

CITY OF ALBUQUERQUE



June 16, 2010

Fred C. Arfman, P.E.
Isaacson & Arfman, P.A.
128 Monroe St NE
Albuquerque, NM 87108

**Re: First Choice Community Healthcare, 1401 William St SE, Grading and
Drainage Plan**

Engineer's Stamp dated 6-1-10 (L14/D058)

Dear Mr. Arfman,

Thank you for submitting a plan for our files.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

C: file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(Rev. 12/05)

PROJECT TITLE: First Choice Community Healthcare Improvements ZONE MAP/DRG. FILE # L-14 / D058
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: A portion of Tract 397, MRGCD Property Map No. 41, Bernalillo County, NM
CITY ADDRESS: 1401 William St. SE, Albuquerque, NM 87102

ENGINEERING FIRM: ISAACSON & ARFMAN, PA
ADDRESS: 128 MONROE NE
CITY, STATE: ALBUQUERQUE, NM

CONTACT: Asa Weber
PHONE: 268-8828
ZIP CODE: 87108

OWNER: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

ARCHITECT: Gregory T. Hicks & Associates
ADDRESS: 110 Second St. SW, Suite 204
CITY, STATE: Albuq. NM

CONTACT: Russ Golitely
PHONE: 243-7492
ZIP CODE: 87102

SURVEYOR: Forstbauer Surveying
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

CONTRACTOR: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT
☐ DRAINAGE PLAN 1st SUBMITTAL
☒ DRAINAGE PLAN RESUBMITTAL
☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERT (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT
☐ ENGINEER/ARCHITECT CERT (TCL)
☐ ENGINEER/ARCHITECT CERT (DRB S.P.)
☐ ENGINEER/ARCHITECT CERT (AA)
☐ OTHER (Supplemental Information)

CHECK TYPE OF APPROVAL SOUGHT:

☐ SIA/FINANCIAL GUARANTEE RELEASE
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D APPROVAL
☐ S. DEV. FOR BLDG. PERMIT APPROVAL
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY (PERM)
☐ CERTIFICATE OF OCCUPANCY (TEMP)
☒ GRADING PERMIT APPROVAL
☒ PAVING PERMIT APPROVAL
☐ WORK ORDER APPROVAL
☒ OTHER (S.O.19 Approval)

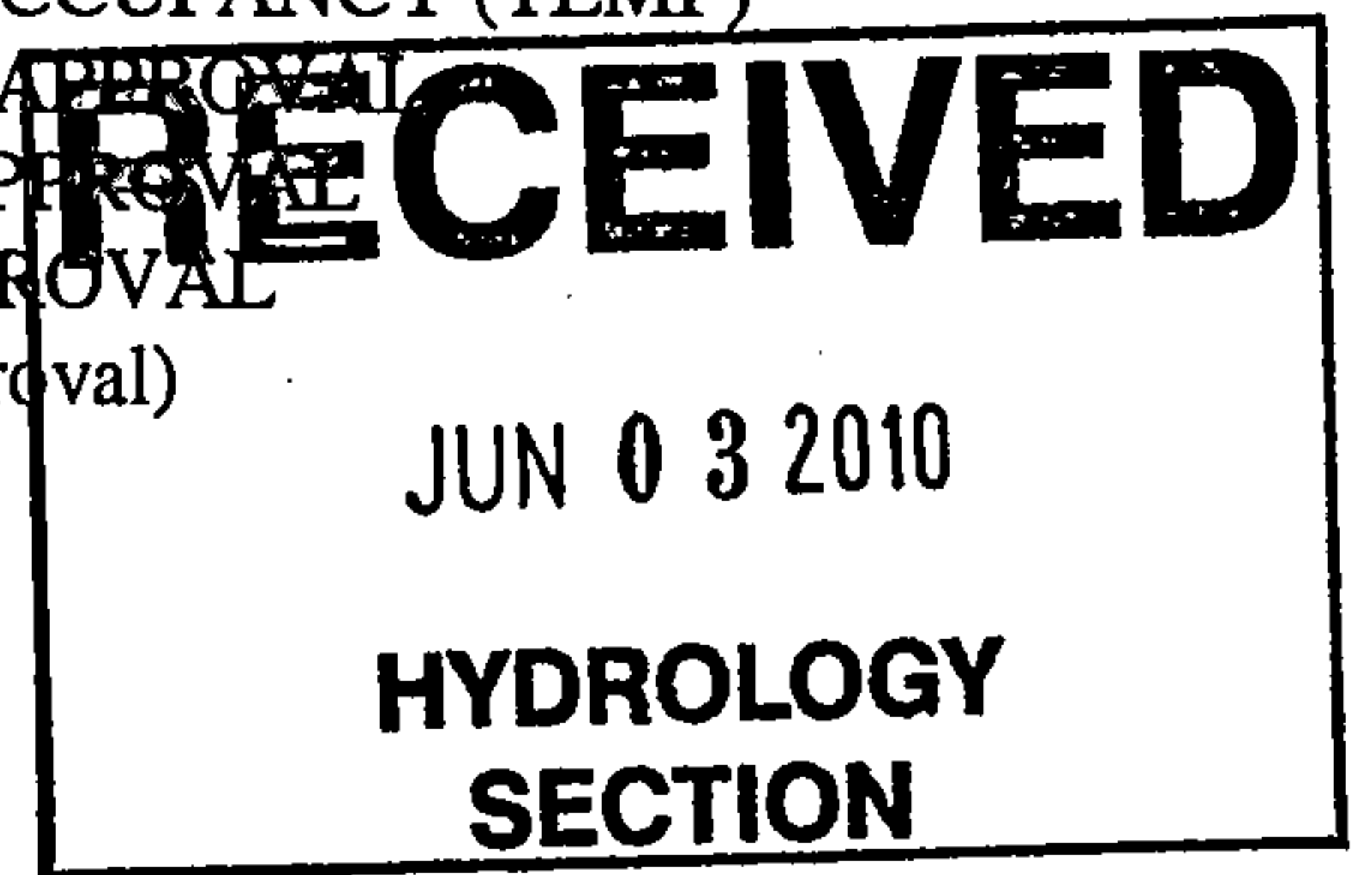
WAS A PRE-DESIGN CONFERENCE ATTENDED:

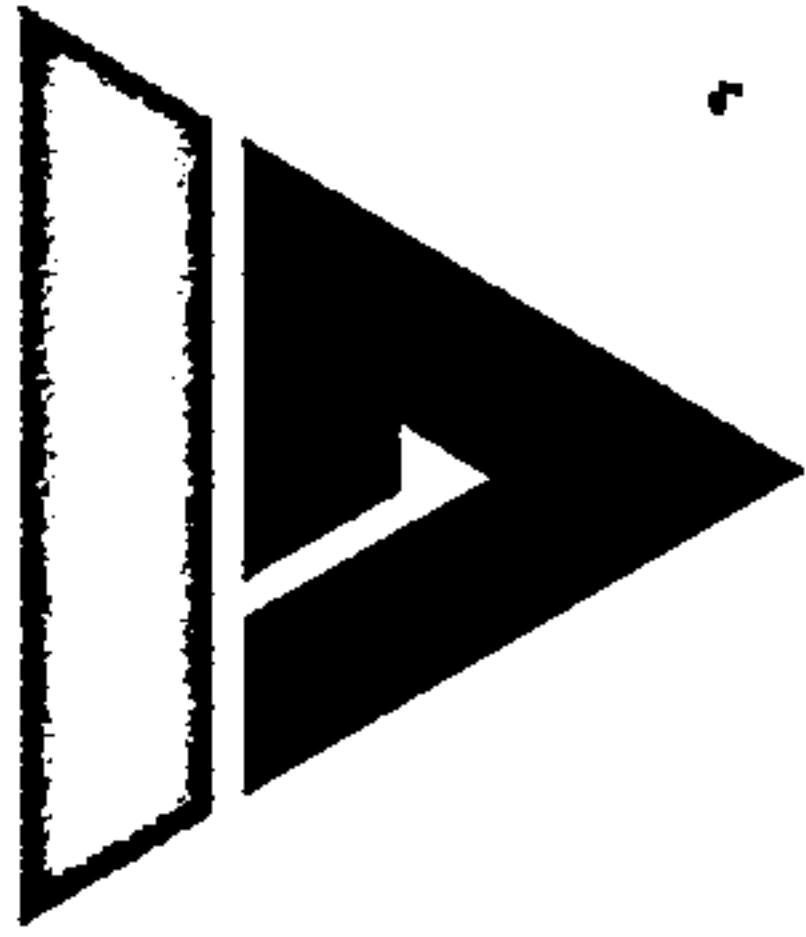
☐ YES
☐ NO
☐ COPY PROVIDED

SUBMITTED BY: Fred C. Arfman, PE DATE: 6/2/2010
Isaacson & Arfman, 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 define 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.





Isaacson & Arfman, P.A.

Consulting Engineering Associates

*Thomas O. Isaacson, PE & LS * Fred C. Arfman, PE * Åsa Nilsson-Weber, PE*

February 9, 2010

Mr. Curtis A. Cherne, PE
Senior Engineer, Planning Dept.
COA Hydrology Dept.

RE: First Choice Community Healthcare Grading and Drainage Plan (L14/D058)

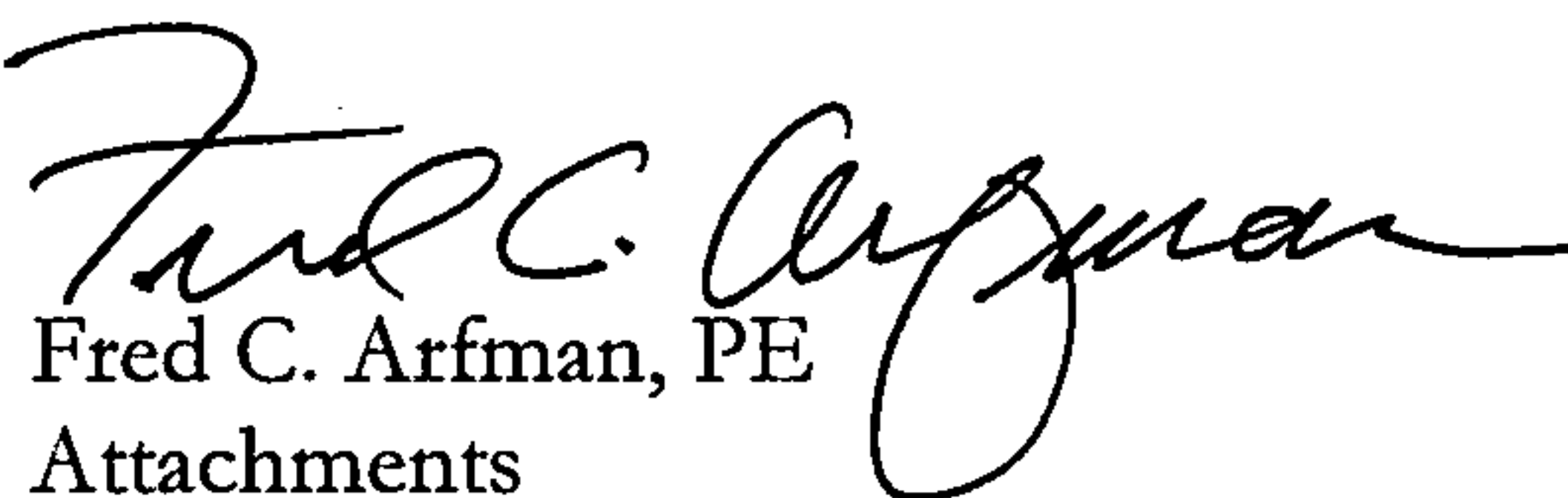
Dear Mr. Cherne:

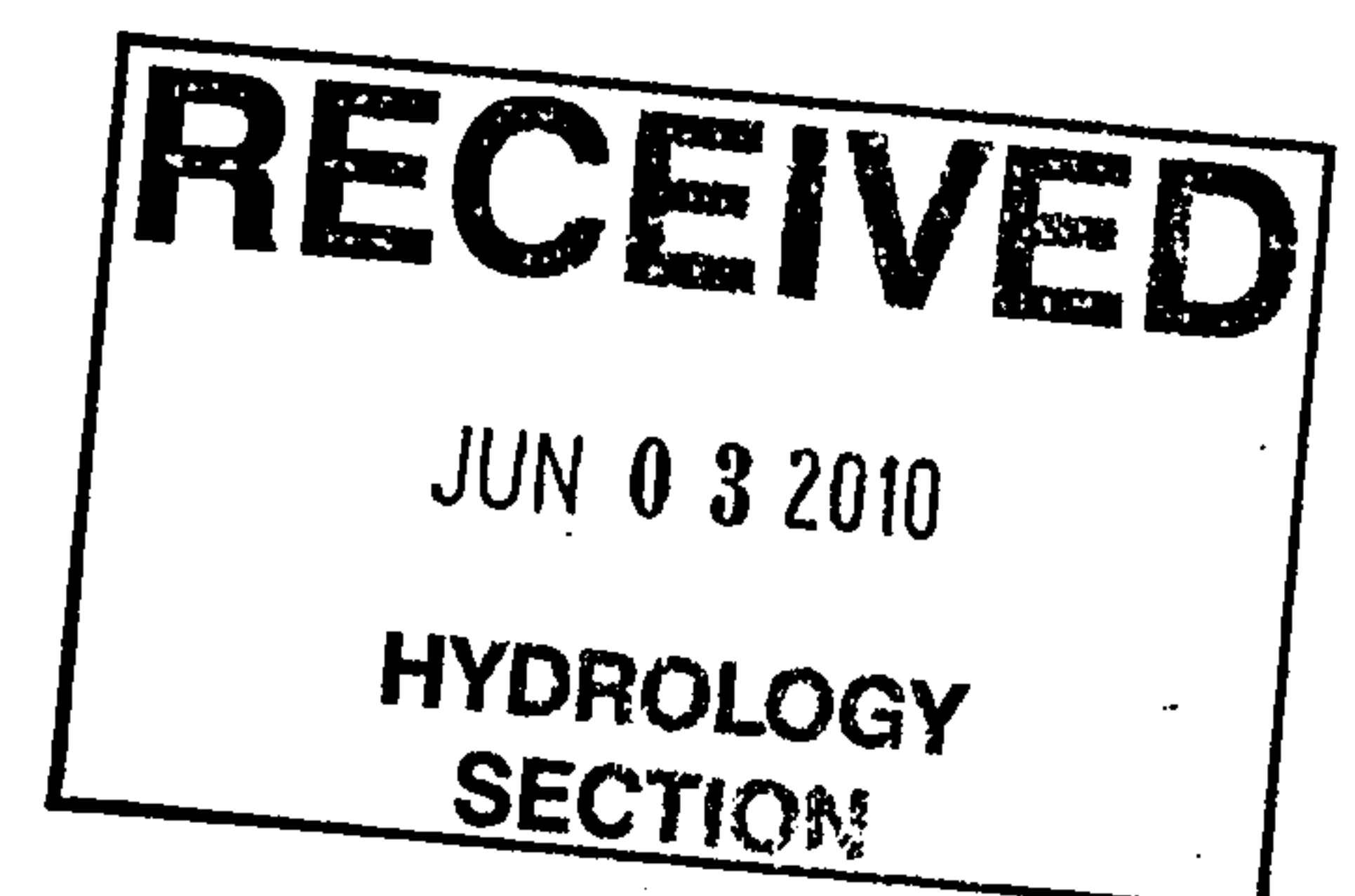
Included with this letter is one copy of the revised Grading and Drainage Plan for the above referenced property. Due to significant cost cutting to bring the project within budget, the majority of site plan improvements have been eliminated as follows:

- Existing public walks, driveways, discharge patterns, etc. will not be altered.
- Existing on-site asphalt pavement will remain with a 1.5" overlay and re-striping provided.
- A portion of concrete walk will be constructed adjacent to the building to accommodate the modified roof discharge locations and handicap accessibility.
- The existing curb along the west side of the west parking area will be removed and replaced due to poor condition.

We are providing this plan for your files to override the previous Drainage/Grading and SO19 submittals. Please don't hesitate to call me or Bryan Bobrick with any questions or comments.

Sincerely,
ISAACSON & ARFMAN P.A.


Fred C. Arfman, PE
Attachments



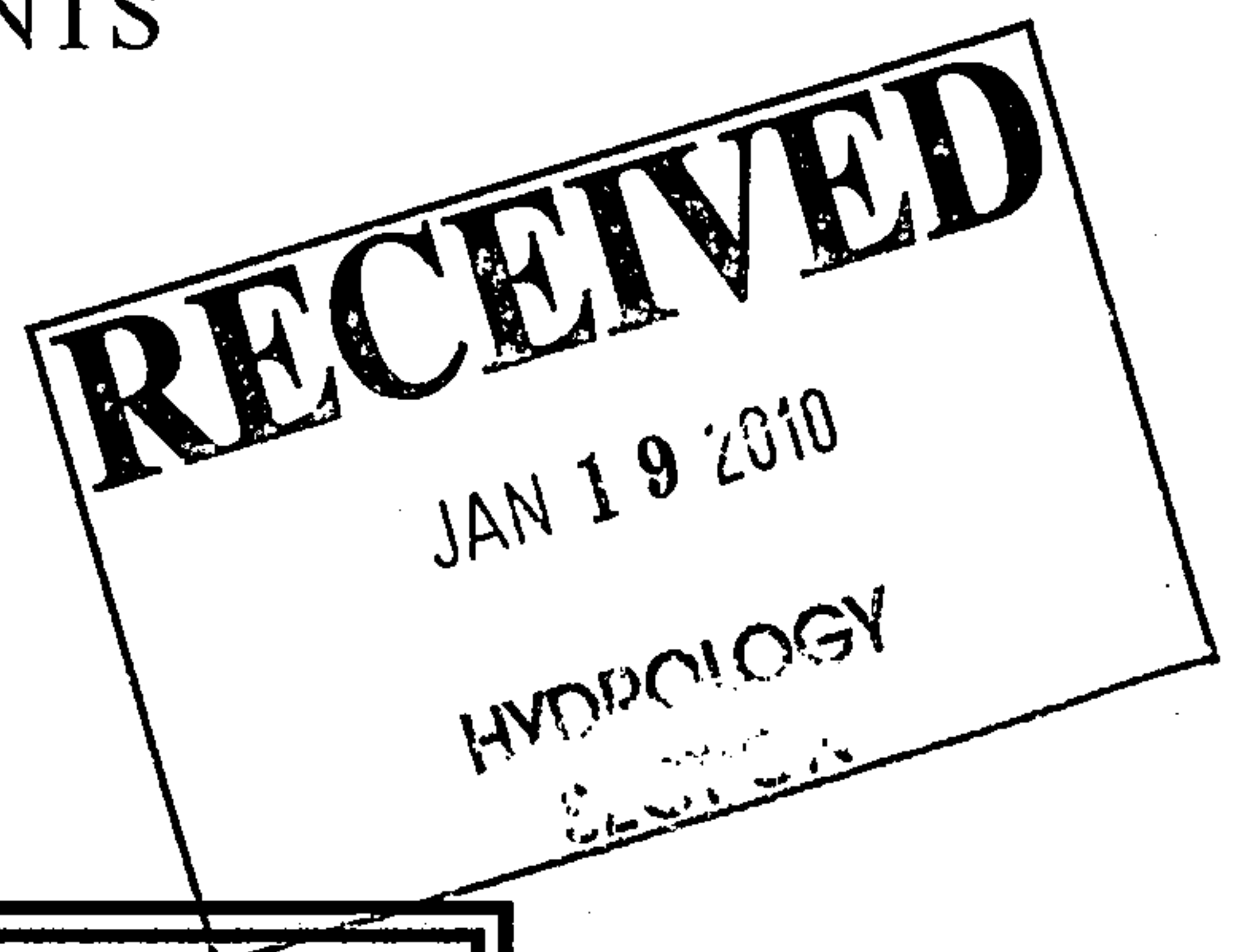
JANUARY 13, 2010

DRAINAGE REPORT

FOR

SOUTH BROADWAY HEALTH CENTER
SITE IMPROVEMENTS

BY



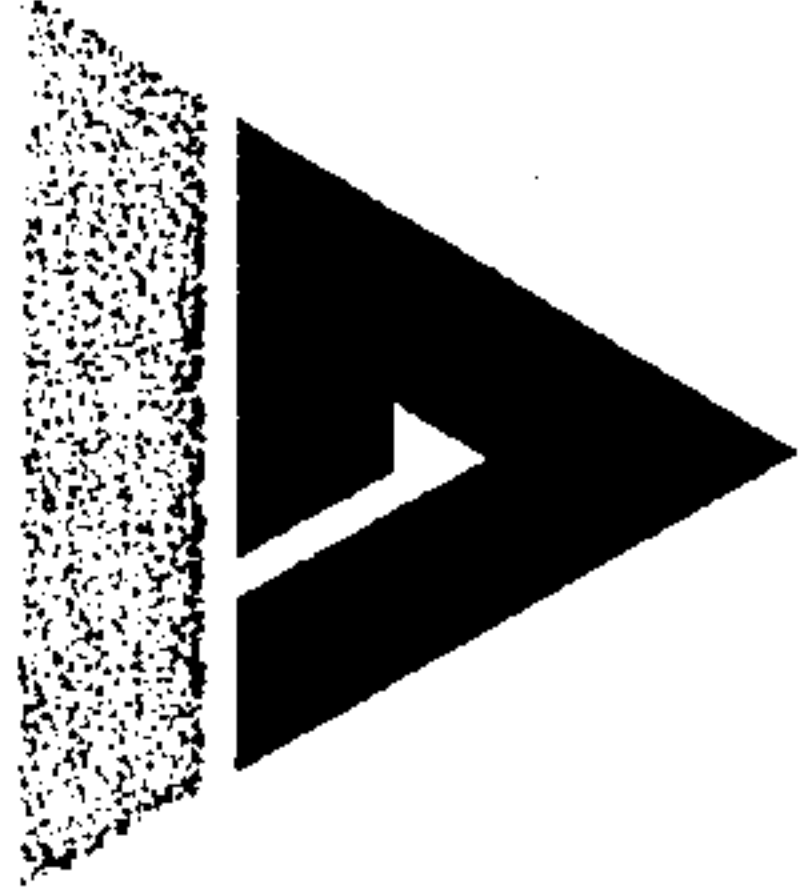
I&A PROJECT 1752



SUPPLEMENTAL INFORMATION

CONTENTS

Drainage Analysis	1
Site Key	2
Historic / Developed Flow Calculations	3
Channel Report.....	4
FIRM Floodplain Map Exhibit	5



Isaacson & Arfman, P.A.

Consulting Engineering Associates

*Thomas O. Isaacson, PE & LS * Fred C. Arfman, PE * Åsa Nilsson-Weber, PE*

DRAINAGE ANALYSIS FOR: First Choice Community Healthcare South Broadway Health Center

1401 William St. SE
Albuquerque, NM 87102

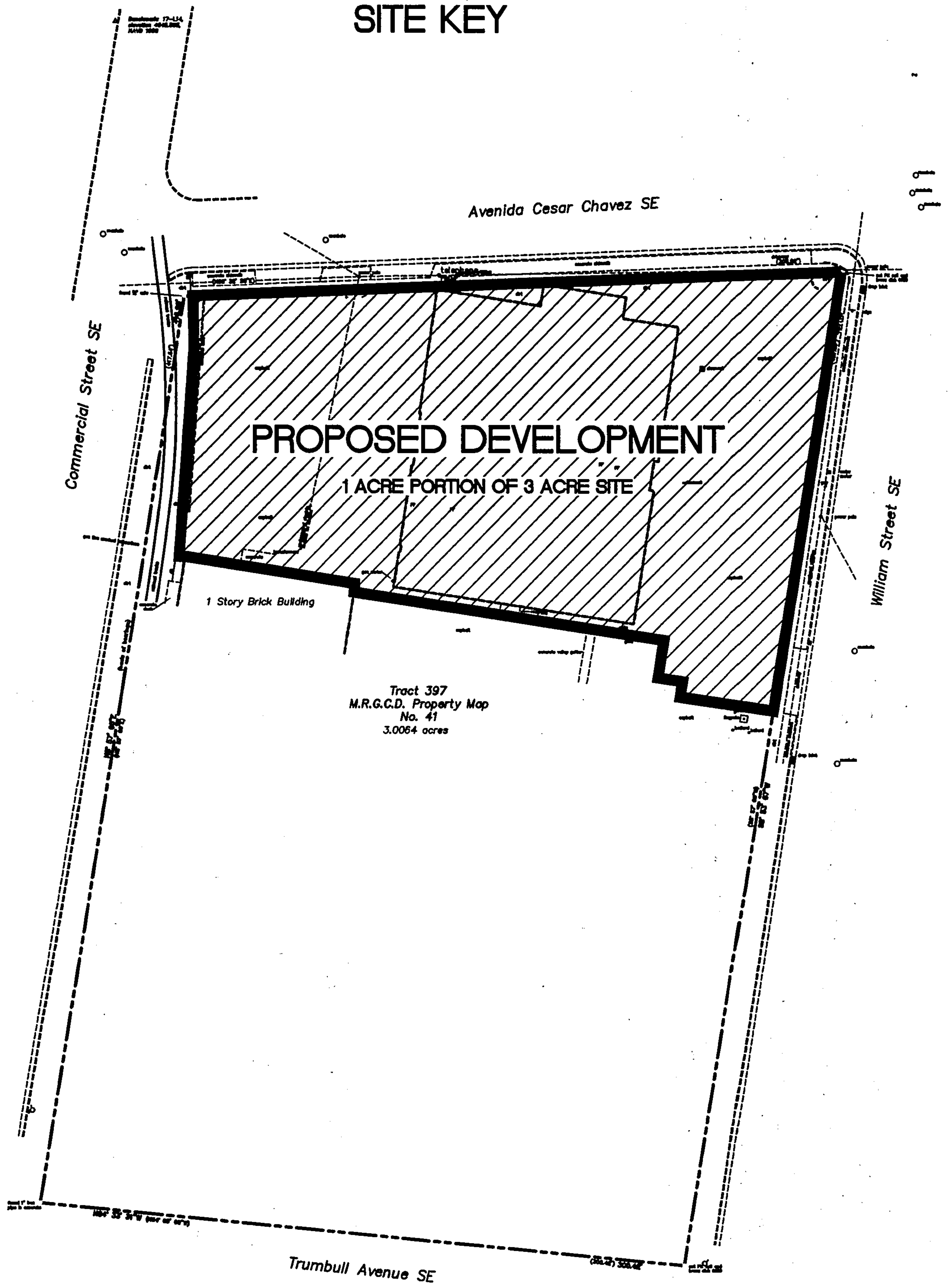
The proposed development occurs on approximately 1 acre of a 3 acre property (see SITE KEY exhibit). Calculations provided indicate the total discharge from the proposed area (100-year, 6-hour storm event) will be 4.6 cfs. This discharge will be split into two sub-basins with approximately 2.3 cfs discharging north to Avenida Cesar Chavez SE via the access driveways and approximately 2.3 cfs discharging to Williams St. SE via new covered sidewalk culverts.

The removal of existing impervious pavement to be replaced by landscaping will provide a minimal decrease in historic discharge.

Roof discharge will be reworked to discharge all flow to the east and west sides of the building.

The proposed covered sidewalk culverts (12" bottom width) have a max. capacity of 3.2 cfs at a depth of 6" (see CHANNEL REPORT exhibit). Proposed discharge to each is 1.2 cfs max.

SITE KEY



CALCULATIONS: First Choice Healthcare : 1/13/10

Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993

ON-SITEAREA OF SITE: 44216 SF = 1.0

100-year, 6-hour

HISTORIC FLOWS:**DEVELOPED FLOWS:****EXCESS PRECIP:**

	Treatment SF	%
Area A =	0	0%
Area B =	0	0%
Area C =	1768.64	4%
Area D =	42447.36	96%
Total Area =	44216	100%

	Treatment SF	%
Area A =	0	0%
Area B =	0	0%
Area C =	4422	10%
Area D =	39794	90%
Total Area =	44216	100%

Precip. Zone	2
$E_A = 0.53$	
$E_B = 0.78$	
$E_C = 1.13$	
$E_D = 2.12$	

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

$$\text{Weighted E} = \frac{E_A A_A + E_B A_B + E_C A_C + E_D A_D}{A_A + A_B + A_C + A_D}$$

Historic E =	2.08 in.	Developed E =	2.02 in.
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On-Site Volume of Runoff: $V_{360} = E * A / 12$

Historic V_{360} =	7666 CF	Developed V_{360} =	7447 CF
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On-Site Peak Discharge Rate: $Q_p = Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D / 43,560$

For Precipitation Zone 2

$Q_{pA} =$	1.56	$Q_{pC} =$	3.14
$Q_{pB} =$	2.28	$Q_{pD} =$	4.70

Historic Q_p =	4.7 CFS	Developed Q_p =	4.6 CFS
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Channel Report

Hydraflow Express Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc.

Monday, Jan 18 2010

12" WIDE X 6" DEEP COVERED SIDEWALK CULVERT

Rectangular

Bottom Width (ft) = 1.00
Total Depth (ft) = 0.50

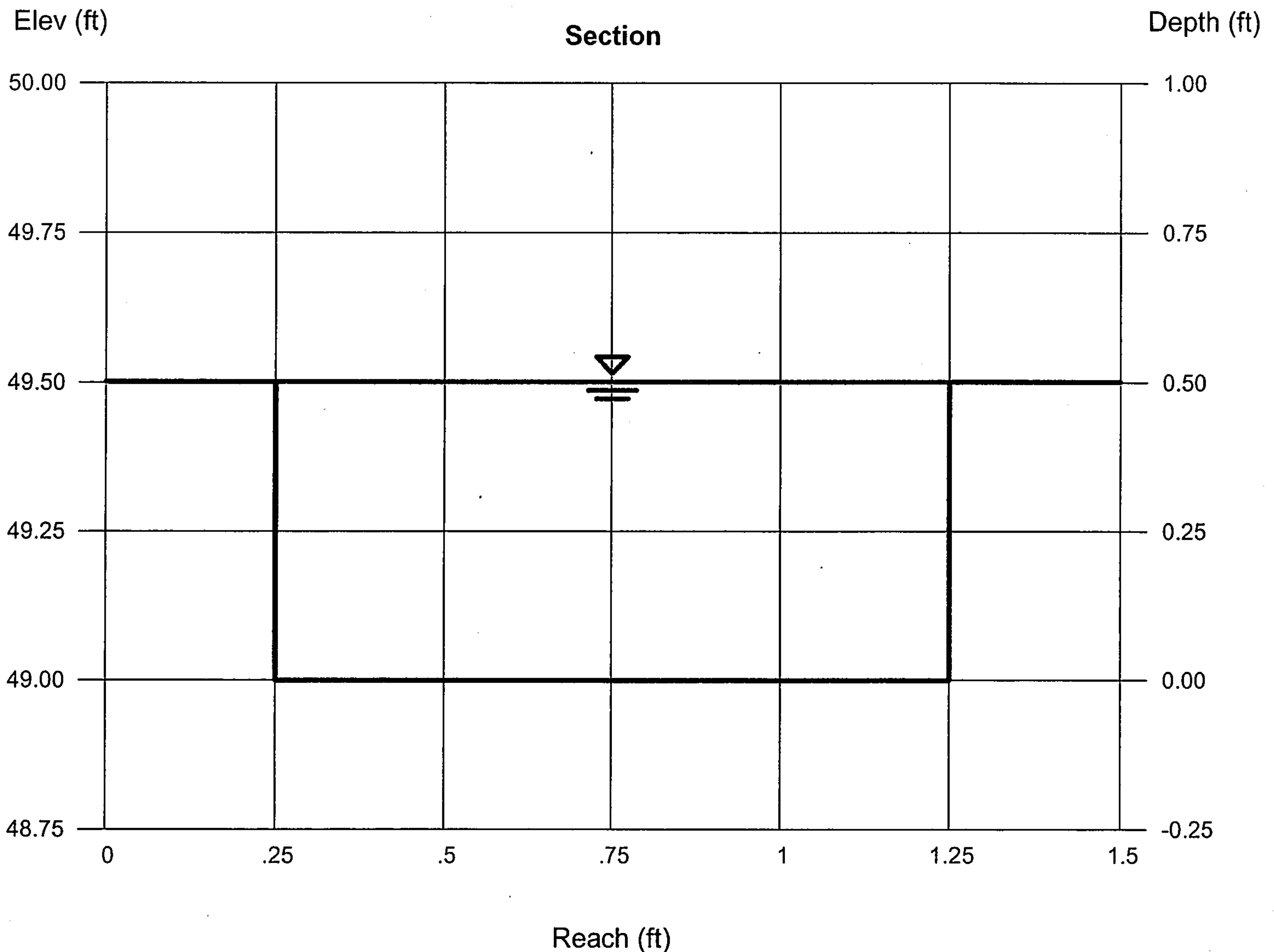
Invert Elev (ft) = 49.00
Slope (%) = 2.00
N-Value = 0.013

Calculations

Compute by: Q vs Depth
No. Increments = 10

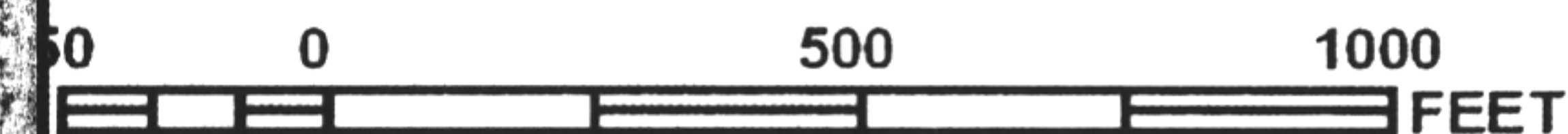
Highlighted

Depth (ft) = 0.50
Q (cfs) = 3.206
Area (sqft) = 0.50
Velocity (ft/s) = 6.41
Wetted Perim (ft) = 2.00
Crit Depth, Yc (ft) = 0.50
Top Width (ft) = 1.00
EGL (ft) = 1.14





MAP SCALE 1" = 500'



NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0334G

FIRM

FLOOD INSURANCE RATE MAP
BERNALILLO COUNTY,
NEW MEXICO
AND INCORPORATED AREAS

PANEL 334 OF 825

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ALBUQUERQUE CITY OF	350002	0334	G

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER
35001C0334G

MAP REVISED
SEPTEMBER 26, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

CITY OF ALBUQUERQUE



February 12, 2010

Asa M. Nilsson-Weber, P.E.
Isaacson & Arfman, P.A.
128 Monroe St NE
Albuquerque, NM 87108

Re: First Choice Community Healthcare, 1401 William St SE, Grading and Drainage Plan

Engineer's Stamp dated 2-10-10 (L14/D058)

Dear Ms. Nilsson-Weber,

Based upon the information provided in your submittal received 2-10-10, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

PO Box 1293

Albuquerque

NM 87103

- The flow-line at the north east corner of the site (drive entrance) should remain unchanged or changed to drain to the drop inlet on William St.
- Per our conversation, 2-12-09, the wet utility improvements will be built under a Mini Work Order. In that case, the sidewalk culverts can be constructed with an SO-19 Permit. If the project goes to Work Order, then the sidewalk culverts should be built per the Work Order.

Thank you for submitting two copies of the plan. We give one to the inspector.

www.cabq.gov

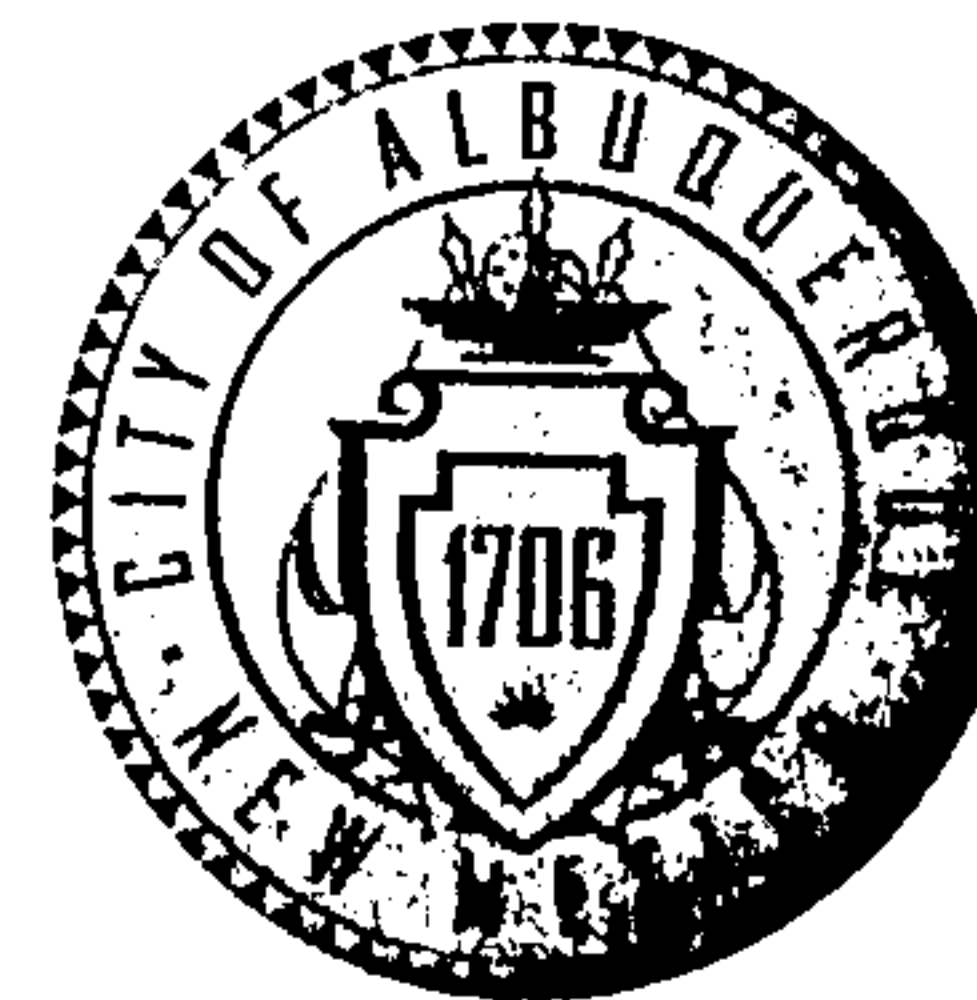
If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

C: file

CITY OF ALBUQUERQUE



February 3, 2010

Asa M. Nilsson-Weber, P.E.
Isaacson & Arfman, P.A.
128 Monroe St NE
Albuquerque, NM 87108

Re: First Choice Community Healthcare, 1401 William St SE, Grading and Drainage Plan

Engineer's Stamp dated 1-18-10 (L14/D058)

Dear Ms. Nilsson-Weber,

Based upon the information provided in your submittal dated 1-19-10, the above referenced plan cannot be approved for Building Permit or SO-19 Permit until the following comments are addressed:

- Hydrology requests the southern sidewalk culvert be moved north of the highpoint (48.37) in William St. so that the runoff will more readily run towards the inlet to the north.
- Keyed Note 15 specifies to "See detail this sheet", but a detail is not provided.
- Work in the ROW in addition to what is proposed is not required, however, ponding in the gutter on Avenida Cesar Chavez may be eliminated by replacing the curb and gutter at the northeast corner of the site.

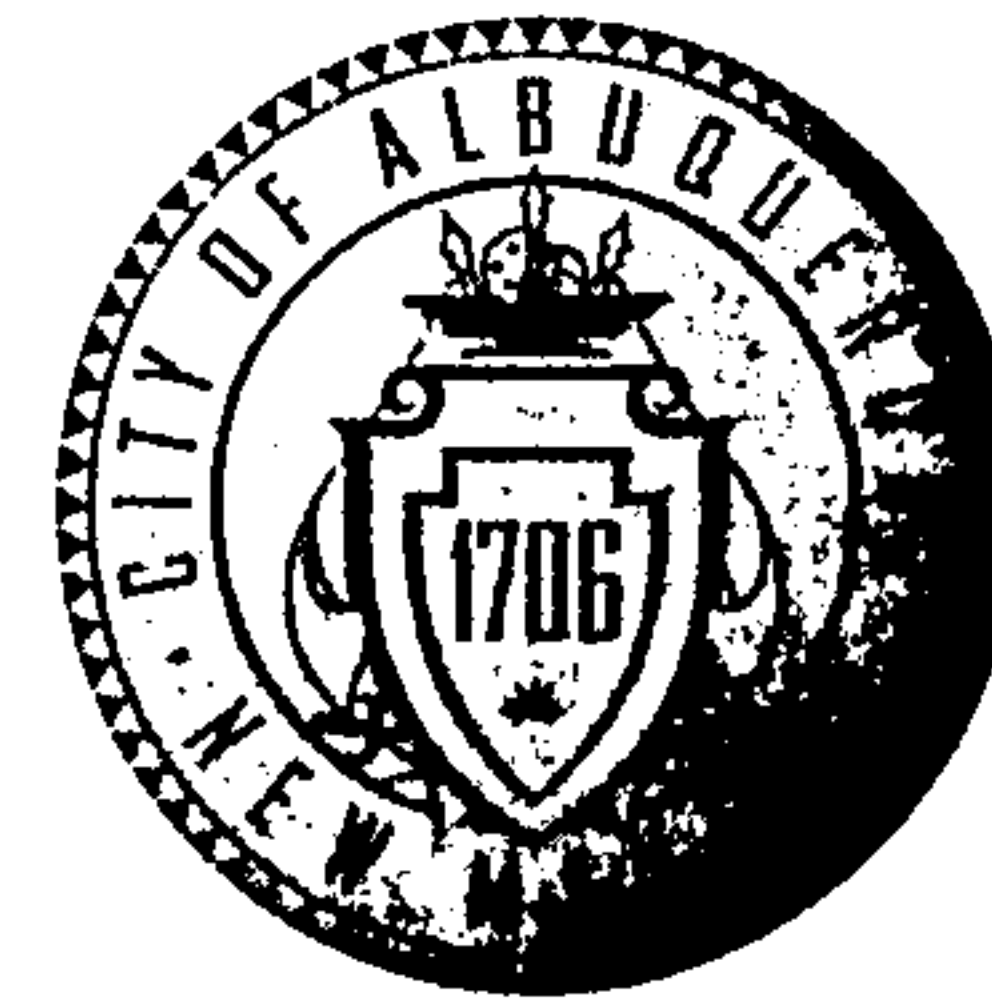
If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

C: file

CITY OF ALBUQUERQUE



February 22, 2010

Asa M. Nilsson-Weber, P.E.
Isaacson & Arfman, P.A.
128 Monroe St NE
Albuquerque, NM 87108

Re: First Choice Community Healthcare, 1401 William St SE, Grading and Drainage Plan

Engineer's Stamp dated 2-15-10 (L14/D058)

Dear Ms. Nilsson-Weber,

Based upon the information provided in your submittal received 2-16-10, the above referenced plan is approved for Building Permit and SO 19 Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

A separate permit (SO 19) is required for construction within City ROW. A copy of this approval letter must be on hand when applying for the excavation/barricading permit. If there is a Work Order associated with this project, this work is to be included in the Work Order.

To obtain a temporary or permanent CO, Engineer Certification of the Grading Plan per the DPM is required and the sidewalk culverts in the City ROW must be inspected and accepted. Please contact Duane Schmitz, 235-8016, to schedule an inspection.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

C: file
Antoinette Baldonado, Excavation and Barricading
Duane Schmitz, Street/Storm Drain Maintenance

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/05)

PROJECT TITLE: First Choice Community Healthcare Improvements ZONE MAP/DRG. FILE # L-14 / D058
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: A portion of Tract 397, MRGCD Property Map No. 41, Bernalillo County, NM
CITY ADDRESS: 1401 William St. SE, Albuquerque, NM 87102

ENGINEERING FIRM: ISAACSON & ARFMAN, PA
ADDRESS: 128 MONROE NE
CITY, STATE: ALBUQUERQUE, NM

CONTACT: Åsa Weber
PHONE: 268-8828
ZIP CODE: 87108

OWNER: _____
ADDRESS: _____
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CONTACT: _____
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CONTACT: Russ Golitely
PHONE: 243-7492
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- ☐ DRAINAGE REPORT
☐ DRAINAGE PLAN 1st SUBMITTAL
☒ DRAINAGE PLAN RESUBMITTAL
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☐ ENGINEER/ARCHITECT CERT (DRB S.P.)
☐ ENGINEER/ARCHITECT CERT (AA)
☐ OTHER (Supplemental Information)

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA/FINANCIAL GUARANTEE RELEASE
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☐ S. DEV. FOR BLDG. PERMIT APPROVAL
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☐ FOUNDATION PERMIT APPROVAL
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☐ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ WORK ORDER APPROVAL
☒ OTHER (S.O.19 Approval)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
☐ NO
☐ COPY PROVIDED

SUBMITTED BY: Åsa Nilsson-Weber, PE DATE: 2/16/2010
Isaacson & Arfman, 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 define the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

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