

WATER SERVICE IMPACT STUDY

5338 E San Miguel Avenue Paradise Valley, Arizona

LDG PROJECT #2106249

Prepared for:

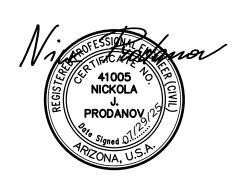
Kate & Joseph Hogan 5338 E San Miguel Avenue, Paradise Valley, Arizona 85253

Submitted to:

Town of Paradise Valley
Engineering Department
6401 E Lincoln Dr.
Paradise Valley, Arizona 85253

Prepared by:

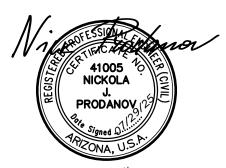
Land Development Group, LLC 8808 N Central Ave., Ste 288 Phoenix, Arizona 85020 Contact: Nick Prodanov, PE, PMP P: 602 889 1984



July 29th, 2025

TABLE OF CONTENTS

			PAGE
1.	Introdu	uction	2
2.	Domes	tic Water and Fire Suppression System	2
3.	Refere	nces	3
		<u>APPENDICES</u>	
Appen	dix A-1	Vicinity Map	4
Appen	dix A-2	Water Flow Test	5
Appen	dix A-3	Will Serve Letter	6



July 29th, 2025

1. INTRODUCTION

This Water Service Impact Study and related design have been developed in accordance with the current Town of Paradise Valley Design Standards, Codes and adopted Ordinances. It provides engineering analysis and assessment of the required water services and fire flow demand for the proposed subdivision development - parcel 172-47-086, located at 5338 E San Miguel Avenue, Paradise Valley, AZ 85253, and also being Lot 29 of Stone Canyon Amended, a subdivision recorded in Book 371 of Maps, Page 31, MCR, which is a portion of the NE ¼ of Section 17, Township 2 North, Range 4 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona. Refer to Appendix A-1 – Vicinity Map.

The property is bounded by Solano Drive (north), San Miguel Avenue (south) and residential properties from the west and east. The 2.342-acre lot is zoned R-43 (Hillside), which in accordance with the Town of Paradise Valley Zoning Ordinance allows for one dwelling unit per acre density. Currently are no existing buildings or walls on the property except an existing driveway, which is a remanence of the old home construction. The driveway is leading to both Solano Drive and San Miguel Avenue. The project will consist of splitting the property into two separate lots and construction of hillside single family residences. Future properties will be accessed from north (Solano Drive).

As a part of the project development process, a plat map subject to the Town of Paradise Valley review and approval is prepared and enclosed herein. The owner is proposing to split the property into two lots. The proposed plat map defines the new property divider line, location and distances of the new building setback lines, public utility easements and drainage easements for both lots. All proposed lots will exceed the minimum required area of 1 acre per Chapter 6 of Town of Paradise Valley Code.

2. DOMESTIC WATER AND FIRE SUPPRESSION SYSTEM

EPCOR Water supplies domestic water in the vicinity. There is a 4" CIU main in both Solano Drive and San Miguel Avenue. There is an existing water meter located in the property near the middle of the north property line, which could be utilized for future service.

New water service taps and meters will be required for Lots 1 and 2. There is an existing fire hydrant in Solano Drive, which is approximately 250' west of the northwest property corner. New fire hydrant installation will be required in order to provide proper coverage for the eastern lot.

Fire flow test was conducted on July 24th, 2025 by Arizona Flow Testing, LLC and witnessed by EPCOR representative. Based on the results of the fire flow test, the existing water infrastructure is capable of suppling the required fire flow protection per the Town Code 13.1.6 (1,500 gpm at 20 psi). Fire sprinklers for the new residences will be fed off the domestic water services. New services and water meter will be required for the second parcel created. Per the performed Hydrant Fire Flow Test, the fire hydrant could supply 1,504 gpm at 35 psi, and 2,467 gpm at 20 psi, which meets

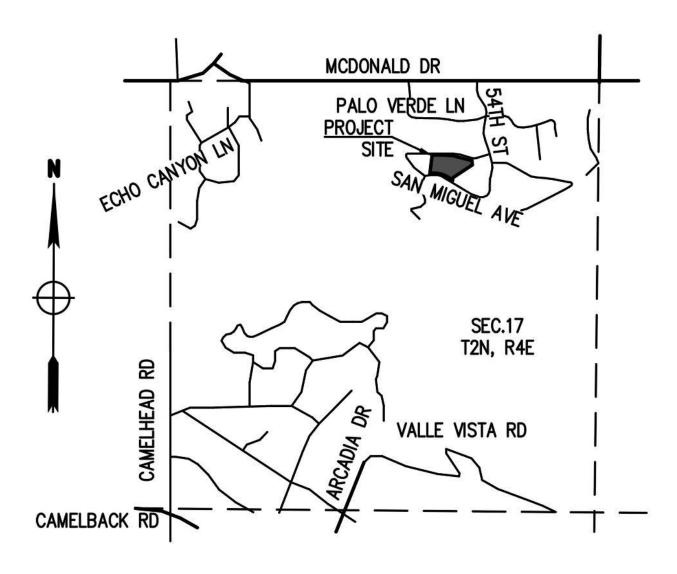
and exceeds the Town of Paradise Valley Code 13.1.6 (1,500 gpm at 20 psi) and the Building Code requirements.

The Town of Paradise Valley is the sanitary sewer provider for this project. There are 8" sewer mains in 54th Street. New sanitary sewer taps will be constructed to service Lots 1 & 2. The lots will be serviced by the new sewer main to be installed in Solano Drive.

3. REFERENCES

- Town of Paradise Valley Design Standards & Policies.
- 2015 International Fire Code, Appendix B, Fire Flow Requirements for Buildings.

APPENDIX A-1 Vicinity Map



APPENDIX A-2 Water Flow Test

Arizona Flow Testing LLC

HYDRANT FLOW TEST REPORT

Project Name: 5338 Lot Split

Project Address: 5338 East San Miguel Avenue, Paradise Valley, Arizona 85253

Client Project No.: Not Provided Arizona Flow Testing Project No.: 25609

Date and Time flow test conducted: July 24, 2025 at 7:30 AM Data is current and reliable until: January 24, 2026

Conducted by: Floyd Vaughan – Arizona Flow Testing, LLC (480-250-8154)

Witnessed by: Garren Willey – EPCOR Water (480-450-4670)

Raw Test Data

Static Pressure: **50.0 PSI** (Measured in pounds per square inch)

Residual Pressure: **40.0 PSI** (Measured in pounds per square inch)

Pitot Pressure: **16.0 PSI** (Measured in pounds per square inch)

Diffuser Orifice Diameter: One 4-inch Hose Monster

(Measured in inches)

Coefficient of Diffuser: 0.7875

Flowing GPM: **1.504 GPM**

(Measured in gallons per minute)

GPM @ 20 PSI: **2,722 GPM**

Data with 10 % Safety Factor

Static Pressure: **45.0 PSI** (Measured in pounds per square inch)

Residual Pressure: **35.0 PSI** (Measured in pounds per square inch)

Approx. distance between hydrants: 2,070 Feet

Main size: Not Provided

Flowing GPM: **1,504 GPM**

GPM @ 20 PSI: **2,467 GPM**

Flow Test Location

North

East Solano Drive

Fire Hydrant (Removed)

East San Miguel Avenue

Pressure Fire Hydrant (Approx. Elevation 1,580 ASL)

registed Map
Palasseripted or your map
Legend A

Legend

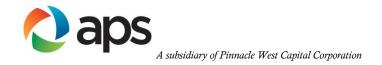
Flow Fire Hydrant (Approx. Elevation 1,428 ASL)

North 54th Place

Project Site 5338 East San Miguel Avenue

Arizona Flow Testing LLC 480-250-8154 www.azflowtest.com floyd@azflowtest.com

APPENDIX A-3Will Serve Letter



Station 4031 P.O. Box 53933 Phoenix, AZ 85072-3933 www.aps.com

May 18, 2022

Kate & Joseph Hogan 5338 E San Miguel Ave, Paradise Valley, Az 85253

Re: 5338 E San Miguel Ave

Dear Kate & Joseph Hogan,

The above referenced project is located in Arizona Public Service Company's electric service area. The Company extends its lines in accordance with the "Conditions Governing Extensions of Electric Distribution Lines and Services," Schedule 3, and the "Terms and Conditions for the Sale of Electric Service," Schedule 1, on file with the Arizona Corporation Commission at the time we begin installation of the electric facilities.

Application for the Company's electric service often involves construction of new facilities for various distances and costs depending upon customer's location, load size and load characteristics. With such variations, it is necessary to establish conditions under which Arizona Public Service will extend its facilities.

The enclosed Schedule 3 policy governs the extension of overhead and underground electric facilities to customers whose requirements are deemed by Arizona Public Service to be usual and reasonable in nature.

Sincerely,

Hailey Parks

Hailey Parks | Administrative Coordinator – T&D Customer Construction East

Physical: 4612 E Bell Rd.

Mailing: PO Box 53999, M.S. 4031 Phoenix, AZ 85004

<u>CCEControlDesk@apsc.com</u> <u>Hailey.Parks@APS.com</u>

(602) 493-4401 Cell



Lumen/CenturyLink Engineering 5025 N Black Canyon Hwy Phoenix, AZ 85015 bics@centurylink.com

July 10, 2025

Joe and Kate Hogan 5338 E San Miguel Ave Paradise Valley, AZ 85253

RE: Residential Project: 5338 lot split - 5338 East San Miguel Avenue, Paradise Valley, Maricopa County, AZ.

Dear Joe and Kate,

The above-mentioned project is located in a parcel of land, 472-47-086, located in Section 17, Township 02N and Range 04E in Maricopa County Arizona.

In response to your "Service Availability" request for the above-mentioned development located at the 5338 East San Miguel Avenue, Paradise Valley, Maricopa County, AZ, this letter is to acknowledge that this subject property is within the Lumen/CenturyLink serving territory.

The tariff Rates and Regulations prescribed for service for this area are on file with your State Utilities Commission.

Sincerely,

Kathy Hadrich

Kathy Hadrich Sr. Manager Local Network Implementation Phoenix, AZ 85015 602/325-0687 Kathrine.hadrich@lumen.com



2355 West Pinnacle Peak Road, Suite 300 Phoenix, AZ 85027 USA **epcor.com**

May 17, 2022

Darius Tabatabay
The Construction Zone

Sent via e-mail to: darius@czphx.com

Re: Will-Serve Letter for Water Service

5338 E. San Miguel Ave, Paradise Valley

APN 172-47-086

Dear Mr. Tabatabay;

This letter is in response to your request to EPCOR Water Arizona Inc. ("EPCOR") regarding EPCOR's willingness to provide water service to the residential parcel referenced above (the "Development"), which it is our understanding will be subdivided as part of this project. EPCOR provides the following information for your consideration:

- 1. EPCOR has confirmed that the Development is located within the area encompassed by EPCOR's Certificate of Convenience & Necessity ("CC&N") for water service as issued by the Arizona Corporation Commission.
- 2. Water service to the Development by EPCOR may be conditioned upon developer entering into a Main Extension Agreement (an "MXA") with EPCOR in a form acceptable to EPCOR, and upon EPCOR and developer fully performing its respective obligations under the MXA. The MXA, if needed, will provide, among other things, that developer will be responsible for constructing at its cost all water main extensions necessary to distribute water from EPCOR's water system to the individual service line connections in the Development. The design and construction of all such main extensions will be subject to EPCOR's approval, and ownership of the main extensions, together with related real property easement rights, must be transferred to EPCOR prior to the initiation of water service in the Development.
- 3. EPCOR understands that a water flow study has previously been conducted for this project. Please provide a copy of any report that was prepared as part of that study, and please also provide a copy of an engineering report prepared showing projected future water demands for the Development, specifically showing water demands of the future subdivided parcel. Future water demand projections are needed to determine if any infrastructure improvements will be needed in order to provide adequate service once the lot has been sub-divided for normal use in the Development upon EPCOR's and developer's fulfillment of its respective obligations under the MXA. Please note that EPCOR does not guarantee the adequacy of its water capacity for fire protection.
- 4. Developer will also be required, as a condition to EPCOR providing water service to the Development, to pay all required fees pursuant to EPCOR's tariffs and as may be provided in the MXA.

This letter assumes that construction of the main extensions within the Development will begin within one (1) year after the date of this letter.

If developer begins construction of any water mains in the Development or any other water service infrastructure intended to serve the Development without, in each instance, the prior written approval of such construction by EPCOR, developer will be proceeding with such construction at its own risk.

This letter does not independently create any rights or obligations in either developer or EPCOR, and is provided for information only. Any agreement between developer and EPCOR for water service in the Development must be memorialized in a written agreement executed and delivered by their respective authorized representatives.

For additional information, please contact me at (623) 445-2459 or at alovisetto@epcor.com.

Sincerely,

Alex Lovisetto, P.E.

Alonath

Developer Services Manager - Eastern



Date: 1.8.2025

Name: DREW BAUSOM

Service Address: 5338 E SAN MIGUEL AVE

City AZ Zip: PARADISE VALLEY 85253

RE: Natural Gas Service: 5338 LOT SPLIT

In response to your recent inquiry concerning the availability of natural gas to the above location, Southwest Gas Corporation is the natural gas supplier for this area.

Please be advised that natural gas is available to the above referenced project from Southwest Gas Corporation in accordance with our existing rules and regulations as filed with the Arizona Public Utilities Commission. We extend our facilities based on economic justification. Without reviewing a preliminary engineering plan for this project, we cannot, at this time, determine what fees would be required from the developer. We are interested in serving this project with the preferred fuel, natural gas, and look forward to hearing from you as plans progress.

Thank you for your inquiry. We look forward to providing safe, reliable, and clean burning natural gas to you and your project. For further information please call (877) 860-6020.

Sincerely,

Southwest Gas Energy Solutions Department