

CITY OF ALBUQUERQUE



January 20, 2015

Mr. Reza Afaghpour, PE
SBS Construction
10209 Snowflake Court NW
Albuquerque, NM 87114

**Re: 4 Unit Townhouse Development
1203 Griegos Road NW
Grading and Drainage Plan
Engineer's Date 1-15-14 (F14D070)**

Dear Mr. Afaghpour,

Based upon the information provided in your submittal received 1-16-14, the above referenced plan is approved Building Permit and SO-19. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

The SO-19 Permit is required for construction within the City Right of Way. A copy of this approval letter must be on hand when applying for the Excavation Permit.

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

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

Sincerely,

Amy L. D. Niese, P.E.
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

C: e-mail



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: _____ Building Permit #: _____ City Drainage #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: _____

City Address: _____

Engineering Firm: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Owner: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Architect: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Contractor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL G & D PLAN
- ☐ GRADING PLAN
- ☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ ENGINEER'S CERT (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEER'S CERT (TCL)
- ☐ ENGINEER'S CERT (DRB SITE PLAN)
- ☐ ENGINEER'S CERT (ESC)
- ☐ SO-19
- ☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE 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
- ☐ CERTIFICATE OF OCCUPANCY (PERM)
- ☐ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☐ OTHER (SPECIFY) _____

WAS A PRE-DESIGN CONFERENCE ATTENDED: _____ Yes _____ No _____ Copy Provided

DATE SUBMITTED: _____ By: _____

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 that are part of a larger common plan of development

4 UNIT TOWNHOUSE PROJECT
FOR JASON BUCHANAN
1203 GRIEGOS ROAD N.W.
ALBUQUERQUE, NEW MEXICO

DESIGN CRITERIA

CODES: 2009 IRC, 2009UMC, 2009 UPC, 2014NEC

PROJECT LOCATION: SOUTHEAST CORNEOF
INTERSECTION OF 12TH STREET AND GRIEGOS ROAD
N.W.
1203 GRIEGOS ROAD N.W., ALBUQUERQUE, NM

ZONE ATLAS MAP: F-14

LEGAL DESCRIPTION: LOTS 3 & 4, BLOCK 2, SANDIA
PLAZA

TOTAL ACREAGE: .3519 ACRES

EXISTING ZONING: C-1

PROPOSED USES: RESIDENTIAL DWELLINGS

PROPOSED ZONING: SU-1 FOR RT - MAXIMUM 24 TWO
BEDROOM DWELLING UNITS

CONSTRUCTION TYPE: TYPE VB NON SPRINKLERED

SEISMIC ZONE: D

MAXIMUM TOTAL DWELLING UNITS: 4 UNITS - 11 DU'S
PER ACRE

MAXIMUM BUILDING HEIGHT: 26'

REQUIRED PARKING:
TOWNHOUSE UNITS: 4 UNITS X 2 PARKING SPACES = 8
PARKING SPACES

PROPOSED PARKING:
OFF STREET PARKING = 12 PARKING SPACES
INCLUDING GARAGES COMPLIES

USABLE OPEN SPACE:

REQUIRED OPEN SPACE:
4 UNITS X 550 = 2200 SF
UOS PROVIDED = 12,045 SF COMPLIES
SEE SHEET 4 FOR UOS PLAN

LANDSCAPE CALCULATION:

SEE SHEET 4

TWO BEDROOM UNITS:

FLOOR AREA (EA. UNIT):	517
LOWER LEVEL HEATED	671
UPPER LEVEL HEATED	1188 SF
TOTAL HEATED	
GARAGE	264 SF
TOTAL AREA	1452 SF

THREE BEDROOM UNITS:

FLOOR AREA (EA. UNIT):	786
LOWER LEVEL HEATED	687
UPPER LEVEL HEATED	1473 SF
TOTAL HEATED	
GARAGE	424 SF
TOTAL AREA	1897 SF

TOTAL BUILDING AREA:

BUILDING :
(2) TWO BEDROOM UNITS

2 X 1188 = 2376 SF HEATED

2 X 264 = 528 SF GARAGE

(2) THREE BEDROOM UNITS

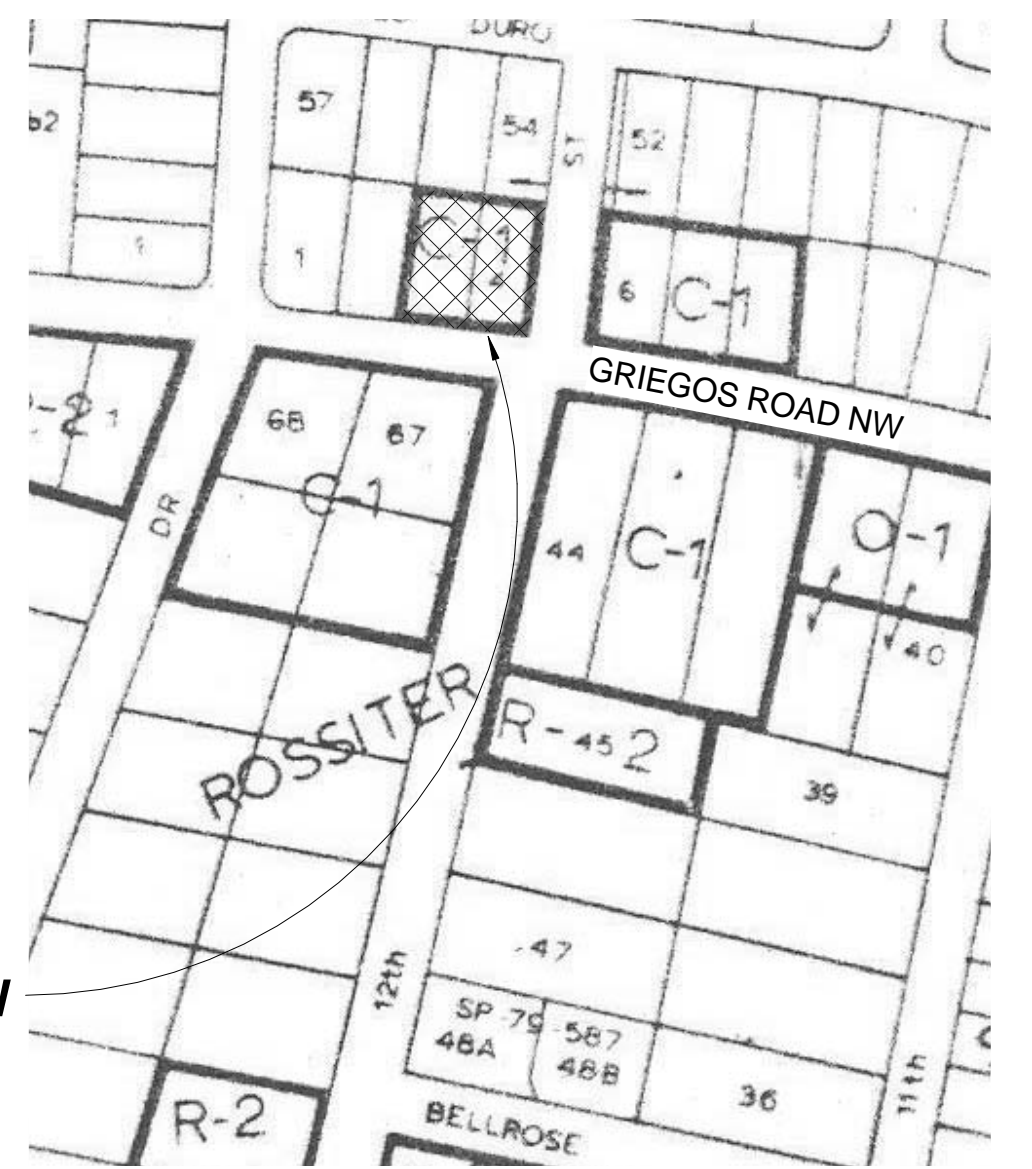
2 X 1473 = 2946 SF HEATED

2 X 424 = 848 SF GARAGE

TOTAL PROJECT HEATED = 5322 SF

TOTAL PROJECT GARAGE = 1376 SF

1203 GRIEGOS RD. NW



VICINITY MAP - ZA MAP F-14

1" = 500'

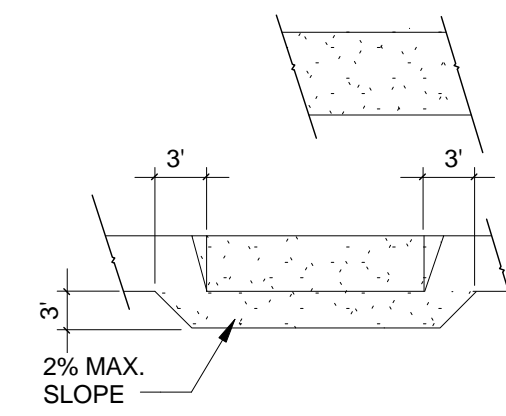
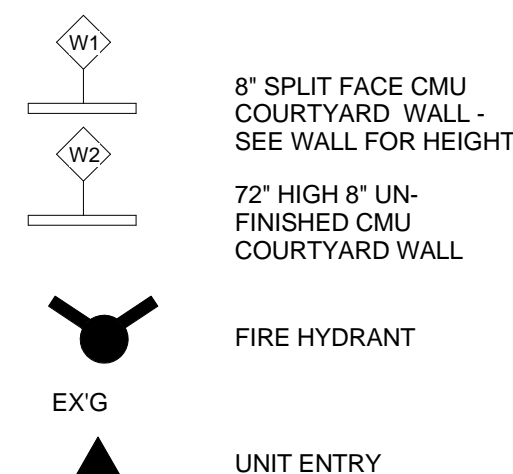
PROJECT NUMBER: _____
APPLICATION NUMBERS: _____

Is an Infrastructure List required? () Yes () No If Yes, then
a set of approved DRC plans with a work order is required for any
construction within Public Right-of-Way or for construction of public
improvements.

DRB SITE DEVELOPMENT PLAN APPROVAL:

Traffic Engineer, Transportation Division	Date
Utilities Development	Date
Parks & Recreation Department	Date
City Engineer	Date
* Environmental Health Department (conditional)	Date
Solid Waste Management	Date
DRB Chairperson, Planning Department	Date

SITE PLAN LEGEND



NEW CONCRETE SIDEWALK -
NEW CONCRETE SITE WORK

DRIVEPAD - COA STANDARD
DETAIL DWG 2425 - SECTION
E-E - ADA ACCESSIBLE - SEE
SITE PLAN FOR WIDTH

HOODED DUSK TO DAWN
EXTERIOR WALL MOUNTED
LIGHTING - SEE DETAIL
SHEET 5

SHEET LIST

Sheet
Number

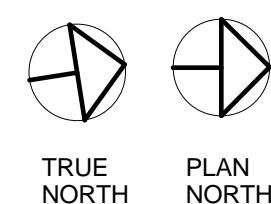
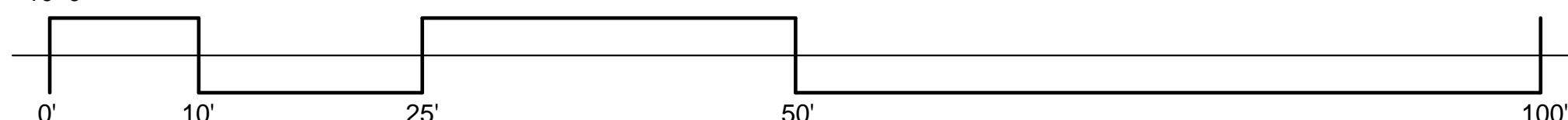
1
A201
A202

Sheet Name

SITE DEVELOPMENT PLAN FOR BUILDING PERMIT
EXTERIOR ELEVATIONS
EXTERIOR ELEVATIONS

SITE DEVELOPMENT PLAN
FOR BUILDING PERMIT

1
Scale: 1" = 10'-0"



ABANDON
DRIVEPAD-PRO-
VIDE NEW
SIDEWALK TO
MATCH PER COA
STD. #2430 AND
CURB & GUTTER AS
PER COA STD. #
2415A

GRIEGOS BLVD. N.W.

ROW VARIES

POWER
POLE

EXISTING 4'-0" WIDE MULTI-
DIRECTIONAL SIDEWALK RAMP

12TH STREET R.O.W. ENCROACH-
MENT INTO PROPERTY

CLEAR SITE TRIANGLE - NO OBJECT/
SHRUBS OVER 3' IN HEIGHT ABOVE
GUTTER PAN IN CLEAR SITE TRIANGLE

TWELFTH STREET N.W.

ROW VARIES

EXISTING CURB CUT
22'-1"

FEATHER CURB TO MATCH
DRIVEPAD ELEV.- TYP. BOTH
SIDES

MINI CLEAR SITE TRIANGLE-
TYP. BOTH SIDES

ADD HANDICAP ACCESSIBLE WALKWAY TO
EXISTING CURB CUT - ALBUQUERQUE STD
DWG # 2425 W/ ADA ACCESS - SECTION E-E

POWER POLE W/
GUY WIRE

FIRE HYDRANT @ SW
CORNER GRANDE DR.
& GRIEGOS ROAD =118'-0"

EXISTING TRANSFORMER -
MAINTAIN CLEARANCES
AS PER PNM

A202

EXISTING GARAGE

6' BLOCK WALL

128.85'

10' X 10' CONCRETE
PATIO, TYP.

POWER POLE

EXISTING LOT LINE

EXISTING 5' PUBLIC UTILITY
EASEMENT (8/28/41, D-33)
& RESTRICTIVE COVENANTS
(8/28/41, BK. "P" MISC., PG. 111)

119.86'

18'-0"

20'-0"

18'-0"

2'-0"

8'-0"

127.07'

EXISTING 4' SIDEWALK

127.07'

127.07'

127.07'

127.07'

127.07'

127.07'

127.07'

- NOTICE TO CONTRACTORS
1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
 2. 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.
 3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL FOR LOCATING SERVICE, 260-1990 OR "811", FOR LOCATION OF EXISTING UTILITIES.
 4. 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.
 5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
 6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
 7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVALS	NAME	DATE
INSPECTOR		

Location
Lots 3 and 4, Block 2, Sandia Plaza, contains +/- 0.3519 acres and is located at 203 Griegos Rd. 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 to replace existing improvements with this new building.

Existing Drainage Conditions
There is undeveloped. This site is fairly flat, and it drains to Griegos Road and 12th Street N.W. No off-site runoff enters the site. Based on the FIRM Map 35001C0119G (revised September 26, 2008) the site does not fall within a 100-year floodplain.

Proposed Conditions and On-Site Drainage Management Plan
The runoff generated from this site will be retained on-site. Several Ponds (A through D) are designed to hold nearly twice 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 parking lot and then to public street via sidewalk culverts. The allowable discharge in the Valley is 2.75 cfs/acre meaning a retention volume requirement of 0.50 inches times the area (638.74 cf). The 90th Percentile/First Flush ponding requirement is 0.34 inches times the impervious area (282.32 cf). Total retention volume provided (2,631.83 cf) far exceeds the ponding requirement in the Valley (638.74 cf) and First Flush (282.32 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=0.000550 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=0.000550 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=0.000550 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=0.000550 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) -
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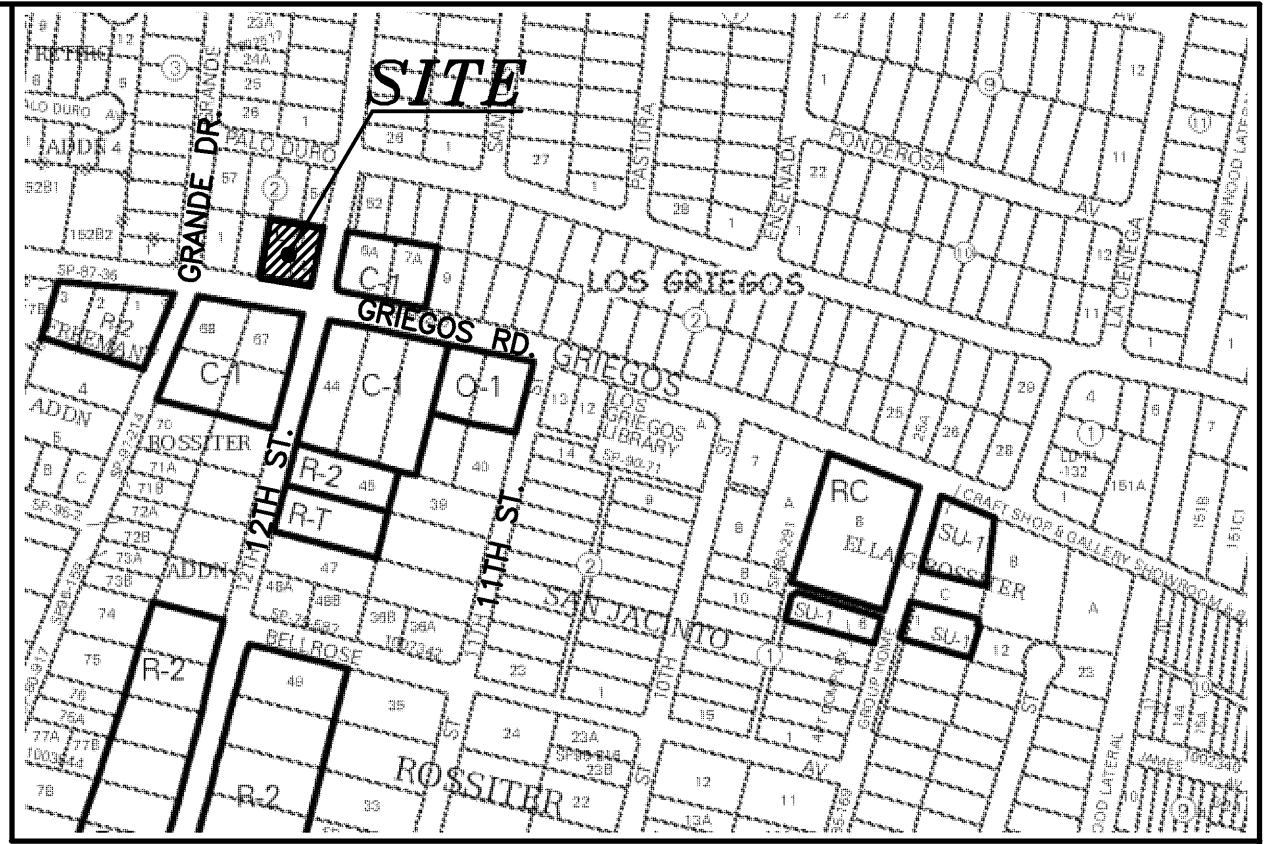
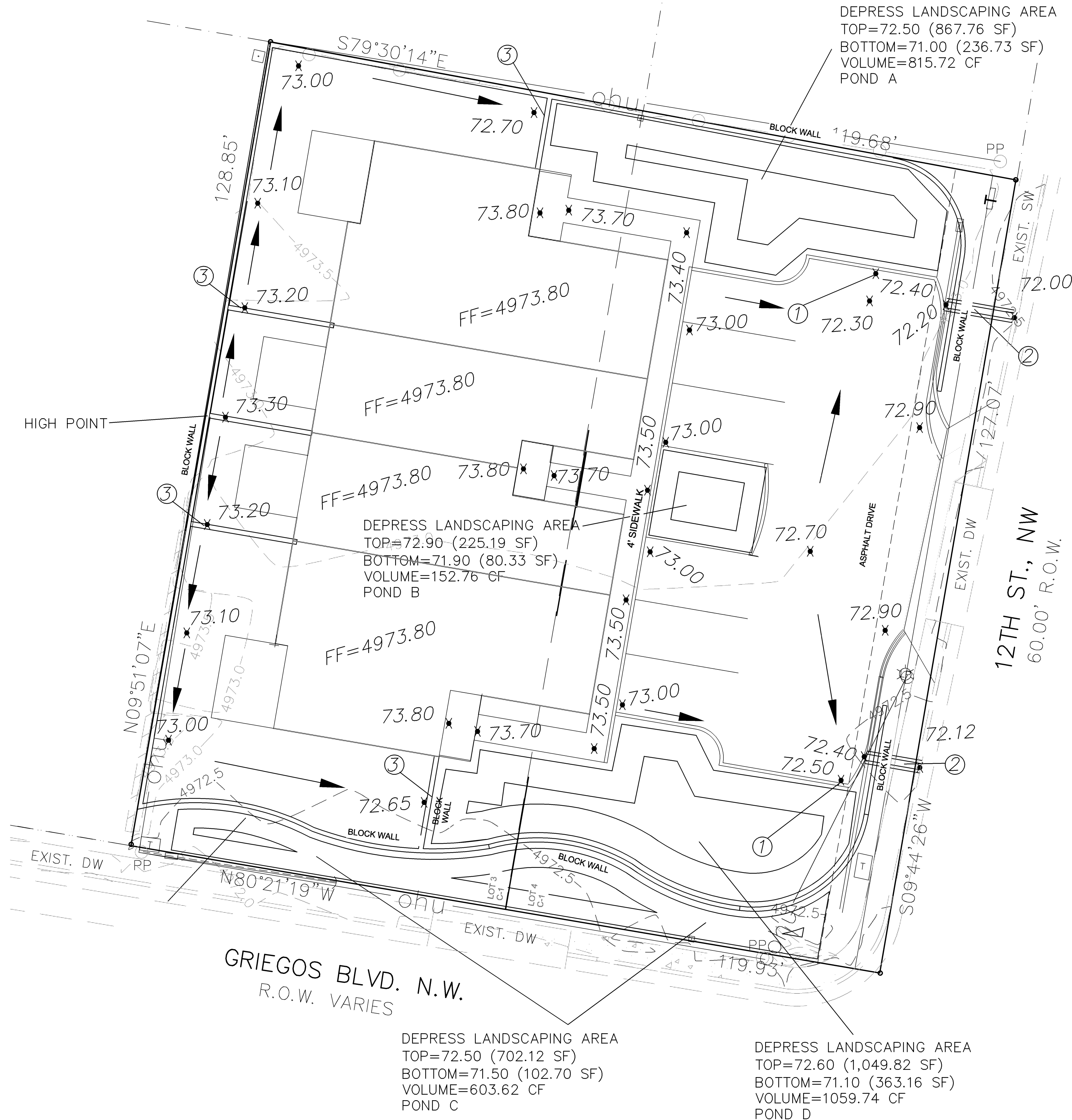
COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1
START	RAINFALL TYPE= 1									TIME=.00 RAIN6= 2.350
COMPUTE NM HYD		100.00	-	1	.00055	.81	.023	.77821	1.533	2.301 PER IMP=.00 TIME=.00 RAIN6= 1.570
START	RAINFALL TYPE= 1									TIME=.00 RAIN6= 2.350
COMPUTE NM HYD		110.00	-	1	.00055	.33	.008	.27828	1.533	.945 PER IMP=.00 TIME=.00 RAIN6= 72.22
START	RAINFALL TYPE= 1									TIME=.00 RAIN6= 1.570
COMPUTE NM HYD		100.10	-	1	.00055	1.48	.053	1.79770	1.500	4.216 PER IMP=.00 TIME=.00 RAIN6= 1.570
START	RAINFALL TYPE= 1									TIME=.00 RAIN6= 1.570
COMPUTE NM HYD		110.10	-	1	.00055	.93	.032	1.07842	1.500	2.650 PER IMP=.00
FINISH										

POND CALCULATION

TOTAL POND AREA PROVIDED = POND A + B + C + D = 2,631.83 CF
TOTAL PONDING VOLUME REQUIRED = VOL. PROPOSED CONDITIONS - VOL. EXISTING CONDITIONS
= 0.053 - 0.023 = 0.03 AC-FT = 1,306.80 CF
TOTAL PONDING VOLUME REQUIRED (VALLEY) = 0.5 INCHES x AREA = (0.5/12 x 15,329.81) = 638.74 CF
TOTAL PONDING VOLUME REQUIRED (90TH PERCENTILE/FIRST FLUSH) = 0.34 INCHES x IMPERVIOUS AREA = (0.34/12 x 9,964.38) = 282.32 CF

NOTES:

1. PROVIDE 12" CURB OPENING
2. 12" SIDEWALK CULRVET PER CITY STD DWG 2236 (TACK WELD PLATE AT THE BOLT)
3. 6" WALL OPENING (OR TURN TWO BLOCKS)



VICINITY MAP: F-14-Z

LEGAL DESCRIPTION:

LOTS 3 AND 4, BLOCK 2, SANDIA PLAZA
CONTAINING 15,329.81 S.F. (0.3519 ACRE)
ZONING: C-1 USES

ADDRESS:

203 GRIEGOS ROAD N.W.

GENERAL NOTES:

1. CONTOUR INTERVAL IS HALF (0.50) FOOT.
2. ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION DOUGLAS, HAVING AN ELEVATION OF 4975.078 FEET ABOVE SEA LEVEL.
3. 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.
4. THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
5. SLOPES ARE AT 3:1 MAXIMUM.

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3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. 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.
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7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

LEGEND

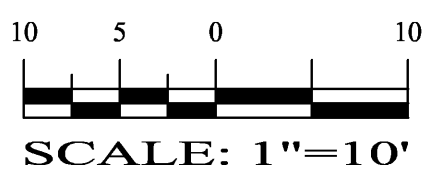
---	5100	---	EXISTING CONTOUR (MAJOR)
---	5102	---	EXISTING CONTOUR (MINOR)
---		---	BOUNDARY LINE
x	85.46		PROPOSED SPOT ELEVATION
x	5265.16		EXISTING GRADE
x	5284.43		EXISTING FLOWLINE ELEVATION
	FL		
■		■	PROPOSED RETAINING WALL
BC	89.08		BOTTOM OF CHANEL
TRW	91.50		TOP OF RETAINING WALL
TF	88.00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



SBS CONSTRUCTION AND ENGINEERING, LLC

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

GRAPHIC SCALE



LAST REVISION: 12/22/2014

4 UNIT TOWNHOUSE DEVELOPMENT GRADING AND DRAINAGE PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
201418-GR.DWG	SH-B	12-22-2014	3