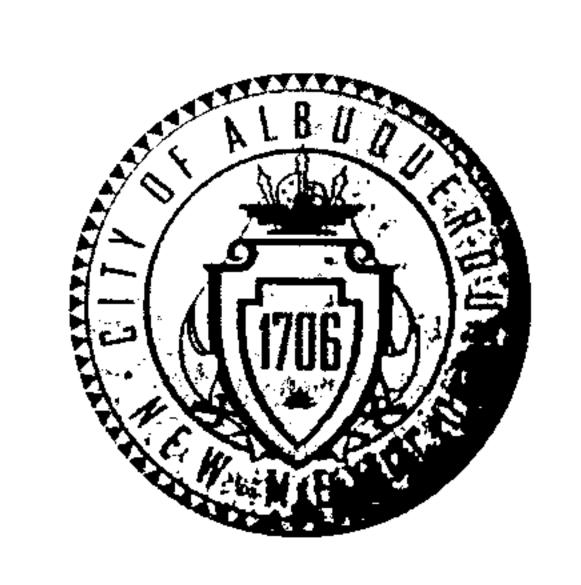
# CITY OF ALBUQUERQUE



December 28, 2010

David Soule, P.E.

Rio Grande Engineering
P.O. Box 67305
Albuquerque, NM 87193

Re: San Antonio Storage, 6300 San Antonio NE,

Permanent Certificate of Occupancy - Approved

Engineer's Stamp dated 02-23-10, (E-18/D061)

Certification dated 12-23-10

Dear Mr. Soule,

Based upon the information provided in the Certification received 12-27-10, the above referenced Certification is approved for a release of a Permanent Certificate of Occupancy by Hydrology.

PO Box 1293

Our records indicate a Release of Financial Guarantee is not required for this project; however, the completion of the work order was a requirement for release of Certificate of Occupancy.

Albuquerque

If you have any questions, you can contact me at 924-3982.

NM 87103

www.cabq.gov

Timothy E. Sims

Sincerely,

Plan Checker—Hydrology Section Development and Building Services

C: CO Clerk—Katrina Sigala
Bradley L. Bingham, P.E.

### Sims, Timothy E.

From:

Lopez, Anthony C.

Sent:

Tuesday, December 28, 2010 1:23 PM

To: Cc: Sims, Timothy E. Bingham, Brad L.

Subject:

RE: San Antonio Self Storage - 6300 San Antonio

The close-out comments have been addressed, reviewed and accepted to meet the city requirements.

Now the package goes to the ABCWUA for their review and acceptance of the water and sewer.

From:

Sims, Timothy E.

Sent:

Monday, December 27, 2010 3:40 PM

To: Cc:

Lopez, Anthony C. Bingham, Brad L.

Subject:

RE: San Antonio Self Storage - 6300 San Antonio

Thanks, when comments are addressed would you let me know the owner & engineer are awaiting their Certificate of Occupancy.

Timothy E. Sims

Plan Checker--Hydrology

505-924-3982

From:

Lopez, Anthony C.

Sent:

Monday, December 27, 2010 3:35 PM

To:

Sims, Timothy E.

Cc:

Bingham, Brad L.

**Subject:** 

RE: San Antonio Self Storage - 6300 San Antonio

Still awaiting response to the close-out comments.

From:

Sims, Timothy E.

Sent:

Monday, December 27, 2010 3:34 PM

To:

Lopez, Anthony C.

Cc: Subject:

Bingham, Brad L. San Antonio Self Storage - 6300 San Antonio

Has the work order been accepted for this project? Please let me know either way.

Thanks,

Timothy E. Sims Plan Checker--Hydrology 505-924-3982

#### DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 01/28/2003rd)

PROJECT TITLE:	San Antonio Storage		/DRG. FILE #: <u>E18/D061</u>
DRB #:	EPC #:	WORK ORE	) <u>+</u> ;
LEGAL DESCRIPTION:	Tract 1-A, P&J subdivision		
CITY ADDRESS:	San antonio east of San Pedro (2300		
		CONTACT	Devid Cerde DE
ENGINEERING FIRM:	Rio Grande Engineering	CONTACT:	
ADDRESS:	PO BOX 67305	PHONE:	(505)321-9099
CITY, STATE:	Alb	ZIP CODE:	87193
OWNER:	Parks Construction	CONTACT:	Jay
ADDRESS:	7121 Washington Ave NE	PHONE:	
CITY, STATE:	Albuquerque , NM	ZIP CODE:	87109
ARCHITECT:		CONTACT:	- <del>-</del>
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
SURVEYOR:	Precision Surveys	CONTACT:	Larry Medrano
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
	· · · · · · · · · · · · · · · · · · ·		
CONTRACTOR:		CONTACT:	· · · · · · · · · · · · · · · · · · ·
ADDRESS:	······································	PHONE:	
CITY, STATE:		ZIP CODE:	
CHECK TYPE OF SUBMIT	TAL:	CHECK TYPE OF A	PPROVAL SOUGHT:
DRAINAGE REF	PORT	x SIA / FINAI	NACIAL GUARANTEE RELEASE
<del></del>	N 1st SUBMITTAL, REQUIRES TCL or equal		ARY PLAT APPROVAL
<del>4+1-27</del>	N RESUBMITTAL	<del></del>	AN FOR SUB'D. APPROVAL
	GRADING & DRAINAGE PLAN	<del></del>	AN FOR BLDG. PERMIT APPROVAL
GRADING PLAI			PLAN APPROVAL
EROSION CON	TROL PLAN	FINAL PLA	AT APPROVAL
x ENGINEER'S C	ERTIFICATION (HYDROLOGY)	FOUNDAT	ION PERMIT APPROVAL
CLOMR/LOMR		BUILDING	PERMIT APPROVAL
TRAFFIC CIRC	ULATION LAYOUT (TCL)	x CERTIFICA	ATE OF OCCUPANCY (PERM.)
	ERTIFICATION (TCL)	CERTIFICA	ATE OF OCCUPANCY (TEMP.)
	ERTIFICATION (DRB APPR. SITE PLAN)		PERMIT APPROVAL
OTHER		to the state of th	ERMIT APPROVAL
			RDER APPROVAL
		OTHER (S	
WAS A PRE-DESIGN CON	IFERENCE ATTENDED:	13 Km	
YES			DEC 27 2010
NO			
COPY PROVIDI	ED		" "TIROLOGY
			MINION_
DATE SUBMITTED:	12/27/2010	BY:	HYDROLOGY SECTION David:Soule

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal.

The particular nature, location and scope of the proposed development defines the degree of drainage detail.

One or more of the following levels of sumbittal may be required based on the following:

- 1. Conceptual Grading and Drainage Plans: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
- 2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
- 3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

# CITY OF ALBUQUERQUE



# Planning Department Transportation Development Services Section

January 6, 2011

David Soule, P.E.

Rio Grande Engineering
P.O. Box 67305

Albuquerque, NM 87193

Re:

Certification Submittal for a Permanent Building Certificate of Occupancy (C.O.)

for San Antonio Storage, [E-18 / D061]

6300 San Antonio NE

Engineer's Stamp Dated 01/06/11

Dear Mr. Soule:

Based upon the information provided in your submittal received 01-06-11, Transportation Development has no objection to the issuance of a Permanent Certificate of Occupancy.

PO Box 1293

This letter serves as a "green tag" from Transportation Development for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

Albuquerque

Our records indicate a 'Release of Financial Guarantee' is not required for this project. However, the completion of the work order was a requirement for release of certificate.

NM 87103

If you have any questions, please contact me at (505)924-3630.

www.cabq.gov

Nilo E. Salgado-Fernandez, P.E.

Sénibr Traffic Engineer

Development and Building Services

Planning Department

C:

Sincerely

Engineer
Hydrology file
CO Clerk

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 01/28/2003rd)

PROJECT TITLE:	San Antonio Storage	ZONE MAP/DRG. FILE #: E18/D061 WORK ORDER #:						
DRB #:	EPC #:	WORK ORDE	<u> </u>					
· DECODIDEIONI	Tract 1-A, P&J subdivision							
LEGAL DESCRIPTION: CITY ADDRESS:	San antonio east of San Pedro	<u> </u>						
CITT ADDRESS.								
ENGINEERING FIRM:	Rio Grande Engineering	CONTACT:	David Soule, PE					
ADDRESS:	PO BOX 67305	PHONE:	(505)321-9099					
CITY, STATE:	Alb	ZIP CODE:	87193					
		CONTACT	lav					
OWNER:	Parks Construction	CONTACT: PHONE:	Jay					
ADDRESS:	7121 Washington Ave NE	ZIP CODE:	87109					
CITY, STATE:	Albuquerque , NM		100					
		CONTACT:	<b>t</b>					
ARCHITECT:		PHONE:						
ADDRESS:		ZIP CODE:						
CITY, STATE:		<del></del>						
SURVEYOR:	Lenor Armijo	CONTACT:	Lenore					
ADDRESS:		PHONE:						
CITY, STATE:		ZIP CODE:						
CONTRACTOR:		CONTACT:						
ADDRESS:		PHONE: ZIP CODE:						
CITY, STATE:								
CHECK TYPE OF SUBMI	ΤΤΔΙ ·	CHECK TYPE OF AP	PROVAL SOUGHT:					
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DRAINAGE RE	PORT		NACIAL GUARANTEE RELEASE					
	AN 1st SUBMITTAL, REQUIRES TCL or equal		AN FOR CURID, APPROVAL					
	AN RESUBMITTAL		AN FOR SUB'D. APPROVAL AN FOR BLDG. PERMIT APPROVAL					
	GRADING & DRAINAGE PLAN		LAN APPROVAL					
GRADING PLA			T APPROVAL					
EROSION CO			ON PERMIT APPROVAL					
	CERTIFICATION (HYDROLOGY)		PERMIT APPROVAL					
CLOMR/LOMF	CULATION LAYOUT (TCL)	- <del></del>	ATE OF OCCUPANCY (PERM.)					
	CERTIFICATION (TCL)		ATE OF OCCUPANCY (TEMP.)					
ENGINEERS (	CERTIFICATION (DRB APPR. SITE PLAN)		PERMIT APPROVAL					
OTHER			ERMIT APPROVAL					
			DER APPROVAL					
		OTHER (S	PECIFY)					
	SAIPPENEALOF ATTENIOEDS		1100					
<del></del>	NFERENCE ATTENDED:		# E. C.					
X YES NO			JAN					
COPY PROVI	DED		Territory of the Party of the P					
		DV.	David Soule					
DATE SUBMITTED:	1/6/2011	BY:						

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal.

The particular nature, location and scope of the proposed development defines the degree of drainage detail.

One or more of the following levels of sumbittal may be required based on the following:

- 1. Conceptual Grading and Drainage Plans: Required for approval of Site Development Plans greater than five
- (5) acres and Sector Plans.
- 2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
- 3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

#### DRAINAGE REPORT

For

# San Antonio Storage Lot 1A- P&J Subdivision Albuquerque, New Mexico

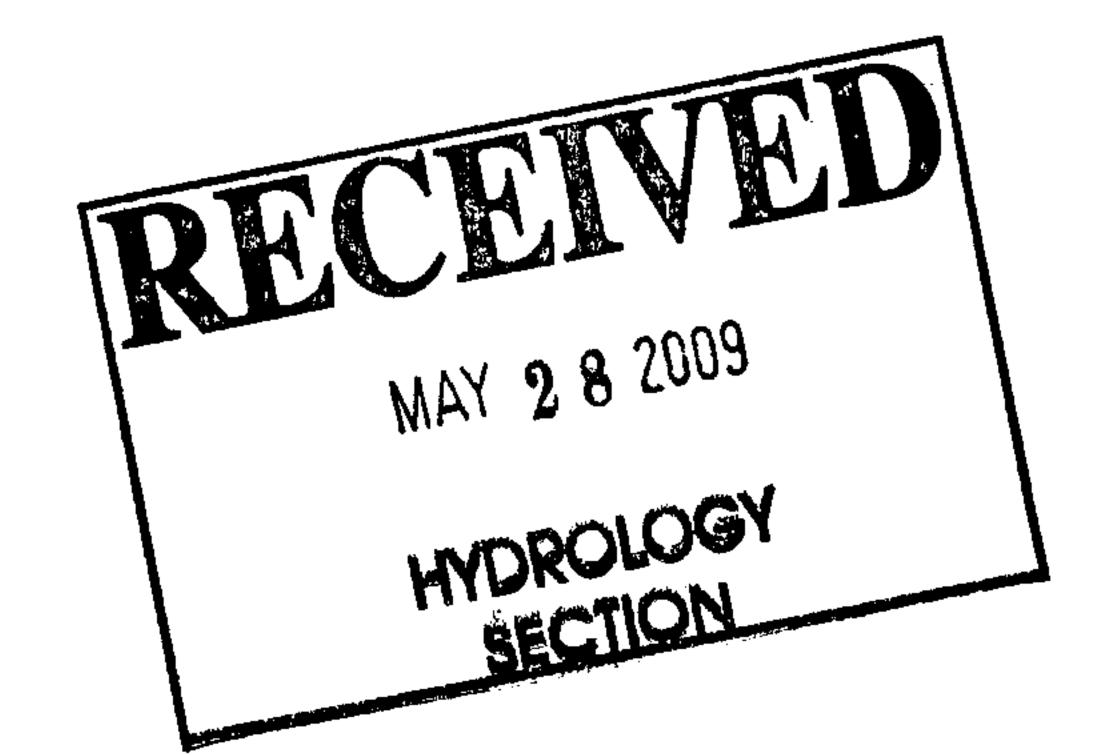
Prepared by

Rio Grande Engineering PO Box 67305 Albuquerque, New Mexico 87193

May 2009



David Soule P.E. No. 14522



#### **PURPOSE**

The purpose of this report is to provide the Drainage Management Plan for an approximately 70,000 square foot storage facility located on the south side of San Antonio east of San Pedro. This plan was prepared in accordance with the City of Albuquerque design regulations, utilizing the City of Albuquerque's Development Process Manual drainage guidelines. This report will demonstrate that the grading does not adversely affect the surrounding properties, nor the upstream or downstream facilities.

Tract 1-A 3.1459 At 
$$1314 \times 1548 = 378645$$

INTRODUCTION  $1-13 + 3.1458 \text{ Ac}$   $139 \times 100 = \frac{13387}{365353} = 6.1$ 

The subject of this report, as shown on the Exhibit A, is a 3.08-acre parcel of land located on the south side of San Antonio between San Pedro and Louisiana in north east Albuquerque.

The legal description of this site is Lot 1A, P&J Subdivision. As shown on FIRM map35001C0137F, the entire property is located within Flood Zone X. This site is located adjacent to the concrete lined Pino Arroyo. An informal pre-design meeting was held with Bradley Bingham, PE. Based on the proximately of the arroyo and a side inlet directly adjacent to the site, the site will be allowed free discharge to the Pino Arroyo.

#### **EXISTING CONDITIONS**

The site is currently undeveloped. This site is a known Landfill. The site slopes from east to west. The site currently has a 3% general east to west grade. The site is impacted by minor offsite flow adjacent to the site. As shown in Appendix A, the upland basin discharges 5.62 cfs onto the site as sheet flow along the interfacing property line. This site currently generates a peak flow rate of 4.81 cfs in a 100-year, 6-hour event. The discharge leaves the site mainly as sheet flow upon the lot to the west.

#### PROPOSED CONDITIONS

The proposed improvements consist of a 70,000 square foot storage facility. Due to the nature of the site as an old land fill, there will be not detention on site. The site will be graded such that the existing drainage upstream will be accepted upon the site. This offsite flow will be directed to an opening in the wall via an earthen swale onsite. The entire site will generate a peak flow rate of 14.49 cfs. The onsite and upland flows combine to discharge 20.10 cfs from the site. The site has been graded to direct all flow to an 18' opening and 10' rundown. This rundown connects to the existing side inlet of the Pino Arroyo. As show in Appendix A, the openings and rundowns have been sized to convey the entire flow.

#### SUMMARY AND RECOMMENDATIONS

This project is located adjacent to the Pino Arroyo. The site accepts the current upland flow and discharges the combined developed flow to an existing side inlet of the concrete lined Pino arroyo. The free discharge design of this site is required due to its previous use as a landfill. The free discharge solution was discussed with the City Hydrologist prior to developing the plan.

The proposed site development does not adversely affect the upstream or downstream facilities. The site was designed in conformance to City of Albuquerque Drainage design policy utilizing the City of Albuquerque DPM criterion. Therefore, we request approval of the site-grading plan. Since this site encompasses more than 1 acre, a NPDES permit will be required prior to any construction activity.

## Weighted E Method

Existing Basins

												100-Year			
Basin	Area	Area	Treat	nent A	Trea	tment B	Treat	ment C	Treat	ment D	Weighted E	Volume	Flow		
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs		
ONSITE	134251.92	3.082	100%	3.082	0%	0.000	0%	0	0%	0.000	0.530	0.136	4.81		
UPLAND	156860.00	3.601	100%	3.6010101	0%	0.000	0%	0	0%	0.000	0.530	0.159	5.62		
Total	291111.92	6.683		6.68		0.000		0	··· <del>··</del>	0.000		0.30	10.43		

Proposed Developed Basins

		<u></u>		11	10-day									
Basin Area	Area	Area	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E	Volume	Flow	Volume
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs	(ac-ft)
ONSITE	134251.92	3.082	0%	0	0%	0.000	0%	0	100%	3.082	2.120	0.544	14.49	0.955
UPLAND	156860.00	3.601	100%	3.6010101	0%	0.000	0%	0	0%	0.000	0.530	0.159	5.62	0.159
Total	291111.92	6.683		3.6010101		0.000		0		3.082		0.704	20.10	1.11

#### **Equations:**

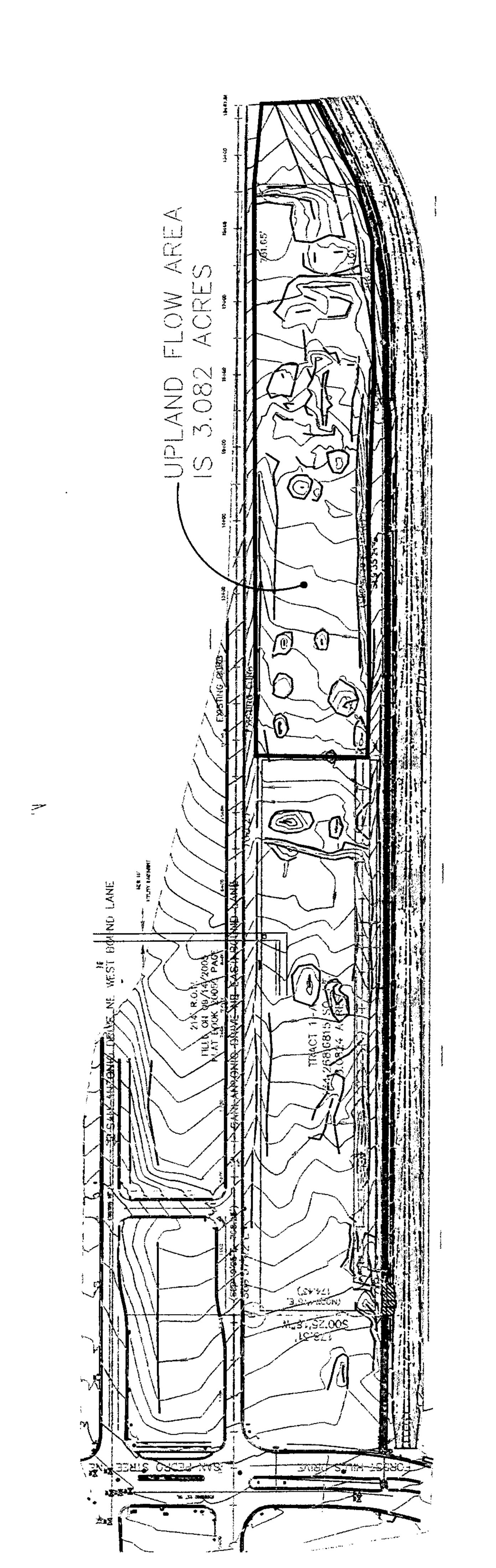
Weighted E = Ea\*Aa + Eb\*Ab + Ec\*Ac + Ed\*Ad / (Total Area)

Volume = Weighted D \* Total Area

Flow = Qa \* Aa + Qb \* Ab + Qc \* Ac + Qd \* Ad

Where for 100-year, 6-hour storm

- 114-11 4441111	
Ea= 0.53	Qa= 1.56
Eb= 0.78	Qb= 2.28
Ec= 1.13	Qc= 3.14
Ed= 2.12	Qd= 4.7



## Concrete Channel Entrance

### Weir Equation:

$$Q = CLH^{3/2}$$

Q = 20.10 cfs

C = 2.95

H = 0.67 ft

L = Length of weir

$$L = \frac{20.10}{2.95(0.67)^{3/2}}$$

L = 12.52 ft (3.7) Weir opening is 18' so OK (3.7)

## Fence opening accepting upland

### Weir Equation:

$$Q = CLH^{3/2}$$

$$Q = CLH^{3/2}$$

$$Q = CLH^{3/2}$$

$$Q = SLH^{3/2}$$

C = 2.95

H = 0.5 ft

L = Length of weir

$$L = \frac{5.62}{2.95(0.5)^{3/2}}$$

## Channel Capacity

	Top Width	Bottom Width	Depth	Area	WP	R	Slope	Q Provided	Q Required	Velocity
	(ft)	(ft)	(ft)	(ft^2)	(ft)		(%)	(cfs)	(cfs)	(ft/s)
Beginning	10	0	0.67	3.35	10.09	0.3320323	1.96	25.78	20.10	6.00

Manning's Equation:

 $Q = 1.49/n * A * R^{2/3} * S^{1/2}$ 

A = Area

R = D/4

S = Slope

n = 0.013

29.76

6.3 35.70

4.1 ch3/ac

## CONSTRUCTION EASEMENT AND CONSTRUCTION STORAGE SITE AGREEMENT

This agreement by and between Inelda Jaramillo owner of a parcel of land identified as Tract 1-B of P & J Subdivision, and Jay Parks owner of a parcel identified as Tract 1-A of P & J Subdivision. Said parcels fall within the jurisdictional boundaries of the City of Albuquerque, New Mexico.

The intent of this agreement is to grant Jay Parks a temporary 20' construction easement along the common boundary line of both parcels identified. Said easement is granted for the purpose of construction of a barrier wall and grading of a drainage swale diverting stormwater runoff within the Jaramillo parcel into the adjacent Pino Arroyo.

This agreement also grants to Jay Parks a temporary storage site containing 20,000 square feet, located on the Jaramillo parcel for the purpose of storage of construction materials to be used in the construction of San Antonio Self Storage. The terms for the storage site allows Jay Parks to install a temporary chainlink fence and a 20' access road for a period of (90) ninety calendar days, commencing at the time a building permit is granted by the City of Albuquerque for construction of San Antonio Self Storage.

Jay Parks agrees to pay Inclda Jaramillo a fee of (\$2,500.00) two thousand five hundred dollars for the use of said storage site and construction easement upon commencing work along the common boundary. Jay Parks will provide Inclda Jaramillo a copy of comprehensive liability insurance protecting Inclda Jaramillo from any liability during the term of this agreement. Jay Parks agrees to remove temporary fencing, storage materials, remove trash and debris created by construction activities and fine grading of the site upon termination of this agreement and the use of the site.

This agreement entered into by and between both parties on the \_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_ 2009. With actual construction to proceed upon the issuance of a building permit by the City of Albuquerque for San Antonio Self Storage, at which time Inelda Jaramillo will be paid the amount noted in full.

Jay Parks, Parks Construction

Inelda Jaramillo, Owner Tract 1-B



## Control Station Data

Station Name: 10-D18

Status: Active

City of Albuquerque, New Mexico Department of Municipal Development Construction Services Division Surveying Section

**Ground to Grid Factor:** 0.999659710

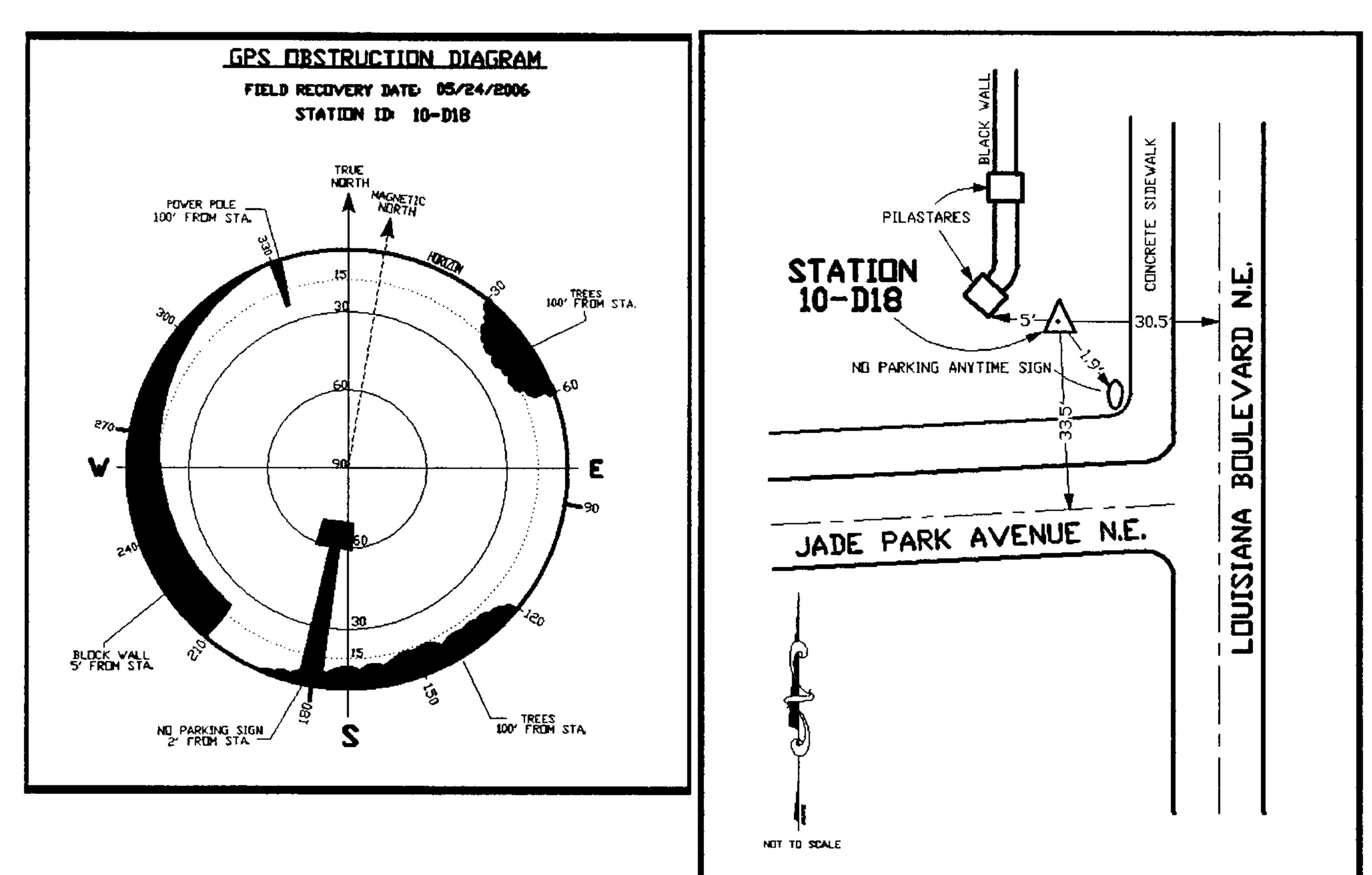
Northing (US survey feet): 1515749.916

Easting (US survey feet): 1545122.187

**Mapping Angle:** -0\_11\_01.11

Northing (meters): 462001.498

Easting (meters): 470954.184



#### **Description:**

The station is located 7.4 miles northeast of downtown Albuquerque at the intersection of Jade Park Avenue and Louisiana Boulevard NE.

To reach the station from the intersection of I-40 and Louisiana Boulevard, travel north on Louisiana Boulevard 4.7 miles to the intersection with Jade Park Avenue and the station on the left.

The station mark is a City of Albuquerque survey control brass disc stamped "10-D18 1978" set in top of a concrete post 0.3 feet below ground.

For more information contact Cliff Wilkie the Geodetic Surveyor at 505-768-3609 or Cwilkie@cabq.gov.

### NAD 83 Position

Datum: NAD 83

**Projection:** New Mexico State Plane

Zone: Central

**Latitude:** 35 - 9 - 56.50272 **Longitude:** 106 - 34 - 7.86924

Ellipsoidal Height (meters): 1601.218

Order: 1 Class: 1

NAVD 1988 Elevation Datum: NAVD 1988 W GVD 29

Orthometric Height (US survey

feet): N/A

http://www.cabq.gov/gissurvey/?stationname=10-D18&submit=Find

## Concrete Channel Entrance

### Weir Equation:

$$Q = CLH^{3/2}$$

Q = 29.94 cfs

C = 2.95

H = 0.67 ft

L = Length of weir

$$L = \frac{29.94}{2.95(0.67)^{3/2}}$$

L = 18.51 ft

Weir opening is 20' so OK

## Fence opening accepting upland

## Weir Equation:

$$Q = CLH^{3/2}$$

Q = 16.05 cfs

C = 2.95

H = 0.5 ft

L = Length of weir

$$L = \frac{16.05}{2.95(0.5)^{3/2}}$$

L = 15.65 ft

Weir opening is 20' so OK

## Weighted E Method

Existing Basins

											100-Year			
Basin	Area	Area	Treati	ment A	Trea	tment B	Treat	ment C	Treat	ment D	Weighted E	Volume	Flow	
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs	
ONSITE	134251.92	3.082	100%		0%	0.000	0%	0	0%	0.000	0.530	0.136	4.81	
UPLAND	156860.00	3.601	100%	<del>•••••</del>	0%	0.000	0%	0	0%	0.000	0.530	0.159	5.62	
Total	291111.92	6.683		6.68		0.000		0		0.000		0.30	10,43	

Proposed Developed Basins

	· •· •· •· • • • • • • • • • • • • • •	<u> </u>		· · · · · · · · · · · · · · · · · ·	1	00-Year, 6-hr.	10-day							
Basin Area	1 4 1	Area	Treatn	nent A	Trea	Treatment B		Treatment C		ment D	Weighted E	Volume	Flow	Volume
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs	(ac-ft)
ONSITE	134251.92	3.082	0%	0	8%	0.247	0%	0	92%	2.835	2.013	0.517	13.89	0.895
UPLAND	156860.00	3.601	0%	0	10%	0.360	0%	0	90%	3.241	1.986	0.596	16.05	1.028
Total	291111.92	6.683		0		0.607		0		6.076		1.113	29.94	1.92

#### **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

Where for 100-year, 6-hour storm

Ea= 0.53 Qa= 1.56 Eb= 0.78 Qb= 2.28 Ec= 1.13 Qc= 3.14 Ed= 2.12 Qd= 4.7

# Channel Capacity from Site to Sile Inlet

	Top Width	Bottom Width	Depth	Area	WP	R	Slope	Q Provided	Q Required	Velocity
	(ft)	(ft)	(ft)	(ft^2)	(ft)		(%)	(cfs)	(cfs)	(ft/s)
Beginning	10	0	1	5.00	10.20	0.4902903	1.96	49.89	29.95	5.99

## Manning's Equation:

 $Q = 1.49/n * A * R^{2/3} * S^{1/2}$ 

A = Area

S = Slope n = 0.013

