CITY OF ALBUQUERQUE

Hydrology Section of the Planning Department

November 10, 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 10/31/2017
(D16D002A6)

Dear Mr. Soule,

Based upon the information provided in the submittal received on 10/31/17 the above-referenced plan cannot be approved for Site Plan for Building Permit, Building Permit or Grading Permit. Prior to DRB approval of the Site Plan for Building Permit the following must be addressed.

- Change the title of the sheet to be included in the Site Plan for Building Permit to Conceptual Grading and Drainage Plan and place a prominent label on the sheet "Not for Construction". A separate Grading and Drainage Plan for construction will contain additional details and must be submitted separately to the Hydrology Section of the Planning Department for approval of Grading Permit and Building Permit. The Building Permit Plans must include all sheets of the Site Plan for Building Permit and the Grading and Drainage Plan prior to Hydrology approval of the Building Permit.
- Add a reference to the Conceptual G&D Plan in a narrative description of the project stating that "The G&D plan for the Blue Sky Subdivision (drainage file D16D002) established Free Discharge as the drainage management plan for this property". Include notes in the narrative that identify the area of site, the area of land disturbance, and the area of paving/impervious surfaces and a description of how the first flush requirements will be met for this site.
- Existing topo and spot elevations on the adjacent properties must be added to the Conceptual G&D Plan with typical section on all sides of the property showing how the grading of this site will not encroach into any neighboring properties nor limit their use. v
- Show all first flush calculations on the Conceptual G&D Plan. Provide calculations of the required first flush volumes for each pond and a table summarizing the area of each contour and the associated volume calculations for each one of the ponds. on the Conceptual G&D Plan.
- Show all hydrology calculations on the Conceptual G&D Plan, including the off-site drainage basin to the east. The portion of the right of way for the North Diversion Channel that currently drains thru this site must be shown on the Conceptual G&D Plan with topography and a basin boundary line. This site must

PO Box 1293

Albuquerque

NM 87103

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continue to accept the offsite drainage and include the flows in onsite hydraulic calculations.

- Clearly indicate building footprints, new paving, curb and gutter, sidewalks, driveways and limits of disturbance on the Conceptual G&D Plan. Line widths and types should be varied instead of being the same for all of these features. More symbols, hatch patters, and line types need to be added to the legend.
- Sidewalk and driveway(s) are required in the public right of way along this property's frontage on Jacs Ln. and must be shown on all sheets of the Site Plan for Building Permit prior to DRB approval. 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 must be shown on the Conceptual G&D Plan.
- Show all hydrology calculations on the Conceptual G&D Plan, including capacity of the onsite drainage swale next to Jacs Ln. and sidewalk culvers. Pond overflow spillways must be directed to sidewalk culverts having capacity for the 100-year peak flow rate that must be shown on the Conceptual G&D Plan with construction notes. Flows in excess of the first flush volume should not mix with the first flush volume, so the inlet and outlet to the pond should be close to each other.
- A note must be added to the Conceptual G&D Plan stating "An excavation permit will be required before beginning any work within City Right-Of-Way". If an infrastructure list is not required at DRB then the rest of the SO-19 notes should also be placed on the plan.
- Existing utilities and easements must be shown on the Conceptual G&D Plan along with a note that says "Two working days prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay." The utilities must be marked in the field and their surveyed locations must be shown on the Conceptual G&D Plan, especially in the existing 30' PNM Gas Pipeline and Communication easement on the east side of this property. Written coinsurance from PNM is required prior to DRB approval of the Site Plan for Building Permit and may take the form of an Encroachment Agreement.
- The existing AMAFCA Excavation Restriction Easement on the east side of the site must be shown on the Conceptual G&D Plan and AMAFCA approval of the plan is required prior to DRB approval of the Site Plan for Building Permit.

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

Sincerely,

James D Hughes

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 #: _____

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:

[X] HYDROLOGY/ DRAINAGE
[ ] TRAFFIC/ TRANSPORTATION
[ ] MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

[ ] ENGINEER/ ARCHITECT CERTIFICATION

[ ] CONCEPTUAL G & D PLAN
[X] GRADING PLAN
[ ] DRAINAGE MASTER PLAN
[ ] DRAINAGE REPORT
[ ] CLOMR/LOMR

[ ] TRAFFIC CIRCULATION LAYOUT (TCL)
[ ] TRAFFIC IMPACT STUDY (TIS)
[ ] EROSION & SEDIMENT CONTROL PLAN (ESC)

[ ] OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: [ ] Yes [X] No

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

[X] BUILDING PERMIT APPROVAL
[ ] CERTIFICATE OF OCCUPANCY

[ ] PRELIMINARY PLAT APPROVAL
[ ] SITE PLAN FOR SUB'D APPROVAL
[X] SITE PLAN FOR BLDG. PERMIT APPROVAL
[ ] FINAL PLAT APPROVAL
[ ] SIA/ RELEASE OF FINANCIAL GUARANTEE
[ ] FOUNDATION PERMIT APPROVAL
[X] GRADING PERMIT APPROVAL
[ ] SO-19 APPROVAL
[ ] PAVING PERMIT APPROVAL
[ ] GRADING/ PAD CERTIFICATION
[ ] WORK ORDER APPROVAL
[ ] CLOMR/LOMR

[ ] PRE-DESIGN MEETING
[ ] OTHER (SPECIFY) _____

DATE SUBMITTED: 10/31/17 By: _____

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: ___

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.

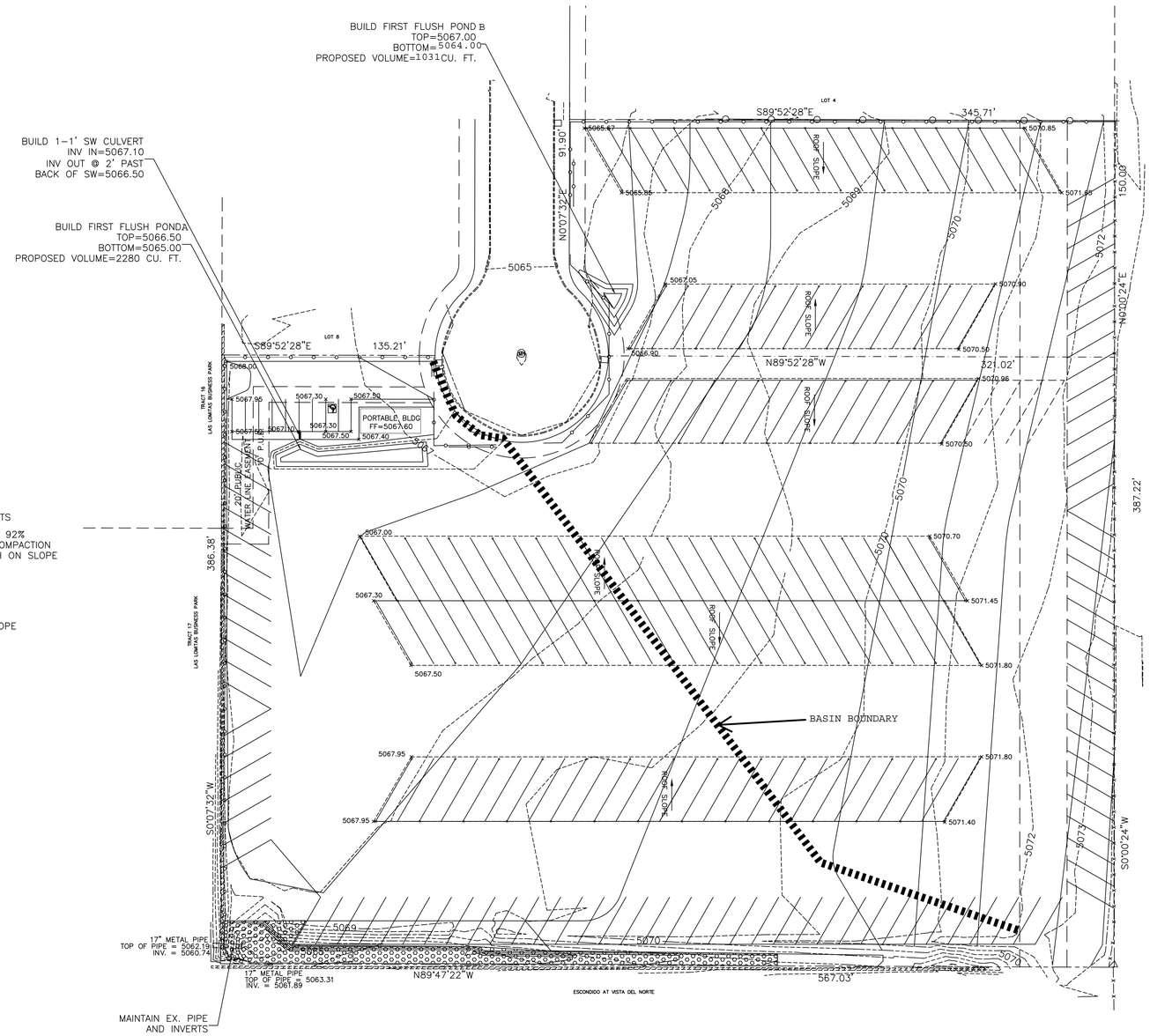
VICINITY MAP: D-16-Z

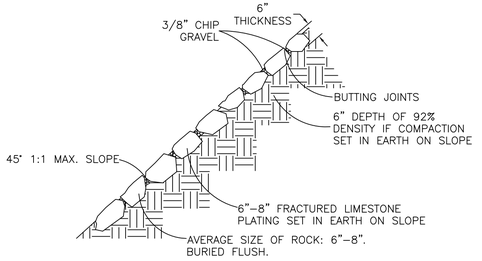
FIRM MAP: FM35001C0136G

BUILD FIRST FLUSH POND B
TOP=5067.00
BOTTOM=5064.00
PROPOSED VOLUME=1031CU. FT.

BUILD 1-1' SW CULVERT
INV IN=5067.10
INV OUT @ 2' PAST
BACK OF SW=5066.50

BUILD FIRST FLUSH POND A
TOP=5066.50
BOTTOM=5065.00
PROPOSED VOLUME=2280 CU. FT.





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.

SCALE: 1"=40'

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.

LEGEND

----------XXXX----------	EXISTING CONTOUR
----------XXXX----------	EXISTING INDEX CONTOUR
----------XXXX----------	PROPOSED CONTOUR
----------XXXX----------	PROPOSED INDEX CONTOUR
►—	SLOPE TIE
· XXXX	EXISTING SPOT ELEVATION
· XXXX	PROPOSED SPOT ELEVATION
----·----·----	BOUNDARY
—— — —— — ——	CENTERLINE
——————	RIGHT-OF-WAY
==========	EXISTING CURB AND GUTTER
	ROCK PLATTNG 1:1 SLOPE MAX

ENGINEER'S SEAL

DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER

10/31/17

DAVID SOULE
P.E. #14522

PICASSO RV

GRADING AND DRAINAGE PLAN

Rio Grande Engineering
1606 CENTRAL AVENUE SE
SUITE 201
ALBUQUERQUE, NM 87106
(505) 872-0999

DRAWN BY WCWJ

DATE 10-30-17

21817-LAYOUT-10-30-17

SHEET # —

JOB # 21817

DRAINAGE REPORT

For

PICASSO RV Storage
@BLUE SKY
7800 Jacs Lane NE

Albuquerque, New Mexico

Prepared by

Rio Grande Engineering
PO Box 93924
Albuquerque, New Mexico 87199

October 30, 2017

David Soule P.E. No. 14522

TABLE OF CONTENTS

Appendix

Map Pocket
Site Grading and Drainage Plan

PURPOSE

The purpose of this report is to provide the Drainage Management Plan for the construction of an RV storage facility located at 7800 Jacs Lane NE. This plan was prepared in accordance with the City of Albuquerque design regulations, utilizing the City of Albuquerque's Development Process Manual drainage guidelines. This report will demonstrate that the grading does not adversely affect the surrounding properties, nor the upstream or downstream facilities.

INTRODUCTION

The subject of this report, as shown on the Exhibit A, is a 6.08-acre parcel of land located at the southeast terminus of Jacs lane south of Paseo Del Norte. The legal description of this site is Lot 5A and 6A, Blue Sky Subdivision. As shown on FIRM map35013C0136G, the entire site is located within Flood Zone X. The site is a graded lot within the blue sky subdivision. The entire downstream infrastructure has been constructed. The site is part of the blue Sky master drainage study and allowed free discharge to the existing inlets located adjacent to the site. The development of this site shall conform to the Blue Sky Master Drainage Plan.

EXISTING CONDITIONS

The site is currently developed as a graded lot. The site currently discharges directly to Jacs Lane. This flow is captured by a series of inlets located adjacent to the site. The storm drain carries the entire subdivision flow to a City maintained retention/detention pond located west off the site on Los Lomitas. The AMAFCA North Diversion Channel is located directly upstream of the site so no upland flows enter the site. A minor swale exists along the southern property line. The swale discharges to a CMP stand pipe at the southwest corner

VICINITY MAP: D-16-Z

FIRM MAP: FM35001C0136G

The proposed improvements consist of approximately 60,000 square feet of phased covered storage for RV's. The floors and the drive isles will be gravel. The site will be graded such that there will be two basins, the southern basin A will discharge 6.49 cfs out a proposed driveway. The northern basin B will discharge 11.97 cfs out a proposed driveway. Each basin will pass thru a first flush pond prior to leaving the site. The required water quality volume of 2026 cf is achieved onsite.

SUMMARY AND RECOMMENDATIONS

This project is a development of a graded pad site. The site is within the master drainage plan area of the Blue Sky development. This site is allowed to free discharge to Jacs and the storm drain within. Since the effected area site encompasses more than 1 acre, a NPDES permit should be required prior to any construction activity.

APPENDIX A

SITE HYDROLOGY

Weighted E Method

PICASO RV

Existing Developed Basins

Basin	Area (sf)	Area (acres)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	100-Year, 6-hr. Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
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	8.0%	0.486	65.0%	3.9523	27%	1.642	1.369	0.694	21.24
POND A BASIN	113585	2.608	0%	0	8.0%	0.209	61.0%	1.59061	31%	0.808	0.869	0.189	6.49
POND B BASIN	151280	3.473	0%	0	8.0%	0.278	68.0%	2.36158	24%	0.833	1.340	0.388	11.97

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted D * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

	Basin A	Basin B
First flush requirement =.34ximpervious area	997.655	1028.704

CONTRIBUTING BASIN		
	A	16887.89 CF
	B	16887.89 CF

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

Ea= 0.53	Qa= 1.57
Eb= 0.78	Qb= 2.28
Ec= 1.13	Qc= 3.14
Ed= 2.12	Qd= 4.7

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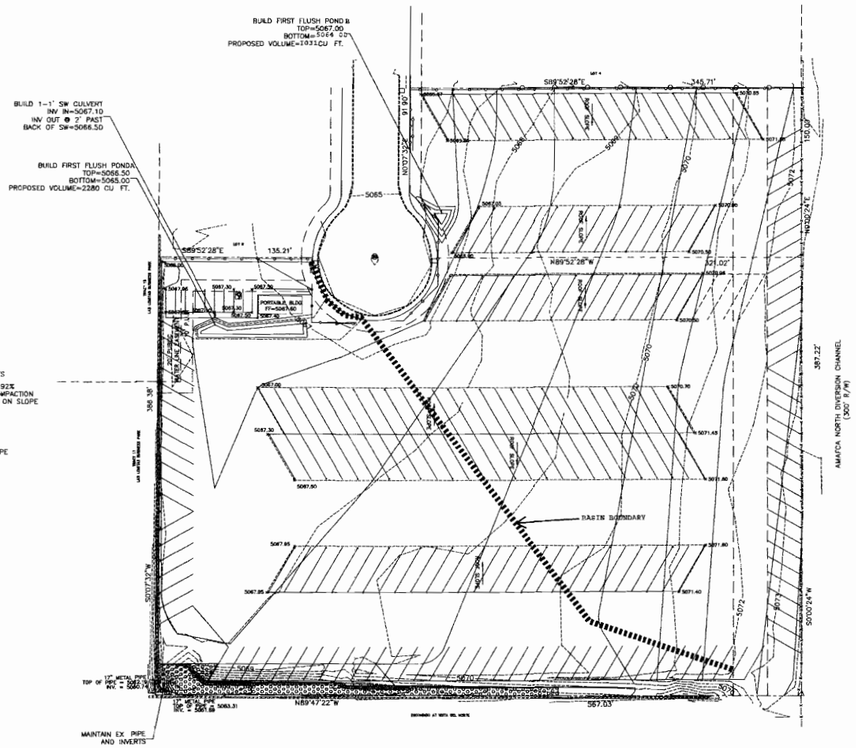

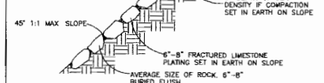

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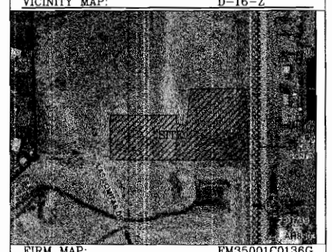

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- XXXX — EXISTING INDEX CONTOUR
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- SLOPE TIE
- • XXXX EXISTING SPOT ELEVATION
- • XXXX PROPOSED SPOT ELEVATION
- BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY
- EXISTING CURB AND GUTTER
- ROCK PLATING 1:1 SLOPE MAX

ENGINEER'S SEAL
DAVID SOULE
NEW MEXICO
14522
PROFESSIONAL ENGINEER
10/31/17
DAVID SOULE P.E. #14522

PICASSO RV

GRADING AND DRAINAGE PLAN

Rio Grande Engineering
1606 CENTRAL AVENUE SE SUITE 201
ALBUQUERQUE, NM 87106
(505) 975-0998

DRAWN BY: WCWJ
DATE: 10-30-17
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