CITY OF ALBUQUERQUE



Aug. 21, 2017

Manny Nuno PE DCI Engineers 2600 Michelson Dr., Suite 930 Irvine, CA 92612

RE: Oso Bio Syringe Line

Grading Plan for Building Permit 4401 Alexander Blvd

Engineer's Stamp Date 7/31/17 Hydrology File: F16D003B1

Dear Mr. Nuno:

Based on the information provided in the submittal received on 8/9/17 the above-referenced Grading Plan is missing and cannot be approved for Building Permit. A G&D Plan must be provided when Paving 2000 sf. or more and for buildings of 1000 sf. or more. After the Grading and Drainage Plan is approved by Hydrology it should be inserted into the Building Permit application. The Grading and drainage plan should address the following:

- 1. It should include a zone atlas map showing the location of the site, a legal description, and show the limits of disturbance.
- 2. Provide a narrative that describes the allowable 100 year peak rate of storm water runoff (32 cfs) from block 5. All of Tract B and a portion of Tract A drains into the pond and the other portion of Tract B free discharges less than 32 cfs. Describe the pond discharge rate (1.08 cfs) as being less than the 0.1 cfs per acre allowed.
- 3. The required pond volume must be recalculated based on the actual area draining to it. The as-built pond volume calculations should include a table with the area of the contours, and volume calculations using the conic method.
- 4. Both existing and proposed elevations in all areas of construction. If it is your intent to match existing grade then add notes instructing the contractor to match existing grade and/or the existing floor elevation(s) instead of actual spot elevations.
- 5. Provide detailed topographic survey of the three entrances and the pond. The topo survey should extend far enough into the parking lot so to include the entire limits of the 100 year spread of water. Both at the pond and at the entrances.

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

- 6. Include hydraulic capacity calculations at each of the three driveways on the north as necessary to insure that the onsite drainage reaches the pond and none of it runs offsite at the driveways.
- 7. A pond maintenance plan and schedule of inspections should be specified on the G&D Plan.
- 8. The pond must be cleaned and inspected prior to Certificate of Occupancy. All trees should be removed from the embankment, dead limbs should be removed, and the outlet structure should be uncovered and reconstructed to prevent clogging. An Engineer's Certification will be required prior to Certificate of Occupancy.
- 9. The existing Private Facility Drainage Covenant must be updated. It should include the new topographic information, maintenance and inspection schedule, outlet details, and volume calculations as an exhibit. The Private Facility Drainage Covenant should be replaced with a Drainage Covenant.

If you have any questions, I can be contacted at 924-3986 or jhughes@cabq.gov.

Sincerely,

James D. Hughes 4.E.

Principal Engineer, Planning Dept. Development Review Services



DRAINAGE REPORT

OSO BIO SYRINGE LINE PROJECT

ALBUQUERQUE, NEW MEXICO



This report has been prepared by the staff of DCI Engineers under the direction of the undersigned professional engineer whose stamp and signature appears hereon.

Prepared by:



2600 Michelson Drive, Suite 930 •Irvine, CA 92614 Tele: (949) 892-4950 •FAX: (949) 892-4970

213-298-3763

DCI Job No.: 16072-0007

Date: July 31, 2017

Revised:

The methods, descriptions, and design calculations shown in this design report conform to the Albuquerque Development Process Manual (Chapter 22 Drainage, Flood Control and Erosion Control) unless noted otherwise, and are under the jurisdiction of the City of Albuquerque relative to the collection, treatment, and disposal of stormwater runoff.



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: Oso Bio Syringe Line			Building Permit #:		City Drainage #:
DRB#:	EPC#:			Work O	
Legal Description: TR B BLK 5 PLAT OF TRACTS A AND	B BLK 5 SUNDT'S	S		-	
City Address: 4401 Alexander Blvd, Albuquerque, New Mexi	ico				
Engineering Firm: DCI Engineers	112			Contact:	Manny Nuño, PE
Address: 2600 Michelson Drive, Suite 930, Irvine, CA 92612	3			_	
Phone#: 949-892-4955	Fax#: 949-89	2-4970		E-mail:	mnuno@dci-engineers.com
Oso Bio				Contact:	John Dumas
Address: 4401 Alexander Blvd, Albuquerque, New Mexico		3 Mill			
Phone#: 949-679-4682	Fax#:			E-mail:	jdumas@ipsdb.com
Architect: Integrated Project Services, LLC				Contact:	John Dumas
Address: 2860 Michelle Drive, Suite 200, Irvine, CA 92606					
hone#: 949-679-4682	Fax#: 949-67	9-4683		E-mail:	jdumas@ipsdb.com
Other Contact:				Contact:	
Address:				•	
hone#:	Fax#:			E-mail:	
Check all that Apply: PEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION		15. 4. 6.3	X BUILDING P	ERMIT AF	
DEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO			X BUILDING P	ERMIT AF E OF OCC	PROVAL CUPANCY
DEPARTMENT: × HYDROLOGY/ DRAINAGE FRAFFIC/ TRANSPORTATION	AUG	0 9 2017	× BUILDING P. CERTIFICAT PRELIMINAR	ERMIT AF E OF OCC RY PLAT	PROVAL CUPANCY
DEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO YPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO	AUG		× BUILDING P. CERTIFICAT PRELIMINAF SITE PLAN F	ERMIT AF E OF OCC RY PLAT FOR SUB'I	PROVAL CUPANCY APPROVAL D APPROVAL S PERMIT APPROVAL
DEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO TYPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO	AUG		BUILDING PARTIFICAT PRELIMINATE SITE PLAN FOR SITE PLAN F	ERMIT AF E OF OCC RY PLAT FOR SUB'I OR BLDG APPROV	PROVAL CUPANCY APPROVAL D APPROVAL E PERMIT APPROVAL GAL
DEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO TYPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO CONCEPTUAL G & D PLAN	AUG		PRELIMINAR SITE PLAN F SITE PLAN F FINAL PLAT SIA/ RELEAS	ERMIT AF E OF OCC RY PLAT FOR SUB'! OR BLDG APPROV SE OF FIN.	PROVAL CUPANCY APPROVAL D APPROVAL E PERMIT APPROVAL AL ANCIAL GUARANTEE
DEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO TYPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO CONCEPTUAL G & D PLAN GRADING PLAN	AUG		X BUILDING P. CERTIFICAT PRELIMINAR SITE PLAN F SITE PLAN F FINAL PLAT SIA/ RELEAS FOUNDATIO	ERMIT AF E OF OCC RY PLAT FOR SUB'I OR BLDG APPROV SE OF FIN. N PERMI	PROVAL CUPANCY APPROVAL D APPROVAL E PERMIT APPROVAL AL ANCIAL GUARANTEE T APPROVAL
DEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO TYPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE MASTER PLAN	AUG		BUILDING PARTICLE AND PRELIMINAR SITE PLAN FOR SITE PLAN FOR SIA/ RELEASE FOUNDATION GRADING PROCESSION OF THE PROCESSIO	ERMIT AF E OF OCC TOR SUB'I OR BLDG APPROV E OF FIN. N PERMIT ERMIT AF	PROVAL CUPANCY APPROVAL D APPROVAL E PERMIT APPROVAL AL ANCIAL GUARANTEE T APPROVAL
DEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO TYPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE MASTER PLAN X DRAINAGE REPORT CLOMR/LOMR	AUG N DEVEL		X BUILDING P. CERTIFICAT PRELIMINAR SITE PLAN F SITE PLAN F FINAL PLAT SIA/ RELEAS FOUNDATIO	ERMIT AF E OF OCC RY PLAT FOR SUB'! OR BLDG APPROV GE OF FIN. N PERMIT ERMIT AF	PROVAL CUPANCY APPROVAL D APPROVAL E PERMIT APPROVAL FAL ANCIAL GUARANTEE T APPROVAL
EPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO YPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE MASTER PLAN X DRAINAGE REPORT CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL	AUG N DEVEL		BUILDING PACE CERTIFICAT PRELIMINATE SITE PLAN FACE SITE PLAN FACE PLAN FAC	ERMIT AF E OF OCC RY PLAT FOR SUB'! OR BLDG APPROV E OF FIN. N PERMIT ERMIT AF OVAL	PROVAL CUPANCY APPROVAL D APPROVAL E PERMIT APPROVAL AL ANCIAL GUARANTEE T APPROVAL PROVAL
EPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO YPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE MASTER PLAN X DRAINAGE REPORT CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL TRAFFIC IMPACT STUDY (TIS)	AUG LAND DEVEL		PRELIMINAR SITE PLAN F SITE PLAN F SITE PLAN F SIA/ RELEAS FOUNDATIO GRADING PI SO-19 APPRO PAVING PER GRADING/PL	ERMIT AF E OF OCC RY PLAT FOR SUB'I OR BLDG APPROV SE OF FIN. N PERMIT ERMIT AF DVAL MIT APPI AD CERT	PROVAL CUPANCY APPROVAL D APPROVAL E PERMIT APPROVAL ANCIAL GUARANTEE T APPROVAL PROVAL ROVAL ROVAL IFICATION
DEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO TYPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE MASTER PLAN X DRAINAGE REPORT CLOMR/LOMR	AUG LAND DEVEL		PRELIMINAR SITE PLAN F SITE PLAN F SIA/ RELEAS FOUNDATIO GRADING PI SO-19 APPRO PAVING PER	ERMIT AF E OF OCC RY PLAT FOR SUB'IL OR BLDG APPROV SE OF FIN. N PERMIT ERMIT AF DVAL MIT APPI AD CERT R APPROV.	PROVAL CUPANCY APPROVAL D APPROVAL E PERMIT APPROVAL ANCIAL GUARANTEE T APPROVAL PROVAL ROVAL ROVAL IFICATION
PEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO PYPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE MASTER PLAN X DRAINAGE REPORT CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL TRAFFIC IMPACT STUDY (TIS)	AUG LAND DEVEL D.) N (ESC)		BUILDING PACE CERTIFICAT PRELIMINATE SITE PLAN FOR FOR SITE PLAN FOR FOR SITE PLAN FO	ERMIT AF E OF OCC RY PLAT FOR SUB'! OR BLDG APPROV GE OF FIN. N PERMIT AF DVAL MIT APP! AD CERT R APPROV. R	PROVAL CUPANCY APPROVAL D APPROVAL E PERMIT APPROVAL ANCIAL GUARANTEE T APPROVAL PROVAL ROVAL ROVAL IFICATION
PEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO EYPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE MASTER PLAN X DRAINAGE REPORT CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL TRAFFIC IMPACT STUDY (TIS) EROSION & SEDIMENT CONTROL PLAN	AUG LAND DEVEL D.) N (ESC)		PRELIMINAR SITE PLAN F SITE PLAN F SITE PLAN F SIA/ RELEAS FOUNDATIO GRADING PI SO-19 APPRO PAVING PER GRADING/ PA WORK ORDER CLOMR/LOM	ERMIT AF E OF OCC RY PLAT FOR SUB'! OR BLDG APPROV GE OF FIN. N PERMIT AF DVAL MIT APPI AD CERT R APPROV. R	APPROVAL D APPROVAL E PERMIT APPROVAL ANCIAL GUARANTEE T APPROVAL PPROVAL ROVAL BROVAL
PEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO EYPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE MASTER PLAN X DRAINAGE REPORT CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL TRAFFIC IMPACT STUDY (TIS) EROSION & SEDIMENT CONTROL PLAN	AUG LAND DEVEL		PRELIMINAR SITE PLAN F SITE PLAN F SITE PLAN F SIA/ RELEAS FOUNDATIO GRADING PI SO-19 APPRO PAVING PER GRADING/ PA WORK ORDER CLOMR/LOM	ERMIT AF E OF OCC RY PLAT FOR SUB'! OR BLDG APPROV GE OF FIN. N PERMIT AF DVAL MIT APPI AD CERT R APPROV. R	PROVAL CUPANCY APPROVAL D APPROVAL E PERMIT APPROVAL ANCIAL GUARANTEE T APPROVAL PROVAL ROVAL ROVAL IFICATION
PEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTRO MS4/ EROSION & SEDIMENT CONTRO PYPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATIO CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE MASTER PLAN X DRAINAGE REPORT CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL TRAFFIC IMPACT STUDY (TIS) EROSION & SEDIMENT CONTROL PLAN OTHER (SPECIFY)	AUG NAME DEVELO LAND DEVELO NO (ESC)	OPIMEN, all	PRELIMINAR SITE PLAN F SITE PLAN F SITE PLAN F SIA/ RELEAS FOUNDATIO GRADING PI SO-19 APPRO PAVING PER GRADING/ PA WORK ORDER CLOMR/LOM PRE-DESIGN N OTHER (SPE	ERMIT AF E OF OCC RY PLAT FOR SUB'! OR BLDG APPROV GE OF FIN. N PERMIT AF DVAL MIT APPI AD CERT R APPROV. R	APPROVAL D APPROVAL E PERMIT APPROVAL ANCIAL GUARANTEE T APPROVAL PPROVAL ROVAL BROVAL

Table of Contents

Section		Pa	ge
1.	Executive Summary	1	
11.	Introduction	1	
<i>III</i> .	Project Description	1	
IV.	Background Documents	2	
V.	Existing Conditions	2	
VI.	Developed Conditions	3	
VII.	Site Improvement Plan	4	
VIII.	Calculations	5	
IX.	Conclusion	9	

List of Appendices

Appendix A Project Vicinity Map	
Appendix B Pre-Developed Drainage Basi	in Map
Appendix C Post-Developed Drainage Base	sin Mar
Appendix D Site Improvement Plans	
Appendix E Private Facility Drainage Cove	enant



I. Executive Summary

The intent of this design brief is to determine the peak stormwater runoff and first flush treatment resulting from the expansion of an existing building and construction of a utility yard located at 4401 Alexander Blvd, N.E. in the City of Albuquerque.

Existing drainage patterns for this site direct runoff into a valley gutter that runs parallel to the east side of the existing building. This valley gutter terminates near the north-east corner of the existing building where runoff sheet flows across the parking lot into an existing stormwater pond on the north-west corner of the property. Drainage patterns for this site will be maintained after the completion of the proposed improvements. No offsite drainage is anticipated for this project.

This project will not increase the amount of impervious coverage of the project site and therefore, the peak flows will not increase and existing hydraulic capacity of the downstream storm drain infrastructure is not exceeded.

II. Introduction

The proposed project is situated in an 11.9 Acre lot, located in block 5 of Sundt's Industrial Center. The lot is owned by Oso Bio Pharmaceuticals and consists of the existing Oso Bio building, parking lot, truck loading dock and landscape islands. The proposed Oso Bio Syringe project will take an existing 2,250 sf utility yard located on the south-east corner of the existing building and expand it to the north, increasing the utility yard to a footprint of 7,880 sf. The building footprint will also be expanded by approximately 3,670 sf near the center of the east side of the existing building. Additionally, a 4" PVC Sewer service will be connected from the existing sewer main on Alexander Blvd to the expanded portion of the building. A total of disturbed area of 12,925 sf will be required for this project.

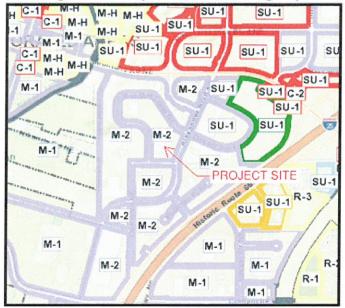
This report will outline the peak flow calculations for the pre- and post-developed hydrology of the affected portion of the project site. Because this project involves additions of 1,000 square feet or more building area, a first flush treatment for the 90th percentile storm will be required. Treatment for this generated Storm Water Quality Treatment Volume (SWQV) is described in further detail as part of this drainage report.

III. Project Location

The proposed improvements are located on an existing property at 4401 Alexander Blvd that is bordered by Alexander Blvd to the east, Joan Hill Place to the south, Montbel Place to the west and Montbel Loop to the north. The property lies within the Elena Gallegos Grant, projected Sections 33 and 34, Township 11 North, Range 3 East, New Mexico Principal Meridian, City of Albuquerque, Bernalillo County, New Mexico.

This project has a zoning designation of M-2 (Land Use Classification =5000, Category = Industrial/Wholesale/Manufacturing) per the ABQMaps Advanced Map Viewer database.

Figure III-1: Project Location Zoning Map



The property is located in Zone X of the flood insurance rate map, community panel No. 35001C0138 E, with an effective date of November 19, 2003 and is not in a special flood hazard area.

Legal Description

Lot lettered "B" in block numbered five (5) of Sundt's industrial center, as the same is shown and designated on the plat thereof, filed in the office of the county clerk of Bernalillo County, New Mexico on April 27, 2007, in Map Book 2007C, Folio 102.

IV. Background Documents

This project area was previously occupied by a Price Club building and was later repurposed into the current Oso Bio building. Below is a list of record documents that were obtained from the ABQMaps – Advanced Map Viewer, Hydrology and Transportation Plans database:

- Calculations for the Hydrology analysis of the original Price Club project were completed by Bohannan-Huston Inc. and are dated September, 1990. This analysis shows that the existing stormwater pond can adequately handle the additional runoff volume generated from the 100-Year storm as a result of the development of the Price Club Building.
- Oso Bio Warehouse Freezer Project Grading and Drainage Plan Building Permit, November 13, 2013.
- An existing Private Facility Drainage Covenant (A135-408) was established in 04/04/2007 between Cardinal Health PTS, LLC and the City of Albuquerque. A copy of this Drainage Covenant is available in Appendix E.

V. Existing Conditions

The existing property at 4401 Alexander Blvd NE is a fully developed site over a 517,297 sf area with the Oso Bio building occupying approximately 133,000 sf of space at the ground level. The remainder of the site is occupied by equipment yards, asphalt parking lot, landscape islands, trash area, and truck loading area.

Drainage for the existing site is pitched away from the existing building into adjacent valley gutters that parallel the east and west faces of the building. These valley gutters channelize the surrounding parking lot runoff towards the north side of the site where they eventually terminate. The runoff disperses from the ends of the valley gutters and sheet flows across the north parking lot area into the existing private stormwater pond.

An adjacent 56,273 sf Albuquerque Ambulance building to the north-west with address 4500 Montbel Pl. NE, Albuquerque, NM 87019, occupies a separate lot within the same block (Lot A, Block 5). This Albuquerque Ambulance building and surrounding parking lot area is 231,305 sf in size and shares the same stormwater management facility as the Oso Bio property.

The existing onsite stormwater pond has a storage capacity of 66,717 cf and was designed to meet flow control and storage criteria for the entire property and ultimately discharges through the face of curb into the gutter on Montbel Loop.

Pre-Developed Drainage Basins:

The existing site hydrology was analyzed as 4 separate basins. Basin A outlines the parking lot area north of the existing building that drains directly into the existing detention pond. Basin B is the portion of the site to the west of the existing building that drains into a valley gutter along the west face of the building and flows northward and outfalls into Basin A. Basin D is the portion of the site to the east of the existing building that drains into a valley gutter along the east face of the building and outfalls into Basin A. Basin C is the roof drainage of the existing building that distributes runoff throughout the surrounding parking lot via downspouts.

A copy of the Pre-Developed Hydrology Map is located in Appendix B. This map shows the drainage basin delineation, flow patterns, acreage, and flow rates of the 100-year storm for the existing site.

VI. Developed Conditions

Proposed improvements for this project include the expansion of the existing utility yard and expansion of the existing building. The existing valley gutter to the east of the building will be realigned to wrap around the outside of the expanded utility yard.

The expanded utility yard will contain 7 new utility pads as well as a new 625 sf hazmat building that connects to one of the entrances on the east face of the existing building by means of a 12" raised platform. The existing AC pavement within the utility yard area will be removed and replaced with PCC pavement.

A single 4" sewer service will be required for service to the newly expanded portion of the building. This sewer lateral will tie-in to the existing 8" PVC sewer line on Alexander Blvd NE.

The water quality treatment and peak flow mitigation component of this project will continue to be handled by the existing stormwater pond that was previously analyzed by Bohannan-Huston Inc. (1990) to handle the developed flow rates resulting from the construction of the original Price Club building and surrounding parking lot before being repurposed into the current Oso Bio building.

PROPOSED BUILDING EXPANSION PROPOSED 4" PVC SEWER 4401 ALEXANDER BLVD, N.E. NEW HAZMAT BUILDING EXPANDED VIILITY YARD WITH CONCRETE outbel PAVEMENT AND NEW

UTILITY PADS Joan Hill Place? MN.E

Figure VI-1: Oso Bio Syringe Line Project Site Map

Post-Developed Drainage Basins:

The post-developed hydrology was analyzed as 5 separate basins. Post-developed Basins A and B, which delineate the north and west portions of the parking lot, remain unchanged from the predeveloped condition. The roof drainage described by drainage basin C increased to incorporate the additional building area after the expansion. The Post-Developed Hydrology Map is shown in Appendix C.

VII. Site Improvement Plan

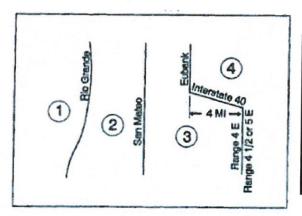
The drainage report accompanies a set of Site Improvement Plans that serves as a set of construction documents for the proposed improvements. This set includes general information, demolition, site improvement, utility, traffic circulation, and fire access plans. Site grading activities are limited to AC replacement with PCC in the utility yard area, realignment of the existing valley gutter, trench backfill and pavement repair for the proposed 4" sewer service, and

excavation and backfill for the new building expansion foundations. A copy of the Site Improvement Plans is included in Appendix D.

VIII. Calculations

Pre-developed and post-developed peak flow rates for the project site were analyzed by applying rational method equation as outlined in Chapter 22, Section 2.0 of the Albuquerque Development Process Manual (ADPM). The following charts and figures were used in the calculations described in this section:

Figure VIII-1: Precipitation Zones from ADPM Table A-1



TA	TABLE A-1. PRECIPITATION ZONES					
Zone	Location					
1	West of the Rio Grande					
2	Between the Rio Grande and San Mateo					
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40					
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40					

Figure VIII-2: Rational Method Coefficient from ADPM Table A-11

TABLE A-11.	RATIONAL	L METHO	D COEFFIC	CIENT, C	
Zone	Trea , 10-YR.]	100-YR. Treatment . 10-YR.			
	A	В	С	D	
1	0.27	0.43	0.61	0.93	
	[0.00,	[0.02,	[0.26,	[0.92,	
	0.08]	0.24]	0.47]	0.92]	
2	0.31	0.45	0.62	0.93	
	[0.00,	[0.04,	[0.29,	[0.91,	
	0.11]	0.28]	0.50]	0.92]	
3	0.35	0.48	0.64	0.93	
	[0.00,	[0.10,	[0.35,	[0.92,	
	0.16]	0.33]	0.55]	0.93]	
4	0.39	0.52	0.66	0.94	
	[0.02,	[0.16,	[0.43,	[0.93,	
	0.23]	0.38]	0.59]	0.93]	

Figure VIII-3: Peak Intensity Chart from ADPM Table A-10

TA	TABLE A-10. PEAK INTENSITY (IN/HR at $t_c = 0.2$ hour)							
Zon e	100-YR. Intensity [2-Y R., 10-YR.]							
1	4.70 [1.84, 3.14]							
2	5.05 [2.04, 3.41]							
3	5.38 [2.21, 3.65]							
4	5.61 [2.34, 3.83]							

Pre-developed peak flow calculations

Rational Method

Q=CIA

C=0.93 (For Zone 2, Treatment D per Table A-11, Chpt 22 ADPM) I=5.05 in/hr (For Zone 2, Treatment D per Table A-10, Chpt 22 ADPM)

Basin A

C=0.93

I=5.05 in/hr

A=4.67 Ac

Q=0.93*5.05 in/hr*4.67 Ac = 21.93 cfs

Basin B

C=0.93

I=5.05 in/hr

A=1.58 Ac

Q=0.93*5.05 in/hr*1.58 Ac = 7.42 cfs

Basin C

C=0.93

I=5.05 in/hr

A=3.05 Ac

Q=0.93*5.05 in/hr*3.05 Ac = 14.32 cfs

Basin D

C=0.93

I=5.05 in/hr

A=2.57 Ac

Q=0.93*5.05 in/hr*2.57 Ac = 12.07 cfs

Total Pre-developed Q_{100} =21.93 cfs + 7.42 cfs + 14.32 cfs + 12.07 cfs = **55.74 cfs**

Post-developed peak flow calculations
Rational Method
Q=CIA

C=0.93 (For Zone 2, Treatment D per Table A-11, Chpt 22 ADPM)

I=5.05 in/hr (For Zone 2, Treatment D per Table A-10, Chpt 22 ADPM)

Basin A C=0.93 I=5.05 in/hr A=4.67 Ac Q=0.93*5.05 in/hr*4.67 Ac = 21.93 cfs

Basin B C=0.93 I=5.05 in/hr A=1.58 Ac Q=0.93*5.05 in/hr*1.58 Ac = 7.42 cfs

Basin C C=0.93 I=5.05 in/hr A=3.13 Ac Q=0.93*5.05 in/hr*3.13 Ac = 14.70 cfs

Basin D C=0.93 I=5.05 in/hr A=2.30 Ac Q=0.93*5.05 in/hr*2.30 Ac = 10.80 cfs

Basin E C=0.93 I=5.05 in/hr A=0.19 Ac Q=0.93*5.05 in/hr*0.19 Ac = 0.89 cfs

Total Post-developed Q_{100} =21.93 cfs + 7.42 cfs + 14.70 cfs + 10.80 cfs + 0.89 cfs = **55.74 cfs**

Figure VIII-4: Tabular Summary of Stormwater Analysis

100-Year Storm Pre-Developed Conditions

Drainage	Rainfall	Total Area,	Peak Runoff		
Basin	Intensity, I (in/hr)	A (acres)	Q ₁₀₀ (cfs)		
Α	5.05	4.67	21.93		
В	5.05	1.58	7.42		
С	5.05	3.05	14.32		
D	5.05	2.57	12.07		
Total		11.87	55.74		

100-Year Storm Post-Developed Conditions

Drainage	Rainfall	Total Area,	Peak Runoff			
	The same and the s		reak Runoii			
Basin	Intensity, I	A (acres)	Q ₁₀₀ (cfs)			
	(in/hr)		100 (
Α	5.05	4.67	21.93			
В	5.05	1.58	7.42			
C	5.05	3.13	14.70			
D	5.05	2.30	10.80			
E	5.05	0.19	0.89			
Total		11.87	55.74			

Based on the results of these calculations, the peak flow rates do not increase for the postdeveloped condition and the previously designed detention basin does not experience any increase in stormwater runoff loading.

First Flush Treatment Calculations

Treatment Calculation Parameters (Per City of Albuquerque Hydrology Department directive) 90th Percentile Storm Event (First Flush): d=0.44 inches

Land Treatment D

Initial abstraction = 0.1 in

First Flush = 0.44 in - 0.1 in = 0.34 in

Precipitation Zone 2 (Between the Rio Grande and San Meteo, Table A-1, Chpt 22 ADPM)

Determine Storm Water Quality Treatment Volume

SWQV = C * d * A * 3630

C= Runoff Coefficient

d = 90th Percentile Storm Depth

A = Area (acres)

SWQV = 0.9 * 0.34 in * 0.3 Ac * 43560 sf / Ac * 1 ft / 12 in = 334 cf

The SWQV of 334 cf resulting from the 90th percentile storm depth remains the same as the existing condition due to the runoff coefficient of the required treatment area remaining unchanged. Therefore, the previously designed pond at the north-west corner of the property will continue to provide for this treatment volume. As part of the requirements for this project, as discussed with the City of Albuquerque Hydrology Department, the contractor shall inspect the pond outlet structure and verify compliance for preventing gross pollutant (debris 2" and larger) discharge. If the pond outlet structure is not in compliance with the pollutant removal criteria, the contractor shall retrofit the structure with a debris screen to ensure compliance with the gross pollutant reduction.

IX. Conclusions

The proposed Oso Bio Syringe project includes improvements to expand a portion of the existing building at 4401 Alexander Blvd as well as the adjacent utility yard located at the south-east corner of the building. Drainage for the improved site will maintain the original flow patterns. Runoff is conveyed from parking lot surface flow in the north-west direction into an existing private detention pond (Existing Private Facility Drainage Covenant, April 4, 2007, A135-408) on the north side of the property which was previously designed to mitigate peak runoff prior to offsite discharge. Since the site imperviousness is not increased as a result of the improvements, the peak flows are not increased. Therefore, the existing stormwater pond that serves this development can adequately convey flows at the existing levels and the downstream storm drain facilities will not require additional hydraulic capacity.

OSO BIO SYRINGE CONCEPT

4401 ALEXANDER BLVD, N.E. ALBUQUERQUE, NM UPC: 101606106405930310

ABBR	REVIATIONS			LEGEND					
ACP	ASPHALT CONCRETE PAVEMENT	ID	INSIDE DIAMETER	STORM PIPE			SO -)	
ADD'L	ADDITIONAL	I.E.	INVERT ELEVATION	NEW A EMETING GATON BASING		CB		C8	
W O	AREA DRAIN	IN (*)	INCH(ES)	NEW & EXISTING CATCH BASINS		408	4		
ຜາ	ADJACENT	INV	INVERT	NEW & EXISTING DRYWELLS		® ^{D₩}		ODW	
NSI	AMERICAN NATIONAL STANDARDS	IRR	IRRIGATION WATER			_20MH		20041	
	INSTITUTE	LB	POUND(S)	STORM MANHOLE				1	
PPROX.	APPROXIMATE(LY)	LCPE	LINED CORRUGATED	SANITARY SEWER PIPE			ss -		_
RCH	ARCHITECT(URAL)		POLYETHYLENE PIPE			SSMH		SS601	
SSY	ASSEMBLY	LF	LINEAR FEET	SANITARY SEWER MANHOLE		•		J	
LDG	BUILDING	MATL	MATERIAL	WATER MAINS -	— w		- w -		
М	BENCHMARK	MAX	MAXIMUM	FIRE HYDRANTS (NEW AND EXISTING) AND	rnc.	₽FH	e ^{lit}		
NDRY	BOUNDARY	MFR	MANUFACTURER	THE HIDRARIS (NEW AND EXISTING) AND	100				
WO	BOTTOM OF WALL (AT FINISHED GRADE)	MH	MANHOLE	WATER METERS			B ₀		
VC .	BEGINNING OF VERTICAL CURVE	MJ	MECHANICAL JOINT	WATER VALVES		H	111		
TV	CARLE TV	MIN.	MINIMUM	HALLY FACILIS	т.	43			
c&G	CURB AND GUTTER	MISC.	MISCELLANEOUS	FITTINGS WITH THRUST BLOCKS	•	A	*	22.5	11.25
28	CATCH BASIN	N	NORTH(ING)		TEE	90°	45"	22.5	11.25
C.	CURB CUT	NO (#)	NUMBER	SURFACE WTR AND PIPE DIRECTION FLOW		•	OR		
D C	CONCRETE DRIVE	oc	ON CENTER	EXISTING CONTOUR LABELS	-		- (457)-		
OF.		0/W	OIL WATER				(+3/)-	-00	_
<i>y</i>	CUBIC FEET (FOOT) CAST IRON	P	POWER	PROPOSED CONTOUR LABELS	-		- 457	_	
.J	CONSTRUCTION JOINT	PC	POINT OF CURVATURE	EXISTING SURFACE ELEVATIONS		Charle		Star It	
il.	CLASS	PIV	POST INDICATOR VALVE	CASING SUNFACE ELETATIONS		1	1		
ı	CENTER LINE	PP	POWER POLE	FINISHED SURFACE ELEVATIONS		XXXXX	Z	XXX IC	
CMP	CORRUGATED METAL PIPE	PL	PROPERTY LINE	PHISHED SORFACE ELEVATIONS		1.5	/2	2.7 10.00	
ONC.	CONCRETE	PSF	POUNDS PER SQUARE FOOT	NEW EASEMENT					
CONST.	CONSTRUCTION	PSI	POUNDS PER SQUARE INCH	NEW ENGLACIO					
PEP	CORRUGATED POLYETHYLENE PIPE	PT	POINT OF TANGENCY	NEW DITCH		>	_	>	
TR	CENTER(ED)	PVC	POLYVINYL CHLORIDE	A					
Y	CUBIC YARD	PVI	POINT OF VERTICAL INFLECTION	TRAFFIC ARROWS	4	₽►	4	>	3
CVA	DOUBLE CHECK VALVE ASSEMBLY	QTY.	QUANTITY	mario padons	7	r	"	~	
DCV		RAD (R)	RADIUS		-5	-5			
EPT.	DOUBLE DETECTOR CHECK VALVE DEPARTMENT	RCP	REINFORCED CONCRETE PIPE	TOP OF WALL/TOE OF WALL)				
DET	DETAIL	RD	ROAD	TOP OF WALLY TOE OF WALL	7				
).I.	DUCTILE IRON	REF	REFERENCE						
IA (ø)	DIAMETER	REQD.	REQUIRED	* *** *** **** ***		2:1			
MK (B)	DIMENSION	RET	RETAINING	SLOPE INDICATORS 3:1		-			
)S	DOWN SPOUT	ROW	RIGHT OF WAY		-	-			
)WG	DRAWING	SD	STORM DRAIN	RIP RAP	B	7			
		S.F.	SQUARE FEET	FILTER FABRIC FENCING		_			
_	EAST(ING)	SHT	SHEET	FILTER FABRIC FENCING					
C	ELECTRICAL CONDUIT	SIM	SIMILAR						
cc	EXTRUDED CONCRETE CURB	SPEC	SPECIFICATION(S)	FOOTING DRAINS					
L=	ELEVATION EDGE OF PAVEMENT	SQ	SQUARE		s				
OP	EDGE OF PAVEMENT EQUIVALENT	SS	SANITARY SEWER	DOWNSPOUTS	(5)				
QUIV.	EQUIVALENT END OF VERTICAL CURVE	STA	STATION	CLEANOUTS (C.O.) SS, ANDCO					
	EXISTING	STD	STANDARD	RWL (NEW AND EXISTING)	0				
XIST. D	FLOOR DRAIN	TOE	TOE OF WALL, OR SLOPE	INTERCEPTOR AND BIO-SWALES					
DC	FIRE DEPARTMENT CONNECTION	T	TELEPHONE WIRE	MIENCELINE WAD BIO-24MEZ	-				
DN	FOUNDATION	TBM	TEMPORARY BENCH MARK	CEMENT CONCRETE		•			
DN FE	FOUNDATION FINISH FLOOR ELEVATION	T.C.	TOP OF CURB			,			
re H	FIRE HYDRANT FL FLANGED		TOP OF GRATE	COORDINATES, & LEADERS	1000.00 5000.00				
H LR	FLOOR	TEMP.	TEMPORARY	/ · ·					
DC DC	FACE OF CURB F.S. FINISHED	TOP	TOP OF SLOPE	STUBBED & PLUGGED LINE -		ı .			
00	SURFACE	TOW	TOP OF WALL		-				
T(')	FOOT (FEET)	TV	TELEVISION WIRE	CONCRETE CURB		_			
TG	FOOTING	TYP.	TYPICAL	CONCRETE CURB & GUTTER =====		-			
10	GAS MAIN	VC	VERTICAL CURVE	CONTRACT CORD & COLLEGE ====					
В	GRADE BREAK	VERT (V)	VERTICAL	NEW ASPHALT/CONCRETE					
M M	GAS METER	WM	WATER METER	PAVEMENT					
77.		W/	WTH	CURB INLET/UNDER	-	-			
en.	CRADE								
	GRADE GATE VALVE	WT	WEIGHT	SIDEWALK INLET	1	3			
RD V B	GATE VALVE HOSE BIBB	1000	WEIGHT WELDED WIRE FABRIC	SIDEWALK INLET (LL) DRAINAGE SWALE	ر <u>ت:</u> آ				

STRAW BALE

ROCK CHECK DAM

000



2. THE CONTRACTOR WILL CONFINE HIS WORK WITHIN THE CONSTRUCTION EASEMENT LIMITS AND/OR RIGHT-OF-WAY OR PROVIDE COPIES OF AGREEMENTS WITH ADJACENT LANDOWNERS TO BERNALILLO COUNTY.

3. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 811 (STATEMDE) FOR LOCATION OF EXISTING UTILITIES.

4. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE SURVEYOR NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY OF ALBUQUERQUE SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. THE CONTRACTOR SHALL NOT ISSURPEY BROWNINGS IN MINITED THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE SURVEYOR AND SHALL NOTIFY THE CITY OF ALBUQUERQUE SURVEYOR AND SHALL NOTIFY THE CITY OF ALBUQUERQUE SURVEYOR WITH THE CITY OF ALBUQUERQUE SURVEYOR. MENT A CHANGE IS MADE IN THE FINSHED ELEVATION OF THE PARKMENT SHALL BE ONCO (NOT YET) THE ORDER OF THE PARKMENT SHALL BE ONCO (NOT YET) THE ORDER OF THE ORDER O

S. IF ANY UILTY LIMES, PPELINES, OF UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWNICS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY DUST WHERE NOW ARE SHOWN IF ANY SUCH EXISTING LINES ARE SHOWN, THE COCKING IN A SEASE UPON IN REGARDATION PROVIDED BY THE OWNER FOR SAUD UTILITY, AND THE INFORMATION MAY BE NOOMBERGE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SEZE, OF TYPE OF THE EXSTING UTILITY, PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SEZE, OR TYPE OF THE EXSTING UTILITY LINES, PPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCUSIVE AND MAY NOT BE COMPLETE, THEREFORE, IT MAKES NO REPRESENTATION PERTAINING THERETO AND ASSIMES NO RESPONSIBILITY OF ANY LINES OF THE CONTINGE OF THE PPELINE, OR UNDERGROUND UTILITY LINES IN ADVANCE OF AND DURING EXCAPATION HOW. THE CONTINGEOUS PLUT RESPONSIBLE FOR ANY LINES OF THE CONTINGEOUS PURPLES STATUTES, MUNICIPAL AND LOCAL ORDINANCES, AND RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL DESTRUCTIONS. SHOULD A CONTUCT EXIST BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMERLY NOTIFY THE ENDRECE IN MERTING SO THAT THE CONTUCT CAN BE RESOLVED WITH A MINIMUM AUDITOR OF DELAY FOR ALL PARTIES.

ALL WATER VALVE BOXES AND MANHOLES IN THE STREET CONSTRUCTION ARE TO BE ADJUSTED TO FINAL GRADE AND WILL BE MEASURED AND PAID PER EACH.

9. CAUTION: THESE DRAININGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REQULATIONS CONCERNING SAFETY AND HEALTH, ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926, SUBPART P-EXCAVATIONS.

10. WHEN ABUITING NEW PAVEMENT TO THE EXISTING INTERSECTING STREETS, THE EXISTING PAVEMENT SHALL BE SAW OUT PER BERNALLLO COUNTY STANDARD DEARNING 246S TO A STRAIGHT LINE AT RIGHT ANGLES, AND ANY BROKEN OR CRACKED PAVEMENT SHALL BE CONSIGNED INCIDENTAL TO PANICH, THEREFORE, NO DIRECT PAYMENT WILL BE MAJE? FOR SWIN CUTTING. THE CONTRACTOR SHALL CONTACT BERNALLILO COUNTY PUBLIC WORKS DIVISION (848-1502) TO REQUEST AN INSPECTOR TO VERIFY PAVEMENT THICKNESS.

12. WHEN APPLICABLE, CONTRACTOR SHALL SECURE TOPSOIL DISTURBANCE PERMIT FROM THE CITY OF ALBUQUEROUE AND AN EXCAVATION/CONSTRUCTION PERMIT FROM BERNAULIQ COUNTY. AN EXCAVATION/CONSTRUCTION PERMIT MILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN BERNAULIQ COUNTY RIGHT-OF-MILE.

13. ANY PAVEMENT DISTURBED BY THE TRENCH SHALL BE REMOVED AND THE FULL SECTION OF PAVEMENT SHALL BE REPLACED. FOR THE PAVEMENT BEYOND THAT DISTURBED BY THE EXCAVAITED TRENCH, THE FOLLOWING APPLIES UNLESS OTHERWISE NOTED ON PLANS:

A. IF ONLY ONE LANE IS DISTURBED BY TRENCHING, THE REMANDER OF THE ONE ENTIRE LANE SHALL BE MILLED AND RESURFACED. IN A FOURL-LANE STREET, IF MORE THAN ONE LANE BUT LESS THAN HALF THE STREET IS AFFECTED, THEM THE REMANDER OF HALF THE STREET (TWO LANES MINIMUM) SHALL BE MILLED AND RESURFACED.

B. IF MORE THAN ONE-HALF OF ANY STREET WIDTH IS AFFECTED, THEN ALL PAYING IN THE STREET FROM CURB TO CURB SHALL BE MILLED AND RESURFACED.

14. THE CONTRACTOR SHALL CONTACT BERNAULLO COUNTY TRAFFIC ENGINEERING (848-1504) BEFORE REMOVING AND/OR INSTALLING ANY TRAFFIC SIGNS OR PERMANENT STRIPING AND MARKINGS. ALL STRIPING AND PAYEMENT MARKINGS, INCLUDING LANE LINES, CROSSMALKS, LECENDS, AND SYMBOLS, ARE TO BE CONSTRUCTED OF HOT THERMOPLASTIC IN ACCORDANCE WITH THE MANUAL ON UNITED TRAFFIC CONTROL DEWICES (MUTCO), LATEST EDITION. ANY PAYEMENT MARKINGS AND SIGNS REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT EXISTING LOCATIONS. SUCH WORK PAUL BE CONSIDERED MODERTIAL TO CONSTRUCTION OF THE PROJECT.

15. INSTALL BLUE REFLECTIVE RAISED PAVEMENT MARKERS IN THE CENTER OF ROADWAY TO DELINEATE ALL HYDRANT LOCATIONS

17. BARRICADING AND CONSTRUCTION PERMITS MUST BE OBTAINED FROM BCPWD (848-1502) PRIOR TO BEGINNING OF ANY CONSTRUCTION EFFORTS.

19. THE CONTRACTOR SHALL RESTORE ALL ACCESS ROADS TO THE PRE-CONSTRUCTION CONDITION. ANY DAMAGE TO ROADWAY AND/OR UNDERGROUND UTILITIES SHALL BE PROMPTLY REPAIRED AT THE CONTRACTOR'S EXPENSE.

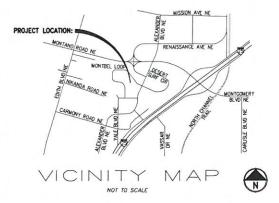
20. ALL ROADWAY WORK DETAILED IN THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREIN, BE CONSTRUCTED IN ACCORDANCE WITH THE NIMDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. 21. WHEN APPLICABLE, THE CONTRACTOR SHALL SECURE A TOPSOIL DISTURBANCE PERMIT FROM THE CITY OF ALBUQUERQUE AND AN EXCAVATION/CONSTRUCTION PERMIT FROM BERNAULLIO COUNTY. AN EXCAVATION/CONSTRUCTION PERMIT MILL BE REQUIRED BEFORE BECOMING ANY MORK MIRHIN BERNAULLIO COUNTY FIGHT-OF-MAY.

22. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE NATIONAL POLLUTANT ELIMINATION DISCHARGE SYSTEM (NPDES) REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, OBTAINING AN NPDES PERMIT DURING CONSTRUCTION, SUBMISSION OF A COMPLETED NO APPLICATION, MAD SUBMISSION OF A COMPLETED NOT. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE INTERNATION OF AND INSPECTION REPORTS FOR THE STORM WATER POLLUTION PREVENTION PLAN (SMPPP). IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAKE THE SMPPP REVENED AND APPOXED BY THE BERMAULLIO COUNTY, PROBLET ON IMPLEMENTATION OF THE SMPPP.

23. THE CONTRACTOR WILL BE RESPONSIBLE FOR DISPOSING OF ALL DEBRIS, INCLUDING BUT NOT LIMITED TO THE HAZARDOUS WASTE AT DISPOSAL SITES APPROVED BY GOVERNMENTAL AGENCIES REGULATING THE DISPOSAL OF SUCH MATERIALS.

24. THE CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. THE CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, METER PERMANENT OR TEMPORARY. THIS GRAFFITI REMOVAL SHALL BE CONSIDERED INCIDENTAL; THEREFORE, NO SEPHRATE PARMY WILL SE MADE.

FOR PERMIT



PROJECT TEAM:

CIVIL ENGINEER:
DCI ENGINEERS
2600 MICHELSON DR., SUITE 930
IRVINE, CA 92612
CONTACT: MANNY NUNO, P.E.
PHONE: (949) 892-4950

NATURAL GAS: NEW MEXICO GAS COMPANY 1625 RIO BRAYO SW SUITE 27-87105 PHONE: (888) 664-2726

UTILITY PURVEYORS:

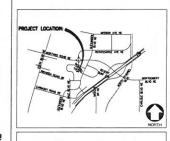
WATER:
WATER UTILITY AUTHORITY
ONE CIMC PLAZA NW
ROOM 5027
ALBUQUERQUE, NM 87102
PHONE: (505) 842-9287

POWER: PNM 414 SILVER AVE. SW ALBUQUERQUE, NM 87102 PHONE: (888)342-5766

SHEET INDEX

FEMA FLOOD ZONE:

THE PROPERTY IS LOCATED IN ZONE X OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL, NO. 35001C0138 E, WITH AN EFFECTIVE DATE OF NOVEMBER 19, 2003 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.



Project Services

IPS Profess

3 CORPORATE PARK SUITE 100 IRVINE, CA 92606 949,679,4682 PHONE

949.679.4683 FAX www.ipsdb.com

onal Engineers and Architects PC

RVINE, CALIFORNIA 92612 PHONE: (949) 892-4950 • FAX: (949) 892-4970

Coppright 07/2017 (Filmulo Comercine Inc. All Rights Reserved. The discusses, see the blass and designs may set be recent, in steen or in part, officed officer permittent from Filmulo Commission to: (Finals Commission to:

CONFIDENTIAL



4401 ALEXANDER BLVD. ALBUQUEROUE, NM. SYRINGE LINE **PROJECT**

> **GENERAL CIVIL** INFORMATION

DPRES: 12/31/2018



HORIZ(H) HORIZONTAL

HEIGHT

HIGH DENSITY POLYETHYLENE

CONTRACTOR NOTE:

UNDERGROUND SERVICE ALERT ONE-CALL NUMBER 811

C0.0

