

Location
Lot 1-A & 2-A being a re-plat of Lots 1 and 2, Block 12 of Burges replat, Perfecto Armijo, contains +/- 7,078.74 sf and is located at 608 8th Street N.W. See attached portion of the Vicinity Map for exact location.

Purpose
The purpose of this drainage report is to present a grading and drainage solution for the proposed buildings.

Existing Drainage Conditions
There is undeveloped. This site is fairly flat, and it drains the north to an existing paved alley and to the west to 8th St. No offsite runoff enters this site. Based on the FIRM Map 35001C0334G (revised September 26, 2008) the site does not fall within a 100-year floodplain.

Proposed Conditions and On-Site Drainage Management Plan
The developed runoff generated from this site will be partly retained on-site. Ponds A and B are designed to hold the volume of the 100-yr/6-day volume under the proposed conditions minus 100-yr/6-day volume under the historical conditions. Then when the ponds exceed their capacity the runoff will overflow into the alley. The allowable discharge in the Valley is 2.75 cfs/acre meaning a retention volume requirement of 0.50 inches times the area (294.95 cf). The 90th Percentile/First Flush ponding requirement is 0.34 inches times the impervious area (130.37 cf). Total retention volume provided (591.37 cf) exceeds the ponding requirement in the Valley (294.95 cf) and First Flush (130.37 cf).

Calculations
City of Albuquerque, Development Process Manual, Section 22.2, Hydrology Section, was used for runoff calculations. See this plan for AHYMO input and Summary output files.

* ZONE 2

* 100-YEAR, 6-HR STORM (UNDER EXISTING CONDITIONS) *

START TIME=0.0
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=2.01 IN RAIN SIX=2.35 IN
RAIN DAY=2.75 IN DT=0.03333 HR

* ON-SITE
COMPUTE NM HYD ID=1 HYD NO=100.0 AREA=0.000254 SQ MI
PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
TP=0.1333 HR MASS RAINFALL=-1

* 10-YEAR, 6-HR STORM (UNDER EXISTING CONDITIONS) *

START TIME=0.0
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.34 IN RAIN SIX=1.57 IN
RAIN DAY=1.83 IN DT=0.03333 HR

* ON-SITE
COMPUTE NM HYD ID=1 HYD NO=110.0 AREA=0.000254 SQ MI
PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
TP=0.1333 HR MASS RAINFALL=-1

* 100-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS) *

START TIME=0.0
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=2.01 IN RAIN SIX=2.35 IN
RAIN DAY=2.75 IN DT=0.03333 HR

* ON-SITE
COMPUTE NM HYD ID=1 HYD NO=100.1 AREA=0.000254 SQ MI
PER A=0.00 PER B=10.00 PER C=15.00 PER D=65.00
TP=0.1333 HR MASS RAINFALL=-1

* 10-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS) *

START TIME=0.0
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.34 IN RAIN SIX=1.57 IN
RAIN DAY=1.83 IN DT=0.03333 HR

* ON-SITE
COMPUTE NM HYD ID=1 HYD NO=110.1 AREA=0.000254 SQ MI
PER A=0.00 PER B=10.00 PER C=15.00 PER D=65.00
TP=0.1333 HR MASS RAINFALL=-1

FINISH

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -
INPUT FILE = 608-8th.txt

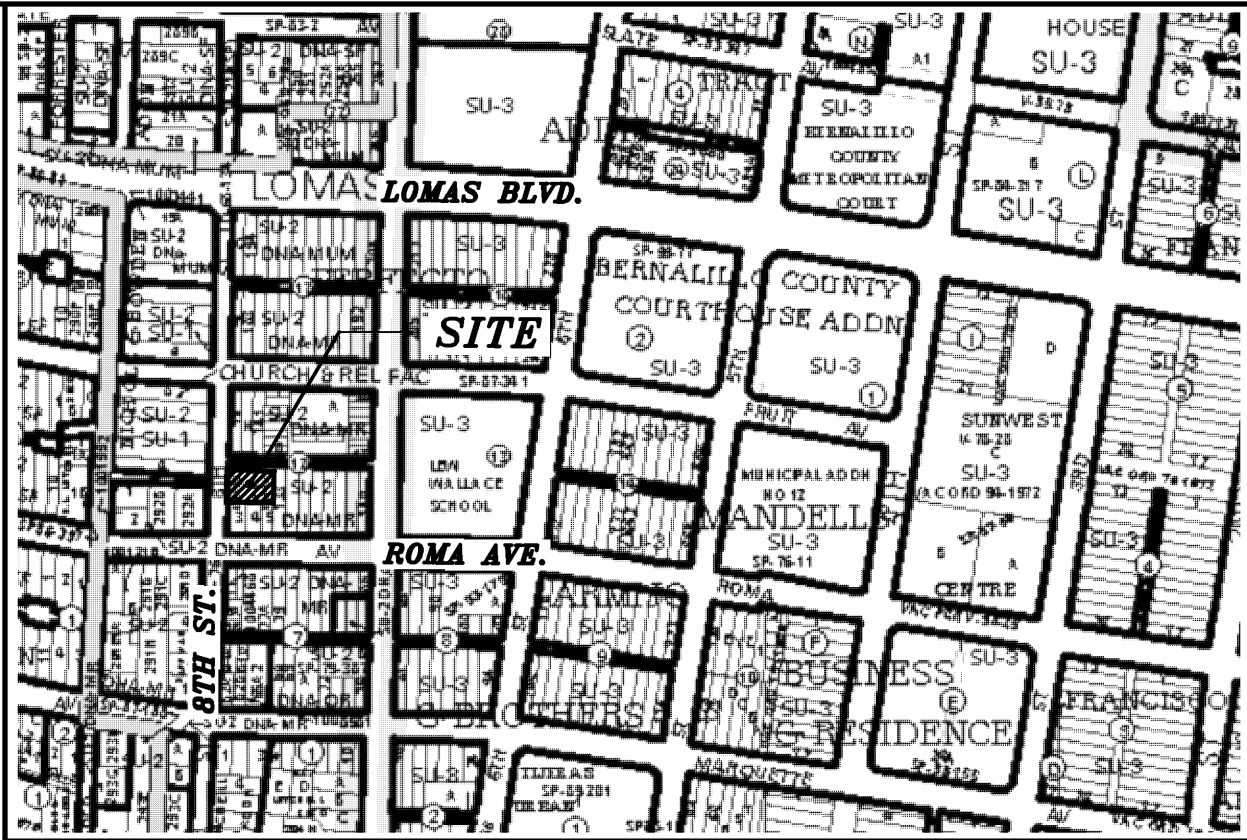
- VERSION: 1997.02d RUN DATE (MON/DAY/YR) =01/14/2015
USER NO.= AHYMO-I-9702c01000R31-AH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1
START	TYPE= 1									
RAINFALL	TYPE= 1									
COMPUTE NM HYD	100.00	-	1	.00025	.38	.011	.77821	1.533	2.329	2.350
START	TYPE= 1									
RAINFALL	TYPE= 1									
COMPUTE NM HYD	110.00	-	1	.00025	.16	.004	.27828	1.533	.958	1.570
START	TYPE= 1									
RAINFALL	TYPE= 1									
COMPUTE NM HYD	100.10	-	1	.00025	.70	.024	1.79770	1.500	4.276	72.22
START	TYPE= 1									
RAINFALL	TYPE= 1									
COMPUTE NM HYD	110.10	-	1	.00025	.44	.015	1.07842	1.500	2.685	72.22
FINISH										

NOTES:

- 6" WALL OPENING (OR TURN TWO BLOCKS) WITH #4 REBAR 3" ON CENTER, DO NOT BLOCK THIS OPENING AT ANY TIME.
- NEW SIDEWALK, MATCH THE ALLEY GRADE.
- NEW SIDEWALK ALONG 8TH. STREET

TOTAL POND AREA PROVIDED = POND A + B = 591.37 CF
TOTAL PONDING VOLUME REQUIRED = VOL. PROPOSED CONDITIONS - VOL. EXISTING CONDITIONS
= 0.024 - 0.011 = 0.013 AC-FT = 566.28 CF
TOTAL PONDING VOLUME REQUIRED (VALLEY)= 0.5 INCHES x AREA = (0.5/12 x 7,078.74) = 294.95 CF
TOTAL PONDING VOLUME REQUIRED (90TH PERCENTILE/FIRST FLUSH) = 0.34 INCHES x IMPERVIOUS AREA = (0.34/12 x 4,601.18) = 130.37 CF



VICINITY MAP: J-14-Z
LEGAL DESCRIPTION:
LOT 1, LANDS OF BUCHANON, CONTAINING 7,078.89 S.F. (0.1625 ACRE)
ZONING: SU-2

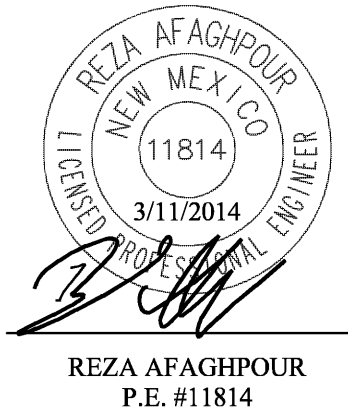
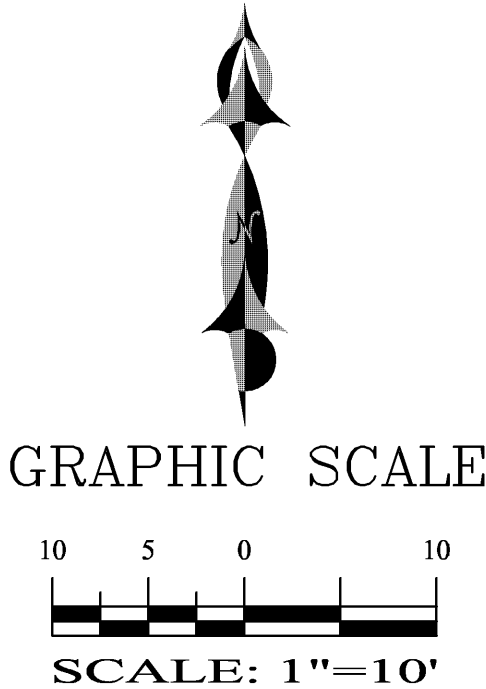
- GENERAL NOTES:**
- CONTOUR INTERVAL IS HALF (0.50) FOOT.
 - ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 17_J14, HAVING AN ELEVATION OF 4957.484 FEET ABOVE SEA LEVEL.
 - UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.
 - THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
 - SLOPES ARE AT 3:1 MAXIMUM.

NOTICE TO CONTRACTORS

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

LEGEND

- 5100 — EXISTING CONTOUR (MAJOR)
- 5102 — EXISTING CONTOUR (MINOR)
- — BOUNDARY LINE
- ✕ 85.46 PROPOSED SPOT ELEVATION
- ✕ 5265.16 EXISTING GRADE
- ✕ 5284.43 FL EXISTING FLOWLINE ELEVATION
- — PROPOSED RETAINING WALL
- BC=89.08 BOTTOM OF CHANEL
- TRW=91.50 TOP OF RETAINING WALL
- TF=88.00 TOP OF FOOTING
- HP HIGH POINT



SBS CONSTRUCTION AND ENGINEERING, LLC

10209 SNOWFLAKE CT. NW
ALBUQUERQUE, NEW MEXICO 87114
(505)899-5570

TOWNHOUSES FOR LOBBEREGET GRADING AND DRAINAGE PLAN

DRAWING: 201418-GR.DWG
DRAWN BY: SH-B
DATE: 12-22-2014
SHEET #

C102

CITY OF ALBUQUERQUE



March 26, 2015

Reza Afaghpour, PE
SBS Construction and Engineering, LLC
10209 Snowflake Ct NW
Albuquerque, NM 87114

**Re: Townhouses for Lobberegt
608 8th St NW
Grading & Drainage Plan
Engineer's Stamp dated: 3-11-15 (J14D174)**

Dear Mr. Afaghpour,

Based upon the information provided in your submittal received 3/12/2015, this plan is approved for Grading Permit and Building Permit.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

PO Box 1293

If you have any questions, you can contact me at 924-3695 or Rudy Rael at 924-3977.

Albuquerque

New Mexico 87103

www.cabq.gov

Sincerely,

Rita Harmon, P.E.
Senior Engineer
Planning Department

C: RR/RH
email