

CITY OF ALBUQUERQUE

Planning Department
David S. Campbell, Director



Timothy M. Keller, Mayor

January 3, 2018

David Soule, PE
Rio Grande Engineering
1606 Central SE Suite 201
Albuquerque, NM 87106

**Re: Picasso RV - 7800 Jacs Ln. NE
Grading & Drainage Plan Engineer's Stamp Dated 12/29/2017
(D16D002A6)**

Dear Mr. Soule,

Based upon the information provided in the submittal received on 1/2/2018 the above-referenced plan is approved for Building Permit and Grading Permit.

PO Box 1293

Please attach a copy of this approved plan in the construction sets when submitting for a building permit. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist and Private Facility Drainage Covenant will be required.

Albuquerque

A Private Drainage Covenant for the ponds must be submitted to Madeline Caruthers along with a check for \$25 payable to Bernalillo County and the Covenant must be recorded prior to Certificate of Occupancy release.

NM 87103

An ESC plan must be submitted to Stormwater Quality Control prior to Grading Plan approval. After the ESC plan is approved an ESC Permit must be obtained prior to beginning construction.

www.cabq.gov

If you have any questions, you can contact me at 924-3986 or e-mail Jhughes@cabq.gov.

Sincerely,

James D. Hughes, P.E.
Principal Engineer, Planning Dept.
Development Review Services



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: PICASSO RV **Building Permit #:** _____ **City Drainage #:** E16D 002A6
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: LOT 5A AND 6A BLUE SKY SUBDIVISION
City Address: 7800 JACS LANE

Engineering Firm: RIO GRANDE ENGINEERING **Contact:** DAVID SOULE
Address: PO BOX 93924, ALBUQUERQUE, NM 87199
Phone#: 505.321.9099 **Fax#:** 505.872.0999 **E-mail:** DAVID@RIOGRANDEENGINEERING.COM

Owner: PICASSO HOMES **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Architect: JOE SIMONS **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Check all that Apply:

DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

☐ ENGINEER/ ARCHITECT CERTIFICATION
☐ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY
☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☒ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR
☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

DATE SUBMITTED: 12/29/17 **By:** _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____

CITY OF ALBUQUERQUE

Hydrology Section of the Planning Department



November 29, 2017

David Soule, PE
Rio Grande Engineering
1606 Central SE Suite 201
Albuquerque, NM 87106

**Re: Picasso RV - 7800 Jacs Ln. NE
Grading & Drainage Plan Engineer's Stamp Dated 11/21/2017
(D16D002A6)**

Dear Mr. Soule,

Based upon the information provided in the submittal received on 11/27/17 the above-referenced plan cannot be approved for Building Permit and/or Grading Permit until the following comments are addressed.

1. Flow arrows and spot elevations should be added showing the onsite swale next to Jacs Ln. that will divert onsite drainage into the ponds before it enters the public right of way. **We have adjusted contours and added arrows and spots**
2. A typical section showing the horizontal and vertical dimensions from the right of way line of Jacs Ln. to the curb and gutter, sidewalk, and onsite drainage swale should be shown on the G&D Plan. Hydraulic capacity calculations should be shown next to the section of the onsite swale. **We expanded pond and added xsec**
3. Similarly the hydraulic capacity calculations of the swale in section C-C should either be revised in the report to match the geometry of the section on the G&D Plan or the revised calculations can be shown on the G&D Plan next to the section. The detail and the calculations should agree. **We updated channel capacity**
4. Please add a big caution note in the vicinity of the existing 30' PNM Gas Pipeline and Communication easement on the east side of this property. **Added**
5. Written approval of this plan is required from PNM **only fill placed, pending nm gas***
6. This work requires an ESC plan to be submitted to the storm water quality engineer (Curtis Cherne, PE ccherne@cabq.gov) prior to Grading Permit approval. **Obtained**

If you have any questions, you can contact me at 924-3986.

Sincerely,

James D. Hughes, P.E.
Principal Engineer, Planning Dept.
Development Review Services

*** We have requested written authorization but not yet recieved. The plan does not have any Cut in the area of easement**

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Weighted E Method

PICASO RV

Existing Developed Basins

											100-Year, 6-hr.		
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
			%	(acres)	%	(acres)	%	(acres)	%	(acres)			
EXISTING	264865	6.080	0%	0	80.0%	4.864	20.0%	1.21609	0%	0.000	0.850	0.431	14.91
PROPOSED	264865	6.080	0%	0	7.4%	0.452	61.3%	3.730	31%	1.898	1.413	0.716	21.67
POND A BASIN	36320	0.834	0%	0	8.0%	0.067	60.0%	0.50028	32%	0.267	1.419	0.099	2.98
POND B BASIN	62196	1.428	0%	0	8.0%	0.114	61.0%	0.87097	31%	0.443	1.409	0.168	5.08
POND C BASIN	147484	3.386	0%	0	8.0%	0.271	62.0%	2.09918	30%	1.016	0.865	0.244	11.98
BASIND	8742	0.201	0%	0	50.0%	0.100	50.0%	0.10034	0%	0.000	0.955	0.016	0.54
UPLAND	18865	0.433	0%	0	0.0%	0.000	60.0%	0.25985	40%	0.173	1.526	0.055	1.63

Equations:

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

Volume = Weighted D * Total Area

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Where for 100-year, 6-hour storm (zone 3)

$E_a = 0.53$

$E_b = 0.78$

$E_c = 1.13$

$E_d = 2.12$

First flush requirement=.34ximpervious area

Provided

Basin A Basin B Basin C

329.301 546.2882 1253.614

527 689 1387

CONTRIBUTING BASIN

A 4294.235 CF

B 7302.329 CF

C 10631.14 CF

$Q_a = 1.57$

$Q_b = 2.28$

$Q_c = 3.14$

$Q_d = 4.7$

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)
top	4	0	0.67	1.34	4.22	0.3176497	1.6	3.36	0.54	0.40

Manning's Equation:

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

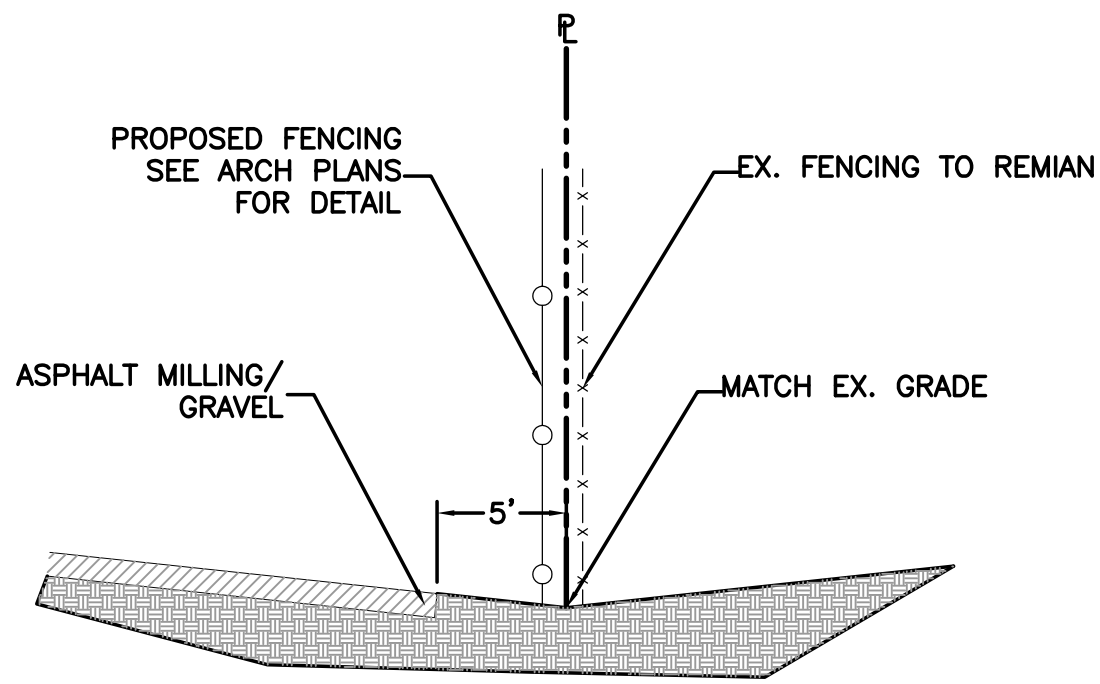
A = Area

R = D/4

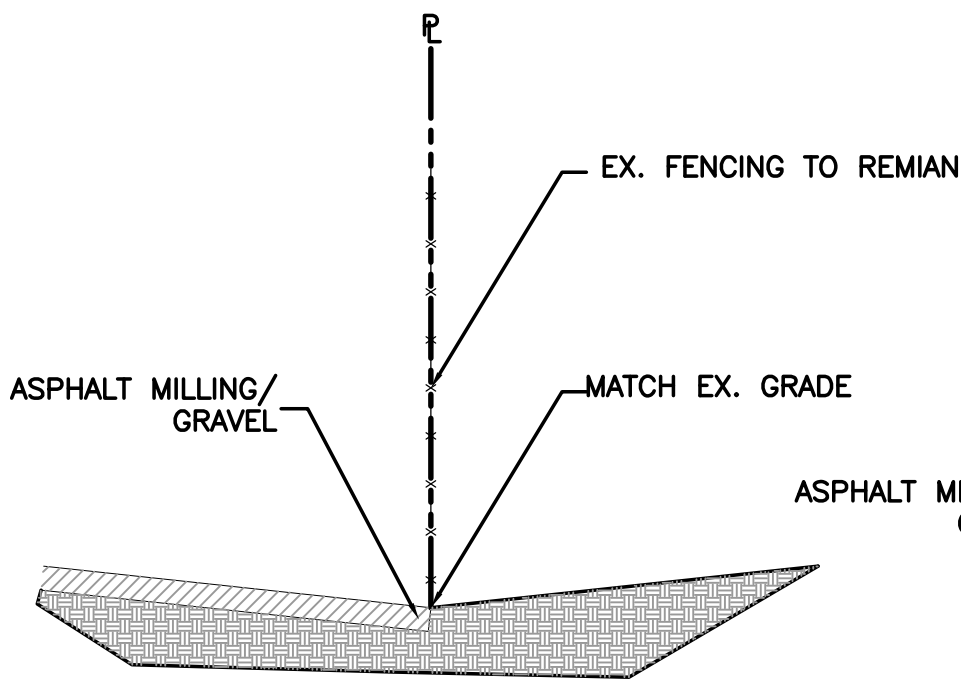
S = Slope

n = 0.035

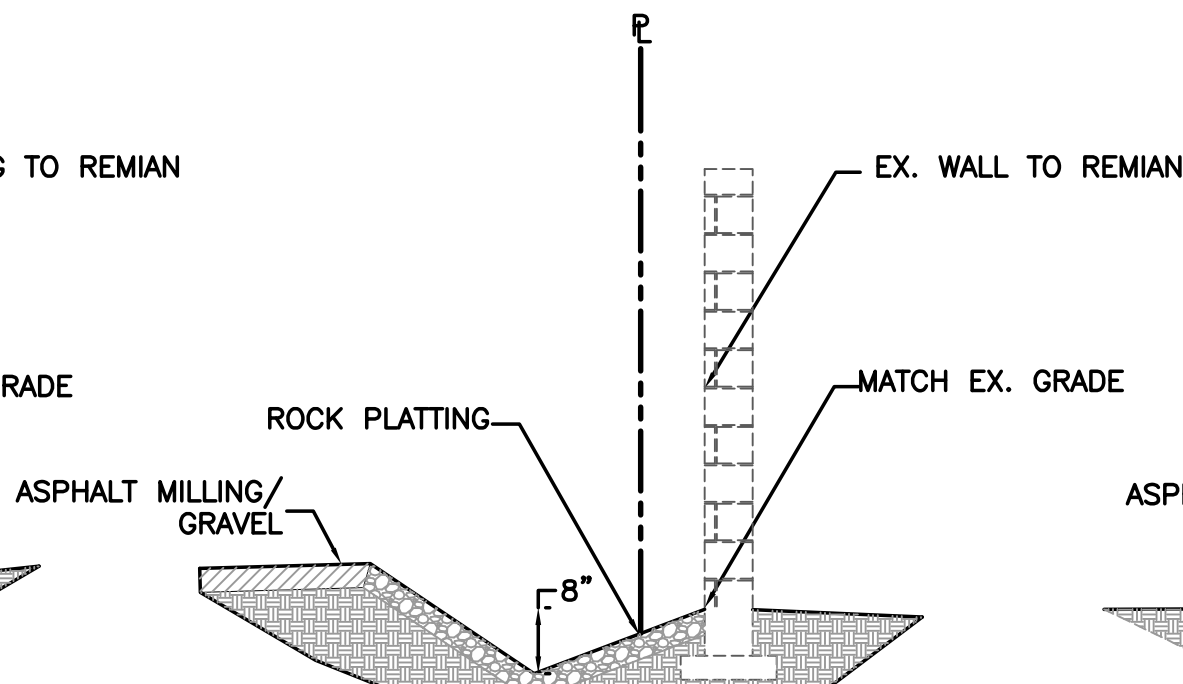
Note, channel section limited by elevation on south property line



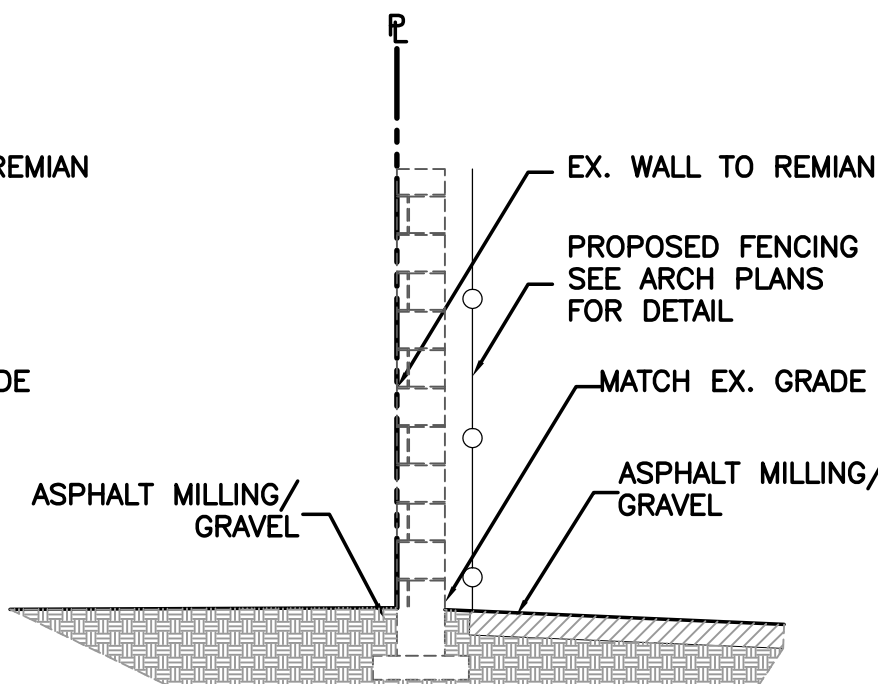
SECTION A-A
NTS



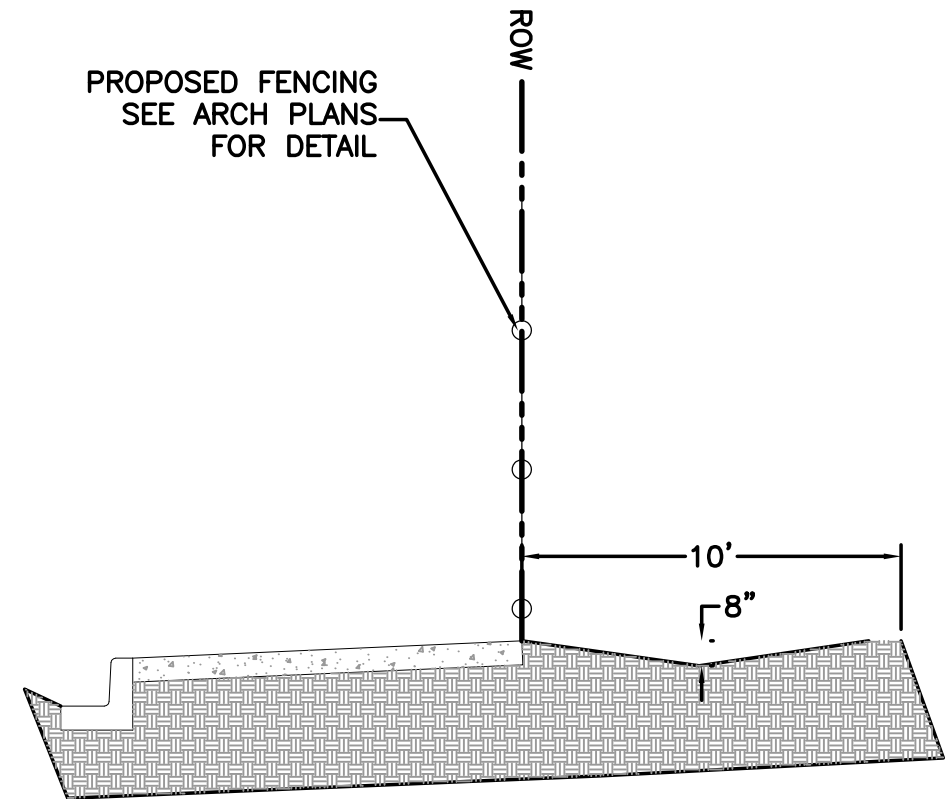
SECTION B-B
NTS



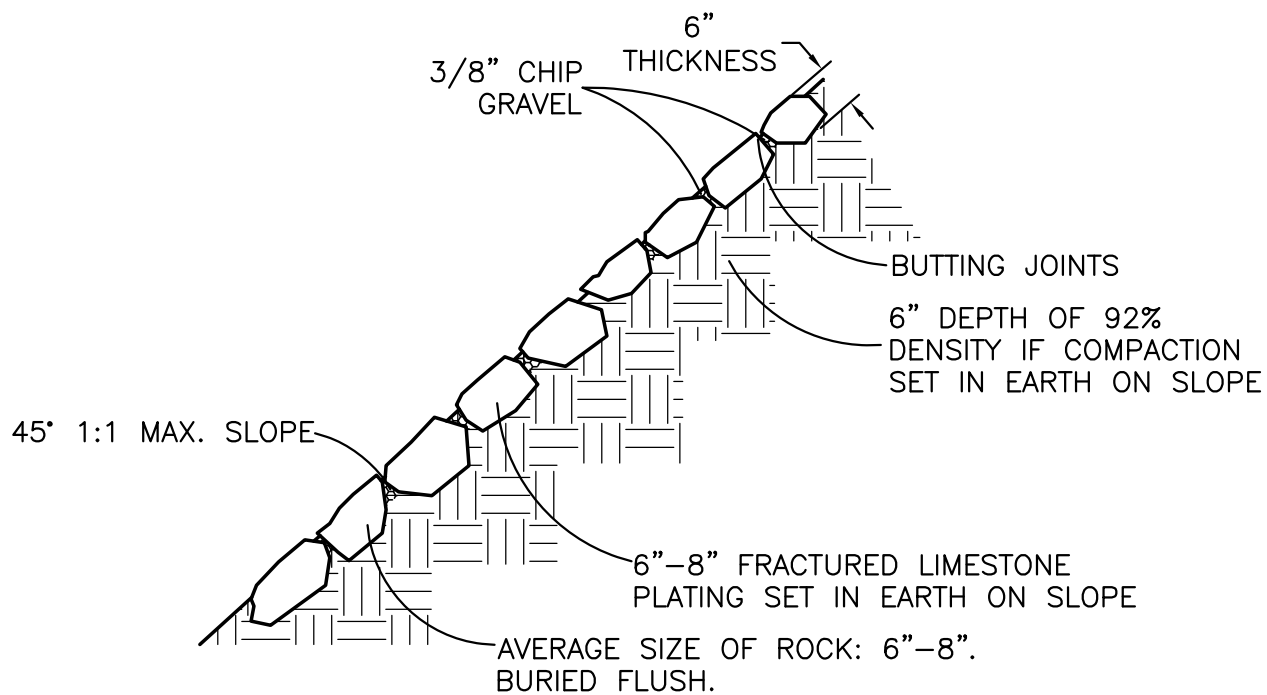
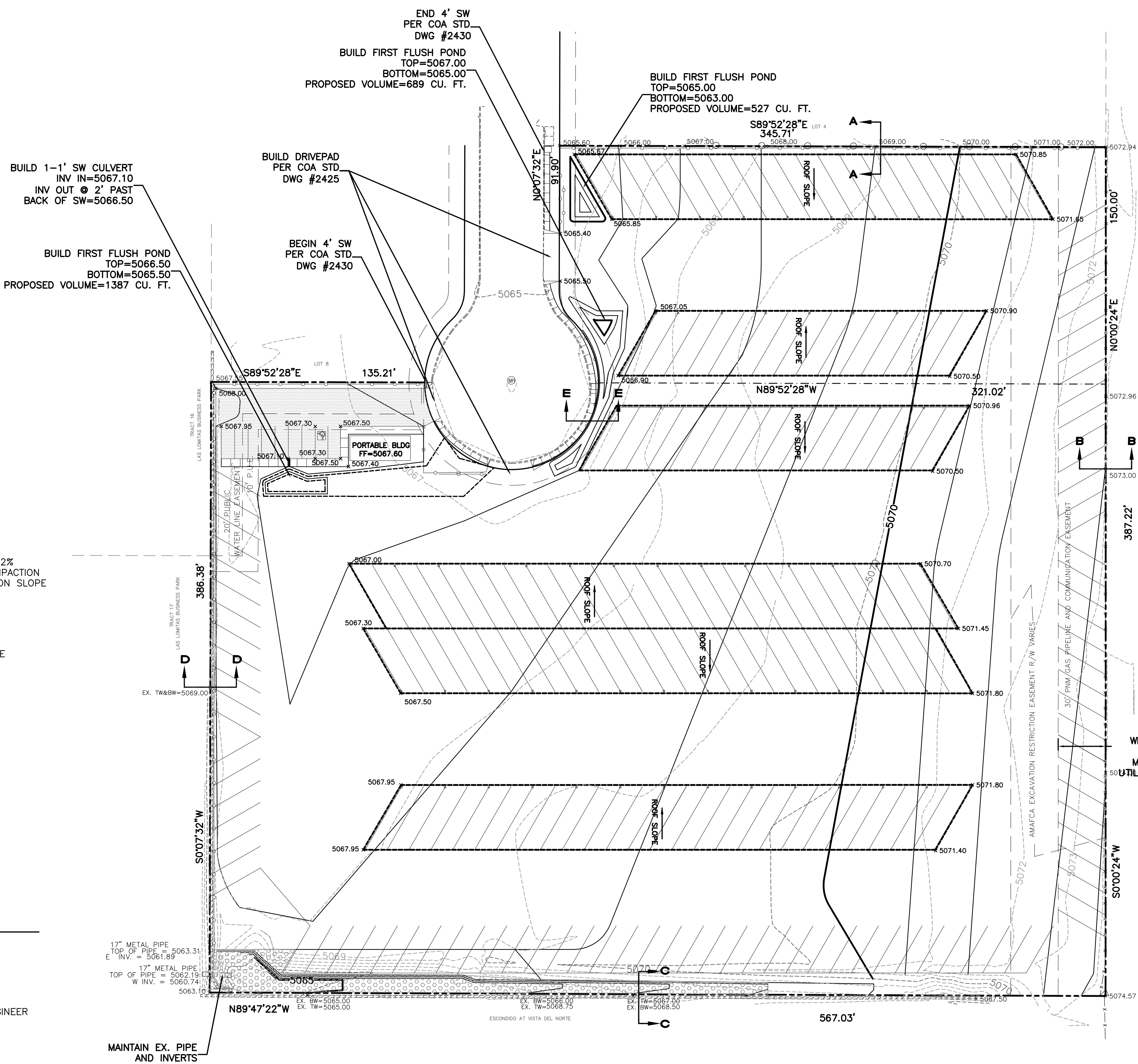
SECTION C-C
NTS



SECTION D-D
NTS



SECTION E-E
NTS

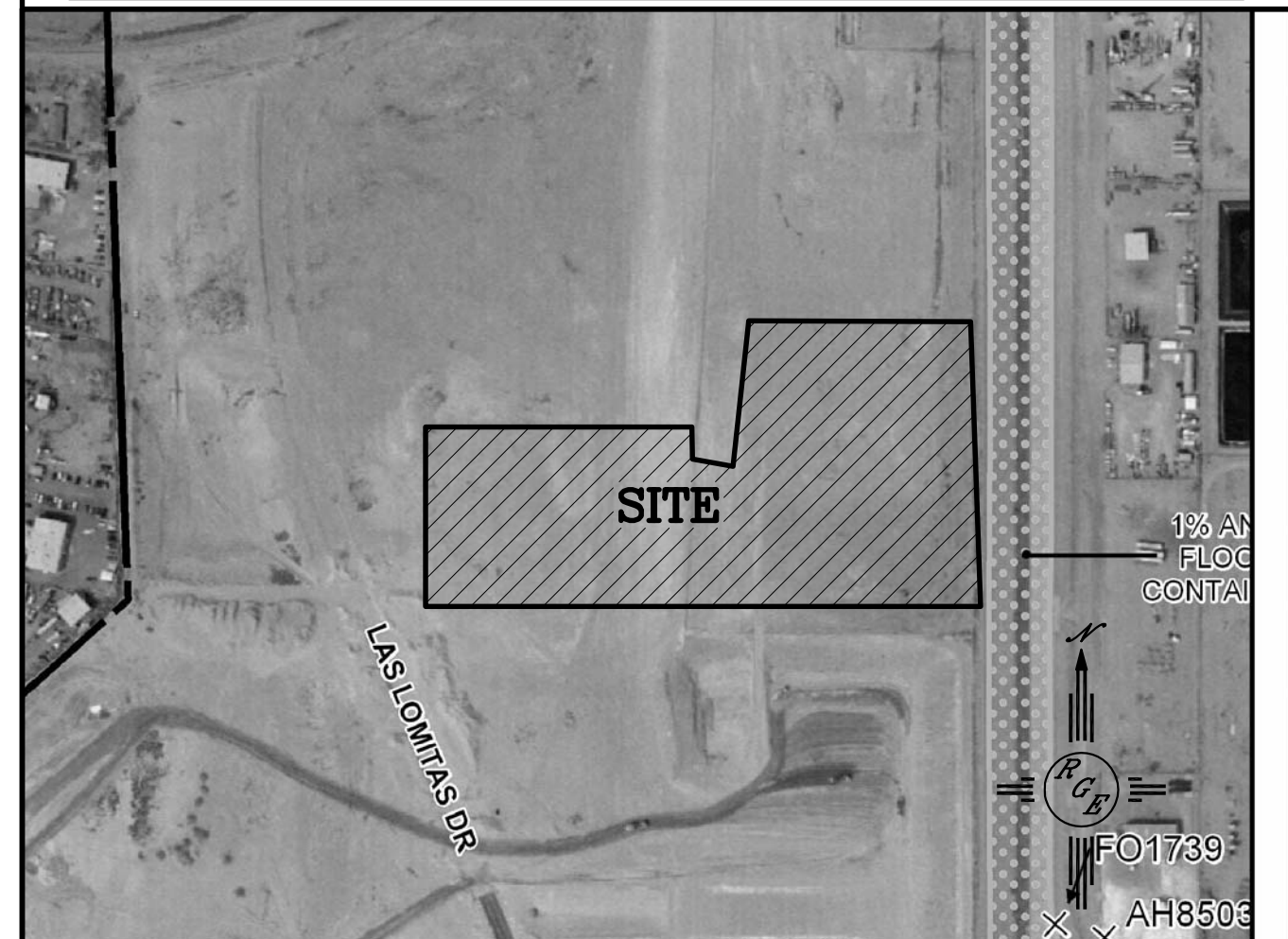


ROCK PLATING DETAIL
NTS

CAUTION:
EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS. SHOULD ANY CONFLICTS EXIST THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. TWO WORKING DAYS PRIOR TO ANY EXCAVATION THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL "811" OR 505.260.1990

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



FIRM MAP: FM35001C0136G

LEGAL DESCRIPTION:

LOT 5 AND 6-A, LAS LOMITAS BUSINESS PARK

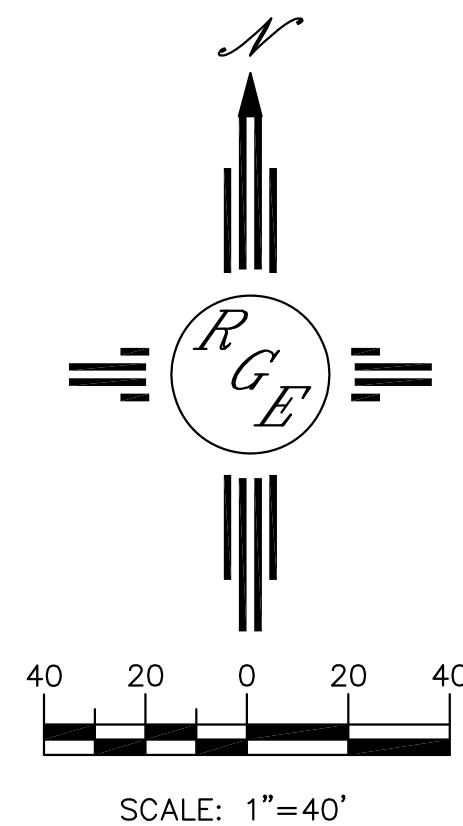
NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL SLOPES SHALL BE 3:1 MAX. (UNLESS NOTED) AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
3. ANY PERIMETER WALLS MUST BE PERMITTED SEPARATELY. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
4. SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.
5. FLOWS FROM AMAFCA RIGHT OF WAY SHALL BE ALLOWED TO DRAIN ONTO THE SITE UNIMPEDED. SITE GRANTED FREE DISCHARGE PER D16D002.
6. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT OF WAY.
7. PARKING AREA SHALL BE MIXTURE OF ASPHALT MILLINGS AND GRAVEL. PARKING LOT SHALL NOT BE PAVED.

LEGEND

---	EXISTING CONTOUR
- - - - -	EXISTING INDEX CONTOUR
---	PROPOSED CONTOUR
- - - - -	PROPOSED INDEX CONTOUR
•	EXISTING SPOT ELEVATION
•	PROPOSED SPOT ELEVATION
---	BOUNDARY
---	CENTERLINE
---	RIGHT-OF-WAY
---	EASEMENT
---	EXISTING CURB AND GUTTER
---	PROPOSED CONCRETE SIDEWALK
---	PARKING CANOPY
---	PARKING STRIPE
---	ROCK PLATING 1:1 SLOPE MAX
---	PROPOSED ASPHALT PAVING

NOTE:
ANY WORK PERFORMED
WITHIN THE EXISTING 30' PNM
EASEMENT
MUST NOT DISTURB EXISTING
UTILITIES, EXTREME CARE REQUIRED



<div>ENGINEER'S SEAL</div> <div>DAVID SOULE NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 14522</div> <div>12/29/17</div> <div>DAVID SOULE P.E. #14522</div>	PICASSO RV	DRAWN BY: WCUJ
	GRADING AND DRAINAGE PLAN	DATE: 12-29-17
	<div>Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999</div>	21817-LAYOUT-10-30-17
		SHEET # — JOB # 21817