

FINAL

~~PRELIMINARY~~

WATER DISTRIBUTION SYSTEM

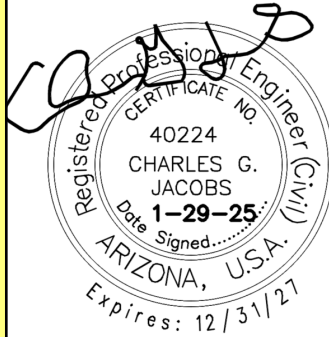
BASIS OF DESIGN REPORT

The Arden

7601 E Polk Street

Scottsdale, Arizona

1-29-2025



Prepared for  
Tomcack Design  
Mark Tomcack

**FINAL Basis of Design Report**

- APPROVED
- APPROVED AS NOTED
- REVISE AND RESUBMIT



Disclaimer: If approved, the approval is granted under the condition that the final construction documents submitted for city review will match the information herein. Any subsequent changes in the water or sewer design that materially impact design criteria or standards will require re-analysis, re-submittal, and approval of a revised basis of design report prior to the plan review submission.; this approval is not a guarantee of construction document acceptance. For questions or clarifications contact the Water Resources Planning and Engineering Department at 480-312-5685.

BY Levi Dillon

DATE 4/4/2025

Address applicable comments below and herein within submitted plans:

- 1) DS&PM 6-1.417, C. Meters and backflow need to be adjacent but separated by the property line. When the location of a backflow preventer cannot be accommodated adjacent to the meter, the designer shall:  
Request official permission from the Water Resources Department to separate the meter from the backflow preventer. Backfill the water line between the meter box and the backflow preventer with 1-sack controlled low strength material (CLSM) per MAG, Section 728. CLSM shall be placed to the full width of the trench and to 6 inches above top of pipe. Note on the plans that inspection of the water piping connecting the meter to the backflow preventer be inspected by a city backflow prevention specialist prior to CLSM and backfill.
- 2) clarify on plan what is being done with the 4 existing water meters and services that service the parcels being redeveloped. Confirm inactive meters and contact the City to remove. Note that the corp at the main must be closed and the service line removed for any unused meters/services. DS&PM 6-1.408. Note meter development fee credit can be applied for any removed/unused meters towards new meters.
- 3) call out COS riser detail without double check on plans. Confirm with fire plan review staff.
- 4) confirm service/meter size and vault requirement on the approved plans. 3-inch meter in vault currently shown on BOD utility plan.
- 5) confirm with fire plan review staff that a remote BF is preferred here and not on each building riser.
- 6) review all water line crossings for conflicts with other utilities. Realign where possible. Where not feasible to realign apply any needed extra protection per MAG and City requirements. DS&PM 6-1.415
- 7) strongly recommend DIP instead of C-900 pipe for the 4-inch main and 2-inch building services. Conform to plumbing and applicable code.
- 8) Address comments on the BOD utility plan.

**JACOBS WALLACE, LLC**  
*ENGINEERING PLANNING MANAGEMENT*

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**JACOBS WALLACE, LLC**  
*ENGINEERING PLANNING MANAGEMENT*

**INTRODUCTION**

The proposed project consists of a multi-story multi-family for rent townhouse style apartments. The existing building and parking will be demolished. Polk St will be abandoned.

The 1.2-acre site is located at the intersection of Miller Rd and Polk St on the east side of Miller Rd. The immediate NEC of the intersection is not a part of this project. The site is bordered on all sides by existing commercial/multifamily developments. There are 24 proposed 3 story units.

The site lies within the Northwest Quarter of Section 2, Township 1 North, Range 4 East of Gila and Salt River Base and Meridian. See the Appendix for a vicinity map.

**EXISTING CONDITIONS**

There is an existing 8" ACP water main in Miller Rd. There are 2 existing services to the site that will be abandoned. There are no wells on the properties. There is a service extended to the northeast area of the site that will be abandoned with the other services.

**PROPOSED CONDITIONS**

The proposed project will install a new 6" DIP dedicated private fireline with 3" services that will be mounted with the wall with access panels for fire protection providing service for the 13R proposed sprinkler system (per architect) A new public fire hydrant will also be provided located at the drive entry for the project. The hydrant will be installed per MAG standards 360. For the domestic water a new 2" type K cooper tubing will be installed along with a 2" meter per COS standards 2330. A separate 1" landscape type k copper tubing service connection and meter will be installed per COS standards 2330. Backflow preventors will be provided for each new connection per COS standards 2351 & 2352.

All water line construction and design will conform to M.A.G. standards and specifications and the latest revision of the City of Scottsdale Design Standards and Policies Manual. All water demands are based on Figure 4.1-3, Average Day Water Demand per Dwelling Unit of the City of Scottsdale Design Standards and Policies Manual.

**WATER ANALYSIS**

Residential: 24 units

Average Daily Flow:

Residential:

$$23 \text{ units} * 0.27 \text{ gpm/unit} = \mathbf{6.21 \text{ GPM}}$$

Maximum Daily Demand: Average Daily Demand x 2

$$23 \text{ units} * (0.27\text{gpm/unit}*2)=\mathbf{12.42 \text{ GPM}}$$

Peak Demand: Maximum Daily Demand x 3.5

$$23 \text{ units} * (0.27\text{gpm/unit}*3.5)= \mathbf{21.74 \text{ GPM}}$$

Fire Flow Demand: (Per City of Scottsdale DSPM Section 6-1.501)

1,500 gpm @ 30 psi (For commercial, industrial, and multi-family)

Max Daily Demand + Fire Flow = **1,513 gpm @ 30 psi (COS requirement)**

**JACOBS WALLACE, LLC**  
*ENGINEERING PLANNING MANAGEMENT*

**WATER MODEL RESULTS**

A water model will not be completed for this project. See meter sizing calculation sizing attached per DSPM 6-1.202,G,6,d.ii. A new public hydrant is being proposed between the two tested hydrants. The proposed hydrant will improve the hydrant spacing along Miller Rd and will also help with the required spacing for our onsite FDC locations. A fire flow test was completed using an existing hydrant located near the northwest corner of McKellips Rd and Miller Rd roughly 350' south of the entry to this project and the northwest corner of Taylor St roughly 180' north of the entry to this project.

**EXISTING PRESSURE & FLOW**

test taken 9-20-24 by EJ (See Attached)

**Raw Data:**

Static Pressure: 109 psi

Residual Pressure: 84 psi

Flow: 2,338 gpm

20psi Flow: 4,640 gpm

**Data with 37psi safety Factor:**

Static Pressure: 72 psi

Residual Pressure: 47 psi

Flow: 2,338 gpm

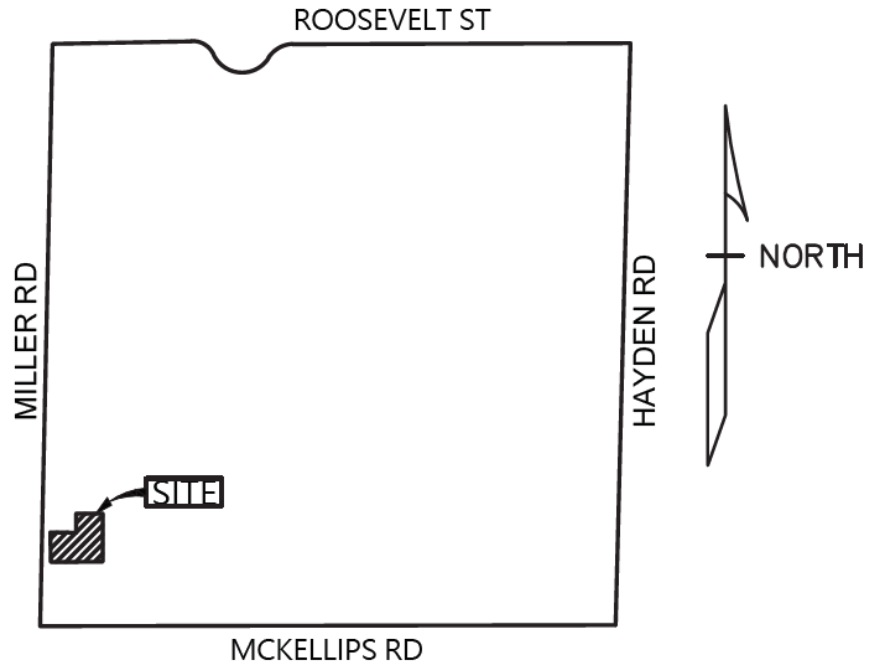
20psi Flow: 3,472 gpm

**CONCLUSION**

Based on the information provided and the flow test results, the city system will be able to handle the proposed project demands as estimated above. The flow test shows that there is adequate flow and pressure for proper fire protection.

It is important to note that the actual available flow can be affected by varying seasonal and diurnal water demands, growth within the City, and system operations. This report solely describes the flow available at a design maximum day condition based on current flow tests.

## Vicinity Map



**VICINITY MAP**  
NOT TO SCALE

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Aerial Map



**JACOBS WALLACE, LLC**  
ENGINEERING PLANNING MANAGEMENT

FIXTURE UNIT CALCULATION						
MARK	DESCRIPTION	QTY	WASTE		WATER	
			DFU	TOTAL	WSFU	TOTAL
UNIT TYPE I						
-	FULL BATH GROUP	3	5	15	3.6	10.8
-	KITCHEN GROUP	1	2	2	2.5	2.5
-	ICEMAKER	1	-	-	1	1
-	CLOTHES WASHER	1	2	2	1.4	1.4
-	lavatory	1	1	1	0.7	0.7
INDIVIDUAL UNIT TYPE TOTAL				20		16.4
				x 23		x 23
23 total units				460		377.2

plan calls out 3" meter and vault (confirm for plan submittal)

WATER SUPPLY CALCULATION	
UTILITY COMPANY: CITY OF SCOTTSDALE, AZ.	
STATIC PRESSURE: 65 P. S. I. (REDUCED IF REQUIRED, PROVIDE PRV).	
TOTAL F. U. : 377.2 = 100 GPM, USE NEW 2" WATER METER W/ RPBP	
65.0 P. S. I.	PRESSURE IN MAIN
- 5.0 P. S. I.	WATER METER LOSS
- 10.0 P. S. I.	BACKFLOW PREVENTER LOSS
- 20.0 P. S. I.	FIXTURE LOSS
- 8.6 P. S. I.	DROP FOR ELEVATION (20 FT. x 0.43)
-----	
21.4 P. S. I. AVAILABLE	
<u>ALLOWABLE FRICTION LOSS:</u>	
PIPE LENGTH (TAP TO METER)	= 60 FT.
PIPE LENGTH (METER TO LAST FIXTURE)	= 450 FT.
VERTICAL LENGTH	= 20 FT.
EQUIVALENT LENGTH OF FITTINGS	= 90 FT.
TOTAL DEVELOPED LENGTH = 620 FT.	
P. S. I. AVAILABLE	21.4
----- X 100 = 3.4 P. S. I. /100 FT.	
TOTAL LENGTH	620 FT.
MAXIMUM ALLOWABLE LOSS PER 100 FT. OF PIPE = 3.4 P. S. I.	
NOTES:	
1. PLUMBING CONTRACTOR TO VERIFY AND COORDINATE EXACT STREET PRESSURE AND NOTIFY ENGINEER OF ANY DISCREPANCIES.	
2. PLUMBING CONTRACTOR TO PROVIDE A PRESSURE REDUCING VALVE (PRV) ON CUSTOMER SIDE OF WATER METER IF THE STREET PRESSURE EXCEEDS 80 PSI, PRV TO BE SET AT 80 PSI.	
3. PLUMBING CONTRACTOR IS TO PROVIDE AND INSTALL A CITY APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER SAME SIZE AS BUILDING MAIN. BACKFLOW PREVENTER SHALL BE READILY ACCESSIBLE FOR INSPECTION	
4. BEFORE LOCAL JURISDICTION ACCEPTS THE INSTALLED BACKFLOW DEVICE:	
(1) DEVICE MUST BE TESTED BY A STATE CERTIFIED BACKFLOW TESTER AND TEST RESULTS FORWARDED TO THE LOCAL JURISDICTION'S BACKFLOW SPECIALIST.	
(2) LOCAL JURISDICTION CAN PROVIDED UP-TO-DATE LIST OF CERTIFIED TESTERS.	
(3) TESTER FEES TO BE AT EXPENSE OF THE PLUMBING CONTRACTOR.	



# Flow Test Summary

Project Name: EJFT 24331 - Polk Living  
Project Address: 7601 E Polk, Scottsdale, AZ 85248  
Date of Flow Test: 2024-09-20  
Time of Flow Test: 6:50 AM  
Data Reliable Until: 2025-03-20  
Conducted By: Alonzo M. & Simon R. (EJ Flow Tests) 623.999.7637  
Witnessed By: Chris Mendez (City of Scottsdale) 602.908.9046  
City Forces Contacted: City of Scottsdale (602.908.9046)  
Permit Number: C76453

**Note** Scottsdale requires a max static pressure of 72 psi for safety factor.

## Raw Flow Test Data

Static Pressure: 109.0 PSI  
Residual Pressure: 84.0 PSI  
Flowing GPM: 2,338  
GPM @ 20 PSI: 4,640


## Data with a 37 PSI Safety Factor

Static Pressure: 72.0 PSI  
Residual Pressure: 47.0 PSI  
Flowing GPM: 2,338  
GPM @ 20 PSI: 3,472

## Hydrant F<sub>1</sub>

Pitot Pressure (1): 47 PSI  
Coefficient of Discharge (1): 0.9  
Hydrant Orifice Diameter (1): 2.5 inches  
Pitot Pressure (2): 50 PSI  
Coefficient of Discharge (2): 0.9  
Hydrant Orifice Diameter (2): 2.5 inches



 Static-Residual Hydrant

 Flow Hydrant

Distance Between F<sub>1</sub> and R  
544 ft (measured linearly)

Static-Residual Elevation  
1193 ft (above sea level)

Flow Hydrant (F<sub>1</sub>) Elevation  
1199 ft (above sea level)

Elevation & distance values are approximate

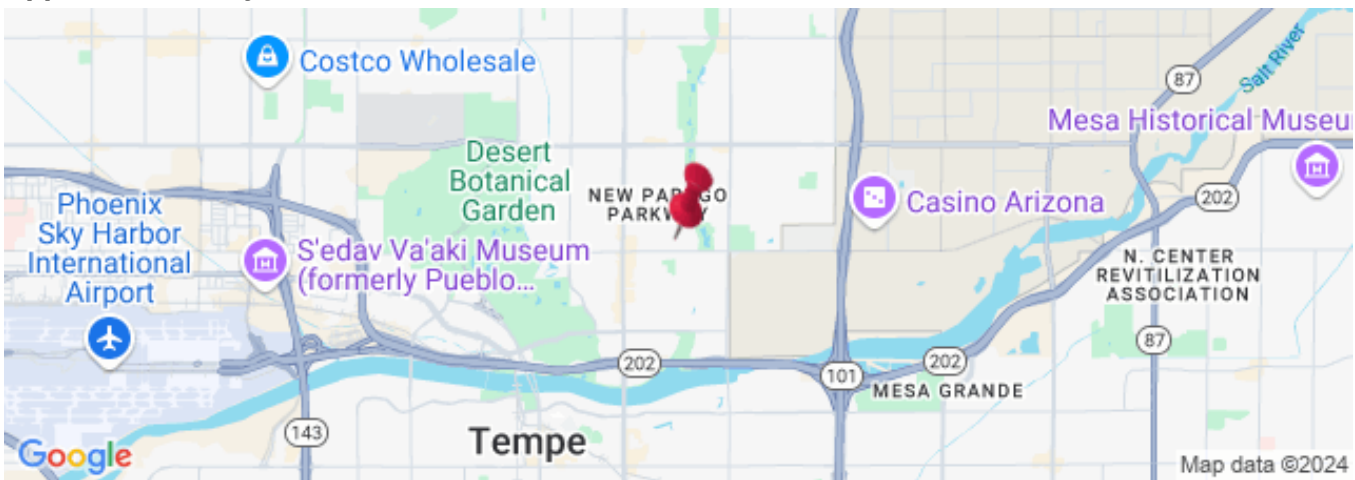
## Static-Residual Hydrant



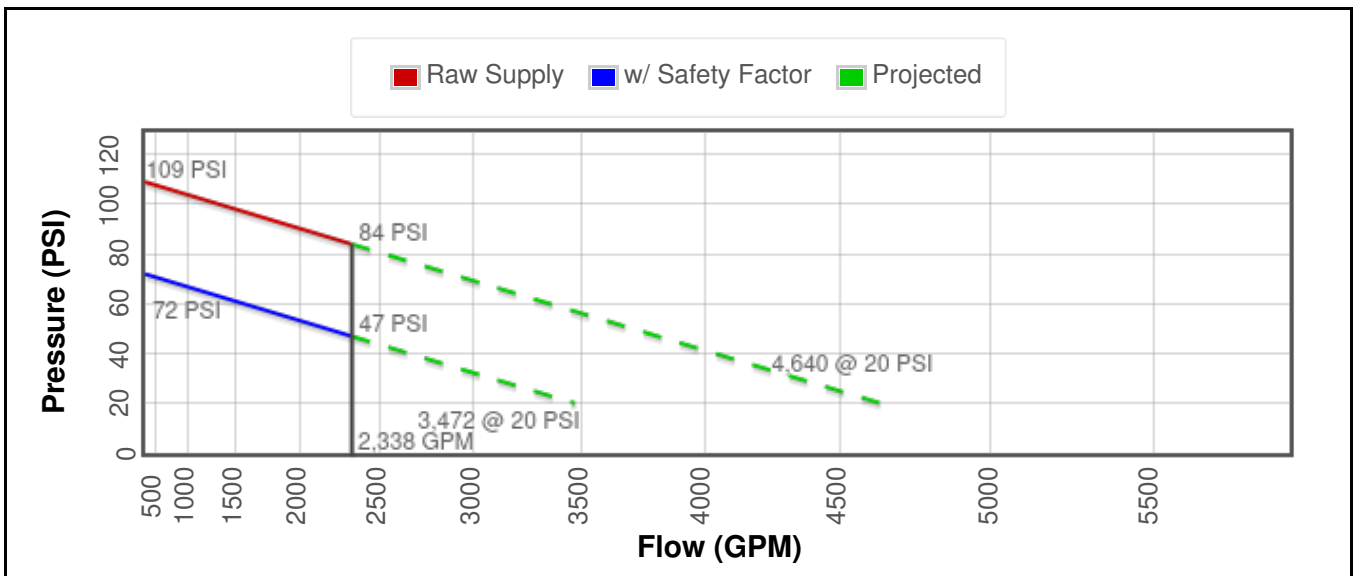
## Flow Hydrant (only hydrant F1 shown for clarity)



## Approximate Project Site



## Water Supply Curve N<sup>1.85</sup> Graph



**LEGAL DESCRIPTION**

PARCEL NO. 1:  
THE WEST 140 FEET OF THE SOUTH 100 FEET OF THE NORTH 225 FEET OF THE FOLLOWING DESCRIBED PROPERTY:

THAT PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 1 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF SECTION 2; THENCE NORTH ALONG THE WEST LINE OF SAID QUARTER SECTION 522 FEET;  
THENCE EAST 278 FEET;  
THENCE SOUTH 522 FEET TO THE SOUTH LINE OF SAID SECTION;  
THENCE WEST 278 FEET TO THE BEGINNING.

PARCEL NO. 2:  
THAT PART OF THE SOUTH 522 FEET OF THE WEST 278 FEET OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 1 NORTH, RANGE 4 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTH QUARTER CORNER OF SECTION 2 THENCE RUNNING NORTH 389.00 FEET;  
THENCE NORTH 88 DEGREES 37 MINUTES EAST 140.00 FEET TO THE TRUE POINT OF BEGINNING;  
THENCE NORTH 88 DEGREES 37 MINUTES EAST 72.00 FEET;  
THENCE SOUTH 100.00 FEET;  
THENCE SOUTH 88 DEGREES 37 MINUTES WEST 72.00 FEET;  
THENCE NORTH 100.00 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL NO. 3:  
THAT PART OF THE SOUTH 522 FEET OF THE WEST 278 FEET OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 1 NORTH, RANGE 4 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTH QUARTER CORNER OF SECTION 2, THENCE RUNNING NORTH 389 FEET;  
THENCE NORTH 88 DEGREES, 37 MINUTES EAST 212 FEET, TO THE TRUE POINT OF BEGINNING;  
THENCE NORTH 88 DEGREES, 37 MINUTES EAST 66 FEET,  
THENCE SOUTH 100 FEET;  
THENCE SOUTH 88 DEGREES, 37 MINUTES WEST 66 FEET;  
THENCE NORTH 100 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL NO. 4:  
THAT PORTION OF THE SOUTH 522.00 FEET OF THE WEST 278.00 FEET OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 1 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 2, A CITY OF SCOTTSDALE BRASS CAP IN HANDHOLE, FROM WHICH THE CENTER OF SECTION 2, A STEM OF A BRASS CAP FLUSH, BEARS NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, BASIS OF BEARINGS, A DISTANCE OF 2643.58 FEET;  
THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, ALONG THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 2, A DISTANCE OF 522.15 FEET (MEASURED) 522 FEET RECORD, TO THE NORTH LINE OF THE SOUTH 522 FEET OF THE SOUTHEAST QUARTER OF SECTION 2;  
THENCE LEAVING SAID WEST LINE, NORTH 88 DEGREES 37 MINUTES 16 SECONDS EAST, ALONG THE NORTH LINE OF THE SOUTH 522 FEET OF SAID SOUTHEAST QUARTER, A DISTANCE OF 40.01 FEET (MEASURED) 40.00 FEET RECORD, TO THE EAST LINE OF THE 40 FOOT RIGHT-OF-WAY LINE OF MILLER ROAD;  
THENCE CONTINUING ALONG SAID NORTH LINE, NORTH 88 DEGREES 37 MINUTES 16 SECONDS EAST, AND PARALLEL WITH THE SOUTH LINE OF SECTION 2, A DISTANCE OF 110.23 FEET, TO THE POINT OF BEGINNING;  
THENCE CONTINUING NORTH 88 DEGREES 37 MINUTES 16 SECONDS EAST, A DISTANCE OF 127.84 FEET (MEASURED) 127.77 FEET RECORD TO THE EAST LINE OF THE WEST 278.00 FEET OF SAID SOUTHEAST QUARTER;  
THENCE LEAVING SAID NORTH LINE, SOUTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, ALONG THE EAST LINE OF THE WEST 278.00 FEET, A DISTANCE OF 100.03 FEET (MEASURED) 100.00 FEET RECORD;  
THENCE LEAVING SAID EAST LINE, SOUTH 88 DEGREES 37 MINUTES 16 SECONDS WEST, AND PARALLEL WITH THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 2, A DISTANCE OF 127.84 FEET (MEASURED) 127.77 FEET RECORD TO THE SOUTHEAST CORNER OF PARCEL 1 DESCRIBED IN DOCUMENT NO. 2014-579989;  
THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, AND PARALLEL WITH THE WEST LINE OF THE SOUTHEAST QUARTER AND ALONG THE EAST LINE OF PARCEL 1 DESCRIBED IN DOCUMENT NO. 2014-579989, A DISTANCE OF 100.03 FEET (MEASURED) AND 100.00 FEET RECORD TO THE POINT OF BEGINNING.

**BENCHMARK**

BRASS CAP IN HAND HOLE AT THE INTERSECTION OF MCKELLIPS AND MILLER ROAD AND HAVING AN ELEVATION OF

ELEVATION = 1192.22 NAVD 88 DATUM, MDDOT POINT ID# 64087-01

**BENCHMARK CERTIFICATION**

I HEREBY CERTIFY THAT ALL ELEVATIONS REPRESENTED ON THIS PLAN ARE BASED ON NAVD 1988 AND MEET THE FEMA BENCHMARK MAINTENANCE (BMM) CRITERIA

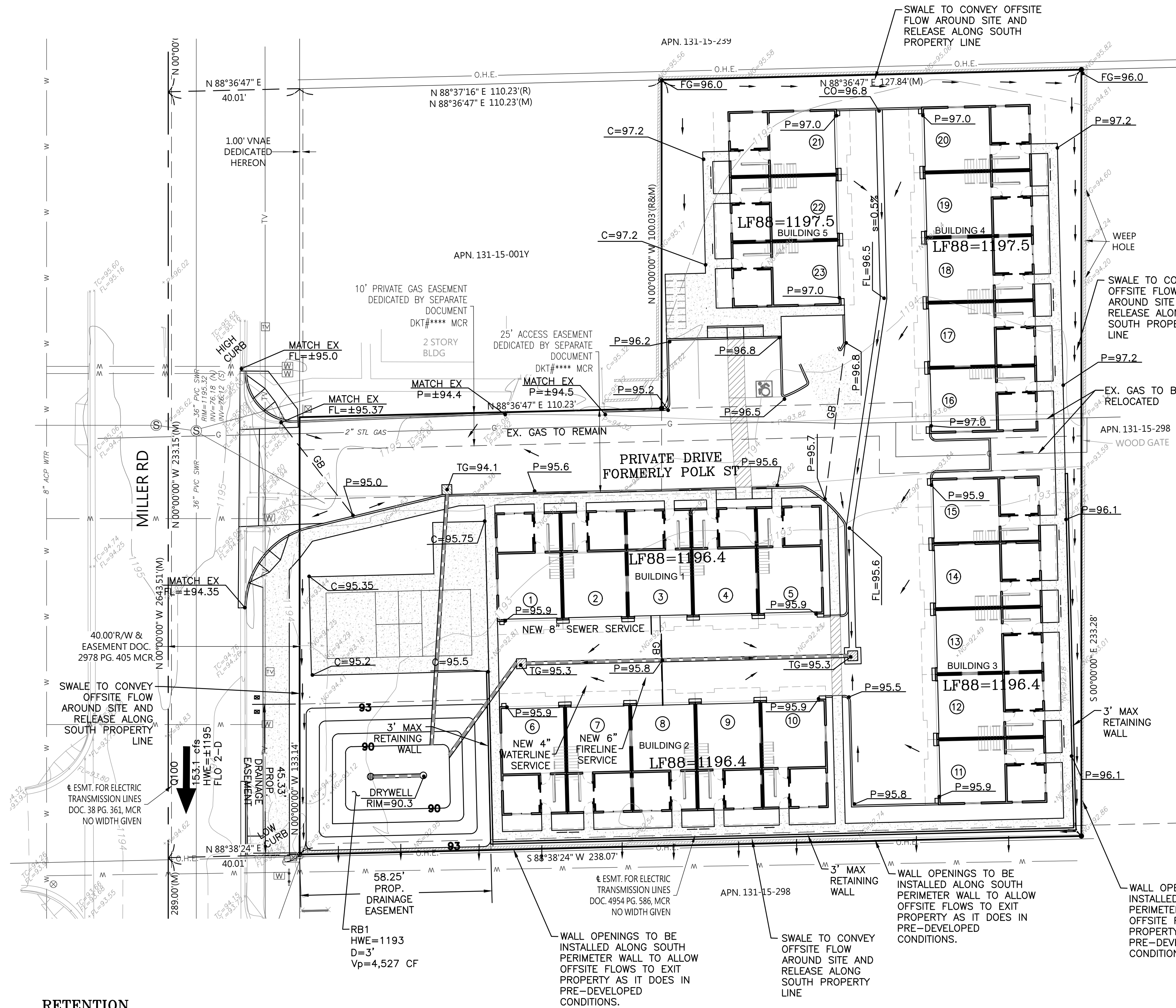
**BASIS OF BEARING**

THE WEST LINE OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 1 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA;

BEARING = N 00°00'00" W



**THE ARDEN**  
CONCEPTUAL GRADING AND DRAINAGE PLAN  
7601 E POLK ST  
A PORTION OF THE SE1/4 OF SECTION 2, T.1N., R.4E.  
MARICOPA COUNTY, ARIZONA



**RETENTION**

RETENTION REQUIRED: 2,301 CF  
RETENTION PROVIDED: 4,527 CF  
SEE DRAINAGE REPORT FOR CALCULATIONS

**FLOOD INSURANCE RATE MAP (FIRM) INFORMATION**

COMMUNITY NUMBER	COMMUNITY MAP NUMBER	PANEL NUMBER	PANEL DATE	SUFFIX	FIRM INDEX DATE	FIRM ZONE	BASE FLOOD ELEVATION (AO ZONE, USE DEPTH)
045013	04013C	2235	09/18/20	M	02/08/24	UNSHADED X	N/A

FLOOD HAZARD ZONE X IS DEFINED AS AREAS AREA OF MINIMAL FLOOD HAZARD

COMMUNITY NUMBER	COMMUNITY MAP NUMBER	PANEL NUMBER	PANEL DATE	SUFFIX	FIRM INDEX DATE	FIRM ZONE	BASE FLOOD ELEVATION (AO ZONE, USE DEPTH)
045013	04013C	2235	09/18/20	M	02/08/24	SHADED X	N/A

FLOOD HAZARD SHADED ZONE X IS DEFINED AS AREAS .2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE

**CIVIL ENGINEER**

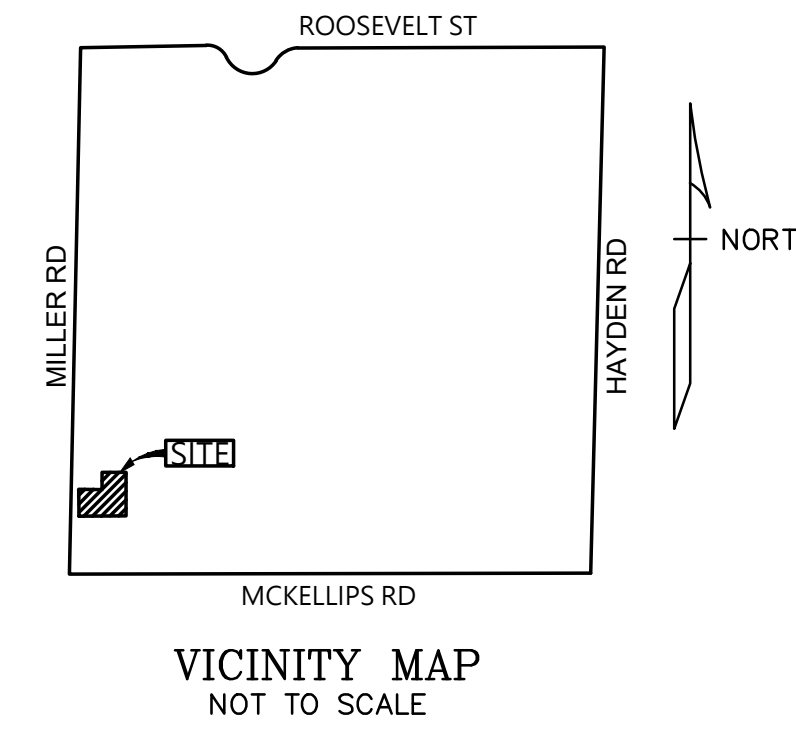
JACOBS WALLACE, LLC  
2233 W. BETHANY HOME RD  
PHOENIX, AZ 85015  
CHUCK JACOBS  
602.757.5964

**ARCHITECT**

MARK TOMCEK, R.A.  
TOMCEK DESIGN  
4368 NORTH CIVIC CENTER PLAZA  
SUITE 201  
SCOTTSDALE, ARIZONA 85251  
TEL 602 619 7751  
FAX 480 718 8387

**OWNER**

POLK DEVCO LLC  
15721 N GREENWAY HAYDEN LP  
STE 105  
SCOTTSDALE, AZ 85260  
DAVID FREE



**CONSTRUCTION TYPE**

V-B

**PROJECT DESCRIPTION**

THE PROPOSED PROJECT IS A MULTIFAMILY APARTMENT DEVELOPMENT ON AN INFILL LOT. EXISTING STRUCTURES HAVE BEEN SCRAPPED AND THE LOT IS DIRT. POLK STREET IS BEING ABANDONED AND A PLAT WILL COMBINE THE VARIOUS PARCEL THAT MAKE UP THIS PROJECT.

**ASSESSOR PARCEL NUMBERS**

131-15-001S, 131-15-001F, 131-15-001N, 131-15-001L

**SITE AREA**

NET AREA = 44485 SF OR 1.02 AC  
DISTURBED AREA = 44485 SF OR 1.02 AC

**LEGEND**

- FOUND BRASS CAP IN HANDHOLE
- FOUND BRASS CAP FLUSH
- FOUND 1/2" REBAR
- FOUND NAIL IN PAVEMENT
- FOUND IRON PIPE
- POST
- SIGN
- LIGHT POLE
- WATER MANHOLE
- FIRE HYDRANT
- ELECTRIC JUNCTION BOX
- SANITARY SEWER MANHOLE
- GAS VALVE
- TELEPHONE RISER
- ELECTRIC CABINET
- PVC PIPE
- ELECTRIC METER
- WATER METER
- WATER VALVE
- SAGUARO CACTUS
- GAS METER
- AC UNIT
- DOWN GUY
- UTILITY POLE
- PALO VERDE TREE
- MESQUITE TREE
- PALM TREE
- SEWER CLEANOUT
- LIGHT POLE
- TREE

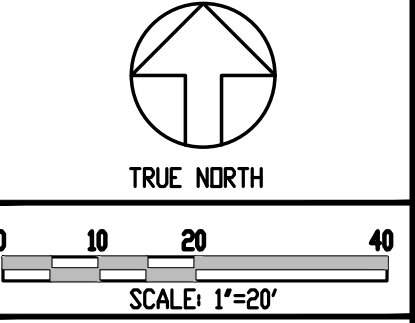
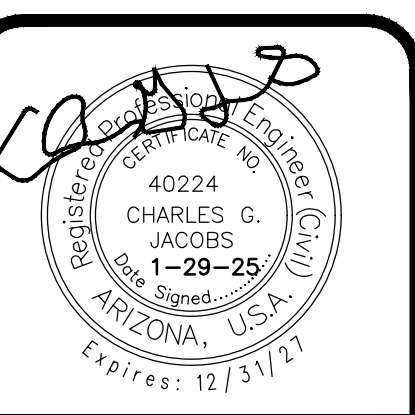
- (R) RECORD DATA
- (M) MEASURED DATA PER THIS SURVEY
- (C) CALCULATED DATA PER THIS SURVEY
- BK., PG. BOOK AND PAGE NUMBER
- DOCUMENT NUMBER
- DOCKET AND PAGE NUMBER
- ASSESSOR PARCEL NUMBER
- R/W RIGHT OF WAY

- PROPERTY BOUNDARY LINE
- ADJACENT BOUNDARY LINE
- SECTION LINE
- EASEMENT LINE
- STREET CENTERLINE
- WOOD FENCE
- STEEL RAIL FENCE
- CHAIN LINK FENCE
- WATER LINE
- SEWER LINE
- GAS LINE
- TELEPHONE LINE
- OVERHEAD ELECTRIC LINE
- ELECTRIC LINE

PRELIMINARY SUBMITTAL	DATE	BY	APP.	DESCRIPTION
CGJ	1-29-25	CGJ		
CGJ	10-14-24			
B	A			

TEH ARDEN  
7601 E POLK STREET  
SCOTTSDALE, AZ  
CONCEPTUAL  
G & D PLAN

JACOBS WALLACE, LLC  
ENGINEERING - PLANNING - MANAGEMENT  
2233 W. BETHANY HOME ROAD  
PHOENIX, AZ 85015  
602.757.5964



OCTOBER 2024

DRAWING NO.  
**C1.0**  
JOB: 0293

NOTE ALL EXISTING SERVICES TO SITE TO BE ABANDONED/REMOVED. EXISTING GAS IN POLK ST TO REMAIN WITHIN A NEWLY DEDICATED EASEMENT  
ALL PROPOSED ONSITE UTILITIES ARE PRIVATE

**LEGAL DESCRIPTION**

PARCEL NO. 1:  
THE WEST 140 FEET OF THE SOUTH 100 FEET OF THE NORTH 225 FEET OF THE FOLLOWING DESCRIBED PROPERTY:

THAT PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 1 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF SECTION 2; THENCE NORTH ALONG THE WEST LINE OF SAID QUARTER SECTION 522 FEET;  
THENCE EAST 278 FEET;  
THENCE SOUTH 522 FEET TO THE SOUTH LINE OF SAID SECTION;  
THENCE WEST 278 FEET TO THE BEGINNING.

PARCEL NO. 2:  
THAT PART OF THE SOUTH 522 FEET OF THE WEST 278 FEET OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 1 NORTH, RANGE 4 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTH QUARTER CORNER OF SECTION 2 THENCE RUNNING NORTH 389.00 FEET;  
THENCE NORTH 88 DEGREES 37 MINUTES EAST 140.00 FEET TO THE TRUE POINT OF BEGINNING;  
THENCE NORTH 88 DEGREES 37 MINUTES EAST 72.00 FEET;  
THENCE SOUTH 100.00 FEET;  
THENCE SOUTH 88 DEGREES 37 MINUTES WEST 72.00 FEET;  
THENCE NORTH 100.00 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL NO. 3:  
THAT PART OF THE SOUTH 522 FEET OF THE WEST 278 FEET OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 1 NORTH, RANGE 4 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTH QUARTER CORNER OF SECTION 2, THENCE RUNNING NORTH 389 FEET;  
THENCE NORTH 88 DEGREES, 37 MINUTES EAST 212 FEET, TO THE TRUE POINT OF BEGINNING;  
THENCE NORTH 88 DEGREES, 37 MINUTES EAST 66 FEET,  
THENCE SOUTH 100 FEET;  
THENCE SOUTH 88 DEGREES, 37 MINUTES WEST 66 FEET;  
THENCE NORTH 100 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL NO. 4:  
THAT PORTION OF THE SOUTH 522.00 FEET OF THE WEST 278.00 FEET OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 1 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 2, A CITY OF SCOTTSDALE BRASS CAP IN HANDHOLE, FROM WHICH THE CENTER OF SECTION 2, A STEM OF A BRASS CAP FLUSH, BEARS NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, BASIS OF BEARINGS, A DISTANCE OF 2643.58 FEET;  
THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, ALONG THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 2, A DISTANCE OF 522.15 FEET (MEASURED) 522 FEET RECORD, TO THE NORTH LINE OF THE SOUTH 522 FEET OF THE SOUTHEAST QUARTER OF SECTION 2;  
THENCE LEAVING SAID WEST LINE, NORTH 88 DEGREES 37 MINUTES 16 SECONDS EAST, ALONG THE NORTH LINE OF THE SOUTH 522 FEET OF SAID SOUTHEAST QUARTER, A DISTANCE OF 40.01 FEET (MEASURED) 40.00 FEET RECORD, TO THE EAST LINE OF THE 40.01 FEET RIGHT-OF-WAY LINE OF MILLER ROAD;

THENCE CONTINUING ALONG SAID NORTH LINE, NORTH 88 DEGREES 37 MINUTES 16 SECONDS EAST, AND PARALLEL WITH THE SOUTH LINE OF SECTION 2, A DISTANCE OF 110.23 FEET, TO THE POINT OF BEGINNING;  
THENCE CONTINUING NORTH 88 DEGREES 37 MINUTES 16 SECONDS EAST, A DISTANCE OF 127.84 FEET (MEASURED) 127.77 FEET RECORD TO THE EAST LINE OF THE WEST 278.00 FEET OF SAID SOUTHEAST QUARTER;  
THENCE LEAVING SAID NORTH LINE, SOUTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, ALONG THE EAST LINE OF THE WEST 278.00 FEET, A DISTANCE OF 100.03 FEET (MEASURED) 100.00 FEET RECORD;  
THENCE LEAVING SAID EAST LINE, SOUTH 88 DEGREES 37 MINUTES 16 SECONDS WEST, AND PARALLEL WITH THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 2, A DISTANCE OF 127.84 FEET (MEASURED) 127.77 FEET RECORD TO THE SOUTHEAST CORNER OF PARCEL 1 DESCRIBED IN DOCUMENT NO. 2014-579989;  
THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, AND PARALLEL WITH THE WEST LINE OF THE SOUTHEAST QUARTER AND ALONG THE EAST LINE OF PARCEL 1 DESCRIBED IN DOCUMENT NO. 2014-579989, A DISTANCE OF 100.03 FEET (MEASURED) AND 100.00 FEET RECORD TO THE POINT OF BEGINNING.

**BENCHMARK**

BRASS CAP IN HAND HOLE AT THE INTERSECTION OF MCKELLIPS AND MILLER ROAD AND HAVING AN ELEVATION OF

ELEVATION = 1192.22 NAVD 88 DATUM, MCDOT POINT ID# 64087-01

**BENCHMARK CERTIFICATION**

I HEREBY CERTIFY THAT ALL ELEVATIONS REPRESENTED ON THIS PLAN ARE BASED ON NAVD 1988 AND MEET THE FEMA BENCHMARK MAINTENANCE (BMM) CRITERIA

**BASIS OF BEARING**

THE WEST LINE OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 1 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA;

BEARING = N 00°00'00" W

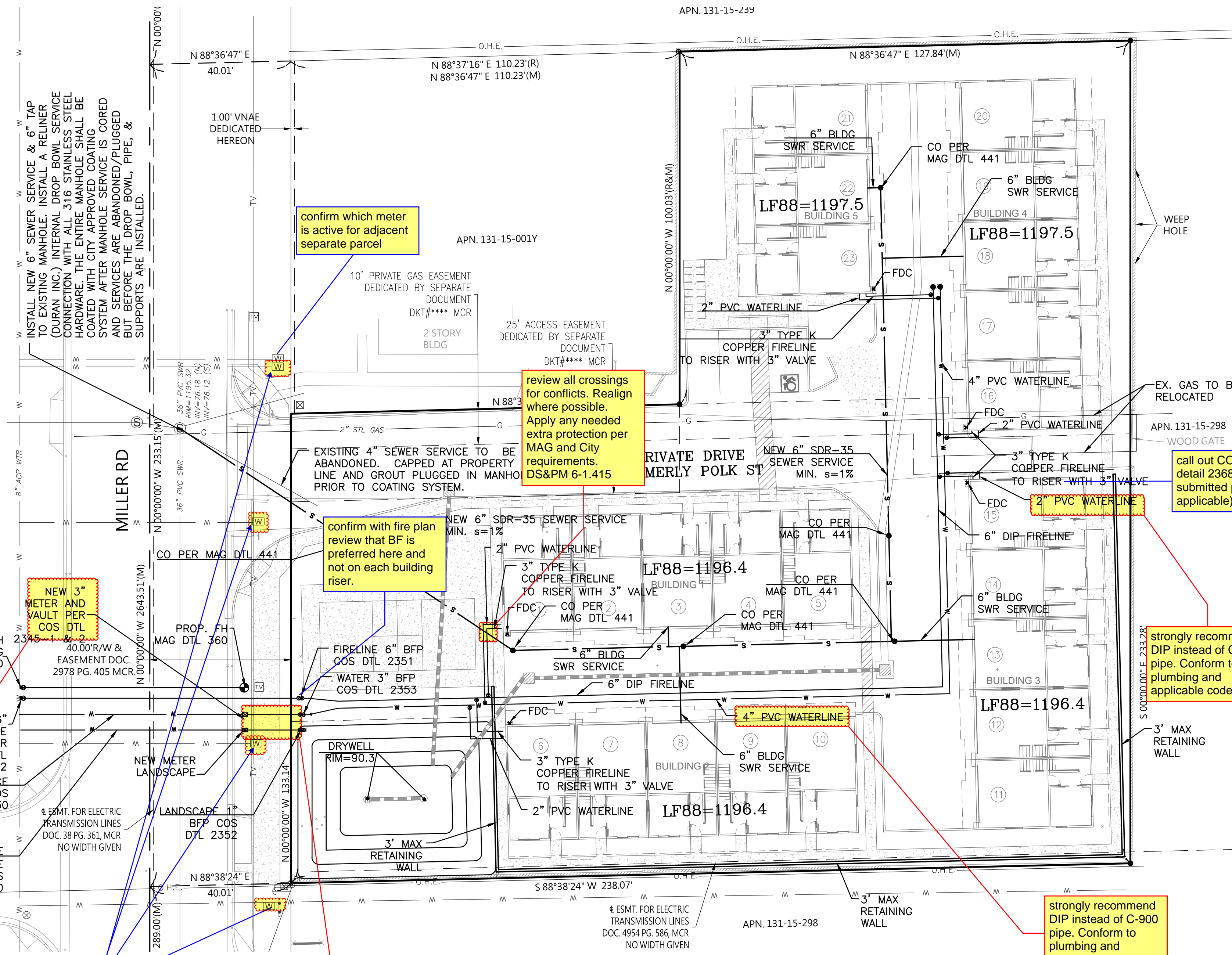


# THE ARDEN

## PRELIMINARY UTILITY PLAN

### 7601 E POLK ST

A PORTION OF THE SE1/4 OF SECTION 2, T.1N., R.4E.  
MARICOPA COUNTY, ARIZONA



confirm service/meter size and vault requirement on the approved plans.

yes, copper type K continuous tubing.

clarify on plan what is being done with the 4 existing water meters and services. Confirm inactive meters. Confirm inactive meters and contact the City to remove. Note that the corp at the main must be closed and the service line removed for any unused meters/services. DS&PM 6-1.408. Note meter development fee credit can be applied for any removed/unused meters towards new meters.

DS&PM 6-1.417. C. Meters and backflow need to be adjacent but separated by the property line. When the location of a backflow preventer cannot be accommodated adjacent to the meter, the designer shall. Request permission from the Water Resources Department to separate the meter from the backflow preventer. Backfill the water line between the meter box and the backflow preventer with 1-sack controlled low strength material (CLSM) per MAG, Section 728. CLSM shall be placed to the full width of the trench and to 6 inches above top of pipe. Note on the plans that inspection of the water piping connecting the meter to the backflow preventer be inspected by a city backflow prevention specialist prior to CLSM and backfill.

**FIRE RISER & SPRINKLERS**  
FIRE RISER TO BE INSTALLED WITHIN EXTERIOR WALL AND HAVE ACCESS PANEL. BFP AT RISER IS NOT REQUIRED DUE TO HAVE A DEDICATED FIRELINE THAT ALREADY HAS BFP. THIS WILL BE A 13D SYSTEM

call out COS riser detail without double check on plans. Confirm with fire plan review staff.

**CIVIL ENGINEER**

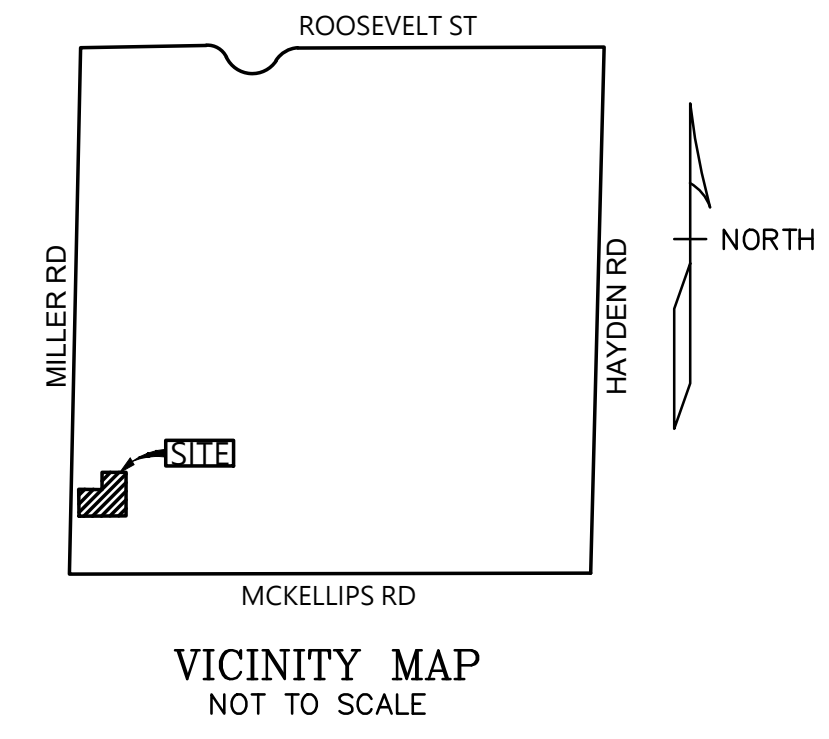
JACOBS WALLACE, LLC  
2233 W. BETHANY HOME RD  
PHOENIX, AZ 85015  
CHUCK JACOBS  
602.757.5964

**ARCHITECT**

MARK TOMCÁK, R.A.  
TOMCÁK DESIGN  
4368 NORTH CIVIC CENTER PLAZA  
SUITE 201  
SCOTTSDALE, ARIZONA 85251  
TEL 602 619 7751  
FAX 480 718 8387

**OWNER**

POLK DEVCO LLC  
15721 N GREENWAY HAYDEN LP  
STE 105  
SCOTTSDALE, AZ 85260  
DAVID FREE



**CONSTRUCTION TYPE**

V-B

**PROJECT DESCRIPTION**

THE PROPOSED PROJECT IS A MULTIFAMILY APARTMENT DEVELOPMENT ON AN INFILL LOT. EXISTING STRUCTURES HAVE BEEN SCRAPED AND THE LOT IS DIRT. POLK STREET IS BEING ABANDONED AND A PLAT WILL COMBINE THE VARIOUS PARCEL THAT MAKE UP THIS PROJECT.

**ASSESSOR PARCEL NUMBERS**

131-15-001S, 131-15-001F, 131-15-001N, 131-15-001L

**SITE AREA**

NET AREA = 44485 SF OR 1.02 AC  
DISTURBED AREA = 44485 SF OR 1.02 AC

**LEGEND**

- FOUND BRASS CAP IN HANDHOLE
- FOUND BRASS CAP FLUSH
- FOUND 1/2" REBAR
- FOUND NAIL IN PAVEMENT
- FOUND IRON PIPE
- POST
- SIGN
- LIGHT POLE
- WATER MANHOLE
- FIRE HYDRANT
- ELECTRIC JUNCTION BOX
- SANITARY SEWER MANHOLE
- GAS VALVE
- TELEPHONE RISER
- ELECTRIC CABINET
- PVC PIPE
- ELECTRIC METER
- WATER METER
- WATER VALVE
- SAGUARO CACTUS
- GAS METER
- AC UNIT
- DOWN GUY
- UTILITY POLE
- PALO VERDE TREE
- MESQUITE TREE
- PALM TREE
- SEWER CLEANOUT
- LIGHT POLE
- TREE

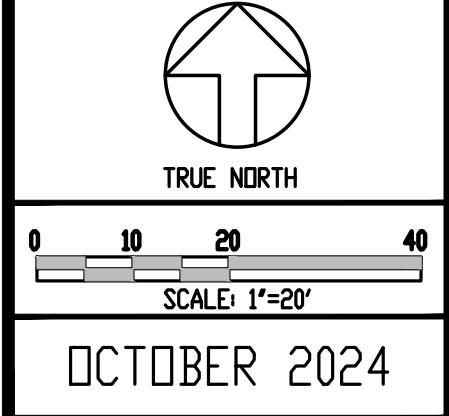
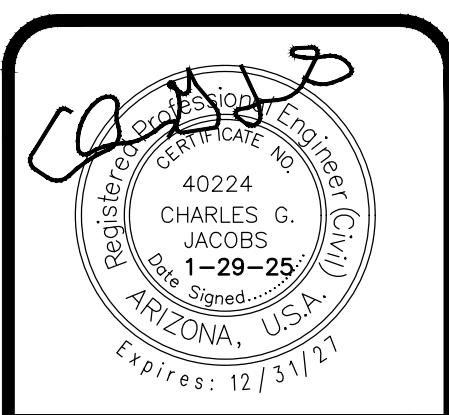
- (R) RECORD DATA
- (M) MEASURED DATA PER THIS SURVEY
- (C) CALCULATED DATA PER THIS SURVEY
- BK., PG. BOOK AND PAGE NUMBER
- DOC. DOCUMENT NUMBER
- DKT., PG. DOCKET AND PAGE NUMBER
- APN ASSESSOR PARCEL NUMBER
- R/W RIGHT OF WAY

PROPERTY BOUNDARY LINE	---
ADJACENT BOUNDARY LINE	---
SECTION LINE	---
EASEMENT LINE	---
STREET CENTERLINE	---
WOOD FENCE	---
STEEL RAIL FENCE	---
CHAIN LINK FENCE	---
WATER LINE	---
SEWER LINE	---
GAS LINE	---
TELEPHONE LINE	---
OVERHEAD ELECTRIC LINE	---
ELECTRIC LINE	---

PRELIMINARY SUBMITTAL	CGJ	DATE	1-29-25
PRELIMINARY SUBMITTAL	CGJ	DATE	10-14-24
RELEASE	BY	DATE	

TEH ARDEN  
7601 E POLK STREET  
SCOTTSDALE, AZ  
PRELIMINARY  
UTILITY PLAN

JACOBS WALLACE, LLC  
ENGINEERING - PLANNING - MANAGEMENT  
2233 W. BETHANY HOME ROAD  
PHOENIX, AZ 85015  
602.757.5964



DRAWING NO.  
**C2.0**  
JOB: 0293

NOTE ALL EXISTING SERVICES TO SITE TO BE ABANDONED/REMOVED. EXISTING GAS IN POLK ST TO REMAIN WITHIN A NEWLY DEDICATED EASEMENT

ALL PROPOSED ONSITE UTILITIES ARE PRIVATE