assist in the subsurface drainage of stormwater through the vadose zone. No stormwater flow will be allowed to discharge the site, in accordance with existing drainage patterns.

2. Introduction

The intent of this drainage report is to present a grading and drainage solution for the proposed development within the COA municipal limits. This development aims to establish a concrete batching plant, warehouse, and associated facilities on land that is currently vacant and undisturbed. The grading and drainage solution shall demonstrate that all storm water generated from the development will be captured and retained within the developed site and shall meet all first flush and water conservation storage requirements as identified by the DPM.

3. Project Location & Background

The proposed development is located within the COA municipal boundary, east of the Rio Grande River along 2nd Street and just south of Woodward Road. The site is bounded to the south by undeveloped vacant land and to the north by the Bernalillo County Animal Care and Resource Center. A vicinity map identifying the location of the proposed development is depicted in Figure 1 below.

The proposed development is situated across 3 (three) individual lots legally described by the Bernalillo County Parcels as MRGCD Map #44 Tract 100, MRGCD Map #44 Tract 100-D, and Tract 2 Lands of Good Cents Inc. The total 6.3-acre site is located within the Non Residential – General Manufacturing (NR-GM) zoning of the Bernalillo County Integrated Development Ordinance (IDO). The 3 (three) lots, although encompassing 1 (one) development, will be partitioned into a northern and a southern section, each with their own individual grading and drainage solutions and layouts.

The topography of the site is relatively flat and does not promote the drainage of storm runoff in any distinct direction. There are no existing private storm drain facilities on-site, nor are there any public storm drain facilities within the adjacent public right-of-way (ROW) along 2nd Street. The lack of existing

infrastructure to convey the storm runoff emphasizes the need for the design of full retention drainage facilities within the proposed development.

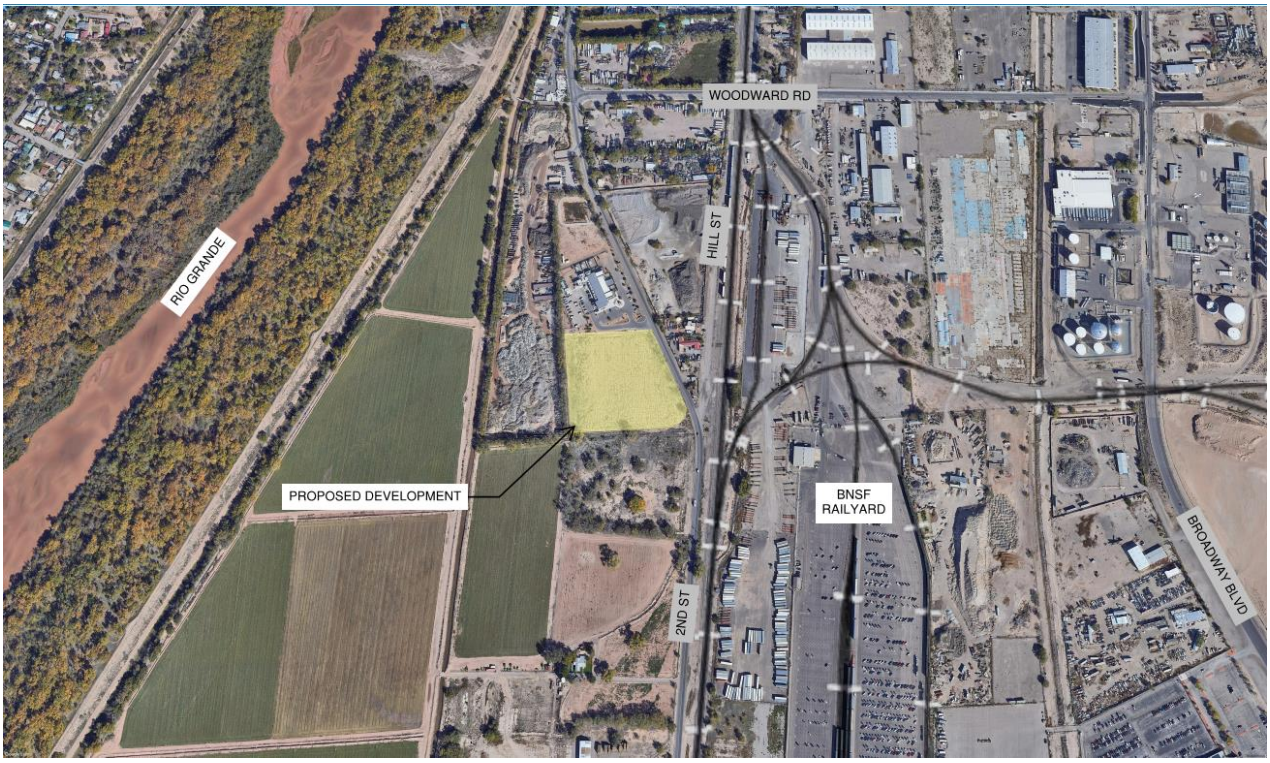


Figure 1 - Vicinity Map

4. Relevant Drainage Reports & Drainage Plans

As part of this analysis, an evaluation of previously completed drainage reports and master plans for the site and neighboring infrastructure was conducted. A list of the previously completed documents referenced in this analysis can be found below.

- Animal Care Center Grading and Drainage Plan (see Appendix A)

5. Flood Hazard Zones

The site is located between 2 (two) separate FEMA Maps, 35001C0341G for the eastern portion as shown in Figure 2 and 35001C0342G for the western portion as shown in Figure 3. The maps identify that the property lies within Zone X which is delineated by areas that reside outside of the 0.2% chance annual floodplain.

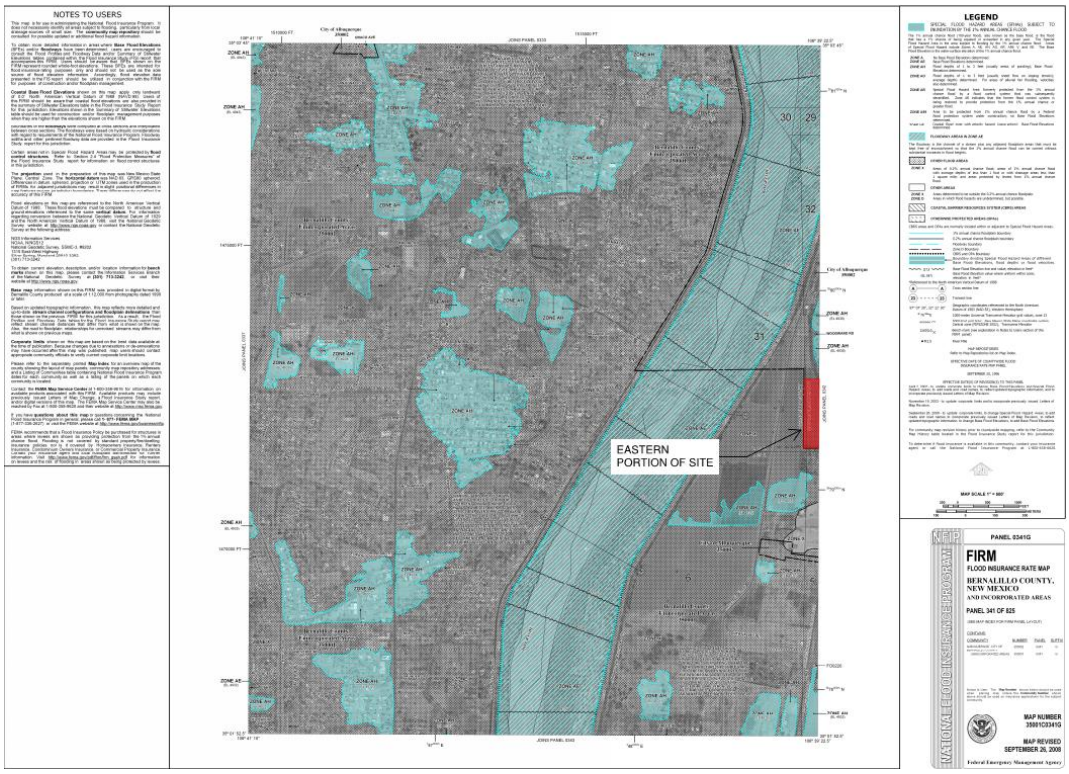


Figure 2 - FEMA FIRMette Map 1 (Eastern Portion)

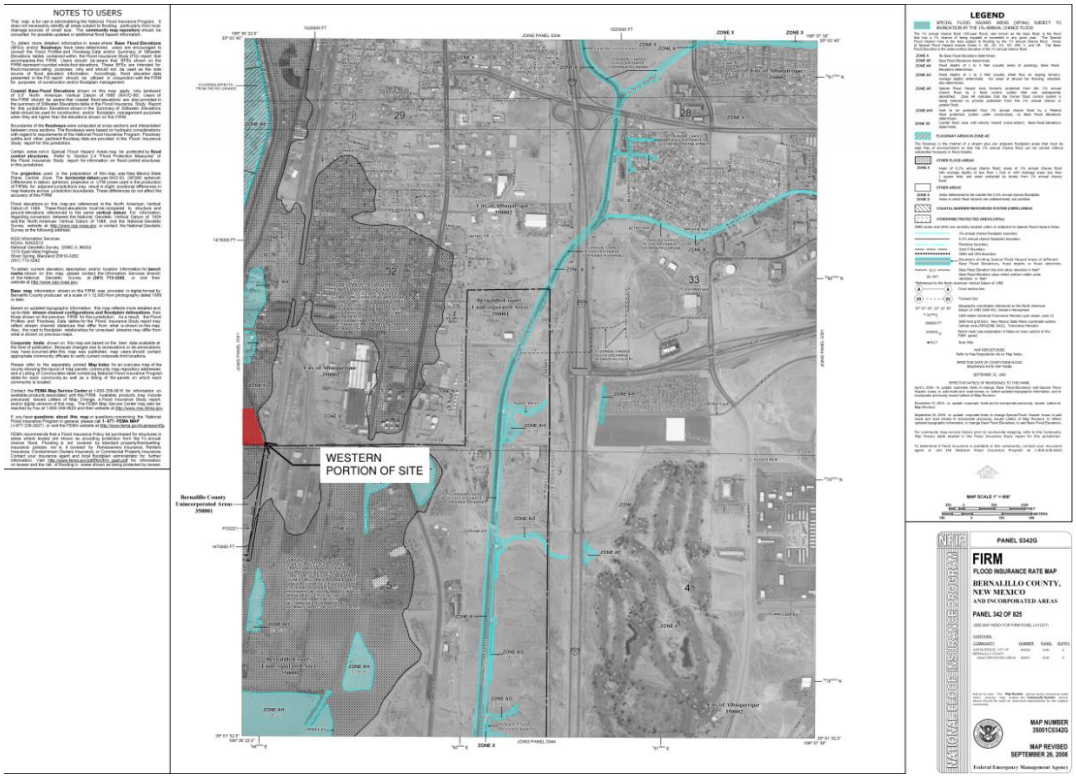


Figure 3 - FEMA FIRMette Map 2 (Western Portion)

6. Methodology

This drainage study is based on the procedures outlined in the COA's DPM, Revised September 2020. This study uses the Weighted E method as described in Part 6-2(A) of the DPM to estimate the runoff and volume for the site based on a 100-year, 10-day storm event for total retention. The calculations and tables used in this evaluation can be found in Appendix B of this report for reference.

7. Precipitation

As detailed in the previous section, the 100-yr 10-day design storm was used to estimate the peak runoff and retention pond sizing for this site. Precipitation values used to extract this information were obtained from Table 6.2.2 of the COA DPM for Zone 2.

8. Land Treatments

The land treatments used in the Weighted E method are as described in the COA DPM Table 6.2.3 and are summarized below:

- Land Treatment A – Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined Arroyos.
- Land Treatment B – Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
- Land Treatment C – Soil compacted by human activity. Unpaved parking, roads and trail. Most vacant lots. Gavel or rock on plastic (desert landscaping)
- Land Treatment D – Impervious areas, pavement and roofs.

The undeveloped site is comprised completely of Land Treatment A as it has not been previously disturbed by construction activities. The developed site contains a mixture of land treatments including B, C, and D.

9. Existing Undeveloped Conditions

The existing undeveloped site was treated as one complete basin for the purpose of estimating the maximum storm water runoff and volumes generated during the storming event. The entirety of the basin was characterized by Land Treatment A as it has not been previously disturbed. Storm water runoff from the existing undeveloped site does not currently have a means of leaving the site and most (if not all) of the runoff is expected to infiltrate into the shallow groundwater table below. The estimated historical runoff associated with the undeveloped site is approximately 12.5 cfs.

10. Proposed Developed Conditions

The following sections detail the infrastructure necessary for the attenuation of the anticipated storm runoff associated with the proposed development.

10.1. Basins

As discussed previously, the proposed site was split into 2 (two) independent development areas for the purpose of controlling the storm water runoff quantities. The northern section which comprises the warehouse and trailer parking areas and the southern section which is comprised of the concrete batching area, a shop, and an office facility. Each of these developed sections will contribute their own drainage volumes and associated infrastructure to control those volumes. The conceptual site/grading plans for these separate layouts can be found in Appendix C for reference.

The northern section, which encompasses a total of 56% of the developed area, is estimated to produce a total of 47,621 ft^3 of runoff during the 100-year, 10-day storm event at a flowrate of 16.6 ft^3/s. This runoff will be routed via surface flow throughout the development to 1 (one) of 3 (three) on-site retention ponds with a total storage volume of 55,560 ft^3. These retention ponds will all be constructed with a 2' wide by 3' deep bio-infiltration trench that will be filled with gravel to promote drainage into the subsurface.

The southern section, which encompasses the remaining 44% of the developed area, is estimated to produce a total of 18,004 ft^3 of runoff during the 100-year, 10-day storm event at a flowrate of 10.5 ft^3/s. This runoff will be routed via surface flow throughout the development to 1 (one) of 2 (two) on-site retention ponds with a total storage volume of 20,760 ft^3. These retention ponds will all be constructed with a 2' wide by 3' deep bio-infiltration trench that will be filled with gravel to promote drainage into the subsurface.

10.2. Retention Ponds

Runoff from the proposed development will sheet flow into a series of on-site retention ponds as discussed in the previous section. These retention ponds were sized to accommodate the 100-year, 10-day storm event as required in the COA DPM. A summary of each of the retention ponds proposed for this development can be found in Table 1 below.

Table 1 - Retention Pond Summary

Pond #	Area (ft^2)	Pond Depth (ft)	Pond Volume (ft^3)	Infiltration Trench Length (ft)
Developed Area - North				
1	2,860	6	17,160	70
2	3,205	6	19,230	50
3	3,205	6	19,230	50
Developed Area - South				
1	2,175	4	8,700	60
2	3,015	4	12,060	90

Each of these retention structures will be constructed with a 2’ wide by 3’ deep trench along the bottom of the ponds. The trenches will be backfilled with gravel wrapped in a layer of geotextile fabric to facilitate the drainage into the subsurface layers. The total retention of all storm water from the developed site will assist in maintaining the historic stormwater control patterns for this area.

11. Stormwater Quality

The U.S. Environmental Protection Agency (EPA) Report, Estimating Predevelopment Hydrology in the Middle Rio Grande Watershed, New Mexico, TetraTech, April 2014, EPA Publication Number 832R-14-007, yields runoff values of 0.42 inches for the 90th percentile storm. To calculate the required stormwater quality volume (SWQV), the impervious area associated with the development is multiplied by this value of 0.42 inches. Since this site is going to handle the storm runoff via on-site retention ponds, no runoff will be discharged from this site and the SWQV will be accommodated within these retention structures accordingly.

12. Conclusion

This report highlights that the stormwater flows as a result of the proposed development will continue to infiltrate into the subsurface to match pre-development conditions. All stormwater from the developed area will be handled via on-site infrastructure and no public infrastructure improvements are required for this development.

APPENDIX A
ANIMAL CLINIC GRADING AND DRAINAGE PLAN

VICINITY MAP

LEGEND

— — —	EXISTING CONTOUR LINE
———	NEW CONTOUR LINE
TC / FL	TOP OF CURB / FLOW LINE
FF = 4938.6	FINISH FLOOR ELEVATION
36.7	SPOT ELEVATION
———	STORM DRAIN
■■■■■	GRAVEL TRENCH

DRAINAGE CALCULATIONS

LEGAL: Tracts 100-A & 100-B, MRGCD Map 44, Bernalillo County, NM

AREA: Total= 5.468 Acres Project Site=148,350 SF (3.40 acres)

BENCHMARK: City of Albuquerque Station 'NM 47-2D' being an aluminum disc ELEV= 4942.068 (NAVD 1988)

SURVEYOR: Harris Surveying, Inc. dated April, 2015

PRECIPITATION ZONE: 2

FLOOD HAZARD: From FEMA Map 35001C0356H (dated 8/16/2012), this site is identified as being within Zone 'X' which is determined to be outside the 0.2% chance annual floodplain.

EXISTING CONDITIONS: The existing site is undeveloped, is very flat, and has been used as irrigated fields. It slopes very slightly from the north down to the south at approximately 0.25%.

PROPOSED IMPROVEMENTS: The proposed improvements include a 17,000 SF single-story building with associated paved parking and landscaping. There will also be outside kennel areas with concrete and gravel surfacing and gravel surfaced overflow parking areas.

DRAINAGE APPROACH: The drainage plan will direct flows to the perimeter of the parking areas where multiple landscaped depressions are proposed. Developed runoff will be conveyed to the ponding areas both as surface flow and piped roof drain discharge. Proposed gravel-filled trenches at the detention pond bottoms will allow the ponded storm water to percolate to the coarse sand strata located at approximately 4' below the ground surface. This allows the detention ponds to drain within a 6-hour period. City of Albuquerque DPM Section 22 Hydrology criteria provides the following runoff rates and volumes:

Precipitation Zone: 1
Existing land treatment: 100% A
Q= (3.40)(1.56) = 5.3 CFS
V= (148,350)(0.53/12)= 6,552 CF

Proposed land treatment: 26% A, 2% B, 21% C, & 51% D (Unit Q=3.51 CFS/AC)
Q= (3.40)(3.51)= 11.9 CFS
V= (38570)(.0442)+(2950)(.065)+(31160)(.0942)+(75670)(.1767)= 18,202 CF

Storage Volume Provided= 24,350 CF (>18,202 therefore OK)

FIRST FLUSH: The first flush volume is calculated using the impervious areas. It is based on 0.44" rainfall less the 0.1" initial abstraction giving
-- V= (75,670)(0.34/12) = 2,145 CF
The depressed landscape pond areas provide 2,180 CF storage volume at approximately 0.1' depth.

WATER CONSERVATION: The site will detain the 90th percentile storm runoff volume which is based on 0.615" rainfall (0.615/12=.05125'), calculated as:
-- V= (148,350)(.05125)= 7,603 CF (provided at 0.33' pond depth)

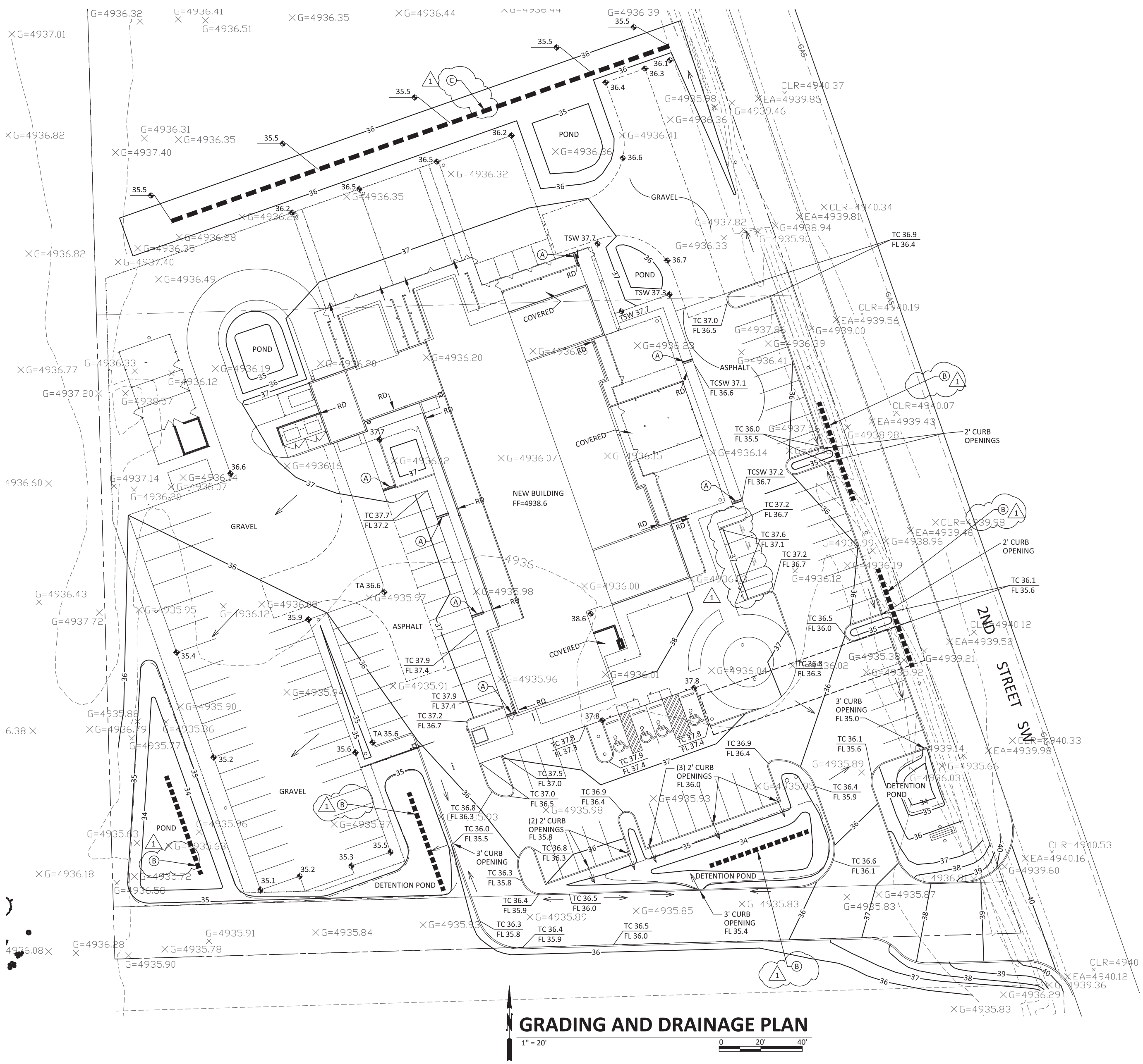
The proposed improvements won't increase site runoff. Additionally the proposed onsite detention volumes address the first flush and water conservation storage requirements.

KEYED NOTES

A. INSTALL TRENCH DRAIN IN SIDEWALK AT DOWNSPOUT LOCATION SHOWN.

B. INSTALL 50 LF BY 2' WIDE BY 3' DEEP TRENCH AT POND BOTTOM. TRENCH TO BE BACKFILLED WITH 3/4-1" GRAVEL WRAPPED ON ALL SIDES WITH NON WOVEN GEOTEXTILE FABRIC (4 OZ/SY WITH A FLOW RATE OF 140 GPM/SF).

C. INSTALL 250 LF BY 2' WIDE BY 3' DEEP TRENCH AT POND BOTTOM. TRENCH TO BE BACKFILLED WITH 3/4-1" GRAVEL WRAPPED ON ALL SIDES WITH NON WOVEN GEOTEXTILE FABRIC (4 OZ/SY WITH A FLOW RATE OF 140 GPM/SF).



GRADING AND DRAINAGE PLAN

1" = 20'

ISSUED FOR BIDS & PERMIT 12/04/15

BDA Architecture, P.C.
Gladysz & Usiak Architecture, LLC

BERNALILLO COUNTY
ANIMAL CARE AND RESOURCE CENTER
3001 2nd Street SW
Albuquerque, New Mexico 87105
Bernalillo County

GRADING & DRAINAGE PLAN

REV.#	DATE	COMMENTS
REVISION: 1	01-06-16	Revised Parking Spaces and added gravel trenches

REVIEWS: INITIALS SVM CB; SVM SVM

BCAC
PROJECT NO.: 1431
DRAWN: CB
DATE: 12/04/15

C101

APPENDIX B
WEIGHTED E METHOD STORM RUNOFF CALCULATION

Weighted E Method

Zone:
Zone 2
UnDeveloped Basins - North

Basin	Basin Area			Treatments								100-Year			10-Year			2-Year		
	Area (sf)	Area (acres)	Area (sq miles)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs
UnDeveloped	180,052.0	4.13	0.006	100%	4.13	0%	0.00	0%	0.00	0%	0.00	0.620	0.214	7.07	0.150	0.052	1.69	0.000	0.000	0.00
Total	**180,052.0**	**4.133**	**0.00646**		**4.13**		**0.000**		**0.000**		**0.000**		**0.214**	**7.07**		**0.052**	**1.69**		**0.000**	**0.00**

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)
Volume = Weighted D * Total Area
Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

$V_{10\text{-}DAY}=V_{6HR}+A_D(P_{10DAYS}-P_{6HR})/12$ IN/FT

P_{10DAYS} = 3.62 In (From DPM Table 6.2.2)

P_{6HR} = 2.29 In (From DPM Table 6.2.2)

6-Hour Excess Precipitation, 'E' (DPM 6.2.13)

Zone:	Event	A	B	C	D
Zone 2	100 Year	0.62	0.8	1.03	2.33
Zone 2	10 Year	0.15	0.3	0.48	1.51
Zone 2	2 Year	0	0.02	0.16	0.98

Peak Discharge Rate for Small Watersheds (DPM 6.2.14)

Zone:	Event	A	B	C	D
Zone 2	100 Year	1.71	2.36	3.05	4.34
Zone 2	10 Year	0.41	0.95	1.59	2.71
Zone 2	2 Year	0	0.08	0.61	1.66

6-Hour Excess Precipitation, 'E' (DPM 6.2.13)

Zone:	Event	A	B	C	D
Zone 1	2 Year	0	0.01	0.13	0.92
Zone 2	2 Year	0	0.02	0.16	0.98
Zone 3	2 Year	0	0.05	0.19	1.05
Zone 4	2 Year	0	0.28	0.87	1.39
Zone 1	100 Year	0.55	0.73	0.95	2.24
Zone 2	100 Year	0.62	0.8	1.03	2.33
Zone 3	100 Year	0.67	0.86	1.09	2.58
Zone 4	100 Year	0.76	0.95	1.2	3.34
Zone 1	10 Year	0.11	0.26	0.43	1.43
Zone 2	10 Year	0.15	0.3	0.48	1.51
Zone 3	10 Year	0.18	0.34	0.52	1.64
Zone 4	10 Year	0.25	0.41	0.59	2.15

Peak Discharge Rate for Small Watersheds (DPM 6.2.14)

Zone:	Event	A	B	C	D
Zone 1	2 Year	0	0.02	0.5	1.56
Zone 2	2 Year	0	0.08	0.61	1.66
Zone 3	2 Year	0	0.15	0.71	1.73
Zone 4	2 Year	0	0.28	0.87	1.88
Zone 1	100 Year	1.54	2.16	2.87	4.12
Zone 2	100 Year	1.71	2.36	3.05	4.34
Zone 3	100 Year	1.84	2.49	3.17	4.49
Zone 4	100 Year	2.09	2.73	3.41	4.78
Zone 1	10 Year	0.3	0.81	1.46	2.57
Zone 2	10 Year	0.41	0.95	1.59	2.71
Zone 3	10 Year	0.51	1.07	1.69	2.81
Zone 4	10 Year	0.7	1.28	1.89	3.04

Weighted E Method

Zone:
Zone 2
Developed Basins - North

Basin	Basin Area			Treatments								100-Year			10-Year			2-Year		
	Area (sf)	Area (acres)	Area (sq miles)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs
DEVELOPED SITE	180,052.0	4.13	0.006	0%	0.00	17%	0.70	0%	0.00	83%	3.43	2.070	0.713	16.55	1.304	0.449	9.96	0.817	0.281	5.75
Total	**180,052.0**	**4.133**	**0.00646**		**0.00**		**0.703**		**0.000**		**3.431**		**0.713**	**16.55**		**0.449**	**9.96**		**0.281**	**5.75**

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)
Volume = Weighted D * Total Area
Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

$V_{10\text{-}DAY}=V_{6HR}+A_D(P_{10DAYS}-P_{6HR})/12$ IN/FT

P_{10DAYS} = 3.62 In (From DPM Table 6.2.2)
P_{6HR} = 2.29 In (From DPM Table 6.2.2)

Storm Retention Pond Volume Requirements

100YR,6HR		**31,057 CU.FT.**
100YR, 10DAY	**RET. POND**	**47,621 CU.FT.**

6-Hour Excess Precipitation, 'E' (In) (DPM 6.2.7)

Zone:	Event	A	B	C	D
Zone 2	100 Year	0.62	0.8	1.03	2.33
Zone 2	10 Year	0.15	0.3	0.48	1.51
Zone 2	2 Year	0	0.02	0.16	0.98

Peak Discharge Rate (cfs/acre) for Small Watersheds (DPM 6.2.8)

Zone:	Event	A	B	C	D
Zone 2	100 Year	1.71	2.36	3.05	4.34
Zone 2	10 Year	0.41	0.95	1.59	2.71
Zone 2	2 Year	0	0.08	0.61	1.66

6-Hour Excess Precipitation, 'E' (DPM 6.2.7)

Zone:	Event	A	B	C	D
Zone 1	2 Year	0	0.01	0.13	0.92
Zone 2	2 Year	0	0.02	0.16	0.98
Zone 3	2 Year	0	0.05	0.19	1.05
Zone 4	2 Year	0	0.28	0.87	1.39
Zone 1	100 Year	0.55	0.73	0.95	2.24
Zone 2	100 Year	0.62	0.8	1.03	2.33
Zone 3	100 Year	0.67	0.86	1.09	2.58
Zone 4	100 Year	0.76	0.95	1.2	3.34
Zone 1	10 Year	0.11	0.26	0.43	1.43
Zone 2	10 Year	0.15	0.3	0.48	1.51
Zone 3	10 Year	0.18	0.34	0.52	1.64
Zone 4	10 Year	0.25	0.41	0.59	2.15

Peak Discharge Rate for Small Watersheds (DPM 6.2.8)

Zone:	Event	A	B	C	D
Zone 1	2 Year	0	0.02	0.5	1.56
Zone 2	2 Year	0	0.08	0.61	1.66
Zone 3	2 Year	0	0.15	0.71	1.73
Zone 4	2 Year	0	0.28	0.87	1.88
Zone 1	100 Year	1.54	2.16	2.87	4.12
Zone 2	100 Year	1.71	2.36	3.05	4.34
Zone 3	100 Year	1.84	2.49	3.17	4.49
Zone 4	100 Year	2.09	2.73	3.41	4.78
Zone 1	10 Year	0.3	0.81	1.46	2.57
Zone 2	10 Year	0.41	0.95	1.59	2.71
Zone 3	10 Year	0.51	1.07	1.69	2.81
Zone 4	10 Year	0.7	1.28	1.89	3.04

Weighted E Method

Zone:
Zone 2
UnDeveloped Basins - South

Basin	Basin Area			Treatments								100-Year			10-Year			2-Year		
	Area (sf)	Area (acres)	Area (sq miles)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs
Undeveloped	140,505.0	3.23	0.005	100%	3.23	0%	0.00	0%	0.00	0%	0.00	0.620	0.167	5.52	0.150	0.040	1.32	0.000	0.000	0.00
Total	**140,505.0**	**3.226**	**0.00504**		**3.23**		**0.000**		**0.000**		**0.000**		**0.167**	**5.52**		**0.040**	**1.32**		**0.000**	**0.00**

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)
Volume = Weighted D * Total Area
Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

$V_{10\text{-DAY}}=V_{6HR}+A_D(P_{10DAYS}-P_{6HR})/12$ IN/FT

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Zone 1	10 Year	0.3	0.81	1.46	2.57
Zone 2	10 Year	0.41	0.95	1.59	2.71
Zone 3	10 Year	0.51	1.07	1.69	2.81
Zone 4	10 Year	0.7	1.28	1.89	3.04

Weighted E Method

Zone:
Zone 2
Developed Basins - South

Basin	Basin Area			Treatments								100-Year			10-Year			2-Year		
	Area (sf)	Area (acres)	Area (sq miles)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs
DEVELOPED SITE	140,506.0	3.23	0.005	0%	0.00	8%	0.26	72%	2.32	20%	0.65	1.272	0.342	10.49	0.672	0.181	5.69	0.313	0.084	2.51
Total	**140,506.0**	**3.226**	**0.00504**		**0.00**		**0.258**		**2.322**		**0.645**		**0.342**	**10.49**		**0.181**	**5.69**		**0.084**	**2.51**

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)
Volume = Weighted D * Total Area
Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

$V_{10\text{-}DAY}=V_{6HR}+A_D(P_{10DAYS}-P_{6HR})/12$ IN/FT

P_{10DAYS} = 3.62 In (From DPM Table 6.2.2)

P_{6HR} = 2.29 In (From DPM Table 6.2.2)

Storm Retention Pond Volume Requirements

100YR,6HR		**14,889**	**CU.FT.**
100YR, 10DAY	**RET. POND**	**18,004**	**CU.FT.**

6-Hour Excess Precipitation, 'E' (In) (DPM 6.2.7)

Zone:	Event	A	B	C	D
Zone 2	100 Year	0.62	0.8	1.03	2.33
Zone 2	10 Year	0.15	0.3	0.48	1.51
Zone 2	2 Year	0	0.02	0.16	0.98

Peak Discharge Rate (cfs/acre) for Small Watersheds (DPM 6.2.8)

Zone:	Event	A	B	C	D
Zone 2	100 Year	1.71	2.36	3.05	4.34
Zone 2	10 Year	0.41	0.95	1.59	2.71
Zone 2	2 Year	0	0.08	0.61	1.66

6-Hour Excess Precipitation, 'E' (DPM 6.2.7)

Zone:	Event	A	B	C	D
Zone 1	2 Year	0	0.01	0.13	0.92
Zone 2	2 Year	0	0.02	0.16	0.98
Zone 3	2 Year	0	0.05	0.19	1.05
Zone 4	2 Year	0	0.28	0.87	1.39
Zone 1	100 Year	0.55	0.73	0.95	2.24
Zone 2	100 Year	0.62	0.8	1.03	2.33
Zone 3	100 Year	0.67	0.86	1.09	2.58
Zone 4	100 Year	0.76	0.95	1.2	3.34
Zone 1	10 Year	0.11	0.26	0.43	1.43
Zone 2	10 Year	0.15	0.3	0.48	1.51
Zone 3	10 Year	0.18	0.34	0.52	1.64
Zone 4	10 Year	0.25	0.41	0.59	2.15

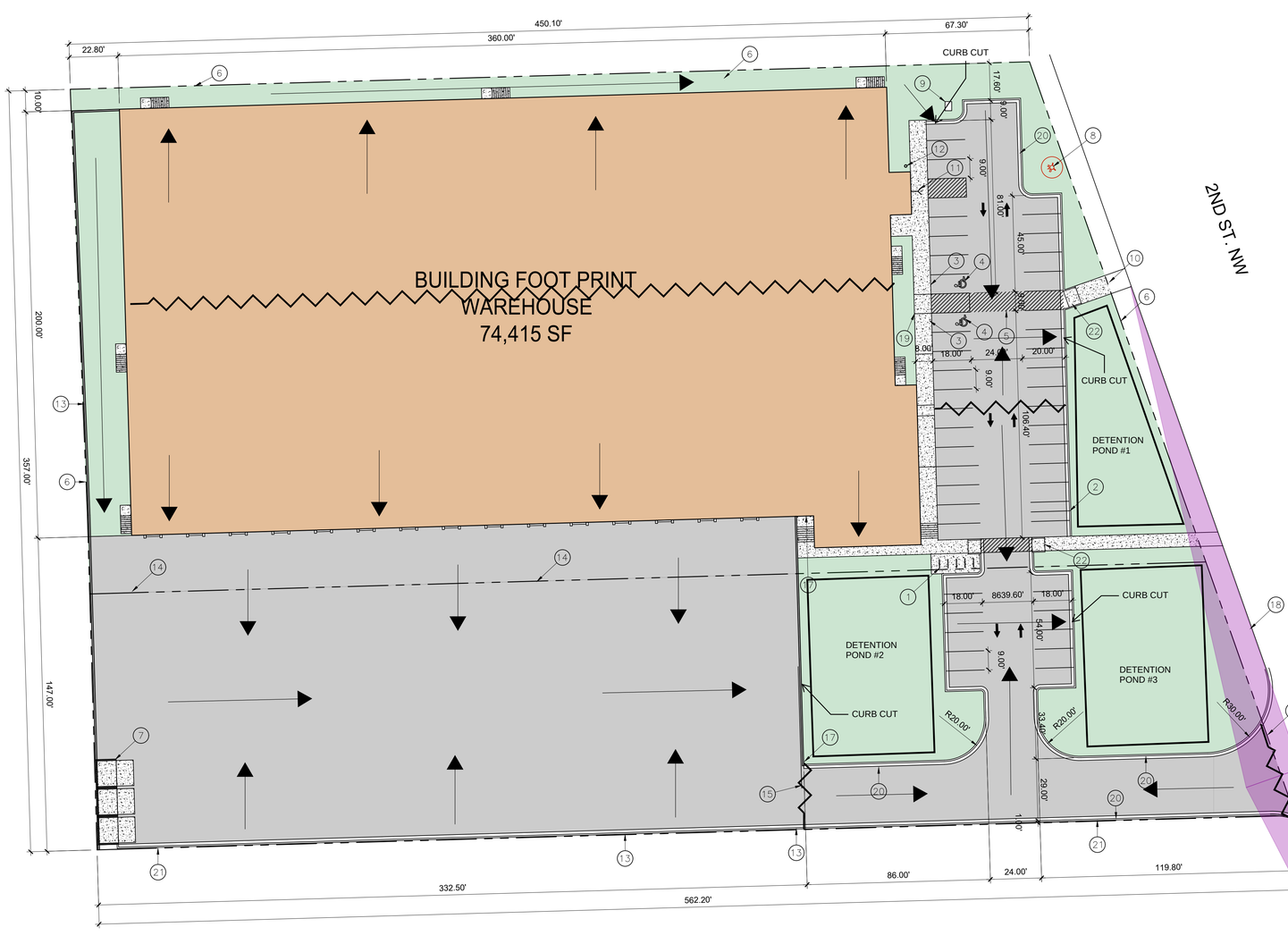
Peak Discharge Rate for Small Watersheds (DPM 6.2.8)

Zone:	Event	A	B	C	D
Zone 1	2 Year	0	0.02	0.5	1.56
Zone 2	2 Year	0	0.08	0.61	1.66
Zone 3	2 Year	0	0.15	0.71	1.73
Zone 4	2 Year	0	0.28	0.87	1.88
Zone 1	100 Year	1.54	2.16	2.87	4.12
Zone 2	100 Year	1.71	2.36	3.05	4.34
Zone 3	100 Year	1.84	2.49	3.17	4.49
Zone 4	100 Year	2.09	2.73	3.41	4.78
Zone 1	10 Year	0.3	0.81	1.46	2.57
Zone 2	10 Year	0.41	0.95	1.59	2.71
Zone 3	10 Year	0.51	1.07	1.69	2.81
Zone 4	10 Year	0.7	1.28	1.89	3.04

APPENDIX C
CONCEPTUAL SITE AND GRADING PLANS

KEYED NOTES

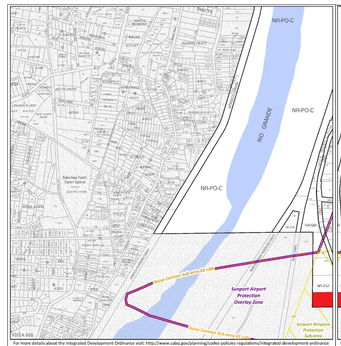
1. BIKE RACK, REF DETAIL ON SHEET A-100
2. MOTORCYCLE PARKING SIGN REF DETAIL ON SHEET A-100
3. H.C. PARKING SIGN, REF DETAIL ON SHEET A-100
4. HC PARKING SYMBOL
5. ACCESSIBLE ROUTE
6. EXISTING PROPERTY LINE
7. REFUSE CONTAINER, REF DETAIL ON SHEET A-100
8. NEW FIRE HYDRANT
9. IRRIGATION BOX
10. NEW SIDEWALK, 2% MAX CROSS SLOPE, 1.5% PREFERRED CROSS SLOPE, REFERENCE CITY OF ALBUQUERQUE STANDARD DETAIL 2430
11. FIRE DEPT. CONNECTION
12. PIV
13. 6' CMU WALL
14. EXISTING PROPERTY LINE TO BE VACATED
15. VEHICULAR GATE
19. CURB RAMP, REFERENCE CITY OF ALBUQUERQUE STANDARD DETAIL 2441, NOTE DETAIL 2446 FOR DETECTABLE WARNING SURFACE.
20. KNOX BOX
21. CLEAR SIGHT TRIANGLE. LANDSCAPING, FENCING AND SIGNING WILL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES AND SHRUBBERY BETWEEN 3 AND 8 FT TALL (AS MEASURED FROM THE GUTTER PAN) WILL NOT BE ACCEPTABLE IN THE CLEAR SIGHT TRIANGLE
22. CURB RAMP, REFERENCE CITY OF ALBUQUERQUE STANDARD DETAIL 2441, NOTE DETAIL 2446 FOR DETECTABLE WARNING SURFACE.
23. RED PAINT WITH "FIRE LANE" NOTATION.
24. NEW PROPERTY LINE
25. EGRESS STAIR



SITE PLAN

SCALE: 1" = 30'-0"

0' 15' 30' 60' 90' 120'



IDO Zone Atlas May 2018

The Zone Districts and Overlay Zones are established by the Integrated Development Ordinance (IDO).

IDO Zoning information as of May 17, 2018

Gray Shading Represents Area Outside of the City Limits

Zone Atlas Page: **M-13-Z**

Easement, Escarpment, Petroglyph National Monument, Areas Outside of City Limits, Airport Protection Overlay (APO) Zone, Character Protection Overlay (CPO) Zone, Historic Protection Overlay (HPO) Zone, View Protection Overlay (VPO) Zone

0 250 500 1,000 Feet

IDO Zone Atlas May 2018

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IDO Zoning information as of May 17, 2018

Gray Shading Represents Area Outside of the City Limits

Zone Atlas Page: **M-14-Z**

Easement, Escarpment, Petroglyph National Monument, Areas Outside of City Limits, Airport Protection Overlay (APO) Zone, Character Protection Overlay (CPO) Zone, Historic Protection Overlay (HPO) Zone, View Protection Overlay (VPO) Zone

0 250 500 1,000 Feet

NOTE:
ALL IMPROVEMENTS LOCATED IN THE RIGHT OF WAY MUST BE INCLUDED IN ON A PUBLIC WORK ORDER.

LANDSCAPING, FENCING AND SIGNING WILL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES AND SHRUBBERY BETWEEN 3 AND 8 FEET TALL (AS MEASURED FROM THE GUTTER PAN) WILL NOT BE ACCEPTABLE IN THE CLEAR SIGHT TRIANGLE.

ALL PAVING SHALL BE SHALL BE ASPHALT UNLESS NOTED OTHERWISE, REF. DETAIL ON SHEET A-100.1.

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ALL OUTDOOR LIGHT FIXTURES SHALL BE LED. FIXTURES 70 WATTS OR GREATER SHALL BE SHIELDED USING FULL CUTOFF LIGHT FIXTURES.

BUILDING MOUNTED SIGNS SHALL BE EXTERNALLY ILLUMINATED AND SHALL NOT EXTEND MORE THAN 2 FEET ABOVE THE EXTERIOR WALLS OF THE BUILDING.

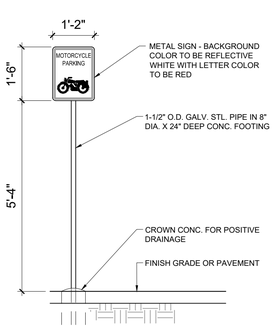
CONCEPTUAL DRAINAGE PLAN LEGEND:

CONCEPTUAL DRAINAGE FLOW ARROW

WATER BLOCK

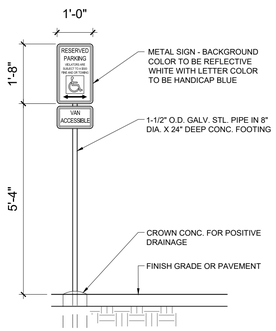
GROSS LOT AREA = 321,346 SF
BUILDINGS = SF
NET LOT AREA = SF
REQUIRED LANDSCAPE AREA @ 15% = SF ; SF PROVIDED

UPC: 101405502501930102, 101405502304230103
LEGAL: MRGCD MAP #44 TR 100-D
ZONING: NR-GM
ZONE ATLAS PAGE: M-13 & M-14



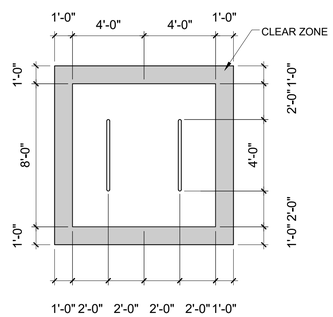
MOTORCYCLE SIGN

SCALE: 1/2" = 1'-0"



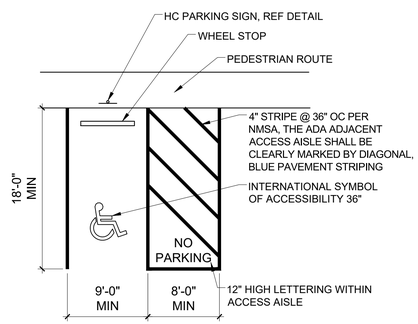
HC SIGN

SCALE: NTS



BIKE PARKING

SCALE: 1/4" = 1'-0"



ADA PARKING

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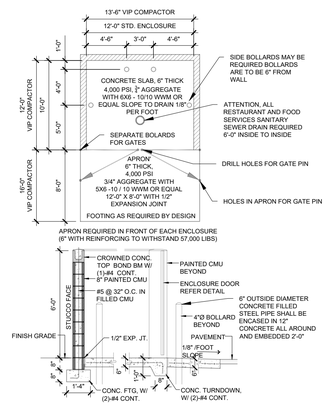


TRASH ENCLOSURE

SCALE: 1/8" = 1'-0"

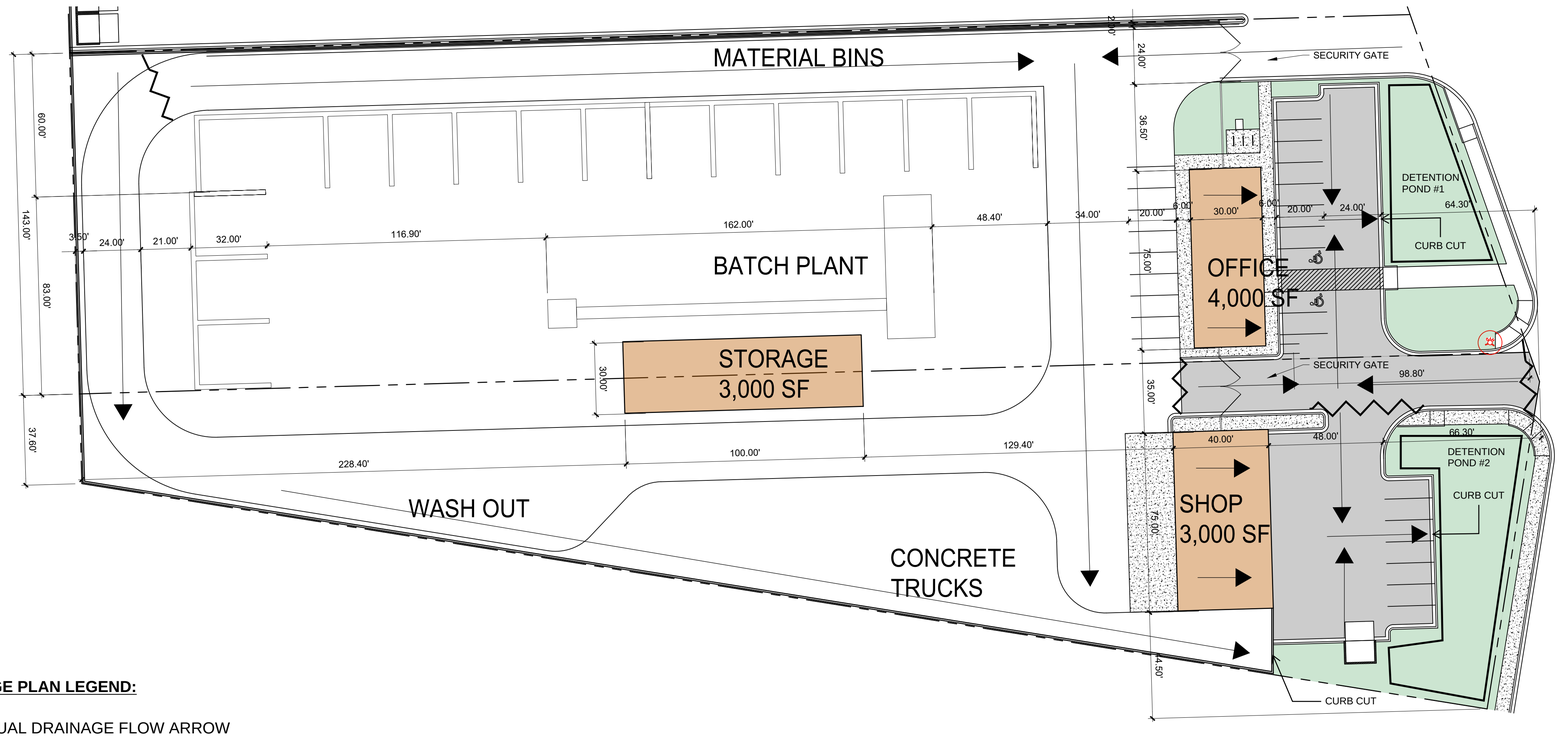
No	Revision Item	Date

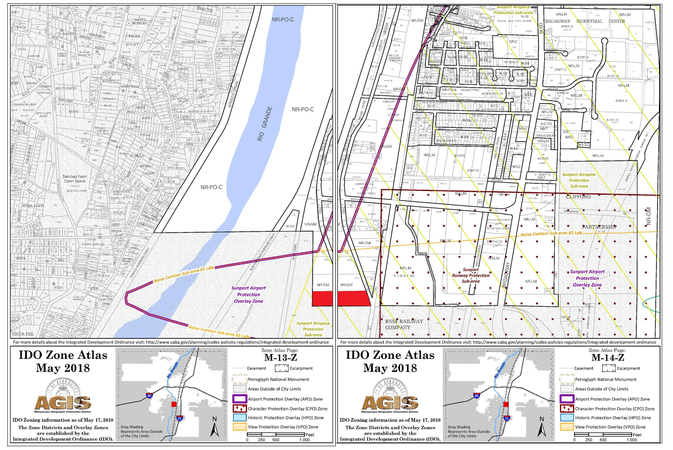
COYOTE WAREHOUSE
3053 2nd ST NW
ALBUQUERQUE, NM 87105

DRAWING TITLE

MASTER PLAN

SEAL	DESIGNED	PROJECT NO
	DRAWN	SCALE
	CHECKED	DRAWING NO **A-100**
	REVIEWED	
	DATE 8/17/2023	





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SITE PLAN

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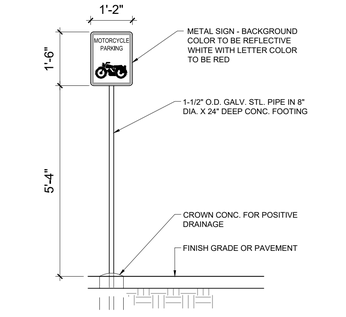

MOTORCYCLE SIGN

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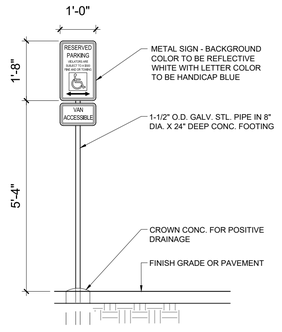

HC SIGN

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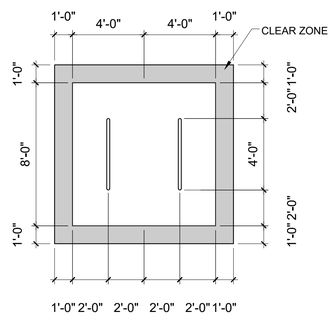

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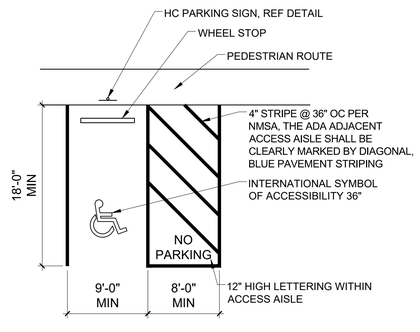

ADA PARKING

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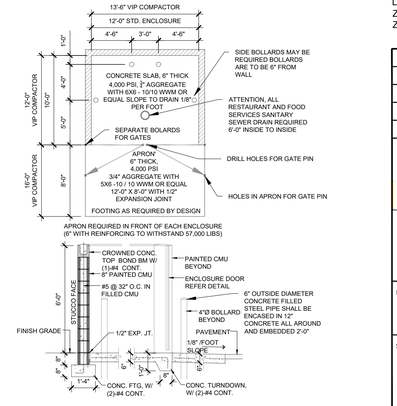

TRASH ENCLOSURE

SCALE: 1/8" = 1'-0"

No	Revision Item	Date

COYOTE BATCH PLANT
3059 2nd ST NW
ALBUQUERQUE, NM 87105

DRAWING TITLE
SITE PLAN

SEAL	DESIGNED	PROJECT NO
	DRAWN	SCALE
	CHECKED	DRAWING NO **A-100**
	REVIEWED	
	DATE 8/17/2023	