# CITY OF ALBUQUERQUE



December 17, 2015

Fred Arfman, PE ISAACSON & ARFMAN, P.A. 128 Monroe Street NE Albuquerque, NM 87108

Richard J. Berry, Mayor

Westgate Heights Park Addition, Unit 2 (File: M09D008B) RE: 8810 Sonya Ave. SW Grading Plan and Drainage Plan Engineer's Stamp Date – 12/010/2015

Dear Mr. Arfman:

Based upon the information provided in your submittal received 12-10-15, the above referenced Grading Plan and Drainage Plan cannot be approved for Grading Permit and Paving Permit until the following comments are addressed.

- Provide spot and contour elevations on the Overall Grading and Drainage Plan sheet.
- Provide flow line elevations at the outfall for each proposed sidewalk culvert onsite.
- The total area for historic flows does not match the total area for developed flows in the Calculation section of the Overall Grading and Drainage Plan sheet. Review this information to ensure the total basin area for existing and proposed conditions match.
- The area of land treatment D used in the First Flush calculation shown appears to be based on information provided in the previous submittal. Update the First Flush calculation on the Grading General Notes and Details sheet to reflect the changes to the area of land treatment D shown in the Calculation section of the Overall Grading and Drainage Plan sheet.

New Mexico 87103

PO Box 1293

Albuquerque

If you have any questions, you can contact me at 924-3421.

www.cabq.gov

Rudy Archuleta, P.E.

Sincerely,

Senior Engineer, Planning Dept.

Development Review Services

Orig:

Drainage file

Addressee via Email



# City of Albuquerque

### Planning Department

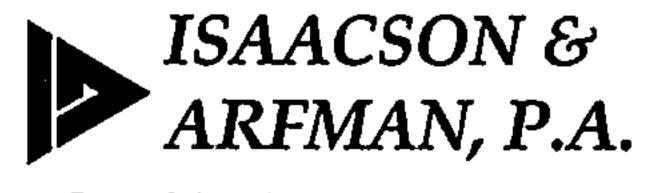
#### Development & Building Services Division

#### DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: Westgate Heights Park	Building Permit #:	City Drainage #: M09/D008B
DRB#: EPC#:	·	Work Order#:
Legal Description: Westgate Heights Park Addition, Unit 2		
City Address: 8810 Sonya Ave. SW - Albuquerque, NM		
Engineering Firm: Isaacson & Arfman, P.A.		Contact: Fred C. Arfman
Address: 128 Monroe Street NE - Albuquerque, NM 87108		
Phone#: (505) 268-8828 Fax#:		E-mail: freda@iacivil.com
Owner: City of Albuquerque		Contact:
Address:		<del> </del>
Phone#:		E-mail:
Architect: Morrow Reardon Wilkinson Miller, Ltd		Contact:
Address: 210 La Veta Drive NE - Albuquerque, NM 87108		
Phone#: (505) 268-2266 Fax#:		E-mail:
Other Contact:		Contact:
Address:		
Phone#:		E-mail:
DEPARTMENT:  X HYDROLOGY/ DRAINAGE  TRAFFIC/ TRANSPORTATION  MS4/ EROSION & SEDIMENT CONTROL	X BUILDING P	APPROVAL/ACCEPTANCE SOUGHT: ERMIT APPROVAL E OF OCCUPANCY
TYPE OF SUBMITTAL:  ENGINEER ARCHITECT CERTIFICATION	SITE PLAN I	RY PLAT APPROVAL FOR SUB'D APPROVAL FOR BLDG. PERMIT APPROVAL
CONCEPTUAL G & D PLAN $old X$ GRADING PLAN		APPROVATOR PROVATOR
DRAINAGE MASTER PLAN		SE OF FINANCIAL GUARANTEE U LE
DRAINAGE REPORT		ERMIT APPROVAL DEC 1 0 2015
CLOMR/LOMR	SO-19 APPR	
TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS) EROSION & SEDIMENT CONTROL PLAN (ESC)	X PAVING PER	RMIT APPROMIND DEVELOPMENT SECTION AD CERTIF <del>ICATION</del> R APPROVAL
OTHER (SPECIFY)	PRE-DESIGN OTHER (SPE	MEETING ECIFY)
IS THIS A RESUBMITTAL?: X Yes No		
DATE SUBMITTED: December 10, 2015 By: Fred C	C. Arfman	

COA STAFF: EL

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_



Consulting Engineering Associates

Bryan Bobrick <br/> <br/> bryanb@iacivil.com>

### Westgate Heights Park - Hydrology Submittal

1 message

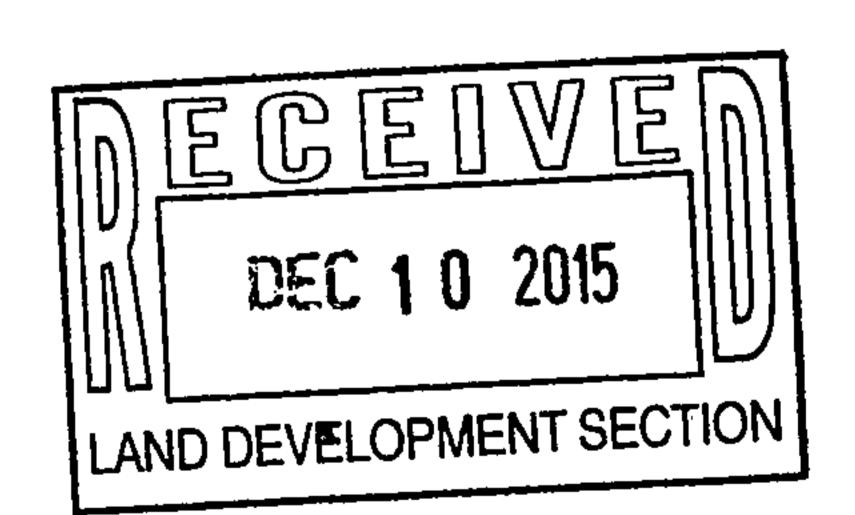
Bryan Bobrick <bryanb@iacivil.com>

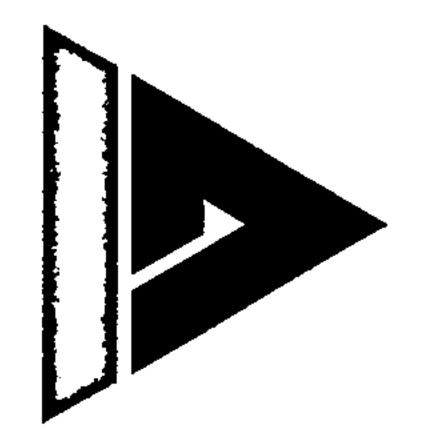
Thu, Dec 10, 2015 at 8:42 AM

To: COA Planning Development Review Services <PLNDRS@cabq.gov> Cc: Fred Arfman <freda@iacivil.com>, John Pope <jpope@mrwmla.com>

Bryan Bobrick Isaacson & Arfman, P.A. 128 Monroe N.E. Albuquerque, NM 87108 (505) 268-8828

2096 GRADING SIGNED 12-09-15.pdf 4090K





Thomas O. Isaacson, PE(RET.) & LS(RET.) . Fred C. Arfman, PE . Asa Nilsson-Weber, PE

December 8, 2015

City of Albuquerque Hydrology Mr. Rudy Archuleta P.E Senior Engineer, Planning Dept. Development Review Services

RE: WESTGATE HEIGHTS PARK ADDITION (M09d008B) – HYDROLOGY SUBMITTAL FOR BUILDING PERMIT REVIEW

Dear Mr. Archuleta,

Attached with this plan is a revised Grading and Drainage plan for your review. Revisions were made in response to site plan revisions and per your review comments dated December 1, 2015. The following bulleted response corresponds to your review comments:

- The overall park property is an existing park which consists of one overall drainage basin with flow discharging from the site at the existing sidewalk culvert at the southeast end of the property. As part of the improvements, depressed landscaping / water harvesting is provided to utilize stormwater for landscaping. No specific volume is required. There are two First Flush retention ponds provided for runoff from impervious areas. Calculations for these ponds are included on the plans.
  - Total discharge from the proposed redeveloped park property is reduced from the current discharge due to the addition of the self-ponding playground area, and the reduction of impervious compacted dirt. Discharge to 86th street has been reduced from 20.5 cfs to 17.7 12.9 cfs (total playground). The addition of depressed water harvesting basins throughout the property are not included in the reduction although these will impact overall discharge.
  - General Note "Z" has been deleted. General Note "Q" addresses the stormwater control
    permit requirement.
  - The open area at the northwest corner is a playground with 12" of playground material. This area will self-pond with stormwater infiltrating into the ground. The landscape architect requested a flat playground to minimize the likelihood of the playground material flowing to a low end. I have added the playground structures in the background for clarification.
  - Existing flowline, top of curb and sidewalk elevations are provided at all proposed drive pad and ADA ramp locations.
  - Optional valley gutter added across drive to potentially reduce maintenance.
  - All curb cuts are key noted.

- Both first flush ponds are intended to provide volume required for first flush retention and will discharge flow in excess of required capacity at the curb opening and at the existing covered sidewalk culvert to 86th Street.
- Covered Sidewalk Culvert supplemental note is provided on Sheet 7.
- The Demolition Plan is included as part of the Landscape Architects Construction Documents.

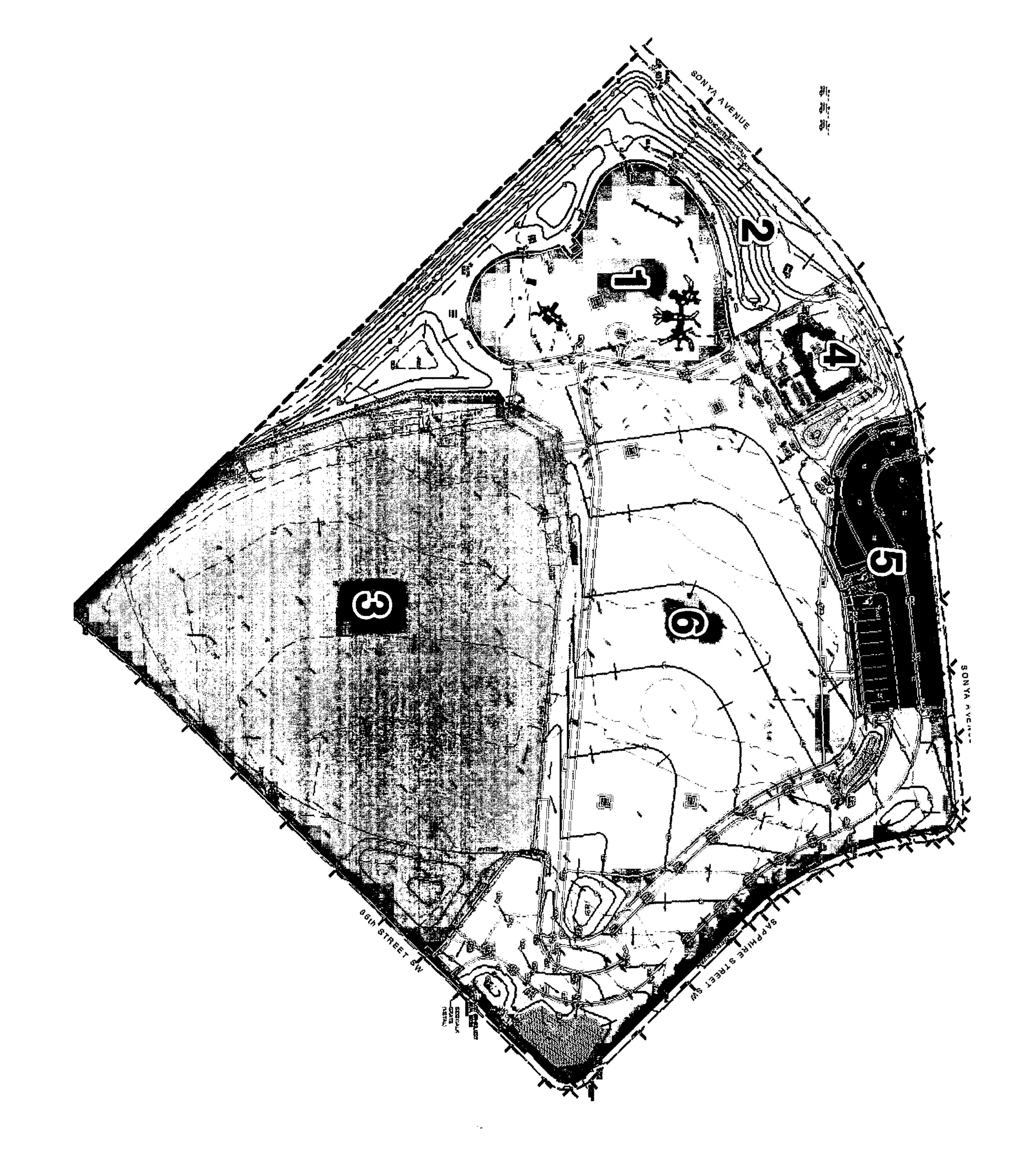
Please don't hesitate to call me with any questions or comments.

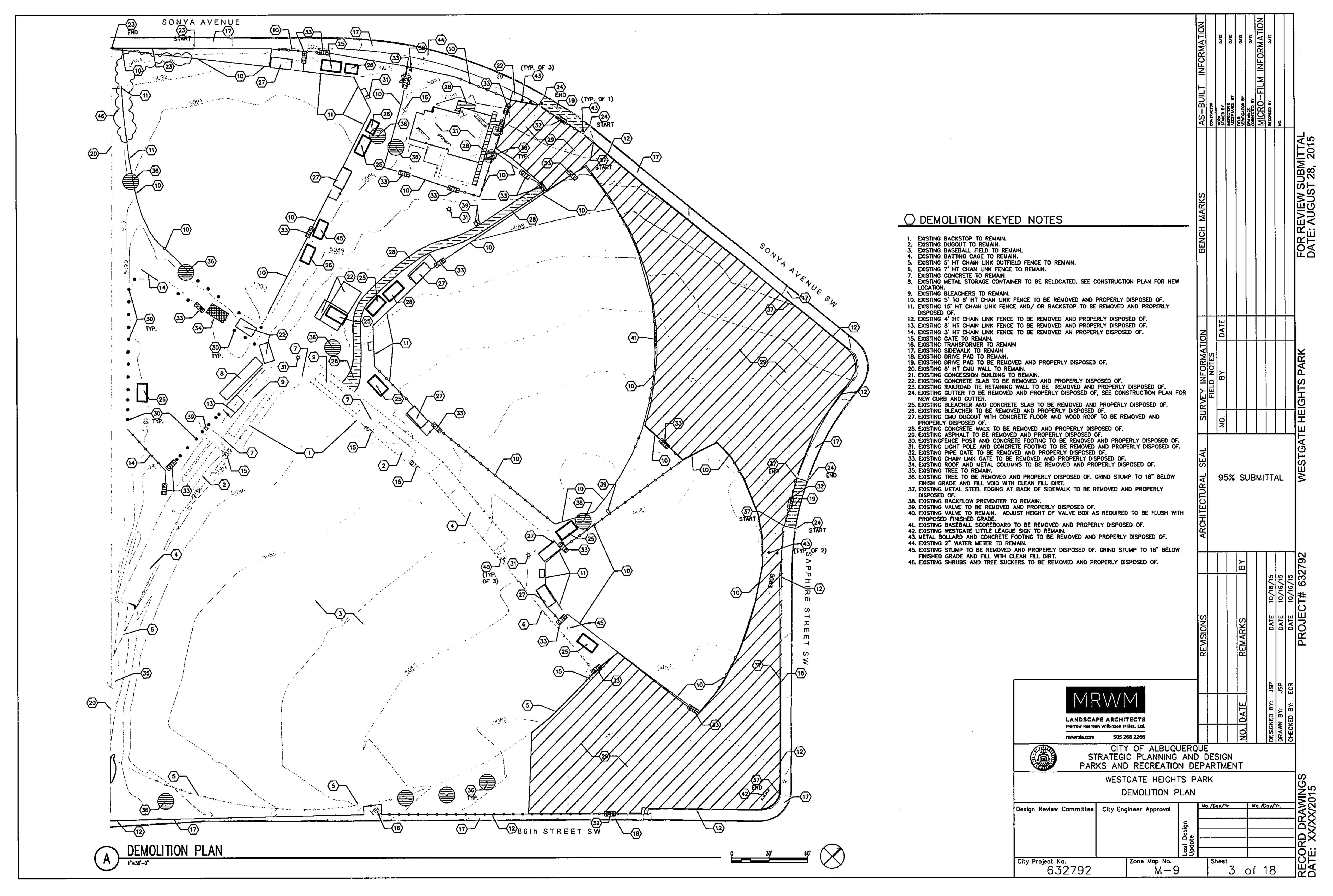
Sincerely,

Isaacson & Arfman, PA

Fred C. Arfman, PE

BASIN NO. 1		† DESCRIPTION	S	elf-Ponding Playground Area		
Area of basin flows =	21166	SF	=	0.5 Ac.		
The following calculation	tions are based on Treatment areas as shown in table to the right			LAND TREATMENT		
	Sub-basin Weighted Excess Precipitation (see formula above)			A = 6 0%	A = 0%	
	Weighted E	= 1.06 is	n.	B=100%	CAMMOT	
	Sub-basin Volum	e of Runoff (see formula abov	ve)	C= 0%	PYERO	
	V360	= 1877	CF	D=* 20%	100°/6	
	Sub-basin Peak I	Discharge Rate: (see formula a	bove)	FIRST FLUSH VOL.		
	Q <sub>P</sub>	= 1.4	cfs	120	) CF	
BASIN NO. 2		DESCRIPTION		Landscape		
Area of basin flows =	35000		=	0.8 Ac.	_	
The following calculation		Creatment areas as shown in t	•	<u> </u>	`	
	<del></del>	ted Excess Precipitation (see		<u> </u>		
	Weighted E			$\mathbf{B} = 50\%$		
	1	e of Runoff (see formula abov	<del></del>	$C = \frac{\pi}{4} \qquad 45\%$		
	V360	= 2564	<u>CF</u>	D= 5%	1	
	$\overline{}$	Discharge Rate: (see formula a		FIRST FLUSH VOL.		
	Q <sub>P</sub>	= 2.0	cfs		) CF	
BASIN NO. 3	-	1 DESCRIPTION	]	Existing Ball Field to Remain		
Area of basin flows =	100248	SF		2.3 Ac.	_	
The following calculation		reatment areas as shown in t	•		`	
· .	<del></del>	ted Excess Precipitation (see		<b>.</b>		
	Weighted E	= 0.88 i		$B = \frac{1}{2}$ 50%		
		e of Runoff (see formula abov		C= 45%		
	V360	= 7343	<u>CF</u>	D=* 5%	<b>\$</b>	
	Sub-basin Peak I	Discharge Rate: (see formula a		FIRST FLUSH VOL.		
D A CIDI NIC	QP	= 5.8	cfs	•	2 CF	
BASIN NO. 4	01.50	: DESCRIPTION		Existing Concessions Bldg		
Area of basin flows =	8153	SF	= 1 1 - 4 - 41 - 1 4	0.2 A C.	7	
ine following calculation		reatment areas as shown in t	•			
		ted Excess Precipitation (see		<b>ʻ</b> r`	j	
	Weighted E		<del></del>	$B = \frac{0\%}{6}$		
		e of Runoff (see formula abov	<del></del>	$C = \frac{1}{2}$ 70% $D = \frac{1}{2}$ 30%	1 1	
	Sub booin Pools I	= 872	CF have		4	
	Sub-basin reak i	Discharge Rate: (see formula a	<del></del>	FIRST FLUSH VOL.	) CE	
DACINI NO 6	Q <sup>P</sup>	0.0	cfs Cult Des		) CF	
BASIN NO. 5	14502	DESCRIPTION	Sub-Bas	sin to First Flush Retention Po	ond #1	
Area of basin flows =	ns are based on T	SF Treatment areas as shown in t	able to the right	0.3 Ac.  LAND TREATMENT	.1	
The following calculation		ted Excess Precipitation (see	•		_j 	
	Weighted E	= 1.60 i		$\mathbf{B} = \begin{bmatrix} 0.76 \\ 10\% \end{bmatrix}$		
	<u> </u>	e of Runoff (see formula abov		$C = \frac{1070}{1070}$	· ]	
	V <sub>360</sub>	= 1938	CF	$D = \frac{5}{1}$ 65%		
		Discharge Rate: (see formula a	<del>.</del>	FIRST FLUSH VOL.	·:_	
•	Qp	= 1.3	cfs	<b>L</b>	CF	
BASIN NO. 6	•	DESCRIPTION		sin to First Flush Retention Po		
Area of basin flows =	119947	SF	=	2.8 Ac.		
	<del>_</del>	reatment areas as shown in t	able to the right	· ·	7	
Sub-basin Weighted Excess Precipitation (see formula above)  A = 0%					1	
•	Weighted E	= 1.17 is		$B = \frac{1}{7}$ 50%	<u> </u>	
		e of Runoff (see formula abov		C= 15%		
	V360	= 11725	CF	$D = \frac{1}{7}$ 35%	1	
	Sub-basin Peak I	Discharge Rate: (see formula a	bove)	FIRST FLUSH VOL.	•	
	QP	= 8.2	cfs	1189	) CF	
			-			





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# CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

December 1, 2015

Fred Arfman, PE
ISAACSON & ARFMAN, P.A.
128 Monroe Street NE
Albuquerque, NM 87108

RE: Westgate Heights Park Addition, Unit 2 (File: M09D008B) 8810 Sonya Ave. SW Grading Plan and Drainage Plan Engineer's Stamp Date – No Stamp

Dear Mr. Arfman:

Based upon the information provided in your submittal received 10-15-15, the above referenced Grading Plan and Drainage Plan cannot be approved for Grading Permit and Paving Permit until the following comments are addressed.

- Delineate drainage basins to clearly identify flow patterns directed to onsite water harvesting ponds. Tabulate basin flows and water harvesting pond volumes.
- Include total discharge to 86<sup>th</sup> Street through existing sidewalk culvert.
- General Note "Z" on the Grading General Notes and Details sheet states that a SWPPP is not required. The total project area of disturbance appears to exceed 1 acre. Adjust note to include plans for a SWPPP.
- Based on spot elevations shown, the open area at the northwest corner of the project appears to be at the same elevation. Adjust grades in this area to ensure positive drainage is met.
- Provide existing flow line, top of curb and sidewalk elevations at all proposed drivepad and ADA ramp locations.
- The parking area near the intersection of Sonya Ave. and Sapphire Road appears to direct parking lot and field flows to a point location, discharging to the harvesting and first flush ponds. Consider the use of valley gutters in this area to ensure positive drainage is met.
- Specify curb cuts within the parking lot at all point discharge locations to a pond.
- Provide emergency outfall information for all water harvesting and first flush ponds.
- When specifying the City of Albuquerque sidewalk culvert detail, ensure a supplemental note is provided for the bolts to be tack welded to the plate.
- Identify the limits of pavement and sidewalk removal needed for proposed improvements.

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

If you have any questions, you can contact me at 924-3994.

Sincerely,

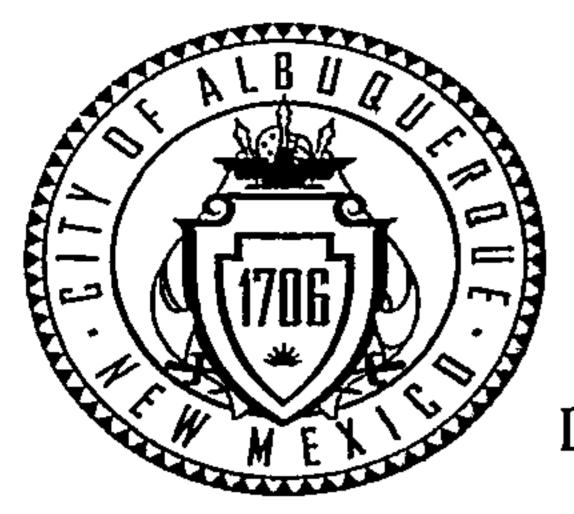
Rudy Archuleta, P.E.
Senior Engineer, Planning Dept.
Development Review Services

Orig:

Drainage file

c.pdf

Addressee via Email



## City of Albuquerque

### Planning Department

#### Development & Building Services Division

#### DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Westgate Heights Park	Building Permit #:	City Drainage #: M-9 10005
DRB#: EPC#:		Work Order#:
Legal Description: Westgate Heights Park Addition, Ur	nit 2	
City Address: 8810 Sonya Ave. SW		
Engineering Firm: Isaacson & Arfman, P.A.		Contact: Fred C. Arfman
Address: 128 Monroe Street NE - Albu	aueraue NM 87108	Contact. 1700 O. 74mman
Phone#: (505) 268-8828 Fax#:	. 440.440, 74.77	E-mail: freda@iacivil.com
		13 man. <u>11 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1</u>
Owner: City of Albuquerque		Contact:
Address:		
Phone#: Fax#:		E-mail:
Architect: Morrow Reardon Wilkinson Miller, Ltd.		Contact:
Address: 210 La Veta Dr. NE - Albuquerque, NM	87108	
Phone#: (505) 268-2266 Fax#:		E-mail:
Current		Contact
Surveyor: Address:		Contact:
Phone#:		E-mail:
1 HOHOM.	·	1.5-111a11.
Contractor:	· · · · · · · · · · · · · · · · · ·	Contact:
Address:		<del></del>
Phone#: Fax#:		E-mail:
TYPE OF SUBMITTAL:	CHECK TYPE OF APPROVA	AL/ACCEPTANCE SOUGHT:
DRAINAGE REPORT	SIA/FINANCIAL GUARAN	TEE RELEASE
X DRAINAGE PLAN 1st SUBMITTAL	PRELIMINARY PLAT APPR	
DRAINAGE PLAN RESUBMITTAL	S. DEV. PLAN FOR SUB'D	APPROVAL
X CONCEPTUAL G & D PLAN	S. DEV. FOR BLDG. PERMI	T APPROVAL     OCT 1 5 2015
GRADING PLAN	SECTOR PLAN APPROVAL	
EROSION & SEDIMENT CONTROL PLAN (ESC)	FINAL PLAT APPROVAL	
ENGINEER'S CERT (HYDROLOGY)	CERTIFICATE OF OCCUPA	NCY (PERM) LAND DEVELOPMENT SECTIO
CLOMR/LOMR	CERTIFICATE OF OCCUPA	
TRAFFIC CIRCULATION LAYOUT (TCL)	FOUNDATION PERMIT AP	PROVAL
ENGINEER'S CERT (TCL)	BUILDING PERMIT APPRO	VAL
ENGINEER'S CERT (DRB SITE PLAN)	·X GRADING PERMIT APPRO	VAL SO-19 APPROVAL
ENGINEER'S CERT (ESC)	X PAVING PERMIT APPROV	AL ESC PERMIT APPROVAL
SO-19	WORK ORDER APPROVAL	ESC CERT. ACCEPTANCE
OTHER (SPECIFY)	GRADING CERTIFICATION	OTHER (SPECIFY)
WAS A PRE-DESIGN CONFERENCE ATTENDED:	Yes No Co	py Provided
DATE SUBMITTED: October 15, 2015	By: Fred C. Arfman	
	Isaacson & Afrman, P.A.	

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following

- 1. Conceptual Grading and Drainage Plan: 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 subdivision containing more than ten (10) lots or constituting five (5) acres or more
- 4. Erosion and Sediment Control Plan: Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development



Consulting Engineering Associates

Bryan Bobrick <br/> <bryanb@iacivil.com>

### Westgate Heights Park - 95% Submittal for hydrology review

1 message

Bryan Bobrick <bryanb@iacivil.com>

Thu, Oct 15, 2015 at 1:51 PM

To: COA Planning Development Review Services <PLNDRS@cabq.gov> Cc: Fred Arfman <freda@iacivil.com>, Ruth Lozano <ruthl@iacivil.com>

Attached is a pdf set of the Grading and Drainage sheets for the referenced project.

Hard copy will be submitted later today or tomorrow.

Thanks

Bryan Bobrick Isaacson & Arfman, P.A. 128 Monroe N.E. Albuquerque, NM 87108 (505) 268-8828



