



COUNCIL SUBCOMMITTEE ON WATER ISSUES MEETING

REGULAR SUBCOMMITTEE MEETING AGENDA

TUESDAY, MARCH 2, 2021, 9:30 AM

201 S Cortez Street
Prescott, AZ 86303
Council Chambers

Councilman Steve Blair - Chairman

Councilman Phil Goode - Member

Councilman Steve Sischka - Member

The following Agenda will be considered by the Prescott Council Subcommittee on Water Issues at Regular Subcommittee Meeting pursuant to the Prescott City Charter, Article II, Section 13. Notice of the meeting is given pursuant to Arizona Revised Statutes, Section 38-431.02. One or more members of the Council may be attending the meeting through the use of a technological device.

Viewing & Participation

This meeting may be viewed on Channel 64, Facebook Live or on the City's Website: [Live City of Prescott Videos](#)

Or via Zoom by registering in advance: [Zoom Registration Link](#)

Comments from the public may be submitted through the City website: [Speaker Request Form](#)

1. CALL TO ORDER

2. ROLL CALL

3. PUBLIC COMMENT

Public comment will be accepted following each agenda item and are limited to three (3) minutes. Please complete a comment card and return it to the City Clerk, speakers will be called in the order received.

4. ACTION ITEMS

A. Approval of the February 2, 2021 Meeting Minutes.

Recommended Action: MOVE to approve the February 2, 2021 minutes as presented.

5. WATER REQUESTS (MORE THAN 2AF/YEAR)

- A. Approval Water Service Application No. WSA20-008, submitted by Jon Rocha on Behalf of Property Owner Southwest Homes LLC, for a 10 lot Subdivision on Yavapai County Assessor Parcel Nos. 306-31-006 Q, R, and S. The Three Contiguous Parcels are Located in the SE1/4, SE1/4, SE1/4 of Section 28, T16N, R02W, GSRB&M at the Northwest Corner of Road 2 South and Road 1 West in Chino Valley.

Recommended Action: MOVE to recommend forwarding WSA20-008 to Council for approval, pending applicant's acquisition of unpledged extinguishment credits.

- B. Water Service Agreement Application No. WSA21-001, Submitted by Dana Fonseca on Behalf of Property Owner NCC Prescott LLC, on Assessor Parcel Numbers 114-01-025A, 001-01-35E, 114-01-036B, 114-01-038A, 114-01-038B, 114-02-085, and 114-02-092A Containing a Total of 3.45 Acres. Located at 401 North Pleasant Street, Prescott.

Recommended Action: MOVE to recommend forwarding WSA21-001 to Council for approval.

- C. Water Service Agreement Application No. WSA21-002, Submitted by Dorn Homes, Inc., on Behalf of Property Owner Chamberlain Development Prescott, LLC, on Yavapai County Assessor Parcel Numbers 102-19-001C (2.97 Acres), 102-19-001D (26.83 Acres) and 102-04-001T (8.89 Acres) for a Total of 38.69 Acres. Located North of Deep Well Ranch Parcel 1.47 and Immediately West of Willow Creek Road in the SW1/4 of Section 26, T15N, R02W, GSRB&M.

Recommended Action: MOVE to recommend forwarding WSA21-002 to Council for approval.

- D. Water Service Agreement Application No. WSA21-003 Submitted by Chamberlain Development Prescott LLC on Behalf of Property Owner JCI Investments LLC, on Yavapai County Assessor Parcel Numbers 106-04-001N and 106-04-001L, Containing 160.08 Acres in the South Half and 160.01 Acres in the North Half for a Total of 320.17 Acres. Located in the N1/2 of Section 04, T14N, R02,W, GSRB&M.

Recommended Action: MOVE to recommend forwarding WSA21-003 to Council for approval.

6. DISCUSSION TOPICS

- A. Infrastructure Topic - Static Water Levels Measurements at City Water Production Wells

Recommended Action: This item is for discussion only. No formal action will be taken.

- B. Infrastructure Topic - Pumping vs. Recharge 2021 Update

Recommended Action: This item is for discussion only. No formal action will be taken.

- C. Northern Arizona Municipal Water Users Association (NAMWUA) and Upper Verde River

Watershed Protection Coalition (Coalition) Update

Recommended Action: This item is for discussion only. No formal action will be taken.

- D. Focus Topic – Draft Issue Brief on Groundwater and the Assured Water Program dated February 11, 2021

Recommended Action: This item is for discussion only. No formal action will be taken.

7. ADJOURNMENT

EXECUTIVE SESSION

Upon a public majority vote of a quorum of the City Council, the Council may hold an executive session, which will not be open to the public, regarding any item listed on the agenda but only for the following purposes:

- (1) Discussion or consideration of personnel matters (A.R.S. §38-431.03(A)(1));
- (2) Discussion or consideration of records exempt by law (A.R.S. §38-431.03(A)(2));
- (3) Discussion or consultation for legal advice with the city's attorneys (A.R.S. §38-431.03(A)(3));
- (4) Discussion or consultation with the city's attorneys regarding the city's position regarding contracts that are the subject of negotiations, in pending or contemplated litigation, or in settlement discussions conducted in order to avoid litigation (A.R.S. § 38-431.03(A)(4));
- (5) Discussion or consultation with designated representatives of the city to consider its position and instruct its representatives regarding negotiations with employee organizations (A.R.S. §38-431.03(A)(5));
- (6) Discussion, consultation or consideration for negotiations by the city or its designated representatives with members of a tribal council, or its designated representatives, of an Indian reservation located within or adjacent to the city (A.R.S. §38-431.03(A)(6));
- (7) Discussion or consultation with designated representatives of the city to consider its position and instruct its representatives regarding negotiations for the purchase, sale or lease of real property (A.R.S. §38-431.03(A)(7)).

THE CITY OF PRESCOTT ENDEAVORS TO MAKE ALL PUBLIC MEETINGS ACCESSIBLE TO PERSONS WITH DISABILITIES. With 72 hours advanced notice, special assistance can be provided for sight and/or hearing-impaired persons at this meeting. Reasonable accommodations will be made upon request for persons with disabilities or non-English speaking residents. Please call the City Clerk (928) 777-1272 to request an accommodation to participate in this public meeting. Prescott TDD number is (928) 445-6811. Additionally, free public relay service is available from Arizona Relay Service at 1-800-367-8939 and more information at www.azrelay.org

Confidentiality

Arizona statute precludes any person receiving executive session information from disclosing that information except as allowed by law. A.R.S. §38-431.03(F). Each violation of this statute is subject to a civil penalty not to exceed \$500, plus court costs and attorneys' fees. This penalty is assessed against the person who violates this statute or who knowingly aids, agrees to aid or attempts to aid another person in violating this article. The city is precluded from expending any public monies to employ or retain legal counsel to provide legal services or representation to the public body or any of its officers in any legal action commenced for violation of the statute unless City Council takes a legal action at a properly noticed open meeting to approve of such expenditures prior to incurring any such obligation or indebtedness. A.R.S. §38-431.07(A)(B).

CERTIFICATION OF POSTING OF NOTICE

The undersigned hereby certifies that a copy of the foregoing notice was duly posted at Prescott City Hall on _____ at _____ m. in accordance with the statement filed by the Prescott City Council with the City Clerk

Sarah M. Siep

Sarah M. Siep, City Clerk

**COUNCIL AGENDA MEMO**

MEETING TYPE/DATE: **REGULAR SUBCOMMITTEE MEETING** **03- 2-21**

DEPARTMENT: **City Clerk**

AGENDA ITEM: Approval of the February 2, 2021 Meeting Minutes.

ITEM SUMMARY

Attached for approval are the Council Subcommittee on Water Issues minutes for the February 2, 2021 meeting.

BACKGROUND

None.

FINANCIAL IMPACT

None.

Recommended Action: MOVE to approve the February 2, 2021 minutes as presented.

ATTACHMENTS

1. [February 2, 2021 Minutes.docx](#)



CITY OF PRESCOTT COUNCIL SUBCOMMITTEE ON WATER ISSUES MEETING

REGULAR SUBCOMMITTEE MEETING MINUTES

TUESDAY, FEBRUARY 2, 2021, 9:30 AM

201 S Cortez Street
Prescott, AZ 86303
Council Chambers

Councilman Steve Blair - Chairman

Councilman Phil Goode - Member

Councilman Steve Sischka - Member

MINUTES OF THE REGULAR SUBCOMMITTEE MEETING OF THE PRESCOTT COUNCIL SUBCOMMITTEE ON WATER ISSUES HELD ON FEBRUARY 2, 2021, IN THE 201 S CORTEZ STREET PRESCOTT, AZ 86303 COUNCIL CHAMBERS.

The following Agenda will be considered by the Prescott Council Subcommittee on Water Issues at Regular Subcommittee Meeting pursuant to the Prescott City Charter, Article II, Section 13. Notice of the meeting is given pursuant to Arizona Revised Statutes, Section 38-431.02. One or more members of the Council may be attending the meeting through the use of a technological device.

1. CALL TO ORDER

Chairman Blair called the meeting to order at 9:33 a.m.

2. ROLL CALL

Steve Blair	Chairman
Phil Goode	Member
Steve Sischka	Member

3. PUBLIC COMMENT

Public comment will be accepted following each agenda item and is limited to three (3) minutes. Please complete a comment card and return it to the City Clerk, speakers will be called in the order received.

4. DISCUSSION & ACTION ITEMS

A. Approval of the January 12, 2021 Meeting Minutes.

MOTION BY MEMBER SISCHKA TO APPROVE ITEM 4.A.; SECONDED BY CHAIRMAN BLAIR: PASSED [2-0]. MEMBER GOODE ABSTAINED FROM VOTING ON THIS ITEM.

B. Focus Topic – Decision and Order No.86-401501.0001 Modification Presentation

Water Resources Project Manager Leslie Graser provided a presentation regarding the Decision and Order (D&O) Modification, project will be submitted by Dec. 31, 2021. Funds will be dispersed from FY21 and FY22 budget. This document is available on the state website as well as the City's website under water management. The modification is in accordance with the current document and due no later than December 31, 2019. Early in the current D&O the City entered into a monitoring and modeling contract related to the Big Chino Water Ranch supplies which is a \$5.6 million dollar project over approximately eight (8) years. The city is in the process of a groundwater flow model which will be operational near September 2021.

Member Sischka asked about Prescott's safe yield number.

Ms. Graser responded that because the AMA is labeled the "Prescott AMA" it is assumed the city is the only one responsible; however, there are multiple cities/towns, the Tribe and unincorporated areas of Yavapai County that are part of the AMA. Everyone has to be involved in this and Prescott does not have a specific number we have to meet.

Ms. Graser continued the presentation with an overview of the State of Arizona Assured Water Program. Staff is working with the State's Assured Water Supply Program and the AMA Program on this project. First designation was granted to the city in November 1999, first modification in 2005, second modification in 2009, and this will be the third modification so this is expected and appropriate. The city has the same consultants, Herb Dishlip, Michael Pearce and Bill Greenslade, involved as in 2009 which is very beneficial.

Modification Application Requirements:

- * Demand Estimates
- * Physical Availability of Source Water
- * Continuous and Legal Availability of Source Water
- * Consistency with Management Plans
- * Financial Capability
- * Consistency with Management Goal
- * Water Quality

Schedule:

- * Standing Monthly Meetings
- * Topic Specific Meetings

* General Timeline - project kickoff (Jan. 2021), monthly meetings (February-July), ADWR pre-application meeting (August 2021), submit application (November 2021).

Staff will provide bi-monthly updates to the Subcommittee, questions in between can be sent to staff anytime via Public Works Director Craig Dotseth.

Chairman Blair asked about the different modification levels and if the amount of water or any other significant changes are being looked at.

Ms. Graser responded that the work group is reviewing the groundwater block, surface water and effluent blocks, and there is discussion on the Big Chino (initial recommendation is that it stay as is for now).

Member Goode commented that the AMA has its own safe yield goal, and it is his understanding that information for the groundwater flow modeling has been sent so we can understand the impact as the city is the only entity with an assured water supply. How do we then work with our partners to ensure long term strategic plan for water management after this modification is completed.

Ms. Graser responded that the focus on safe yield is tied to the AMA, acknowledging importing water supplies has been part of the state plan for quite awhile. It should be made clear that the modification will include running an updated PrAMA groundwater flow model which will have scenarios/projections runs as part of the application process. Goal is to be at safe yield by 2025, regulatory oversight comes from the Department which is why staff has been participating as much as possible in those discussions.

Member of the public Leslie Hoy addressed the Subcommittee and asked if Chino Valley will be applying to be an assured water provider and if that is the case how would that fit in with what the city of Prescott is doing. She added that if anyone notices that CWAG is saying things that are incorrect she would appreciate being contacted so they can correct what they are saying.

Ms. Graser responded that she does not have any information on that.

Member of the public Peter Kroopnick addressed the Subcommittee and commented on the value of our water and said that he doesn't believe we are getting back that value.

Recommended Action: This item was for discussion only, no formal action was taken.

- C. Approval of a Revision to Prescott City Code 3-10-8: Water Conservation Code, Incentive Program, to Add an Additional Rebate Tier for Toilets with 1.28 Gallons per Single Flush.

Water Resources Project Manager Kay Sydow provided a presentation to the Subcommittee regarding a proposal for an additional rebate tier for the toilet rebate for customers who purchased a 1.28 gallon dual flush toilet, in the amount of \$75 for city sewer customers and \$125 for septic customers. Customers experienced a lack of availability of the 1.0 gallon toilets as discussed previously with the Subcommittee. This code change also recommends a retroactive rebate for those who previously purchased the 1.28 gallon single flush toilets in the amount of \$75.

Member Sischka asked if this needs to be passed onto Council.

Staff confirmed.

Member Goode said that even the 1.28 gallon is a significant reduction in a customer's water usage, and the fact that local retailers are not carrying the 1.0 gallon justifies the reasoning for the modification to the code.

Chairman Blair asked how many applications were denied. He feels that it is good we are making the change.

Ms. Sydow responded that eighteen applications were denied.

MOTION BY MEMBER GOODE TO APPROVE PASSING ITEM 4.C. TO COUNCIL FOR APPROVAL; SECONDED BY MEMBER SISCHKA: PASSED [3-0].

5. ADJOURNMENT

Chairman Blair invited Member Goode and Member Sischka to let him know if there are items they would like to see on future agendas and he will discuss with staff.

City Attorney Jon Paladini commented that members of the Subcommittee need to send any requests to staff rather than be discussed amongst the members to avoid open meeting law and then he can discuss with staff.

There being no further business to discuss, Chairman Blair adjourned the meeting at 10:18 a.m.

STEVE BLAIR, Chairman

ATTEST:

SARAH M. SIEP, City Clerk

CERTIFICATION

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Regular Subcommittee Meeting of the Council Subcommittee on Water Issues of the City of Prescott, Arizona held on February 2, 2021. I further certify the meeting was duly called and held and that a quorum was present.

Dated this _____ day of _____, 2021.

AFFIX
CITY
SEAL

Sarah M. Siep, City Clerk

**COUNCIL AGENDA MEMO**

MEETING TYPE/DATE: **REGULAR SUBCOMMITTEE MEETING** **03- 2-21**

DEPARTMENT: **Public Works**

AGENDA ITEM: Approval Water Service Application No. WSA20-008, submitted by Jon Rocha on Behalf of Property Owner Southwest Homes LLC, for a 10 lot Subdivision on Yavapai County Assessor Parcel Nos. 306-31-006 Q, R, and S. The Three Contiguous Parcels are Located in the SE1/4, SE1/4, SE1/4 of Section 28, T16N, R02W, GSRB&M at the Northwest Corner of Road 2 South and Road 1 West in Chino Valley.

ITEM SUMMARY

Water Service Agreement Application No. WSA20-008 was submitted by Jon Rocha on behalf of property owner Southwest Homes LLC, on November 30, 2020. Applicant is seeking potable water supplies to serve Meadow View Subdivision, containing 10 new single family lots in Chino Valley.

BACKGROUND

These vacant parcels lie within the Chino Valley Irrigation District (CVID). As such, the request was evaluated under the CVID Intergovernmental Agreement (IGA) dated March 27, 1998. Total acreage for the three Assessor's Parcel Numbers noted above is 5.66 acres. The CVID IGA provides potable water for one (1) dwelling unit per one (1) acre of land, therefore under the CVID IGA the City will serve 5 of the 10 lots requested.

On October 2, 2020, Mr. Rocha was notified by letter (Attached) that the existing CVID IGA would only serve 5 of the 10 lots requested. The letter also outlined the following:

1. How the applicant could acquire additional water rights in the form of unpledged extinguishment credits.
2. The unpledged extinguishment credits needing to be purchased by the applicant in the amount of 108.25 acre feet (AF) for the additional 5 lots.
3. Additional unpledged extinguishment credits needing to be purchased by the applicant for non-return

effluent flows to the City sewer in the amount of 0.10 AF X 5 lots = total 43.30 AF.

4. When unpledged extinguishment credits are acquired by the applicant, they will be conveyed to the City for the 5 remaining lots.

The attached Agreement for Potable Water, City Contract No. 2021-008 sets forth the responsibilities of the applicant and City to provide water to the Meadow View, 10 lot Subdivision, including the acquisition and conveyance of unpledged extinguishment credits by the applicant.

FINANCIAL IMPACT

N/A

Recommended Action: MOVE to recommend forwarding WSA20-008 to Council for approval, pending applicant's acquisition of unpledged extinguishment credits.

ATTACHMENTS

1. [City Contract 2021-008, WSA 20-008, Rocha Unsigned.pdf](#)
2. [Redacted Rocha Letter Dated 10-2-2020.pdf](#)
3. [Redacted Application Plat Area Map MeadowView Subdivision.pdf](#)

WHEN RECORDED, PLEASE INTEROFFICE TO:

Prescott City Clerk's Office
201 S. Cortez
City Hall

Caption: Agreement for Potable Water
 Southwest Homes, LLC
 City of Prescott

DO NOT REMOVE
THIS IS PART OF THE OFFICIAL DOCUMENT

AGREEMENT FOR POTABLE WATER (WSA 20-008)
Southwest Homes, LLC
City Contract No. 2021-008

WHEREAS, Southwest Homes, LLC ("Applicant") is the owner of real property ("Property"), located within the Chino Valley Irrigation District ("CVID"), to which the City of Prescott ("City") is contractually obligated to provide water; and;

WHEREAS, Applicant wishes to secure approval for the provision of potable water service from the City; and

WHEREAS, Applicant contemplates constructing ten (10) new single family dwelling units on the Property; and

NOW, THEREFORE, in consideration of the covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each party to the other, it is hereby agreed as follows:

1. That this Agreement shall relate to the property identified as Yavapai County Parcel Number(s) 306-31-006 Q, R, and S, more particularly described in the attached "Exhibit A".
2. That in accordance with the City's contractual obligations with CVID, the City will provide sufficient potable water to serve a maximum of ten (10) residential dwellings on the Property, subject to the following:
 - A. That the Applicant shall be solely responsible for the costs of any water main extension or upgrade required to serve the Property.
 - B. The water to be provided pursuant to this Agreement shall be equivalent to domestic flows only, and shall not operate as a guarantee or commitment by the City for any fire flows. The Applicant may provide water storage on the Property for fire flow purposes. No connection to the System shall be permitted which would result in any of the water provided pursuant to this Agreement being used, or made available for use, outside the Property; provided, however, that nothing herein shall preclude the Applicant, the City, and the Town of Chino Valley from entering into a separate mutual agreement providing for the furnishing of the water service described herein by the Town of Chino Valley.
 - C. The Applicant shall provide exclusive twenty-foot (20') utility easements to the City of Prescott for any water main extensions at a location to be determined by the City of Prescott, and at no cost to the City of Prescott.

- D. That the installation of a well on the Property shall result in the termination of this Agreement. In no event shall cross-connections between the System by which City water is supplied to the Property and any other source of water be allowed. Prior to the provision of water by the City, the absence of any such cross-connection shall be demonstrated by certification from the Town of Chino Valley or other certification satisfactory to the City.
 - E. All existing wells on the property shall be abandoned in accordance with ADWR rules prior to the property receiving water service.
 - F. Water service will be provided subject to all City of Prescott Codes and Policies as those may be amended.
- 3. Applicant agrees to pledge to the City 151.56 Acre Feet of unpledged extinguishment credits using the form attached as "Exhibit B". Applicant agrees that the City will have no obligation to provide any water under this agreement until the pledge of credits has been completed and is reflected in the records of the Arizona Department of Water Resources.
 - 4. This Agreement shall run with the land, and shall be binding upon the Property owners' successors in interest and assigns.
 - 5. Pursuant to A.R.S. Section 38-511, the City of Prescott may cancel this Agreement, without penalty or further obligation, if any person significantly involved in initiating, negotiating, securing, drafting or creating this Agreement on behalf of the City is, at any time while the Agreement or any extension of the Agreement is in effect, an employee or agent of any other party to the Agreement in any capacity or a consultant to any other party of the Agreement with respect to the subject matter of the Agreement. In the event of the foregoing, the City of Prescott further elects to recoup any fee or commission paid or due to any person significantly involved in initiating, negotiating, securing, drafting or creating this Agreement on behalf of the City of Prescott from any other party to the Agreement arising as a result of this Agreement.
 - 6. The Applicant hereby agrees to indemnify, and hold harmless the City, its departments and divisions, its employees and agents, from any and all claims, liabilities, expenses or lawsuits as a result of this Agreement, whether said claims, liabilities, expenses or lawsuits arise by the acts or omissions of the Applicant or its agents or employees.
 - 7. Although this Agreement has been drafted by the Prescott City Attorney, it is the result of negotiations by and between the parties. Therefore, any ambiguity in this Agreement is not to be construed against either party.

8. Time is of the essence in this Agreement. The failure of either party to require strict performance of any provision of this Agreement shall not be deemed a waiver of the right of said party thereafter to require strict performance of that or any other provision of this Agreement in accordance with the terms hereof, and without notice.
9. The parties hereto expressly covenant and agree that in the event of a dispute arising from this Agreement, each of the parties hereto waives any right to a trial by jury. In the event of litigation, the parties hereby agree to submit to a trial before the Court.
10. The parties hereto expressly covenant and agree that in the event of litigation arising from this Agreement, neither party shall be entitled to an award of attorney's fees, either pursuant to the Contract, pursuant to ARS Section 12-341.01(A) and (B), or pursuant to any other state or federal statute.

APPLICANT:

DATED this _____ day of _____, 2021.

By: _____
APPLICANT NAME, TITLE

STATE OF ARIZONA)
)ss.
COUNTY OF YAVAPAI)

The foregoing instrument was acknowledged before me this _____ day of _____, 2021, by _____, personally known to me or proven to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument, and acknowledged that he/she executed it.

[Seal]

Notary Public

CITY OF PRESCOTT:

DATED this _____ day of _____, 2021.

GREG L. MANGERELLI, Mayor

ATTEST:

APPROVED AS TO FORM:

SARAH M. SIEP, City Clerk

JON M. PALADINI, City Attorney

STATE OF ARIZONA)
) ss.
COUNTY OF YAVAPAI)

The foregoing instrument was acknowledged before me this _____ day of _____, 2021, by Greg L. Mangerelli, Mayor, personally known to me or proven to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument, and acknowledged that he executed it.

[Seal]

Notary Public

LEGEND

----- SURVEYED PARCEL LINES

----- EXISTING FENCE

----- PROPERTY LINE

----- EASEMENT LINE

(R1) FOUND 3/4" REBAR WITH CAP LS 27738
 SET 1/2" REBAR WITH CAP LS 53690
 RECORD BEARING AND DISTANCE PER R1 OR
 AS NOTED SEE NOTES

IE-PUE INGRESS EGRESS & PUBLIC UTILITY EASEMENT

NOTES

1. BASIS OF BEARING: THE PROJECT COORDINATE SYSTEM AND THE BASIS OF BEARINGS ARE RELATIVE TO THE ARIZONA STATE PLANE COORDINATE SYSTEM OF 1983, CENTRAL 0202 ZONE. LINEAR DIMENSIONS AND COORDINATE VALUES ARE IN INTERNATIONAL FEET.
 2. EXISTING BUILDINGS WERE PRESENT AT TIME OF SURVEY.
 3. A TITLE REPORT WAS NOT PROVIDED NOT ALL EASEMENTS OF RECORD MAY BE SHOWN HEREON.
 4. DOCUMENTS OF RECORD REFERENCE FOR SURVEY YCRO
 5. R1: 2017-0046045
- ROW 1, 2, & 3 TO BE DEDICATED TO TOWN OF CHNO VALLEY FOR RIGHT OF WAY PURPOSES

SITE INFORMATION

APN: 306-31-006L
ADDRESS: 940 S ROAD 1 WEST

OWNER INFORMATION

DBJK INVESTMENTS LLC
CHINO VALLEY, AZ

CERTIFICATION

I, BRANDON M. VAN HORN, DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR IN THE STATE OF ARIZONA. THAT THE SURVEY DESCRIBED AND SHOWN HEREON WAS MADE BY ME DURING THE MONTH OF APRIL, 2019. THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN; THAT THE MONUMENTS SHOWN EXIST OR WILL BE SET AS SHOWN; THAT THEIR POSITIONS ARE CORRECTLY SHOWN, AND THAT SAID MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED

T2 - ROW

Mean: 6809 ± S

SE COR S 28 BRASS
CAP IN ROAD
W ROAD 2 SOUTH
AND S ROAD 1 WEST

W ROAD 2 SOUTH

FOUND STEEL PIN
IN ROAD
W ROAD 2 SOUTH
JOHNSON LN

SURVEY PREPARED FOR:
DUER CATTLE COMPANY LLC

VH LAND SURVEY

7585 E PHARLAP LANE
PRESCOTT VALLEY, AZ 86315
928-710-9700

2007-10-31 00
VILANDSURVEY@GMAIL.COM

WWW.VHILANDSURVEY.COM	SHEET NO.
SURVEYED BY: Brandon Van Hagen	

HORIZONTAL SCALE: 1" = 50'

PROJECT NO.: 19116

OF 1 SHEETS



19116

CORRECTED
LOT 1

All that portion of the Southeast Quarter of Section 28, Township 16 North, Range 2 West, Gila and Salt River Meridian, Yavapai County, Arizona, described as follows;

COMMENCING at the East Quarter Corner of said Section 28 a Town of Chino Valley Brass Cap in asphalt;

Thence along the East line of said Section 28, South 00° 25' 35" East, 2649.11 feet (of record South 01° 53' 49" East, 2649.26 feet) to the Southeast corner of said Section 28, a Town of Chino Valley Brass Cap in asphalt;

Thence, North 45° 24' 01" West, 35.43 feet to a 1/2 rebar with cap Famas;

Thence, North 45° 07' 00" West, 21.32 feet to a 1/2 rebar with cap LS 53890;

Thence, North 89° 49' 04" West, 203.50 feet to the POINT OF BEGINNING being a 1/2 rebar with cap LS 53890;

Thence, North 89° 49' 04" West, 193.50 feet to a 1/2 rebar with cap LS 53890;

Thence, North 00° 13' 20" West, 235.39 feet to a 1/2 rebar with cap LS 53890;

Thence South 89° 49' 04" East, 193.10 feet to a 1/2 rebar with cap LS 53890;

Thence, South 00° 19' 08" East, 235.39 feet to the POINT OF BEGINNING.

Said described parcel contains 45493 square feet (1.04 acres), more or less, subject to any and all easements, reservations, restrictions and conveyances of record.



19116

CORRECTED

LOT 2

All that portion of the Southeast Quarter of Section 28, Township 16 North, Range 2 West, Gila and Salt River Meridian, Yavapai County, Arizona, described as follows;

COMMENCING at the East Quarter Corner of said Section 28 a Town of Chino Valley Brass Cap in asphalt;
Thence along the East line of said Section 28, South 00° 25' 35" East, 2649.11 feet (of record South 01° 53' 49" East, 2649.26 feet) to the Southeast corner of said Section 28, a Town of Chino Valley Brass Cap in asphalt;
Thence, North 45° 24' 01" West, 35.43 feet to a 1/2 rebar with cap Famas;
Thence, North 45° 07' 00" West, 21.32 feet to the POINT OF BEGINNING, being a 1/2 rebar with cap LS 53890;
Thence, North 89° 49' 04" West, 203.56 feet to a 1/2 rebar with cap LS 53890;
Thence, North 00° 19' 08" West, 235.39 feet to a 1/2 rebar with cap LS 53890;
Thence South 89° 49' 04" East, 203.10 feet to a 1/2 rebar with cap LS 53890;
Thence, South 00° 24' 56" East, 235.40 feet to the POINT OF BEGINNING.

Said described parcel contains 47860 square feet (1.10 acres), more or less, subject to any and all easements, reservations, restrictions and conveyances of record.



19116

CORRECTED

LOT 3

All that portion of the Southeast Quarter of Section 28, Township 16 North, Range 2 West, Gila and Salt River Meridian, Yavapai County, Arizona, described as follows;

COMMENCING at the East Quarter Corner of said Section 28 a Town of Chino Valley Brass Cap in asphalt;
Thence along the East line of said Section 28, South 00° 25' 35" East, 2649.11 feet (of record South 01° 53' 49" East, 2649.26 feet) to the Southeast corner of said Section 28, a Town of Chino Valley Brass Cap in asphalt;
Thence, North 45° 24' 01" West, 35.43 feet to a 1/2 rebar with cap Famas;
Thence, North 45° 07' 00" West, 21.32 feet to a 1/2 rebar with cap LS 53890;
Thence, North 00° 24' 56" West, 235.40 feet to the POINT OF BEGINNING, being a 1/2 rebar with cap LS 53890;
Thence, North 89° 49' 04" West, 203.10 feet to a 1/2 rebar with cap LS 53890;
Thence, North 89° 49' 04" West, 193.10 feet to a 1/2 rebar with cap LS 53890;
Thence, North 00° 13' 20" West, 78.25 feet to a 1/2 rebar with cap LS 27738;
Thence, North 88° 56' 26" West, 53.54 feet to a 1/2 rebar with cap LS 27738;
Thence North 00° 25' 26" West, 274.13 feet to a 1/2 rebar with cap LS 27738;
Thence, South 89° 03' 27" East, 449.61 feet to a 1/2 rebar with cap LS 53890;
Thence, South 00° 24' 56" East, 347.37 feet to the POINT OF BEGINNING;

Said described parcel contains 153212 square feet (3.52 acres), more or less, subject to any and all easements, reservations, restrictions and conveyances of record.



Arizona Department of Water Resources
Office of Assured and Adequate Water Supply
1110 W Washington St, Ste 310
Phoenix, Arizona 85007-2954
(602) 771-8599
Web: www.azwater.gov

**Conveyance
of Extinguishment Credits**
A.A.C. R12-15-723

- ❖ The Credit holder's signature on this form must be notarized.
- ❖ **FEES: The fee for a Conveyance of Extinguishment Credits is \$250.00.** Payment may be made by cash, check, or credit card (if you wish to pay by credit card, please contact the Office of Assured and Adequate Water Supply at 602-771-8599). Checks should be made payable to the Arizona Department of Water Resources. **Failure to enclose the fee will cause the form to be returned. Fees for a Conveyance of Extinguishment Credits are authorized by A.R.S. § 45-113 and A.A.C. R12-15-104.**
- ❖ The effective date of this conveyance is the date of Notarization.
- ❖ Enclose the original extinguishment document for the first conveyance. If the original document has been lost, a notarized statement to this effect must be submitted.
- ❖ Once extinguishment credits are pledged to a Certificate of Assured Water Supply, they may not be re-conveyed.
- ❖ In the case of a change in ownership of the subdivision, use this form to re-convey the credits to the same subdivision. You may choose to withdraw the pledged credits in the case of a change in ownership, but only if no lots have been sold.
- ❖ Extinguishment credits may not be transferred or pledged outside of the active management area in which they originated.

DATE RECEIVED

**The undersigned party hereby notifies the Arizona Department of Water Resources of the
Conveyance of the following extinguishment credits:**

EXTINGUISHMENT DOCUMENT NUMBER 58 -	ACTIVE MANAGEMENT AREA (CHECK ONE) ☐ Phoenix ☐ Pinal ☐ Prescott ☐ Tucson
AMOUNT OF CREDITS ON CURRENT EXTINGUISHMENT DOCUMENT Acre-Feet	CREDITS ARE BEING PLEDGED TO (CHECK ONE):
AMOUNT OF CREDITS TO BE CONVEYED Acre-Feet	☐ DESIGNATED WATER PROVIDER DWR NO. 26-
	☐ CERTIFICATE OF ASSURED WATER SUPPLY DWR NO. 27-
	☐ CREDITS ARE NOT BEING PLEDGED AT THIS TIME

Creditholder	If credits are not being pledged at this time, convey to:
FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL	FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL
MAILING ADDRESS	MAILING ADDRESS
CITY / STATE / ZIP CODE	CITY / STATE / ZIP CODE
CONTACT PERSON NAME AND TITLE	CONTACT PERSON NAME AND TITLE
TELEPHONE NUMBER FAX	TELEPHONE NUMBER FAX
Sign in the presence of a Notary Public	
SIGNATURE OF CREDITHOLDER	DATE

NOTARY PUBLIC ACKNOWLEDGMENT

STATE OF ARIZONA)
) §
COUNTY OF)

Subscribed and sworn to before me by _____, (SELLER)
this _____ day of _____, 20_____.

(SEAL)

NOTARY PUBLIC SIGNATURE

DATE COMMISSION EXPIRES _____

NOTICE

A.R.S. § 41-1030(B), (D), (E) and (F) provide as follows:

B. An agency shall not base a licensing decision in whole or in part on a licensing requirement or condition that is not specifically authorized by statute, rule or state tribal gaming compact. A general grant of authority in statute does not constitute a basis for imposing a licensing requirement or condition unless a rule is made pursuant to that general grant of authority that specifically authorizes the requirement or condition.

D. This section may be enforced in a private civil action and relief may be awarded against the state. The court may award reasonable attorney fees, damages and all fees associated with the license application to a party that prevails in an action against the state for a violation of this section.

E. A state employee may not intentionally or knowingly violate this section. A violation of this section is cause for disciplinary action or dismissal pursuant to the agency's adopted personnel policy.

F. This section does not abrogate the immunity provided by section 12-820.01 or 12-820.02.

October 2, 2020

Jon Rocha

Via email:

Re: APNs 306-31-006Q, 306-31-006R, 306-31-006S

Dear Mr. Rocha:

The City's Legal Department has reviewed your request for water service, as well as the Chino Valley Intergovernmental Agreement (CVID IGA) dated March 27, 1998. The total acreage for the three Assessor's Parcel Numbers referenced above is 5.66 acres. Therefore, the City is able to provide water to five (5) lots in your proposed subdivision at a rate of 0.25 acre-feet per year for 100 years.

The City could provide additional water to another five (5) lots as requested, if additional water supplies are conveyed to the City. The first four (4) lots would be required to have 0.25 acre-feet of water multiplied by 100 years, for a total of 100 acre-feet. The fifth lot is calculated slightly differently because the property is 5 acres plus 66 hundredths of an acre. For this fifth lot, the required amount of water is 0.0825 acre-feet multiplied by 100 years, equals 8.25 acre-feet. Therefore, all five lots require 108.25 acre-feet of water rights.

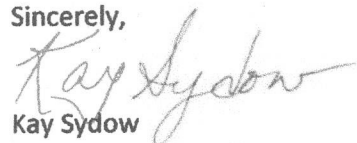
There will be no return flow of effluent to the City. Using the same calculation applied to paragraph 2 above, an additional 0.10 acre-feet of water multiplied by 100 years for each of the five lots increases the total by 43.30 acre-feet.

A list of active unpledged extinguishment credits is attached to this email. It is your responsibility to seek out a right owner(s) bearing a 58-XXXXXX.xxxx to negotiate for the additional **151.55 acre-feet**.

The Arizona Department of Water Resources Well Registry database was reviewed for wells within your area of interest. The following list of wells must be abandoned in accordance with the ADWR rules in order for this property to receive City water service: 55-510745, 55-628072, 55-529852, 55-900375, 55-919180, 55-086127, and 55-901182.

If you intend to proceed with the request for ten (10) connections, per the Water Policy adopted in November 2019, please complete a City of Prescott Water Service Agreement Application. This will allow the project to be reviewed by the Council Subcommittee for Water Issues and subsequently by the Prescott City Council for consideration.

Sincerely,



Kay Sydow

Water Resource Project Manager

Attachments: unpledged extinguishment credits, water policy



WATER SERVICE AGREEMENT APPLICATION

Public Works – Permit Center
201 S. Cortez St., Prescott, AZ 86303
(P) 928.777.1269

Water Service Agreement Applications are submitted in accordance with City Water Management Policy (Resolution NO. 2019-1722). Submit all required documents directly to the Permit Center at 201 S. Cortez St, Prescott, AZ 86302. Please print your contact information legibly.

APPLICANT INFORMATION

Applicant: Southwest Homes, LLC Contact Person: Jon Rocha
Address: P.O. Box 3629 City/State/Zip:
Phone: 928-230-4552 Email: SouthwestHomes92@gmail.com

Property Owner: *SAME Contact Person:
Address: City/State/Zip:
Phone: Email:

PROJECT SITE

Address: No Physical Address Assigned yet.
Current Zoning: SR-1 Proposed Zoning: SR-0.16 PAD
Assessor's Parcel Number(s) of Existing Property:
306-31-0065 306-31-0066 306-31-0067
Existing Water Service (Y/N): N Existing Sewer Service (Y/N): N
Existing Well (Y/N): N If Yes, Well Registry No.:

PROJECT DESCRIPTION

Is the project Residential or Commercial? Residential
Please provide brief description: Please see attached cover letter.

of Proposed Units: 10 # of Proposed Lots: 10
Has a Water Demand Analysis been completed (commercial)? N/A
Has a building permit application been submitted? NO
Has a Planning and Zoning Recommendation been made? NO

Applicant Signature: [Signature]

Date: 11-30-2020

OFFICE USE ONLY

Assigned Tracking No. WSA - Date entered

November 30, 2020

CITY OF PRESCOTT WATER SERVICE AGREEMENT APPLICATION COVER LETTER FOR MEADOW VIEW SUBDIVISION

Applicant, Southwest Homes, LLC (Jon Rocha), is hereby requesting the City of Prescott to serve 100-year water supply to a proposed 10-lot residential subdivision located on the Northwest corner of Road 1 West and Road 2 South in Chino Valley, Arizona.

PROJECT OVERVIEW

The plan for this subdivision is to build ten (10) new single family detached manufactured homes on individual half-acre lots. Existing City of Prescott water main lines front the proposed subdivision and would be extended into subdivision as per plan. Applicant will extend and construct water main lines per City of Prescott standards, requirements and permit process.

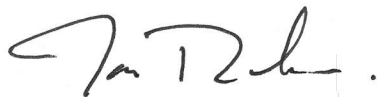
GENERAL CONDITIONS

The subdivision is planned to have City of Prescott water service with 10 water meters per each lot and 1 water meter for common landscaping areas. Additionally, each lot is proposed to have individual conventional septic systems for sewer. Per letter dated October 2, 2020 from Kay Sydow (attached), Applicant will need 151.55 acre-feet of water rights pledged to the City of Prescott to be served 100 year water supply for the proposed subdivision. Applicant has identified a water rights owner that has agreed to sell up to 155 acre-feet of unpledged extinguishment credits. Applicant is ready, willing and able to purchase said credits upon reaching an agreement for water service with the City of Prescott.

SITE PLAN & LANDSCAPED AREAS

All "Open Space and Landscaped Area" shown on Conceptual Site Plan *within* the subdivision will be maintained and watered by its respective property owner (each individual water meters). However, an approximate 9' x 12' landscaped area at the entrance of the subdivision and approximately 15 trees will need additional watering under a separate "common" water meter. Per a formula shared by Kay Sydow, the total acre-feet needed for the common landscaped areas would be 0.01. Entry at 108sf plus 60sf (15 trees; 4 square foot area per tree) equals 168sf of landscaped area. Divided by 43,560 acres = .004 acres of landscaped area. Multiplied by 1.5 is 0.006 AFA. Rounded up to 0.01 AFA to remain inline with calculated figures. Considering additional landscaped area and separate water meter, the total pledged water rights from Applicant needed for the subdivision is **151.56 acre-feet**.

Thank you for your time & consideration.



Jon Rocha, Applicant
Southwest Homes, LLC
928-830-4552

K:\PRS_Roadway\291489000-Chino Valley Minor Plat\Cadd\02-Exhibits\2020-11-23_Site Plan.dwg Nov 24, 2020 james.huggins
XREFS: XED: XBM_3 4291489000.TB
THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.

1101 W ROAD 2 SOUTH
APN: 306-02-531A
OWNER: GRAY JOSEPH D
& DEMBROSKI KATIE RS
ZONING: RCU-2A

1120 S ROAD 1 WEST
APN: 306-02-531D
OWNER: YOUNG FRANK
M & ADELL J RS
ZONING: RCU-2A

1005 S ROAD 1 WEST
APN: 306-33-207
OWNER: BLANDIN FREDERICK R
ZONING: SR-1

1240 W ROAD 2 SOUTH
APN: 306-31-006M
OWNER: D.B.J.K. INVESTMENTS LLC
ZONING: AR-5

APN: 306-31-006Q
OWNER: DUER CATTLE COMPANY LLC
ZONING: SR-1

APN: 306-31-006R
OWNER: DUER CATTLE COMPANY LLC
ZONING: SR-1

841 S ROAD 1 WEST
APN: 306-29-038F
OWNER: ALEXANDER GEORGE P
& VONDA C REVOC TRUST
ZONING: AR-5

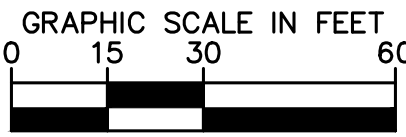
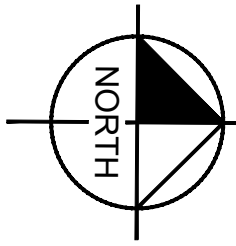
1248 W ROAD 2 SOUTH
APN: 306-31-006N
OWNER: MONIZ JOHN & VIRGINIA RS
ZONING: AR-5

940 S ROAD 1 WEST
APN: 306-31-006S
OWNER: DUER CATTLE COMPANY LLC
ZONING: SR-1

850 S ROAD 1 WEST
APN: 306-31-006K
OWNER: ST CATHERINE LABOURE ROMAN
CATHOLIC MISSION CHINO VALLEY
ZONING: AR-5

LEGEND

- PROPOSED PROPERTY LINE
- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED SETBACK
- OPEN SPACE & LANDSCAPE AREA
- PAVEMENT
- GRADED SHOULDER
- FOUND 1/2" REBAR W/CAP
- SET 1/2" REBAR W/CAP



Kimley»Horn

© 2020 KIMLEY-HORN AND ASSOCIATES, INC.
201 NORTH MONTEZUMA, SUITE 206
PRESCOTT, ARIZONA 86301 (928) 458-7121

SCALE (H): 1"=30'
SCALE (V): N/A
DESIGNED BY: CEK
DRAWN BY: JTH
CHECKED BY: ACB
DATE: NOV 2020

CHINO VALLEY MINOR PLAT
SITE PLAN
S ROAD 1 WEST-CHINO VALLEY, AZ

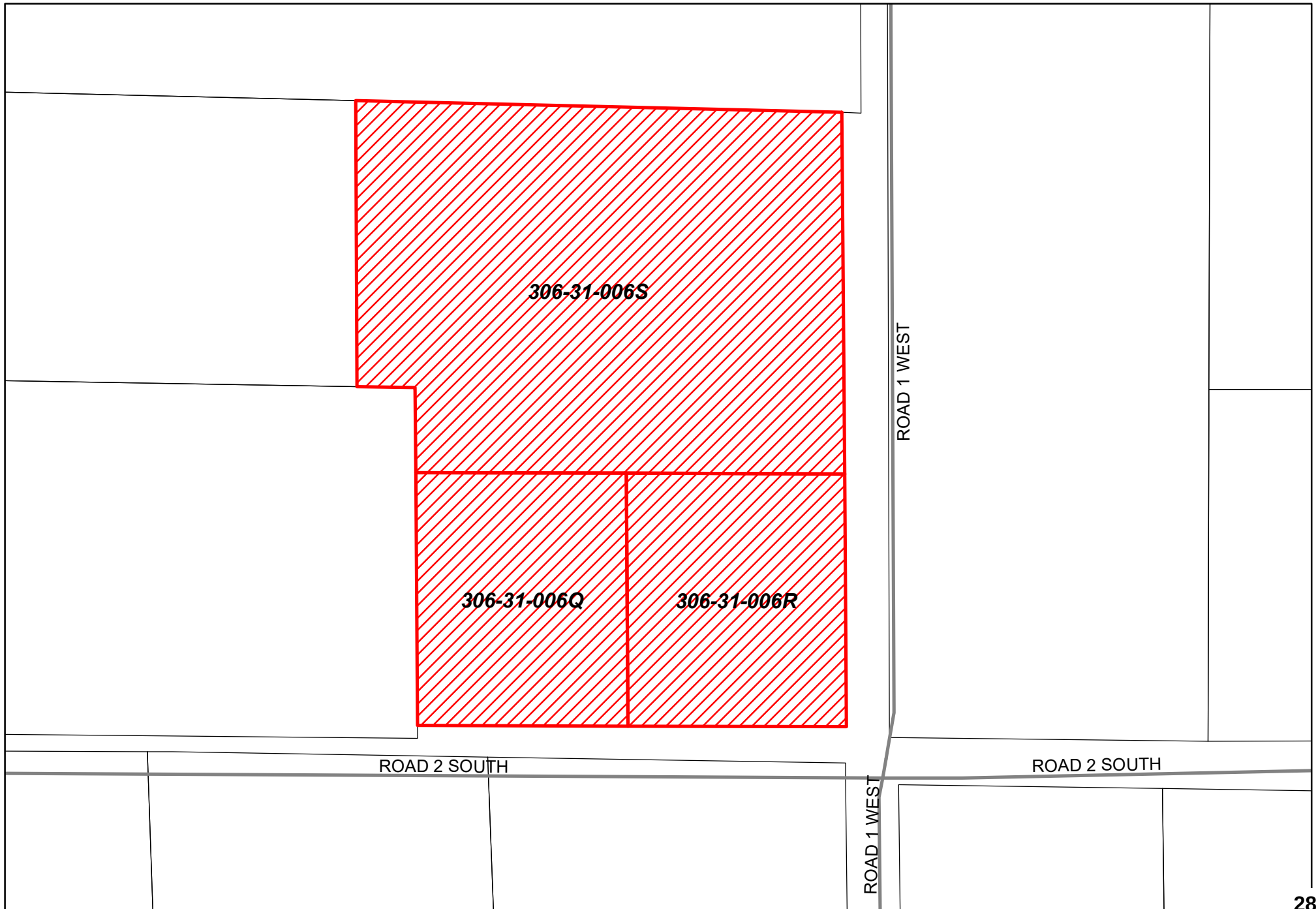
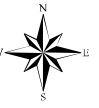
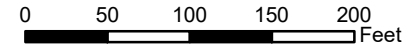


PROJECT NO.
291489000

DRAWING NAME
SP01

01 OF 01

Exhibit B





COUNCIL AGENDA MEMO

MEETING TYPE/DATE: **REGULAR SUBCOMMITTEE MEETING** **03- 2-21**

DEPARTMENT: **Public Works**

AGENDA ITEM: Water Service Agreement Application No. WSA21-001, Submitted by Dana Fonseca on Behalf of Property Owner NCC Prescott LLC, on Assessor Parcel Numbers 114-01-025A, 001-01-35E, 114-01-036B, 114-01-038A, 114-01-038B, 114-02-085, and 114-02-092A Containing a Total of 3.45 Acres. Located at 401 North Pleasant Street, Prescott.

ITEM SUMMARY

Water Service Agreement Application No. WSA21-001 was submitted by Dana Fonseca on behalf of owner NCC Prescott LLC on January 29, 2021. Applicant is seeking potable water supplies to serve the commercial renovation of an existing property containing 16 units for multi-tenant industrial uses. City water and sewer services have previously been installed

BACKGROUND

City of Prescott Water Management Policy (WMP), adopted on November 19, 2019, includes a water connection policy. Projects within the City Limits requiring more than two (2) acre-feet per year are to be reviewed by the Subcommittee on Water Issues prior to submission to City Council.

A water demand analysis was submitted by Prefling Engineering, dated December 8, 2020. At build-out, daily demand is estimated at 2,802 gallons per day, equivalent to 3.14 acre-feet per year.

The applicant has completed the following:

Application Received: September 10, 2020

Pre-Application Conference: September 17, 2020

Submitted all documents: February 4, 2021

Present to the Subcommittee on Water Issues: March 02, 2021

Present to the City Council: March 23, 2021

FINANCIAL IMPACT

None

Recommended Action: MOVE to recommend forwarding WSA21-001 to Council for approval.

ATTACHMENTS

1. [NCC Prescott-Water Service Agreement.pdf](#)
2. [WSA21-001 WATER DEMAND REPORT.pdf](#)
3. [Aerial with APNs.pdf](#)



WATER SERVICE AGREEMENT APPLICATION

Public Works – Permit Center
201 S. Cortez St., Prescott, AZ 86303
(P) 928.777.1269

Water Service Agreement Applications are submitted in accordance with City Water Management Policy (Resolution NO. 2019-1722). Submit all required documents directly to the Permit Center at 201 S. Cortez St, Prescott, AZ 86302. Please print your contact information legibly.

APPLICANT INFORMATION

Applicant: NCC Prescott Contact Person: Diana Fonseca
Address: 340 S. Lemon Ave #4320 City/State/Zip: Walnut, CA 91789
Phone: 323-369-5760 Email: diana@northwoodprops.com

Property Owner: NCC Prescott Contact Person: Diana Fonseca
Address: 401 N. Pleasant St. City/State/Zip: Prescott, AZ
Phone: 323 369 5760 Email: diana@northwoodpro

PROJECT SITE

Address: 401 N. Pleasant St Prescott, AZ
Current Zoning: _____ Proposed Zoning: _____
Assessor's Parcel Number(s) of Existing Property:
114-02-092A 114-01-038B 114-01-035E 114-01-038A
114-01-036B 114-02-085 114-01-025A
Existing Water Service (Y/N): Y Existing Sewer Service (Y/N): _____
Existing Well (Y/N): N If Yes, Well Registry No.: _____

PROJECT DESCRIPTION

Is the project Residential or Commercial? Commercial

Please provide brief description:

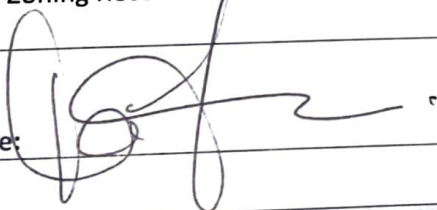
Renovating buildings to multi-tenant industrial building

of Proposed Units: 16 # of Proposed Lots: _____

Has a Water Demand Analysis been completed (commercial)?

Has a building permit application been submitted?

Has a Planning and Zoning Recommendation been made?

Applicant Signature: 

Date: 1/28/2020

OFFICE USE ONLY

Assigned Tracking No. WSA _____

Date entered _____

Water Demand Report

401 N. Pleasant St., Prescott AZ 86301

December 08, 2020

ACCEPTED

City of Prescott

Date_12/31/2020_ By_laurel.collins



EXPIRES: 09/30/2022

Prepared by

Prefling Engineering

4435 E. Chandler Blvd, Suite 200

Phoenix, AZ 85046



Table of Contents

1	Introduction
1.1	Project Description
1.2	Project Location
1.3	Existing Facilities/Conditions
2	Water Design Parameters
2.1	Potable Water Demand Design Criteria
3	Proposed Water System
3.1	Proposed Water Supply System
3.2	Water Demand Calculations
4	Conclusions

Exhibits



EXPIRES: 09/30/2022



Introduction

Project Description

401 N. Pleasant St is an existing industrial facility that is being renovated and subdivided into individual industrial suites. The project is located north of Moeller St and west of Mt. Vernon in Prescott, Arizona. The purpose of this report is to provide an analysis of the potable water services for the proposed redevelopment. The proposed redevelopment consists of approximately 43,112 FT² of grade level and mezzanine industrial space.

This report has been prepared to meet the requirements of the City of Prescott, the Yavapai County Environmental Services Department (MCESD), the Arizona Administrative Code (AAC), and the Arizona Department of Environmental Quality (ADEQ).

Project Location

401 N. Pleasant St is located north of Moller St and West of Mt. Vernon street in Prescott, Arizona. The site is comprised of several lots, Yavapai County APNs # 114-01-038B, 114-02-092A, 114-01-038A, 114-02-085. The proposed occupancy is F-2. The lot is located in the southeast quarter of section 34 township 14 north, range 2 west of the Gila and Salt River Base and Meridian within Yavapai County Arizona. The location of the property is depicted in Exhibit 1 – Vicinity Map.

Existing Facilities/Conditions

This property is currently an existing industrial facility. The lot contains onsite curbing, parking paving, striping, as well a loading dock area. Water supply for 401 N. Pleasant will be provided by the existing 6" CIP water line located in Mt. Vernon. There is an existing 2" double check backflow and 2" water meter that services the existing facility located at the site driveway entrance at Mt. Vernon.



Water Design Parameters

Potable Water Demand Design Criteria

The design criteria used in this report was based upon the City of Prescott Design Standards Manual (Ref 1) and the MAG Uniform Standard Specifications and Details for Public Works Construction (Ref 2.). The specific design criteria for 401 N. Pleasant that serves as the basis of the proposed water design are listed below:

- The average day water demand for industrial facilities is 65 gallons per unit per day. And one unit is considered 1,000 ft² of industrial space.
- The peak day demand is 1.7 times the average day demand.
- Domestic water systems shall be designed to maintain a minimum residual pressure between 50 psi and 100 psi during peak-hour conditions at a flow velocity of less than or equal to 5 fps.
- The minimum fire flow requirement is 1000 gpm for multifamily and small office (City of Prescott Fire Code). A minimum pressure of 25 psi is required during fire flow conditions, at a velocity of less than or equal to 10 fps.
- Generally, water main design shall be based on peak day flow plus fire flow demands up to a maximum of 3,000 gpm.



Proposed Water System

Proposed Water Supply System

Water supply for domestic use for the proposed 401 N. Pleasant on McKinley development shall be provided by the existing 2" water meter and service line to the building(s). The service line is located at the drive entrance to the site at Mt. Vernon St.

Water Demand Calculations

The water demand calculations for 401 N. Pleasant were prepared using the criteria outlined in Section 2 of this report. Table 3.1 summarizes the Average Daily and Peak Hour demands for this project.

Average Day Demand

Industrial facility area = 43,112 ft²

Unit = Area/1000 = 43,112 ft² / 1,000 ft² = 43.112 units

Average Daily Flow = 65 * Units = **2,802 gpd**

Table 3.1 – 401 N. Pleasant St. Water Demand Summary

1 st Floor Office Summary			
Average Day Demand (gpd)	Average Day Demand (gpm)	Peak Hour Demand (gpd)	Peak Hour Demand (gpm)
2,802	1.95	4,763.4	3.28



Conclusions

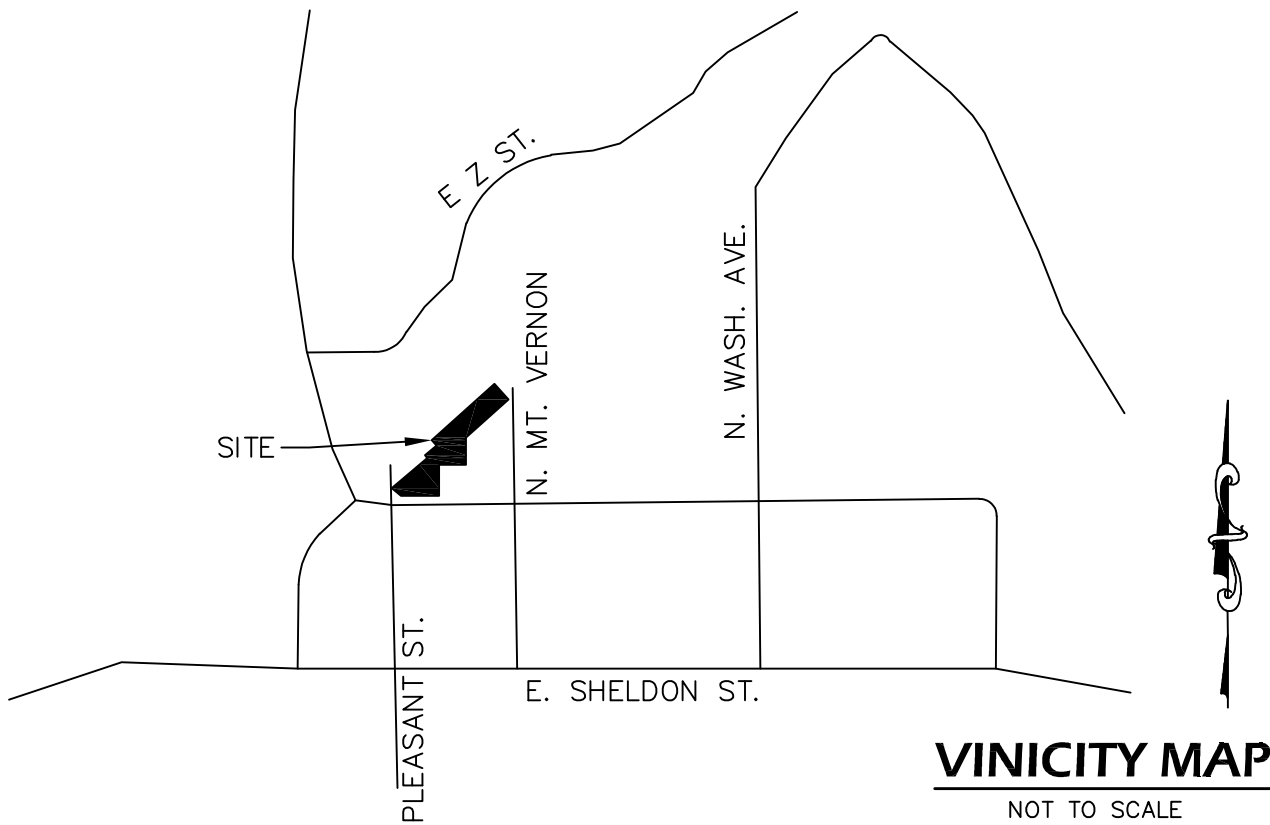
Based on the analysis presented in this Water Design Report, the following conclusions are drawn:

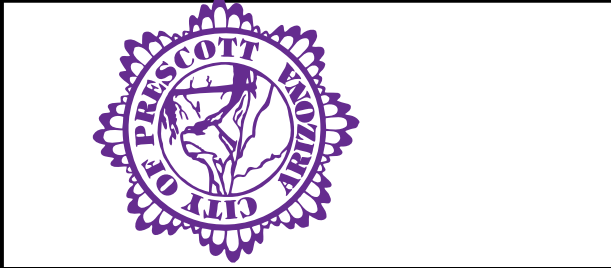
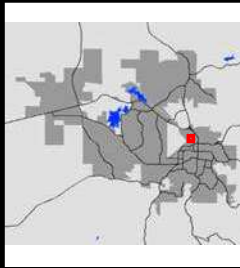
1. This report was prepared in accordance with the recommendations and design parameters of the City of Prescott.
2. The proposed 401 N. Pleasant St. water service line pressures and velocities for potable and fire use are in accordance with the City of Prescott design criteria.
3. All demands have been estimated based on industrial densities outlined in the site plan.
4. The calculations and the design of the water system within this report has been based on generally accepted engineering practices and in accordance with the City of Prescott requirements.
5. The system will adequately provide peak hour and peak demand plus fire flow requirements.



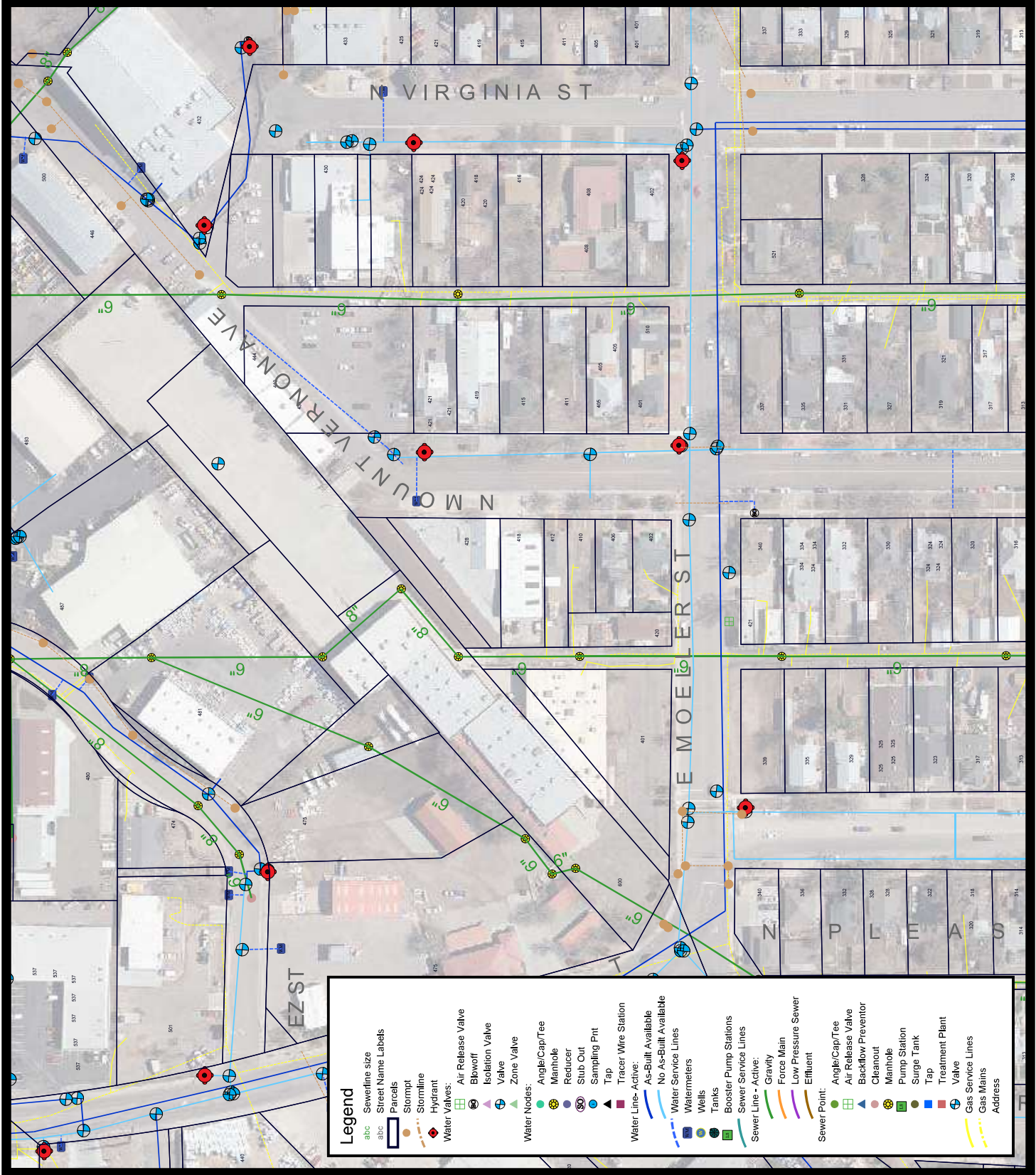
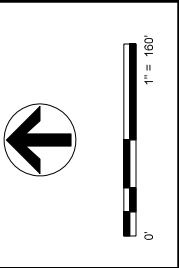
Exhibits





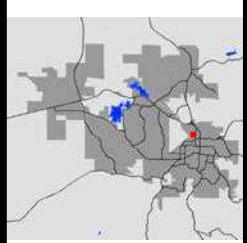


This map is a product of
The City of Prescott

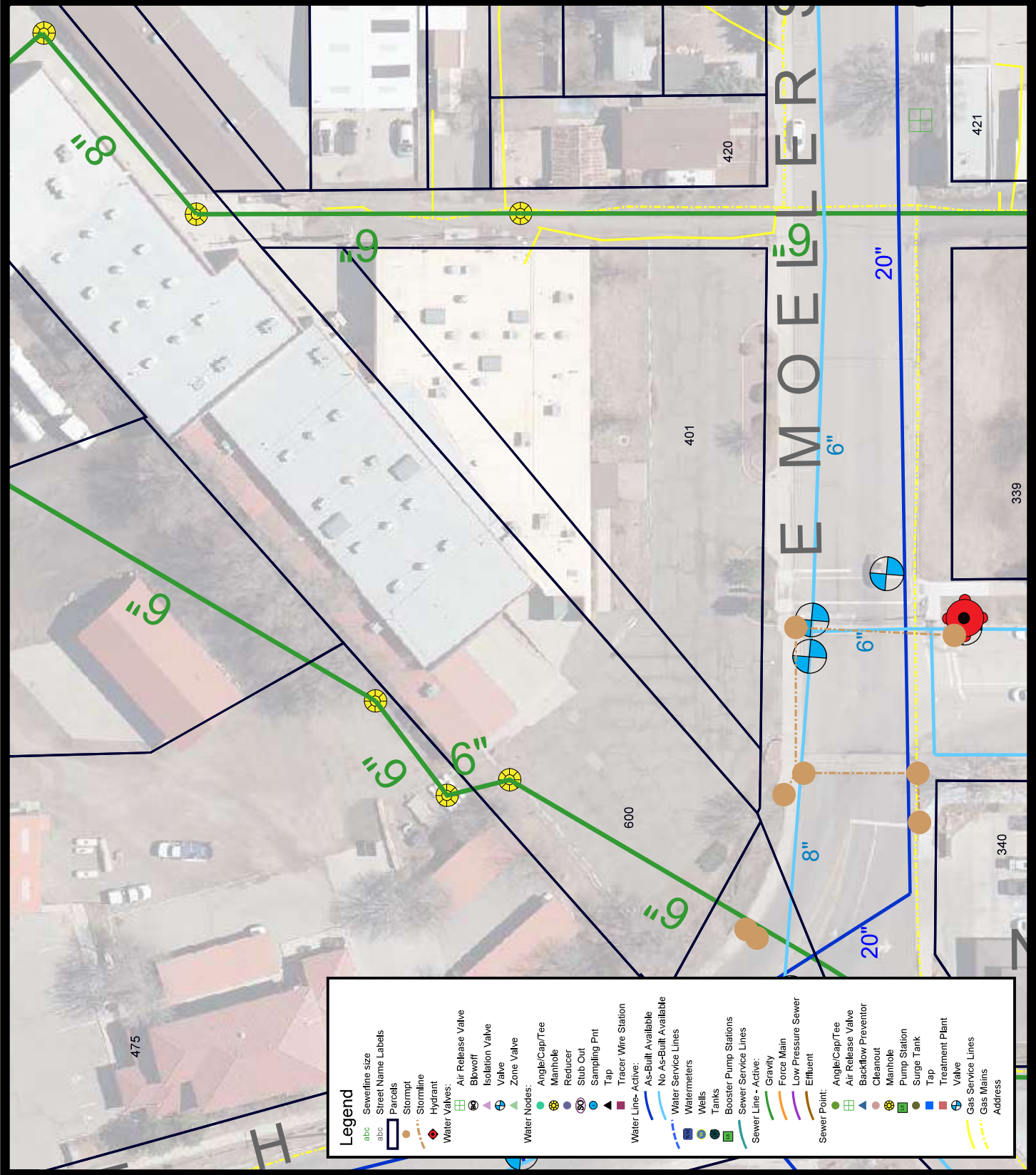


Legend

Sewerline size abc	Street Name Labels	Parcels	Stormpt	Water Valves:	Air Release Valve	Water Nodes:	Water Line - Active:	Water Service Lines	Watermeters	Wells	Tanks	Booster Pump Stations	Sewer Service Lines	Sewer Line - Active:	Gravity	Force Main	Low Pressure Sewer	Sewer Point:	Angle/Cap/Tee	Air Release Valve	Backflow Preventor	Cleanout	Manhole	Pump Station	Surge Tank	Tap	Treatment Plant	Valve	Gas Service Lines	Gas Mains	Address
abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc	abc



This map is a product of
The City of Prescott



Legend

Sewerline size

abc

abc

Parcels

abc

abc

Street Name Labels

abc

abc

Stormline

abc

abc

Hydrant

abc

abc

Water Valves:

abc

abc

Air Release Valve

abc

abc

Blowoff

abc

abc

Isolation Valve

abc

abc

Valve

abc

abc

Zone Valve

abc

abc

Water Nodes:

abc

abc

Angle/Cap/Tee

abc

abc

Manhole

abc

abc

Reducer

abc

abc

Stub Out

abc

abc

Sampling Pnt

abc

abc

Tap

abc

abc

Tracer Wire Station

abc

abc

Water Line- Active:

abc

abc

As-Built Available

abc

abc

No As-Built Available

abc

abc

Water Service Lines

abc

abc

Watermeters

abc

abc

Wells

abc

abc

Tanks

abc

abc

Booster Pump Stations

abc

abc

Sewer Service Lines

abc

abc

Sewer Line - Active:

abc

abc

Gravity

abc

abc

Force Main

abc

abc

Low Pressure Sewer

abc

abc

Effluent

abc

abc

Sewer Point:

abc

abc

Angle/Cap/Tee

abc

abc

Air Release Valve

abc

abc

Backflow Preventor

abc

abc

Cleanout

abc

abc

Manhole

abc

abc

Pump Station

abc

abc

Surge Tank

abc

abc

Tap

abc

abc

Treatment Plant

abc

abc

Valve

abc

abc

Gas Service Lines

abc

abc

Gas Mains

abc

abc

Address

abc

abc

This document is a graphic representation only of best available sources. The City of Prescott assumes no responsibility for any errors.

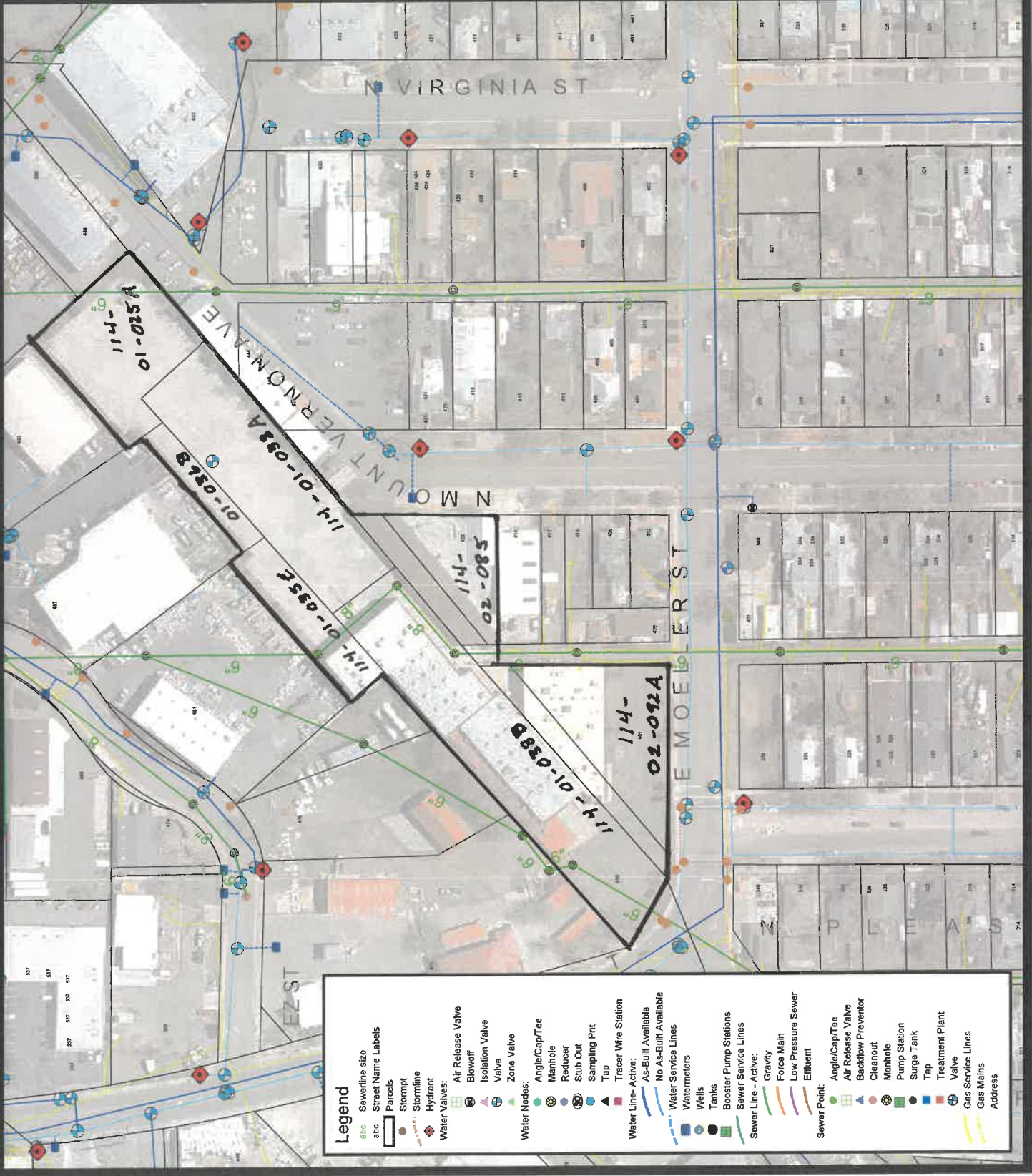
cal:mody, 2020-10-26 10:45:03



This map is a product of
The City of Prescott



0' 1" = 160'



Legend

- Sewerline size
abc
- Street Name Labels
abc
- Parcels
abc
- Stormline
abc
- Hydrant
abc
- Water Valves:
Air Release Valve
Blowoff
Isolation Valve
Valve
Zone Valve
- Water Nodes:
Angle/Cap/Tee
Manhole
Reducer
Stub Out
Sampling Pnt
Tap
Tracer Wire Station
- Water Line - Active:
As-Built Available
No As-Built Available
- Water Service Lines
Watermeters
Wells
- Tanks
Booster Pump Stations
Sewer Service Lines
- Sewer Line - Active:
Gravity
Force Main
Low Pressure Sewer
Effluent
- Sewer Point:
Angle/Cap/Tee
Air Release Valve
Backflow Preventor
Cleanout
Manhole
Pump Station
Sung Tank
Tap
Treatment Plant
Valve
- Gas Service Lines
Gas Mains
Address



COUNCIL AGENDA MEMO

MEETING TYPE/DATE: **REGULAR SUBCOMMITTEE MEETING** **03- 2-21**

DEPARTMENT: **Public Works**

AGENDA ITEM: Water Service Agreement Application No. WSA21-002, Submitted by Dorn Homes, Inc., on Behalf of Property Owner Chamberlain Development Prescott, LLC, on Yavapai County Assessor Parcel Numbers 102-19-001C (2.97 Acres), 102-19-001D (26.83 Acres) and 102-04-001T (8.89 Acres) for a Total of 38.69 Acres. Located North of Deep Well Ranch Parcel 1.47 and Immediately West of Willow Creek Road in the SW1/4 of Section 26, T15N, R02W, GSRB&M.

ITEM SUMMARY

Water Service Agreement Application No. WSA21-002 was submitted by Dorn Homes Inc. on November 9, 2020. Applicant is seeking potable water supplies to serve Westwood Subdivision, Phases 6 & 7, containing 108 new single family lots.

BACKGROUND

City of Prescott Water Management Policy (WMP), adopted November 19, 2019, includes a water connection policy. Projects within City Limits requiring more than two (2) acre-feet per year of potable water are to be reviewed by the Council Subcommittee on Water Issues prior to submission to City Council.

A water demand analysis submitted by Lyon Engineering, dated November 11, 2020. At build-out, daily demand is estimated at 39,424 gallons per day, equivalent to 44.2 acre-feet per year. This property is encompassed within the boundary of the "Procedural Pre-Annexation Agreement, James Deep Well Ranches #1 and #2, Third Amendment to City Contract No. 2010-086". This project will be provided potable water from the Deep Well contract.

Applicant has completed the following:

Pre-Application Conference: August 20, 2020

Application Received: November 9, 2020

Submitted all Documents: February 9, 2021

Present to WIC: March 3, 2021

Present to City Council: March 23, 2021

FINANCIAL IMPACT

N/A

Recommended Action: MOVE to recommend forwarding WSA21-002 to Council for approval.

ATTACHMENTS

1. [WSA21-002 APPLICATION.pdf](#)
2. [Westwood Water Demand.pdf](#)
3. [FINAL PLAT.pdf](#)



WATER SERVICE AGREEMENT APPLICATION

Water Resource Management Division
201 S. Cortez St., Prescott, AZ 86303
(P) 928.777.1645 (F) 928.777.1255

Please complete the form and submit a legible legal description on a separate sheet of paper as well as a site plan of the subject property with proposed improvements. Submit all documents and the filing fee directly to the Community Development Department at 201 S. Cortez St, Prescott, AZ 86302.

APPLICANT INFORMATION

Applicant:	<u>Dorn Homes Inc</u>	Contact Person:	<u>Rusty Weathersby</u>
Address:	<u>600 W Gurley St #100</u>	City/State/Zip:	<u>Prescott AZ 86305</u>
Phone:	<u>928-445-9427</u>	Email:	<u>rweathersby@dornhomes.com</u>

Property Owner:	<u>Chamberlain Development Prescott, LLC</u>	Contact Person:	<u>Rusty Weathersby</u>
Address:	<u>1050 Washington St., Ste.#214</u>	City/State/Zip:	<u>Prescott AZ 86305</u>
Phone:	<u>Tempe, AZ 85281</u>	Email:	<u>rweathersby@dornhomes.com</u>
	<u>480-894-1286</u>		

PROJECT SITE

Address: North of Deep Well Ranch 1.46 & 1.47, west of Willow Creek Road

Current Zoning: SFC Proposed Zoning: SFC

Assessor's Parcel Number(s) of Existing Property:
102 - 19 - 001C 102 - 19 - 001D 102 - 04 - 001T _____

Existing Water Service (Y/N): N Existing Sewer Service (Y/N): N

Existing Well (Y/N): N If Yes, Well Registry No.: _____

PROJECT DESCRIPTION

Is the project Residential or Commercial? Residential

Please provide brief description: New residential community for approximately 108 single family home sites.

of Proposed Units: 108 # of Proposed Lots: 108

Has a Water Demand Analysis been completed (commercial)? Yes per PAC meeting

Has a building permit application been submitted? No

Has a Planning and Zoning Recommendation been made? No

Applicant Signature: Rusty Weathersby

Date: 11/9/2020

OFFICE USE ONLY

DATE:	PERMIT #: WSA18-_____	FEE PAID:	ACCELA:	Legal Attached:
SITE PLAN:	BUILDING PERMIT:	PRELIMINARY PLAT:		

**WESTWOOD PHASES 6 & 7 AT
DEEP WELL RANCH
(PARCEL 1.48)
PRELIMINARY PLAT
WATER MODEL ANALYSIS**

PREPARED FOR:

Dorn Homes Inc.
600 W Gurley St. Suite 100
(928) 445-9427
PROJECT CONTACT:
Chris Harrison

PREPARED BY:

Lyon Engineering & Surveying Inc.,
1650 Willow Creek Road
Prescott AZ 86301
(928) 776-1750



DESIGN: Scott A. Lyon, P.E., R.L.S.
DATE: November 11, 2020
REVISED:

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1.2 System Overview	
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2.2 Water Modeling	
3. Conclusion & References	5
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3.2 References	6

Appendix:

- Appendix A:
 - o Vicinity Map – Exhibit 1
 - o Westwood at DWR - Demand Calculation Table
 - o Existing Fire Flow Test Results
- Appendix B: Average Day Demand
 - o DWR Phase 6 Water Model - Average Day Junction Data
 - o DWR Phase 6 Water Model - Average Day Pipe Data
 - o DWR Phase 6 Water Model - Average Day Reservoir Data
 - o DWR Phase 7 Water Model - Average Day Junction Data
 - o DWR Phase 7 Water Model - Average Day Pipe Data
 - o DWR Phase 7 Water Model - Average Day Reservoir Data
- Appendix C: Max Day Demand
 - o DWR Phase 6 Water Model - Max Day Junction Data
 - o DWR Phase 6 Water Model - Max Day Pipe Data
 - o DWR Phase 6 Water Model - Max Day Reservoir Data
 - o DWR Phase 7 Water Model - Max Day Junction Data
 - o DWR Phase 7 Water Model - Max Day Pipe Data
 - o DWR Phase 7 Water Model - Max Day Reservoir Data
- Appendix D: Peak Hour Demand
 - o DWR Phase 6 Water Model - Peak Hour Junction Data
 - o DWR Phase 6 Water Model - Peak Hour Pipe Data
 - o DWR Phase 6 Water Model - Peak Hour Reservoir Data
 - o DWR Phase 7 Water Model - Peak Hour Junction Data
 - o DWR Phase 7 Water Model - Peak Hour Pipe Data
 - o DWR Phase 7 Water Model - Peak Hour Reservoir Data
- Appendix E:
 - o DWR Phase 6: Water Model – Max Day + Fire Flow Report
 - o DWR Phase 7: Water Model – Max Day + Fire Flow Report
 - o DWR Phase 6: Water System Layout Figure E-2
 - o DWR Phase 7: Water System Layout Figure E-3

1. Introduction

1.1 Purpose: The purpose of this report is to verify the functionality of the existing and proposed water main sizes within pressure Zone 12 and determine the available fire flow for the proposed Westwood at Deep Well Ranch Phases 6-7 (Parcel 1.48). This is the preliminary water report for Westwood Phases 6-7. Westwood is located within the southwest quarter of Section 26, Township 15 North, Range 2 West and will be constructed in two (2) phases. This water model/analysis is for the preliminary plat of phases 6-7 and will analyze the distribution system for these phases and to confirm the availability of fire flow. Westwood Phases 6-7 is in northern Prescott, located north of existing Westwood Phases 4-5, west and north of Willow Creek Road, Antelope Crossings, & Prescott Municipal Airport. Westwood is a mass graded subdivision with 108 proposed single-family home sites that range in elevation from 5025 to 5085. Phases 6-7 are below in elevation from Westwood Phase 5. See Exhibit 1 for the vicinity map.

1.2 System Overview: The two existing water main stubs are both twelve-inch (12") mains located at the termination of Arrowleaf Lane and at Wallflower Way in Westwood Phase 5. The existing water main stubs are connected to the existing 12-inch water mains within Westwood Phase 5 and the twelve inch stub that crosses west from Antelope Crossing Phase 5. All existing water mains are within the Airport Water Zone 12. The existing 12-inch main within Willow Creek Road is connected to the 18-inch water main on the south side of Pioneer Parkway. The 12-inch main runs north near the south boundary of Antelope Crossings where it heads east and connects into the existing water main located on the east side of Highway 89. A fire flow test was conducted on the existing 12-inch water main at the fire hydrant located at the southwest corner of Westwood. The feed hydrant is located approximately 500-feet south on Willow Creek Road. This test result was used as the basis of the water model. The model used an equivalent length 12-inch pipe from the reservoir to match the pressure drop within the water line as shown on the fire flow test. The fire flow test and FlowMaster calculations are shown in Appendix A.

There is an existing eight-inch (8") water main in the northern portion of the site that currently feed one service south of Willow Creek Road and one service to the existing ranch. The existing ranch is located north of the proposed site. The intent of the proposed improvements within Westwood would be to terminate this main within the project limits. The current water service could be reconnected through Antelope Crossings Phase 4. Proposed improvements for Westwood include the extension of the existing 12-inch water mains together with new 8-inch water mains to service the proposed subdivision. All of Westwood is located within the Zone 12 and will be serviced from the existing Zone 12 Reservoir.

2. Water System Design

2.1 Hydraulic Data: The new airport zone pressure will be based on the Zone 12 Tank within the Granite Dells Estates (GDE) development. The base elevation of the Zone 12 Reservoir has been set by the City of Prescott at 5170 feet. Based on a 24 foot high tank, the upper pressure zone elevation of the Airport Zone will be 5077 feet (at the base of the reservoir). The Basis of Design Report completed by Carollo Engineers indicates a new upper elevation of the airport zone to be 5060 feet. This corresponds to roughly a 57 psi minimum system pressure when the tank is full and 47 psi when the tank is empty.

The water model was simplified as a reservoir with a 12-inch feed line based on the fire flow test results. A hydraulic elevation at 5180 ft was used based on the static pressure of the existing fire hydrant where the Roadway elevation of Willow Creek Road is 5,082 feet $[(43\text{psi} \times 2.31) + 5082 = 5181.33]$. This reservoir was connected with 4,000 LF of 12-inch water line to simulate the five psi drop in pressure during the fire flow. Demands were assumed for the two existing developments on the west side of Highway 89. Lyon Engineering does not have regional demand information for the Airport Zone, so this model does not include the commercial uses or the water demand within the City of Prescott Airport (east of Hwy 89). This water model assumes the existing Pressure Reducing Valves do not open on the existing eighteen-inch water main to back feed Zone 12.

Based on the preliminary grading concept, the highest mass graded building pad is approximately 5,086.6 (Phase 5) and the lowest mass graded building is approximately 5,053. Within Phases 6 & 7 the highest pad is approximately 5084.15 and the lowest pad is approximately 5028. The highest street elevation will be 5,085, and this elevation was used as the highest point in the water system. This elevation will maintain a minimum water pressure of 40 psi in the main line. This does not include the additional four feet (4-ft) of bury depth on the proposed water line. The upper end of the grading is located in Phase 5 along the west boundary line. There are 108 single-family home sites proposed for Westwood Phases 6-7. All water services will be located on the residential roadways.

2.2 Water Modeling: Four water scenarios were produced for this report: Average Day, Max Day, Peak Hour, and Max Day with Fire Flow demands. The demands are based on an Average Day Demand times a multiplier. The multipliers have been dictated by the City of Prescott and are as follows:

$$\begin{aligned}\text{Max Day Demand} &= \text{Average Day} \times 1.8 \\ \text{Peak Hour Demand} &= \text{Average Day} \times 3.25\end{aligned}$$

The average day demand per proposed lot was calculated per the City requirements as follows:

$$2.34 \text{ (population per home)} \times 156 \text{ gallons per day per person} = 365.04 \text{ gallons per home per home}$$

For the 108 proposed lots (Phases 6-7) the total calculated demands are as follows:

Average day = 39,424 gallons per day (27.38 gpm)
Max Day = 70,963 gallons per day (49.28 gpm)
Peak Hour = 128,131 gallons per day (88.98 gpm)

The background flows are used from the Westwood Phases 1-5 water model. The average day demand in this model is 128.19.

Pipe velocity criteria was set by the City of Prescott and is as follows:

At Max Day demand: 5 fps maximum
At Peak Hour demand: 7 fps maximum
At Max Day plus Fire Flow: 10 fps maximum

Pipe sizes in the models are based on existing as-builts or by proposed sizes dictated by the City of Prescott. Velocities are shown for every pipe to verify that they fall within the criteria established by the City. See Appendices B-C.

Fire Flow criteria dictated by the City of Prescott General Engineering Standards are as follows; residential uses less than 3,600 square foot home is 1,000 gpm, and 1,500 gpm for residential uses over 3,600 square feet. The response from the City of Prescott Fire Department on the Pre-Application Conference stated a minimum fire flow of 1,500 gpm. Currently there are no floor plans with livable space over 3,600 square feet. The proposed system can deliver 1,500 gpm at the highest elevation lots in Westwood Phase 5. The results of the model are discussed in the conclusion. See Appendix C for potential fire flow results at designated nodes within DWR during the Max Day scenarios. Fire flow results for each development phase(s), at their proposed termination of development, are shown within Appendix C.

3. Conclusion & References

3.1 Conclusion: We have prepared the simplified water model of the Zone 12 Pressure Zone to size the water distribution system of Westwood Phases 6-7. The results based on each phase of development are shown in the following models:

- Phase 6:
Westwood Phase 6 is serviced by a 12-inch main that will be stubbed to the north for future extension into the DWR. This 12-inch line was shown on the overall DWR Master Water Report to service the future residential development north of Phase 6 & 7. Phase 6 has building elevations from 5028 to 5060 resulting in a residual pressure of 52 psi during the Max day demand, with fire flow potential of 1,537 gpm at a calculated residual pressure of 20 psi. This exceed the required 1,500 gpm.

- **Phases 7:**
Westwood Phase 7 is serviced by both 12-inch and 8-inch mains and has building elevations up to 5084.15, resulting in a residual pressure of 41 psi during the Max day demand. The calculated fire flow potential was 1,507 gpm this exceed the required 1,500 gpm.

3.2 References:

References noted below are on file with the City of Prescott:

- Carollo Engineering "Zone 101 Pump Station and Zone 12 Reservoir Basis of Design Report", July 2010
- Lyon Engineering "Deep Well Ranch Parcels 1.46 & 1.47 Residential Water Model Report", January 31, 2019 (ENG1906-005)
- Lyon Engineering "Westwood Phases 4-5 at Deep Well Ranch Final Water Model Report", February 7, 2020 (ENG2002-005)

APPENDIX A

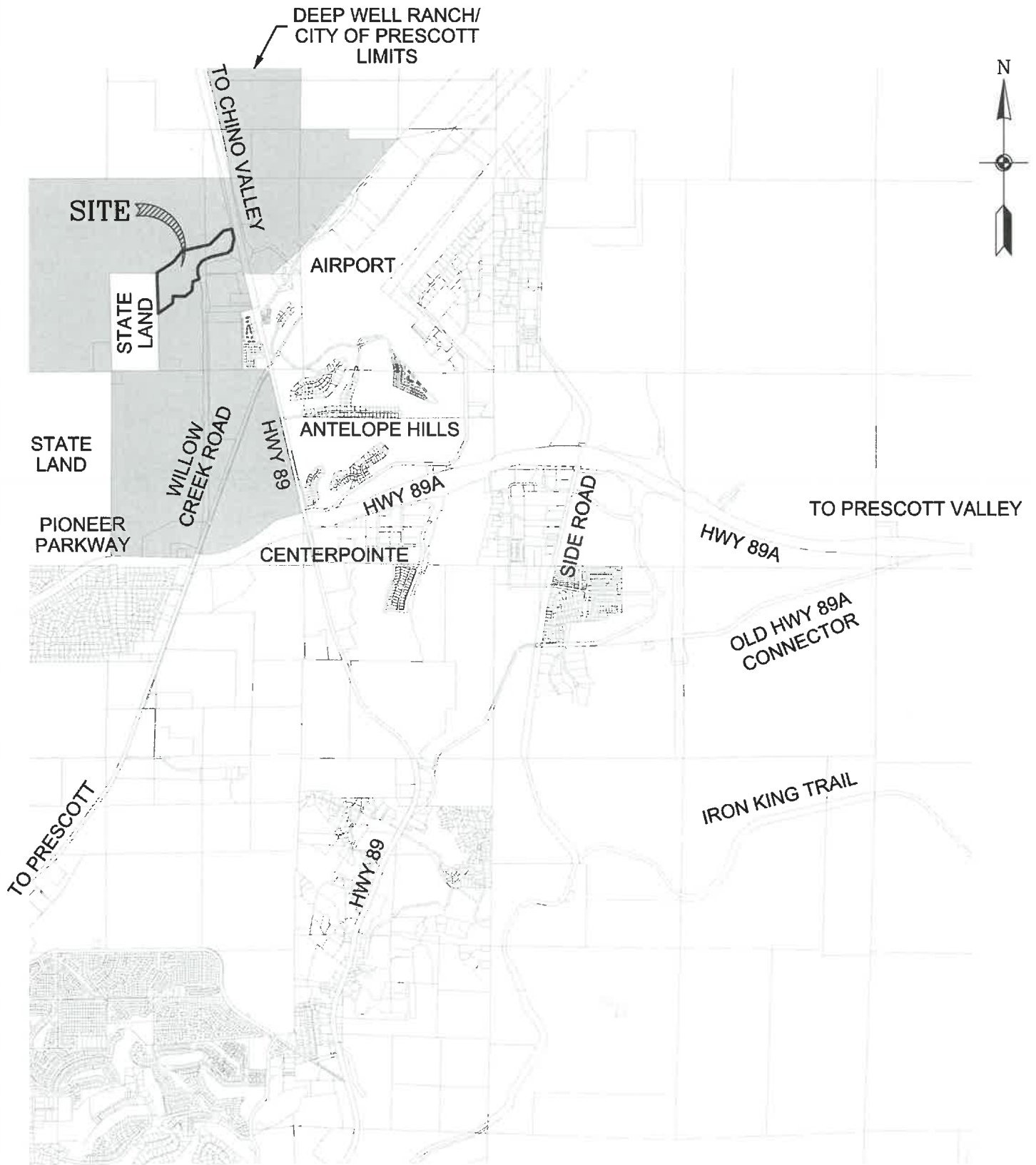
VICINITY MAP – EXHIBIT 1

WESTWOOD AT DEEP WELL RANCH PHASES 6-7 – DEMAND CALCULATION TABLE

FIRE FLOW TEST

LOCATION MAP

NOT TO SCALE



FINAL PLAT
DEEP WELL RANCH PARCEL 1.47

LOCATED IN SECTION 26, TOWNSHIP 15 NORTH, RANGE 2 WEST
OF THE GILA AND SALT RIVER BASE AND MERIDIAN,
YAVAPAI COUNTY, ARIZONA.

WEST QUARTER CORNER
FOUND ALUMINUM CAP MONUMENT
STAMPED "AZTEC 2006"
RLS# 42014

CENTER SECTION CORNER
FOUND CAPPED REBAR
RLS# 33861

S89°54'09"W 2628.41'

1313.92'

1314.49'

FOUND CAPPED REBAR
RLS# 46473

N07°35'08"W 1153.50'

CHAMBERLAIN DEVELOPMENT
PRESCOTT LLC
102-19-001D

SHEET 2

SHEET 3

STATE OF ARIZONA
800-20-033

FOUND CAPPED REBAR
RLS# 46473

DEEP WELL RANCH PARCEL 1.46A & 1.46B
INST# 2019-0003994, YCRO

TRINITY CHRISTIAN SCHOOL
102-19-001A

S 1/4 CORNER
NOTHING FOUND OR SET

LOCATION MAP
SW 1/4 SECTION 26
N.T.S.

27 26
34 35
FOUND ALUMINUM CAP
MONUMENT
STAMPED "AZTEC 2007"
RLS# 42014

1311.99'

N89°39'34"E 2626.15'

1314.16'

8" EASEMENT FOR PUBLIC UTILITIES (PUE)
LYING ADJACENT TO AND PARALLEL TO ALL
INTERIOR RIGHTS-OF-WAYS.

POP-OUT EASEMENT FOR PUBLIC
UTILITIES (PUE) AT EACH FIRE
HYDRANT LOCATION SEE
SHEETS 3 AND 4.

FIRE HYDRANT

STREET SIDE PUE EASEMENT
N.T.S.

20' FRONT SETBACK TO
FACE OF GARAGE DOOR

11' FRONT SETBACK MINIMUM

RESIDENTIAL
STREET CENTERLINE

R.O.W.

INTERIOR LOT

5' SIDE
SETBACK

15' REAR
SETBACK

5' ACCESSORY USE

P.L.

TYPICAL BUILDING ENVELOPE
N.T.S.

LEGEND:

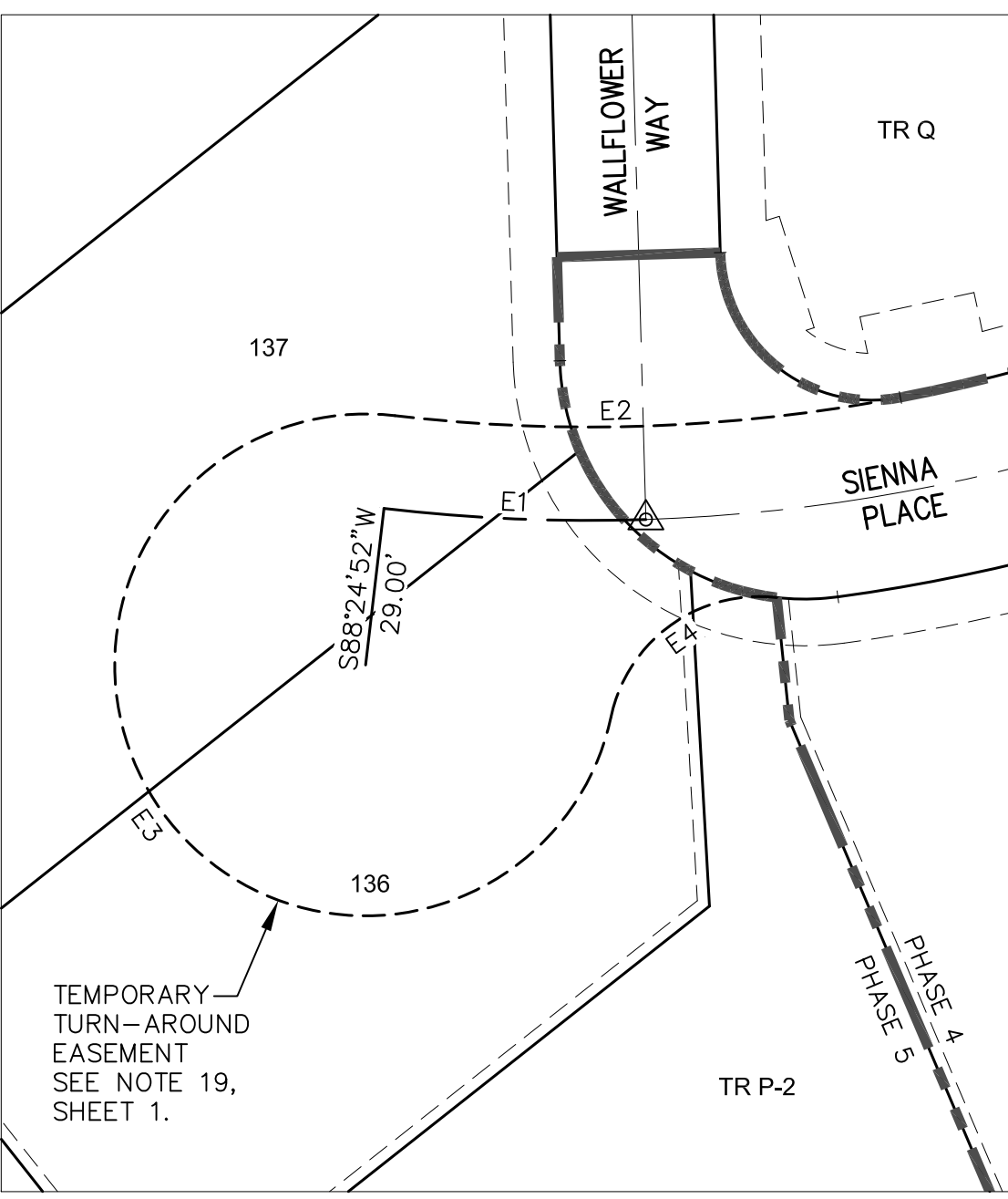
- FOUND SECTION OR QUARTER CORNER AS NOTED
- FOUND MONUMENT AS NOTED
- SECTION LINE
- P.L. PROPERTY LINE
- R.O.W. RIGHT OF WAY
- YCRO YAVAPAI COUNTY RECORDERS OFFICE
- N.T.S. NOT TO SCALE

LOT AREA	
LOT	AREA (SF)
105	9000.00
106	9000.00
107	9000.00
108	9000.00
109	9060.15
110	9529.66
111	9454.56
112	9247.01
113	9017.50
114	9007.42
115	9421.78
116	9129.98
117	9665.67
118	9352.78
119	8973.94
120	9027.53
121	9000.00
122	9000.00
123	9000.00
124	9000.00
125	8798.49
126	9000.00
127	9000.00
128	8980.56
129	10319.16
130	9214.87
131	9000.00
132	9011.44
133	9776.10

LOT AREA	
LOT	AREA (SF)
134	9475.42
135	10720.25
136	10627.21
137	13007.59
138	13859.81
139	13859.81
140	13859.81
141	10849.18
142	10738.13
143	9448.92
144	10925.45
145	9720.78
146	9730.28
147	9400.64
148	8888.36
149	10854.11
150	9814.43
151	9175.34
152	9000.00
153	9000.00
154	8888.60
155	11619.69
156	10179.37
157	9005.19
158	9000.00
159	9000.00
160	9221.91
161	10141.75
162	11076.62
163	10679.21

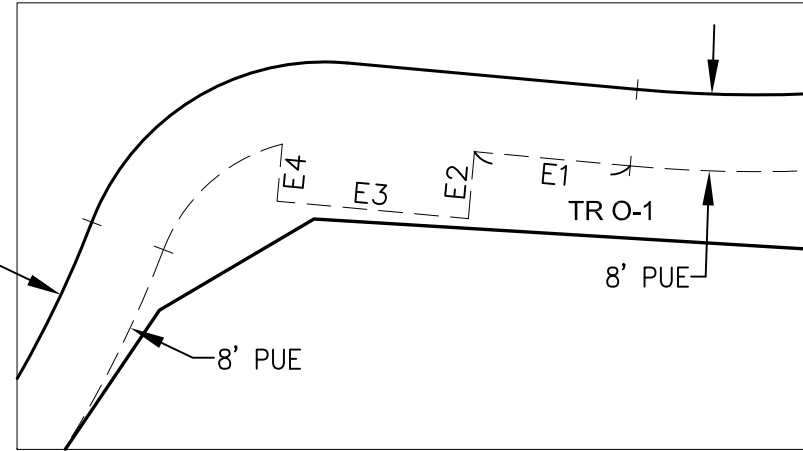
LINE TABLE		
LINE	LENGTH	BEARING
L1	38.00	N76°41'12"E
L2	14.00	N76°41'12"E
L3	14.00	N76°41'12"E
L4	10.00	N76°41'12"E
L5	18.69	S49°02'48"E
L6	46.50	S86°04'26"E
L7	33.98	N80°04'15"E
L8	15.25	S19°36'49"E
L9	13.53	S19°36'49"E
L10	14.37	S19°36'49"E
L11	14.40	S19°36'49"E
L12	27.69	S78°17'59"W
L13	22.64	S82°31'48"W
L14	54.90	N86°31'24"W
L15	18.69	S59°29'13"W
L16	22.18	S34°03'29"W
L17	43.22	S21°17'28"W
L18	12.00	S59°00'00"W
L19	12.00	S59°00'00"W
L20	32.00	N88°24'52"E
L21	2.00	N88°24'52"E
L22	14.00	N88°24'52"E
L23	14.00	N88°24'52"E
L24	2.00	N88°24'52"E
L25	9.86	N60°08'48"E
L26	8.08	N60°08'48"E
L27	76.24	N60°08'48"E
L28	63.14	N40°21'57"E
L29	33.53	N35°33'26"E
L30	33.81	N26°08'02"E
L31	60.45	N32°59'01"E
L32	54.10	N30°31'39"E
L33	4.85	S78°40'38"E
L34	16.78	S78°40'38"E
L35	12.81	N73°41'11"E
L36	23.72	N78°17'59"E
L37	35.75	N82°27'56"E
L38	25.20	S05°38'37"E
L39	14.95	S26°51'51"E
L40	9.01	S36°19'55"W
L41	6.00	S01°35'08"E
L42	0.29	N15°37'45"E
L43	22.57	N02°56'32"E
L44	16.91	N02°56'32"E
L45	18.51	S66°57'45"W
L46	7.10	N88°24'52"E
L47	1.07	N36°19'55"E
L48	4.82	S63°08'09"W
L49	42.50	S67°08'12"E
L50	10.30	S23°02'15"E
L51	5.63	S23°02'15"E
L52	21.14	N05°52'36"W
L53	16.30	N01°35'08"W
L54	8.05	S53°40'05"E
L55	3.07	N26°51'51"W
L56	14.53	N16°37'18"E
L57	14.59	N16°24'04"E
L58	6.00	S88°24'52"W
L59	36.57	N65°59'30"E
L60	36.52	N63°08'09"E
L61	2.86	S64°42'58"E
L62	28.90	N30°31'39"E
L63	16.09	N29°48'45"W
L64	15.63	N48°04'48"W

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	DISTANCE
C1	5.54	114.00	02°47'03"	N11°55'16"W	5.54
C2	33.69	26.00	74°15'03"	S47°39'16"E	31.39
C3	42.47	113.00	21°32'01"	N84°27'12"E	42.22
C4	30.50	137.00	12°45'16"	N88°50'34"E	30.43
C5	33.69	26.00	74°15'03"	N58°05'41"W	31.39
C6	83.90	114.00	42°09'59"	N42°03'10"E	82.02
C7	62.91	86.00	41°54'39"	S42°10'50"W	61.51
C8	40.33	86.00	26°52'07"	S07°47'27"W	39.96
C9	19.53	20.00	55°57'13"	S33°37'13"E	18.76
C10	4.78	20.00	13°40'56"	S68°26'18"E	4.76
C11	82.65	116.00	40°49'17"	N54°52'08"W	80.91
C12	15.37	116.00	07°35'38"	N30°39'40"W	15.36
C13	61.44	166.00	21°12'29"	N16°15'36"W	61.09
C14	44.96	166.00	15°31'01"	N02°06'09"E	44.82
C15	20.05	166.00	06°55'10"	N13°19'14"E	20.04
C16	20.17	166.00	06°57'45"	N20°15'41"E	20.16
C17	6.14	166.00	02°07'05"	N24°48'06"E	6.14
C18	27.96	20.00	80°05'36"	S14°11'10"E	25.74
C19	135.27	312.00	24°50'31"	N41°48'42"W	134.22
C20	125.54	288.00	24°58'34"	N41°44'41"W	124.55
C21	31.22	20.00	89°26'07"	S81°02'59"W	28.14
C22	48.63	316.00	08°49'02"	N40°44'26"E	48.58
C23	50.49	316.00	09°09'14"	N49°43'34"E	50.43
C24	22.70	316.00	04°06'55"	N56°21'38"E	22.69
C25	28.79	1016.00	01°37'24"	N59°13'48"E	28.79
C26	75.28	1016.00	04°14'43"	N62°09'51"E	75.26
C27	47.44	1016.00	02°40'31"	N65°37'29"E	47.44
C28	24.16	316.00	04°22'51"	N69°09'10"E	24.16
C29	60.04	316.00	10°53'11"	N76°47'11"E	59.95
C30	10.51	42.00	14°20'33"	N89°24'03"E	10.49
C31	15.57	42.00	21°14'11"	S72°48'34"E	15.48
C32	28.55	42.00	38°57'01"	S42°42'58"E	28.01
C33	15.87	42.00	21°39'20"	S12°24'48"E	15.78
C34	31.42	20.00	90°00'00"	S46°35'08"E	28.28
C35	30.26	184.00	09°25'22"	N83°42'11"E	30.23
C36	86.69	184.00	26°59'36"	N65°29'42"E	85.89
C37	50.31	184.00	15°39'59"	N44°09'54"E	50.15
C38	72.62	284.00	14°39'04"	N29°00'23"E	72.42
C39	30.00	284.00	06°03'06"	N18°39'18"E	29.98
C40	77.14	116.00	38°06'08"	S34°40'49"W	75.73
C41	40.50	116.00	20°00'15"	S63°44'00"W	40.29
C42	24.71	20.00	70°47'36"	N38°20'20"E	23.17
C43	33.93	114.00	17°03'09"	S11°28'06"W	33.80
C44	35.37	114.00	17°46'27"	S28°52'55"W	35.22
C45	50.47	114.00	25°22'01"	S50°27'09"W	50.06
C46	28.46	86.00	18°57'51"	N53°39'14"E	28.34
C47	86.28	86.00	57°29'06"	N15°25'46"E	82.71
C48	180.03	84.00	122°47'49"	S77°01'39"W	147.50
C49	21.57	84.00	14°42'36"	N34°13'08"W	21.51
C50	55.64	134.00	23°47'20"	N14°58'11"W	55.24
C51	92.16	134.00	39°24'26"	N16°37'42"E	90.36
C52	43.32	284.00	08°44'22"	N40°42'06"E	43.28
C53	55.14	284.00	11°07'26"	N50°38'00"E	55.05
C54	11.02	284.00	02°13'22"	N57°18'24"E	11.02
C55	44.15	984.00	02°34'15"	N59°42'13"E	44.15
C56	85.42	984.00	04°58'25"	N63°28'33"E	85.39
C57	17.17	984.00	00°59'59"	N66°27'45"E	17.17
C58	60.43	284.00	12°11'28"	N73°03'29"E	60.31
C59	45.04	26.00	99°15'40"	N51°12'57"E	39.62
C60	15.51	20.00	44°25'41"	S20°37'43"W	15.12
C61	15.91	20.00	45°34'19"	S65°37'43"W	15.49
C62	70.26	216.00	18°38'17"	N79°05'44"E	69.95
C63	22.62	216.00	06°00'03"	N66°46'34"E	22.61
C64	78.86	216.00	20°55'04"	N53°19'01"E	78.42
C65	24.60	216.00	06°31'34"	N39°35'42"E	24.59
C66	74.62	316.00	13°31'45"	N29°34'02"E	74.44
C67	39.56	316.00	07°10'25"	N19°12'57"E	39.54
C68	36.91	125.00	16°55'13"	N86°45'36"E	36.78
C69	32.35	100.00	18°32'00"	N04°02'48"W	32.21
C70	101.08	100.00	57°54'57"	N34°10'41"E	96.83
C71	133.43	100.00	76°26'57"	N24°54'41"E	123.75
C72	111.57	100.00	63°55'34"	S31°10'22"W	105.87
C73	128.42	100.00	73°34'50"	S52°25'10"W	119.78
C74	111.57	100.00	63°55'34"	N58°49'38"W	105.87
C75	239.99	100.00	137°30'24"	S84°22'57"W	186.41
C76	163.97	150.00	62°37'57"	N04°27'08"E	155.93
C77	1.48	150.00	00°33'49"	N36°03'01"E	1.48
C78	165.45	150.00	63°11'46"	N4°44'02"E	157.19
C79	115.64	300.00	22°05'11"	N47°22'30"E	114.93
C80	149.12	1000.00	08°32'39"	N62°41'25"E	148.99
C81	110.80	300.00	21°09'43"	N77°32'36"E	110.17
C82	181.80	200.00	52°04'57"	N62°22'24"E	175.61
C83	108.40	300.00	20°42'10"	N25°58'50"E	107.81
C84	130.42	300.00	24°54'29"	N41°46'50"W	129.39
C85	37.70	24.00	90°00'00"	N86°37'59"E	33.94
C86	37.70	24.00	90°00'00"	N03°22'01"E	33.94

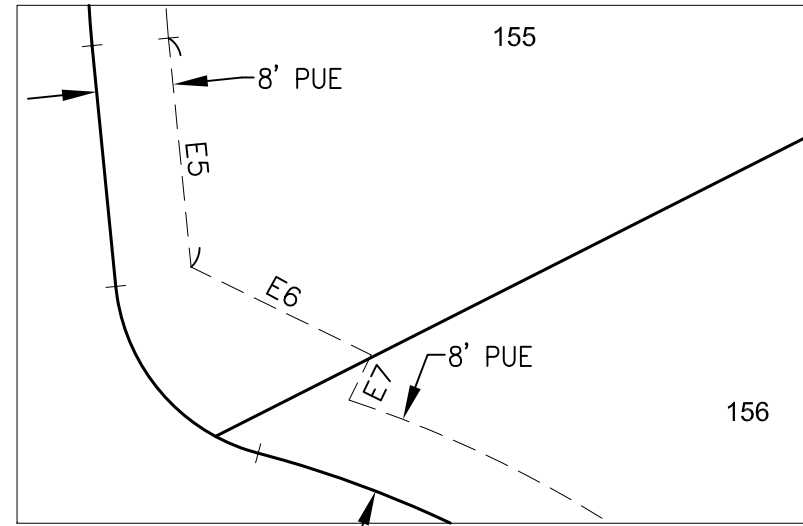


DETAIL "A"
TEMPORARY TURN-AROUND EASEMENT
SCALE: 1"=30'

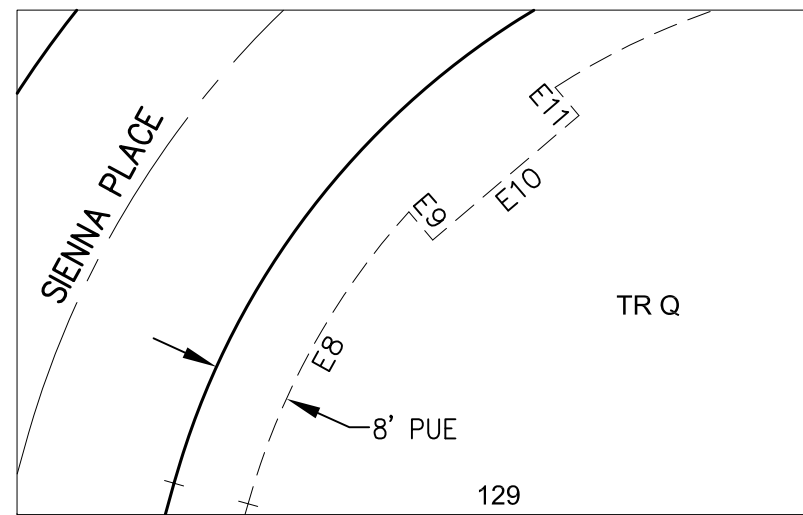
EASEMENT CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	DISTANCE
E1	44.99	300.00	08°35'32"	N87°34'47"W	44.95
E2	87.05	284.00	17°33'46"	S87°56'06"W	86.71



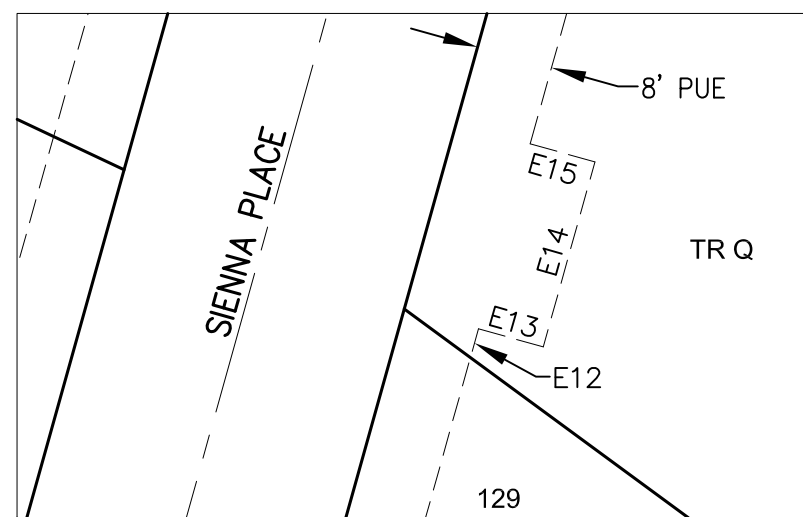
PUE EASEMENT DETAIL A
SCALE: 1"=20'



PUE EASEMENT DETAIL B
SCALE: 1"=20'



PUE EASEMENT DETAIL C
SCALE: 1"=20'



PUE EASEMENT DETAIL D
SCALE: 1"=20'

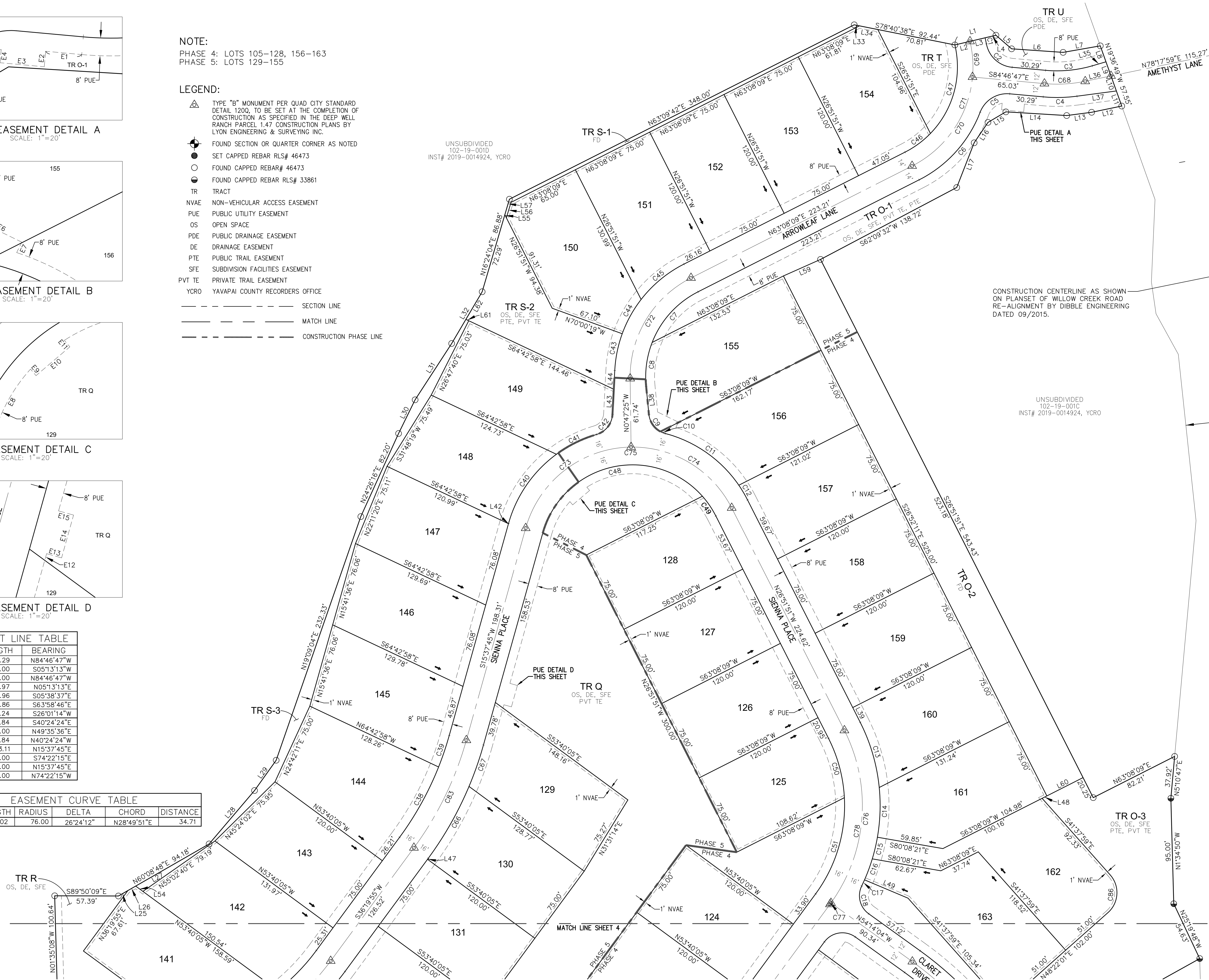
EASEMENT LINE TABLE		
LINE	LENGTH	BEARING
E1	16.29	N84°46'47"W
E2	7.00	S05°13'13"W
E3	20.00	N84°46'47"W
E4	5.97	N05°13'13"E
E5	23.96	S05°38'37"E
E6	20.86	S63°58'46"E
E7	5.24	S26°01'14"W
E8	3.84	S40°24'24"E
E9	20.00	N49°35'36"E
E10	3.84	N40°24'24"W
E11	3.11	N15°37'45"E
E12	7.00	S74°22'15"E
E13	20.00	N15°37'45"E
E14	7.00	N74°22'15"W
E15	7.00	N74°22'15"W

EASEMENT CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	DISTANCE
E8	35.02	76.00	26°24'12"	N28°49'51"E	34.71

NOTE:
PHASE 4: LOTS 105-128, 156-163
PHASE 5: LOTS 129-155

LEGEND:

- TYPE "B" MONUMENT PER QUAD CITY STANDARD DETAIL 120Q, TO BE SET AT THE COMPLETION OF CONSTRUCTION AS SPECIFIED IN THE DEEP WELL RANCH PARCEL 1.47 CONSTRUCTION PLANS BY LYON ENGINEERING & SURVEYING INC.
- FOUND SECTION OR QUARTER CORNER AS NOTED
- SET CAPPED REBAR RLS# 46473
- FOUND CAPPED REBAR# 46473
- FOUND CAPPED REBAR RLS# 33861
- TRACT
- NON-VEHICULAR ACCESS EASEMENT
- PUBLIC UTILITY EASEMENT
- OPEN SPACE
- PUBLIC DRAINAGE EASEMENT
- DRAINAGE EASEMENT
- PUBLIC TRAIL EASEMENT
- SUBDIVISION FACILITIES EASEMENT
- PRIVATE TRAIL EASEMENT
- YAVAPAI COUNTY RECORDERS OFFICE
- SECTION LINE
- MATCH LINE
- CONSTRUCTION PHASE LINE



CONSTRUCTION CENTERLINE AS SHOWN
ON PLANSET OF WILLOW CREEK ROAD
RE-ALIGNMENT BY DIBBLE ENGINEERING
DATED 09/2015.

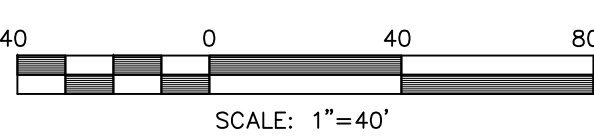
UNSUBDIVIDED
102-19-001C
INST# 2019-0014924, YCRO

WILLOW CREEK ROAD
INST# 2016-0009759, YCRO
INST# 2018-0040988, YCRO
INST# 2018-0036561, YCRO

JASON O'BRIEN, R.L.S.



EXPIRES 6/30/22



LYON ENGINEERING
Civil Engineers • Land Surveyors

1650 WILLOW CREEK ROAD
PRESCOTT, AZ 86301
(928) 776-1750

DEEP WELL RANCH
PARCEL 1.47

DATE: 06-19-20	DRAWN BY: RJW
JOB NO: 861-78	CHECKED BY: JO
SHEET 3 OF 4	





COUNCIL AGENDA MEMO

MEETING TYPE/DATE: **REGULAR SUBCOMMITTEE MEETING** **03- 2-21**

DEPARTMENT: **Public Works**

AGENDA ITEM: Water Service Agreement Application No. WSA21-003 Submitted by Chamberlain Development Prescott LLC on Behalf of Property Owner JCI Investments LLC, on Yavapai County Assessor Parcel Numbers 106-04-001N and 106-04-001L, Containing 160.08 Acres in the South Half and 160.01 Acres in the North Half for a Total of 320.17 Acres. Located in the N1/2 of Section 04, T14N, R02,W, GSRB&M.

ITEM SUMMARY

Water Service Agreement Application No. WSA21-003 was submitted on February 2, 2021. Applicant is seeking potable water supplies to serve Hidden Hills, a 151 lot subdivision.

BACKGROUND

City of Prescott Water Management Policy (WMP), adopted November 19, 2019, includes a water connection policy. Projects within the City Limits requiring more than two (2) acre-feet per year of potable water are to be reviewed by the Subcommittee on Water Issues prior to submission to City Council.

A water demand analysis was submitted by Lyon Engineering on February 1, 2021. At full buildout, daily demand is estimated at 57,676 gallons per day, equivalent to 64.6 acre-feet per year. The water demand analysis report included an error regarding the section where the project is located. The correct location of the project is N1/2 of Section 04, T14N, R02,W. This property is encompassed within the boundary of the "Procedural Pre-Annexation Agreement, James Deep Well Ranches #1 and #2, Third Amendment to City Contract No. 2010-086". This project will be provided potable water from the Deep Well contract.

Applicant has completed the following:

Pre-Application Conference: October 8, 2020

Application Received: February 2, 2021

Submitted all Documents: February 9, 2021

Present to WIC: March 2, 2021

Present to City Council: March 23, 2021

FINANCIAL IMPACT

N/A

Recommended Action: MOVE to recommend forwarding WSA21-003 to Council for approval.

ATTACHMENTS

1. [WATERSERVICEAGREEMENT.pdf](#)
2. [Hidden Hills Water Demand.pdf](#)
3. [PRELIMINARY PLAT.pdf](#)



WATER SERVICE AGREEMENT APPLICATION

Public Works - Water Resource Management Division
201 S. Cortez St., Prescott, AZ 86303
(P) 928.777.1645 (F) 928.777.1255

Please complete this application and submit it with a building permit, site plan, or preliminary plat application. Include a legible legal description (metes and bounds) on a separate sheet of paper. Submit all documents and the filing fee directly to the Permit Center at 201 S. Cortez St, Prescott, AZ 86302.

APPLICANT INFORMATION

Applicant: Chamberlain Development Prescott Contact Person: Vic Chapman
Address: 1050 W Washington Ste 214 City/State/Zip: Tempe, AZ 85281
Phone: 602-989-2488 Email: vchampman@sunstatebuilders.com

Property Owner: JCI Investments LLC Contact Person: _____
Address: same as above City/State/Zip: _____
Phone: _____ Email: _____

PROJECT SITE

Address: Pioneer Parkway & Commerce Drive
Current Zoning: SF-18 Proposed Zoning: SF-18 PAD
Assessor's Parcel Number(s) of Existing Property:
106 - 04 - 001N 106 - 04 - 001L _____
Existing Water Service (Y/N): No Existing Sewer Service (Y/N): No
Existing Well (Y/N): No If Yes, Well Registry No.: _____

PROJECT DESCRIPTION

Is the project Residential or Commercial? Residential
Please provide brief description: 151 proposed lots on 320 acres. Site will be mass graded on the south end and five large estate lots on the north half.

of Proposed Units: 2 # of Proposed Lots: 151

Has a Water Demand Analysis been completed (commercial)? _____
Has a building permit application been submitted? No
Has a Planning and Zoning Recommendation been made? _____

Applicant Signature: 

Date: 2/2/21

OFFICE USE ONLY

DATE:	PERMIT #: WSA18-_____	FEE PAID:	ACCELA:	Legal Attached:
SITE PLAN:	BUILDING PERMIT:	PRELIMINARY PLAT:		



1650 Willow Creek Road
Prescott, AZ
928-776-1750

HIDDEN HILLS PHASE 1 & 2 MASTER WATER REPORT

PREPARED FOR:

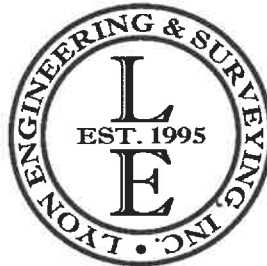
JCI Investments, LLC.
1050 W Washington Street Ste 214
Tempe, AZ 85281

PROJECT CONTACT:

Vic Chapman

PREPARED BY:

Lyon Engineering and Surveying, Inc.
1650 Willow Creek Road
Prescott, AZ 86301



Scott A. Lyon

DESIGN: Scott A. Lyon, P.E.
DATE: November 23, 2020
Revised: February 1, 2021



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Figure 1: Location Map

Figure 2: Hidden Hills Phase 1 Water Model Junction & Pipe Map

Figure 3: Hidden Hills Phases 1-2 Water Model Junction & Pipe Map

Appendices:

Appendix A: HH Phase 1 WaterCAD Results (Average Day, Max Day, Max Day plus Fire Flows, and Peak Hour)

Appendix B: HH Phase 2 WaterCAD Results (Average Day, Max Day, Max Day plus Fire Flows, and Peak Hour)



1 Introduction

1.1 Purpose

The purpose of this report is to verify the functionality of the proposed water main sizes within Hidden Hills (HH). The existing pressure zone servicing Pinon Oaks is too low based on the topography and proposed grading for Hidden Hills, Phases 1-2 development. The preliminary plat for HH will have a total of 158 single family home sites. The distribution system will be designed to provide residential water service and residential fire protection.

1.2 Site Location & Proposed Development

HH is located in the north half of Section 5, Township 14 North, Range 2 West of the Gila and Salt River Base and Meridian. HH will be located west of Pinon Oaks Unit 4, Phases 3 and 4 and north of Pioneer Parkway. HH is proposing 158 dwelling units that will be constructed in two phases. The existing terrain is generally hilly/rolling hills, sloping from the southwest to the northeast. The terrain throughout the development ranges from 5210 up to 5420, with 152 lots ranging in elevation between 5,300 to 5,420. The remain six lots are large estate lots with hilly terrain. The Water Zone will be based on these elevations, which are greater than what is within Pinon Oaks Unit 4 and Long View Estates.

The proposed 158 dwelling units vary in size from 8,879 square feet up to 1,972,362 square feet. Lots 153 to 158 are large estate lots, that cannot be split in the future (comprised of six (6) lots on 160 acres). The proposed zoning of these developments is Single Family 18,000 SF (SF18-PAD). Based on the current zoning of SF-18, the total allowable lots would be 387 dwelling units. The current proposed layout has less than half this amount.

1.3 Existing Water System Overview

HH has an existing water main running along the southern boundary. This 10-inch main runs from Pinon Oaks Unit 4, Phase 2, along the southern boundary to



service Long View Estates to the west of HH. This 10-inch main is the transmission main for Long View Estates. There is also a 6-inch water main located in Cinnamon Drive within the Pinon Oaks Unit 4 subdivision. These water mains are connected to the City of Prescott transmission mains. These transmission mains convey water to the City of Prescott North Reservoir. The North Reservoir has a minimum water surface elevation of 5,563. A new Pressure Reducing Valve (PRV) will be required to service HH. This new PRV can be connected to the existing ten inch (10") water main and subsequently service HH through three connections. In the next few years, the intermediate pump station will be constructed in north Prescott, which will reduce the pressure within the transmission mains, but the hydraulic grade will still be set by the North Reservoir. The existing PRV is located within Pinon Oaks Unit 4 at an elevation of approximately 5,250. The discharge pressure for the valves are set at 68 psi and 50 psi. Based on this, the upper hydraulic grade would be 5,342 feet to maintain 40 psi. This elevation is too low to service HH. Based on the existing ground and proposed mass grading the lots, 96% of the lots will have elevations ranging from 5,420 to 5,300 feet. The minimum hydraulic grade must be set at 5,512 feet.

2 Water System Design

2.1 Water Design Criteria

The water distribution criteria for HH will follow the City of Prescott General Engineering Standards. As previously mentioned, HH Phases 1-2 will be located within a new Pressure Zone which is higher than Pinon Oaks and Long View Estates. The design criteria are presented in Table 1:



Table 1 Water Design Criteria

Design Criteria	Value	Units
Population		
Single Family	2.34	Persons per Dwelling Unit (DU)
Average Day Water Demand		
Single Family	156	Gallons per person per day (gppd)
Maximum Day Water Demand		
Single Family	1.8	X Average Day Demand (gppd)
Peak Hour Water Demand		
Single Family	3.25	X Average Day Demand (gppd)
Fire Flows		
Residential < 3,600 sqft	1,000	Gallons per minute (gpm)
Residential > 3,600 sqft	1,500	Gallons per minute (gpm)
Minimum System Pressure		
Average Day Scenario	40	Pounds per square inch (psi)
Max Day Scenario	40	Pounds per square inch (psi)
Peak Hour Scenario	40	Pounds per square inch (psi)
Max Day plus fire flow	20	Pounds per square inch (psi)
Maximum pipe Velocities		
Average Day Scenario	5	Feet per second (fps)
Max Day Scenario	5	Feet per second (fps)
Peak Hour Scenario	7	Feet per second (fps)
Max Day plus fire flow	10	Feet per second (fps)
Hazen-Williams "C" Factors		
8" Water Main**	110	Coefficient
10" Water Main	115	Coefficient
12" Water Main	120	Coefficient
16" – 18" Water Main	130	Coefficient



2.2 Population Projection & Water Demands

The proposed final plat for HH Phases 1-2 will have a total of 158 single-family dwelling units, and no commercial or multi-family units. Based on this proposed land use in HH, the population estimate for HH is listed in Table 2:

Table 2 Land Use Summary

Phase	Land Use	Population per DU (ppl/DU)	Dwelling Units (DU)	Population (ppl)
1	MDR	2.34	55	129
2	MDR	2.34	103	241

The anticipated water demands for HH Phases 1-2 are shown in Table 3 for the Average Day, Maximum Day, and Peak Hour.

Table 3 Water Demands

Phase	Population (ppl)	Average Day Demand per Person (gpd/person)	Average Day Demand (gpd)	Maximum Day Demand (gpd)	Peak Hour Demand (gpd)
1	128.7	156	20,077	36,139	65,251
2	241.0	156	37,599	67,678	122,197
Totals	370		57,676	103,817	187,448

Existing water demands within the existing Pressure Zone are based on the development north of Pioneer Parkway within Pinon Oaks.

Table 4 Existing Water Demands Pinon Oaks Unit 4

Description	Average Day Demand (gpd)	Maximum Day Demand (gpd)	Peak Hour Demand (gpd)
Pinon Oaks U4	93,450	168,210	303,713
Arroyo Vista	4,015	7,227	13,049
Totals	97,465	175,437	316,761



2.3 Hydraulic Data

HH will be connected into the existing water transmission main as discussed in Section 1.3. The existing transmission main has an existing pressure of approximately 135 psi. A new Pressure Reducing Valve will be installed within the existing City of Prescott easement and will be connected to the existing 10-inch water main that runs along the southern boundary of HH. Since this 10-inch water main runs along the whole boundary, there will be at least three connections to this existing main to loop the water system. Based on the grading of HH, the new water system will need a hydraulic grade of 5,512 to provide a static pressure of 40 psi. As the water system leaves HH, a second PRV will be required to reduce the system pressure within Long View Estates, as it was originally connected within Pinon Oaks. This new pressure zone for HH will be based on the PRV settings of 113 psi and 103 psi for the smaller and larger PRV.

2.4 Water Modeling

WaterCAD Version 8i was used to analyze the water line network as each phase of HH is built, for the Average Day, Max Day, Peak Hour, and Max Day plus Fire Flow scenarios. Detailed results for these scenarios are included in Appendix A-B. Each junction/node is assigned an elevation corresponding to the final grading plan, and the water supply is shown as node R-1 (North Reservoir). This represents the hydraulic grade of the transmission main based on a pressure of 135 psi.

The models located in Appendix A-B contain Figures 2-3, displaying the Junctions & Pipe Map. These maps show the pipe diameter required to provide adequate water pressure and fire flow per phase. The overall water map shows the water model results for HH show a minimum system pressure of 45.9 psi and a maximum pressure of 117.8 psi for the Max Day scenario. The maximum pipe velocities (ft/s), located within Phase 1 are 0.16, 0.29, and 0.53 ft/s for the Average Day, Max Day, and Peak hour scenario, respectively. The maximum pipe



velocities (ft/s), located within Phase 2 are 0.06, 0.10, and 0.18 ft/s for the Average Day, Max Day, and Peak hour scenario, respectively.

A fire flow analysis was completed during the Max Day scenario, assuming 1,500 gpm will be required for HH Phases 1-2, depending on the future structure sizes, a minimum fire flow of 1,500 gpm may be required in HH Phase 1-2. The fire flow analysis shows that 1,000 gpm can be achieved at all locations, but if 1,500 gpm is required due to structure sizes, Junction 206, in the northwest corner of the site will be below this flow.

3 Conclusion & References

3.1 Conclusion

Based on the WaterCAD analysis of the water distribution system for HH Phases 1-2, the following conclusions are made:

- Water service for HH Phases 1 will be provided by the City Prescott through a new PRV connected to the City of Prescott transmission main. The new water distribution system will utilize the existing 10-inch transmission main that runs along the southern boundary of HH.
- Per the City of Prescott a connection to Pinon Oaks is shown with Pipe P-109. This can be zoned off, or the Pinon Oaks subdivision can be transitioned to a higher pressure.
- The proposed water distribution network for HH Phases 1-2 is capable of providing service for all design scenarios (Average Day, Max Day, Peak Hour) in accordance with the design criteria outlined in the HH Master Water Plan Design Report and the City of Prescott General Engineering Standards.
- The water distribution network for HH Phase 1-2 provided the required Max Day plus fire flow for the development except the northwest corner at Junction 206. The homes will need to be less than 3,600 sq.ft., as if each phase of HH is constructed individually in accordance with the design criteria outlined in the GDE Master Water Plan Design Report and the City of Prescott General Engineering Standards.



3.2 Reference

- City of Prescott, "City of Prescott General Engineering Standards 2016"
June 7, 2016

HIDDEN HILLS PHASES 1-2 P.A.D.

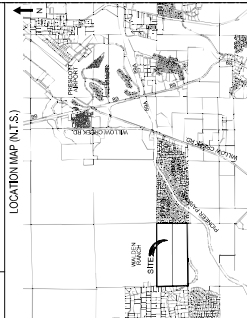
Phase	Total Area (sf)	Total Area (ac)	Open Space Area (sf)	Open Space Area (ac)	Percent Open Space
1	5,473,017	125.64	1,914,698	43.95	35.0%
2	8,569,481	196.73	2,239,782	51.42	26.1%
1-2 Total	14,042,498	322.37	4,154,380	95.37	29.6%

[illegible]

LOTS 153-158 WILL HAVE SEPTIC
TANK OR PRIVATE SEWER

SYMBOL LEGEND	
	EXISTING 10' CONTOUR
	PROJECT/PHASE BOUNDARY
	SUB-PHASE BOUNDARY
	EXISTING LOT/TROW LINE
	YC PARCEL # AND OWNER INFO
	EASEMENT LINE

SHEET INDEX	
SHEET NUMBER	DESCRIPTION
1	OVERALL MAP FINISHING, BOUNDARY & PROJECT DATA
2	PRELIMINARY PLAT SHEET 2--PHASES 1&2
3	PRELIMINARY PLAT SHEET 3--BOUNDARY GEOMETRIC & TRACT DATA
4	PRELIMINARY PLAT SHEET 4--WATER & SEWER CONCEPTUAL PLAN
5	PRELIMINARY PLAT SHEET 5--PHASES 1&2 GRADING/DRAINAGE
6	ROADWAY SECTIONS AND DETAILS



DESCRIPTION OF PROJECT

HIDDEN HILLS PHASES 1 - 2 WILL CONSIST OF OPEN SPACE TRACTS AND 58 SINGLE FAMILY LOTS ON APPROXIMATELY 323 ACRES. THE NORTHERN 160 ACRES WILL CONSIST OF 61 LOTS ACCESSED FROM HIDDEN HILLS.

SITE DATA ACCESSOR PARCELS NUMBERS: 100040011N & 100040011L NET SITE AREA = 323 ACRES OPEN SPACE = 94 ACRES (29.0%)	ZONING
--	----------------------

CURRENT ZONING: SF-11 PAU
PROPOSED ZONING: SF-11 PAU

UTILITIES AND SERVICES

GAS: NORTHERN NATURAL GAS
ELECTRICITY: NORTHERN CALIFORNIA ELECTRICITY
TELEPHONE: CITY LINK OR CABLE ONE
CABLE: CABLE ONE OR CABLE ONE
WATER: CITY OF PRESIDENT
SEWER: CITY OF PRESIDENT
REFUSE DISPOSAL: CITY OF PRESIDENT
POLICE: CITY OF PRESIDENT

LEGAL DESCRIPTION

THE SOUTH HALF OF THE NORTH HALF OF
SECTION 4, TOWNSHIP 14 NORTH, RANGE 2
WEST OF THE GILA AND SALT RIVER
BASE AND MERIDIAN, YAVAPAI COUNTY, ARIZONA

BASIS OF BEARING
EAST LINE OF SECTION 4
2,656.44' AT N00°31'40"E

BENCHMARK

CITY OF PRESCOTT DATUM = NG5 5346
IN PRESCOTT, YAVAPAI COUNTY, COUNTY COURTHOUSE
GROUNDS AT THE BUCKY ONEIL STATUE IN THE REAR
CONCRETE BASE. A USGS STANDARD CAP STAMPED
"5346 PRESC" AND RELETED ON THE TOP OF A 3.0 IRON HPE
ELEVATION # 5357.359 HAND 88

OWNER
CHAMBERLAIN DEVELOPMENT PRESCOTT LLC,
PROJECT CONTACT:
VIC CHAPMAN
1050 W WASHINGTON ST, STE 214
TEMPE, AZ 85281
(602) 989-4488

ENGINEERS/SURVEYORS
 DRAWING: SAL DESIGN: SAL JOB#: 9015413
 DATE OF PREPARATION: 2/1/2021



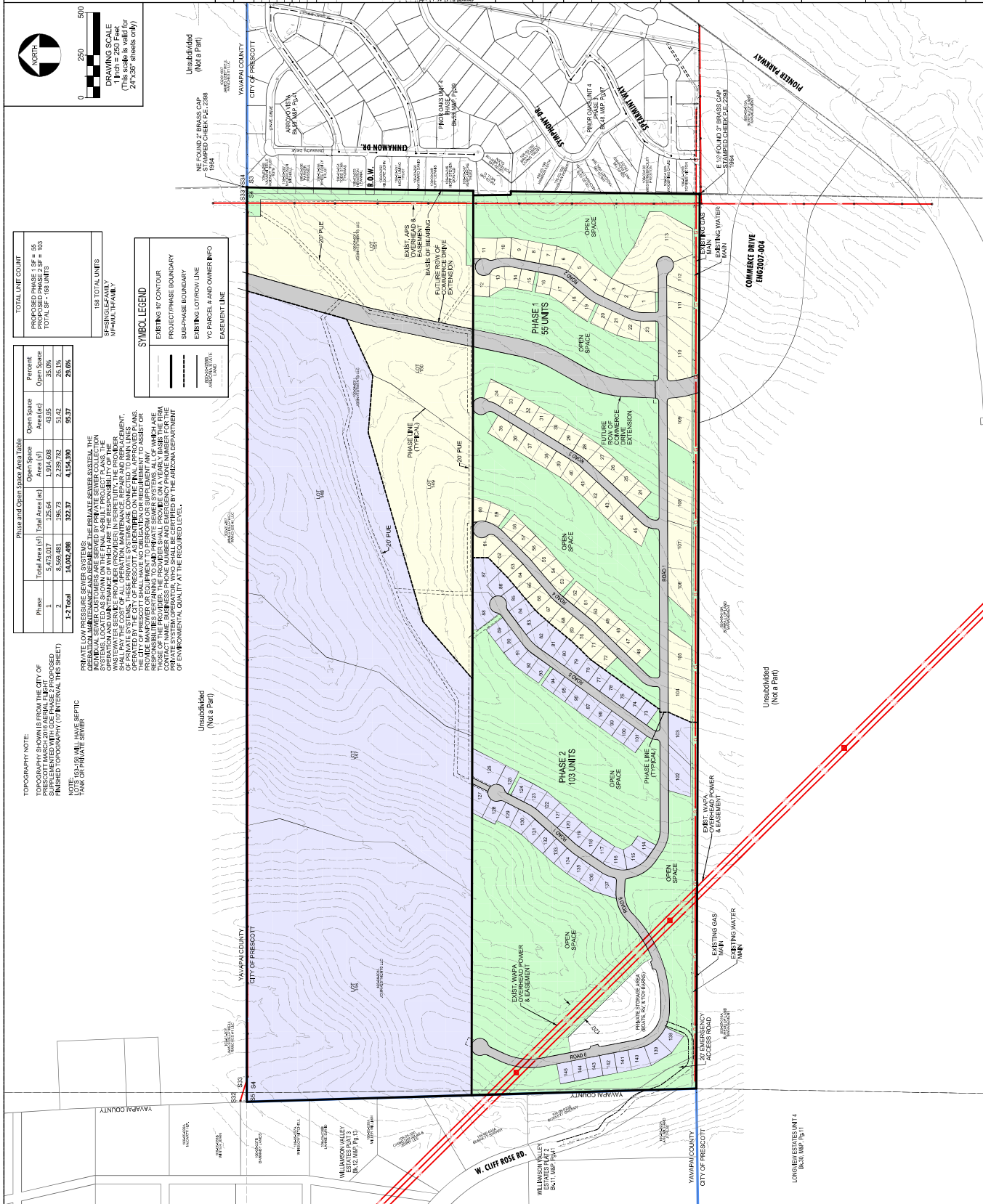
SCOTT ALLISON, P.E.
35898
ARIZONA
REGISTERED PROFESSIONAL ENGINEER LICENSE NO.



ENGINEERING & SURVEYING
1850
ARIZONA
REGISTERED PROFESSIONAL ENGINEER LICENSE NO.

1850 WILLOW CREEK ROAD
PRESCOTT, AZ 86301
DL# 42081 795-1750


 FAX: (638) 775-6805
 SHEET: 1 OF 6





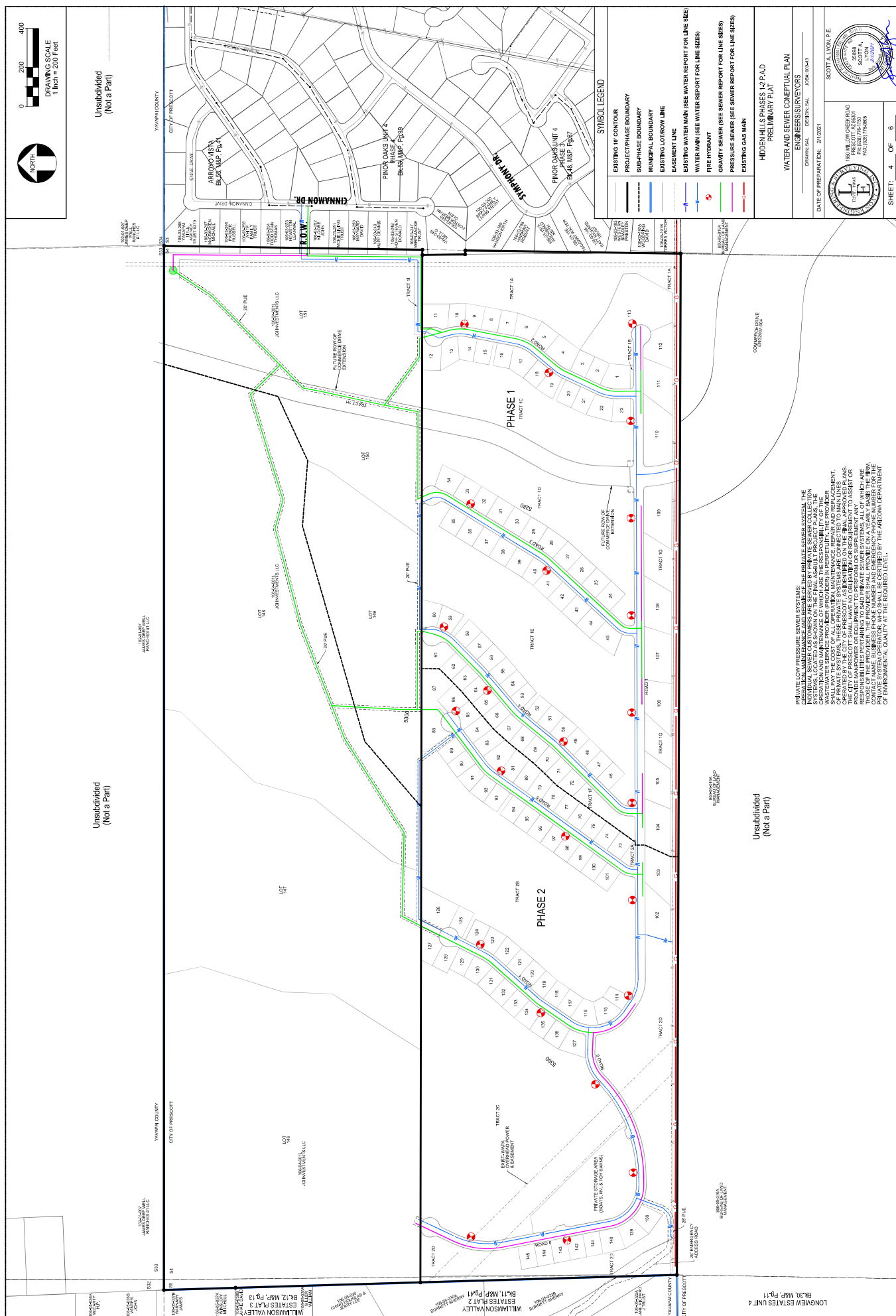


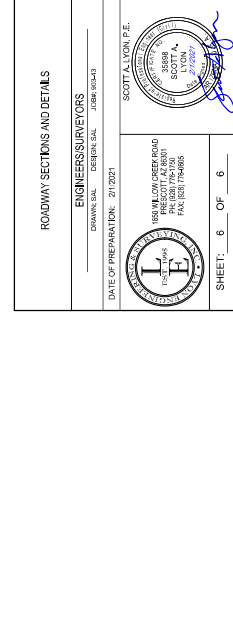
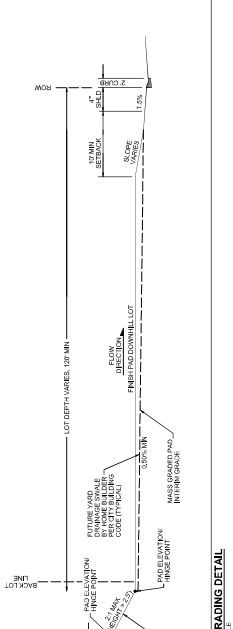
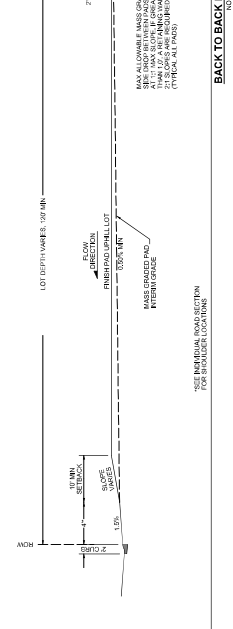
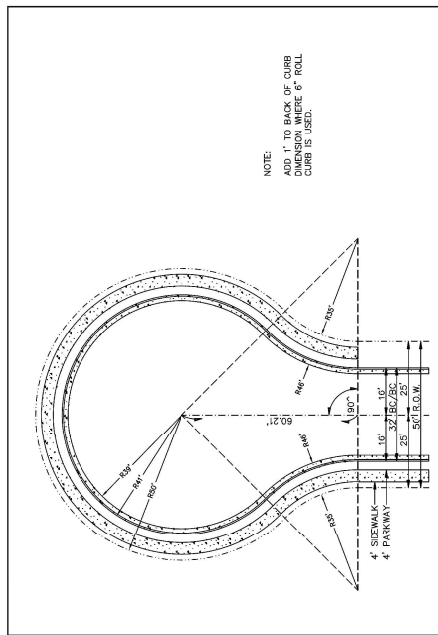
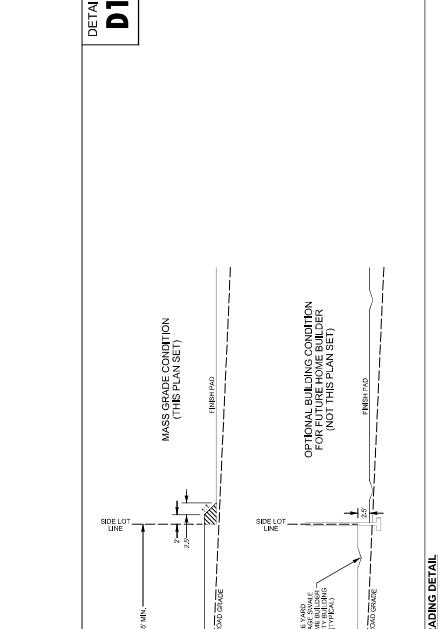
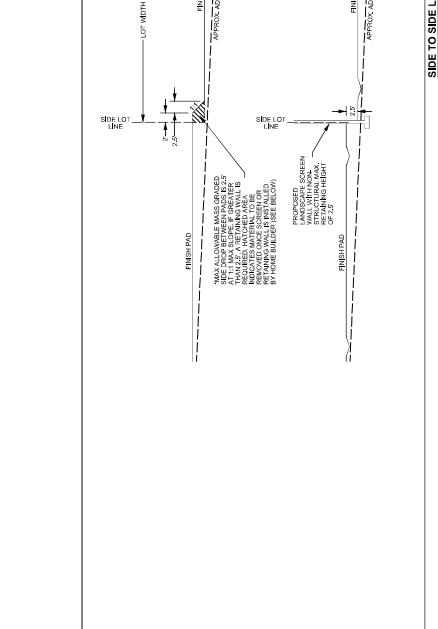
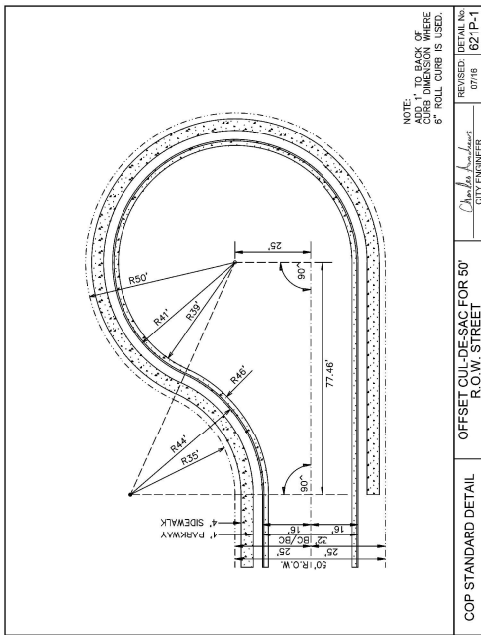
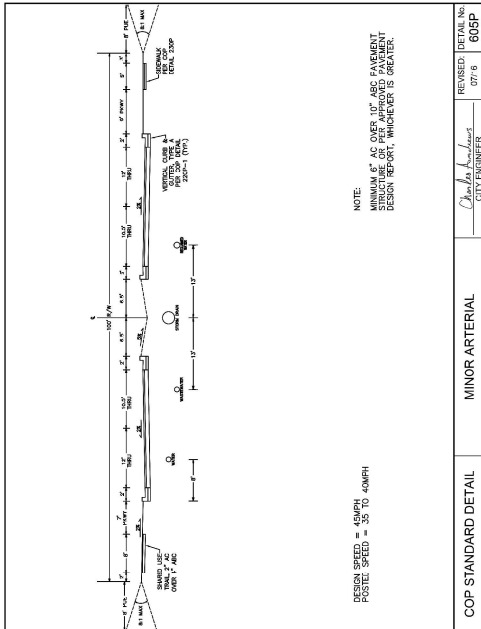
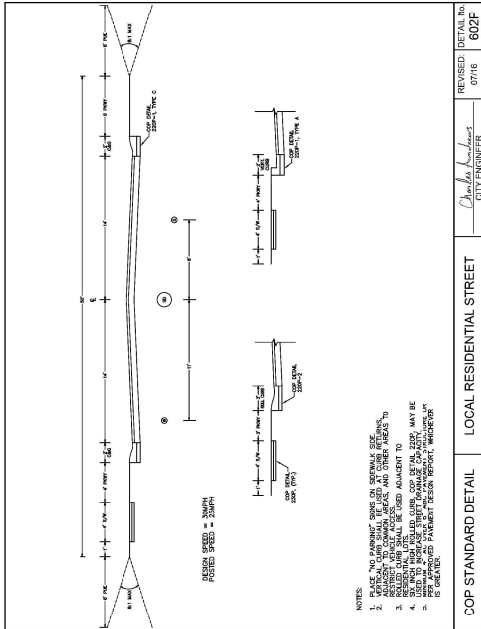
Unsubdivided
(Not a Part)

Unsubdivided
(Not a Part)

Line Table	
Line	Distance
1.1	SP700016 19.94'
1.2	NSP-5316'W 27.08'

Tract Areas				
Tract ID	Open Space and Utilities	Open Space	Utilities	Area (ac)
1A	Open Space	412.034	8.47	Phase 1 - Open Space Tracts
1B	Open Space	1.978	0.05	
1C	Open Space	296.022	6.80	
1D	Open Space	1.978	0.05	
1E	Open Space	569.008	13.06	
1F	Open Space	35.994	0.71	
1G	Open Space	133.685	3.07	
1H	Open Space	133.685	3.07	
1I	Open Space	133.685	3.07	
1J	Open Space	133.685	3.07	
1K	Open Space	133.685	3.07	
1L	Open Space	133.685	3.07	
1M	Open Space	133.685	3.07	
1N	Open Space	133.685	3.07	
1O	Open Space	133.685	3.07	
1P	Open Space	133.685	3.07	
2A	Open Space	5.996	0.14	Phase 2 - Open Space Tracts
2B	Open Space	70.021	15.09	
2C	Open Space	51.060	11.24	
2D	Open Space	51.060	11.24	
Total				2,239.72
Total				4,291.13





**COUNCIL AGENDA MEMO**

MEETING TYPE/DATE: **REGULAR SUBCOMMITTEE MEETING** **03- 2-21**

DEPARTMENT: **Public Works**

AGENDA ITEM: Infrastructure Topic - Static Water Levels Measurements at City Water Production Wells

ITEM SUMMARY

Review of the static water level measurements taken by City staff at seven (7) production wells. Data and graph will be introduced to the Council Subcommittee members.

BACKGROUND

At the January 12, 2021, Council Subcommittee meeting, Chairman Blair was interested in the City's water levels and made a request to have this information at an upcoming meeting. Pending today's discussion, Public Works can adjust how the data is displayed and seek the frequency at which the members would like to have it on their agenda.

Every year the City collects monthly information on the static water levels in their water production wells. This data is a component of the Arizona Department of Water Resources (ADWR) Annual Water Withdrawal and Use Report due no later than March 31st each year.

The City has seven (7) active production wells located in the Little Chino Sub-basin, some within the Town of Chino Valley and others near the Regional Airport. These wells have varying depths, but those clustered together generally have similar geology. Per the procedures used by the Arizona Department of Water Resources and other agencies such as the United State Geological Survey, a static water level is taken once a well's pump is halted for 8 hours or more. This is to allow the local water level to return to a "static" condition. Water levels can also be influenced by other nearby wells that may have their pump in operation. A map has been provided to show the general location of the 7 wells discussed.

FINANCIAL IMPACT

No financial impact related to this item.

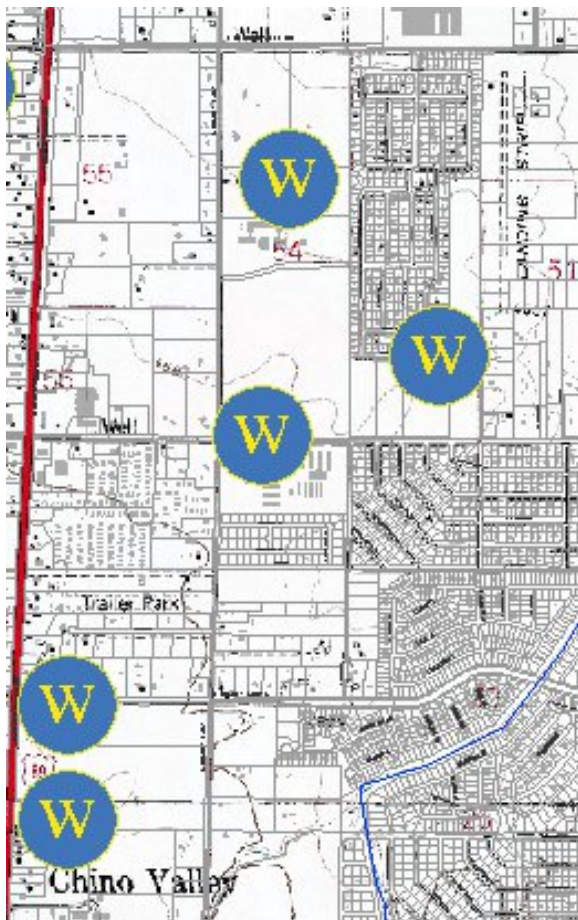
Recommended Action: This item is for discussion only. No formal action will be taken.
--

ATTACHMENTS

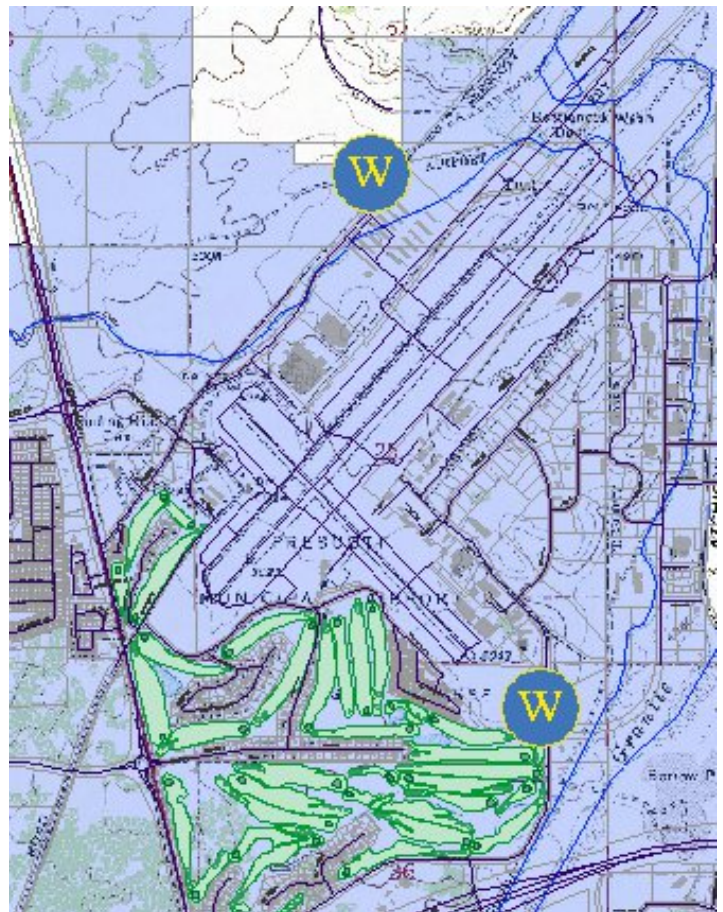
1. [City Production Wells Map](#)
2. [Static Water Level Charts_2 25 2021.docx](#)

City Production Wells

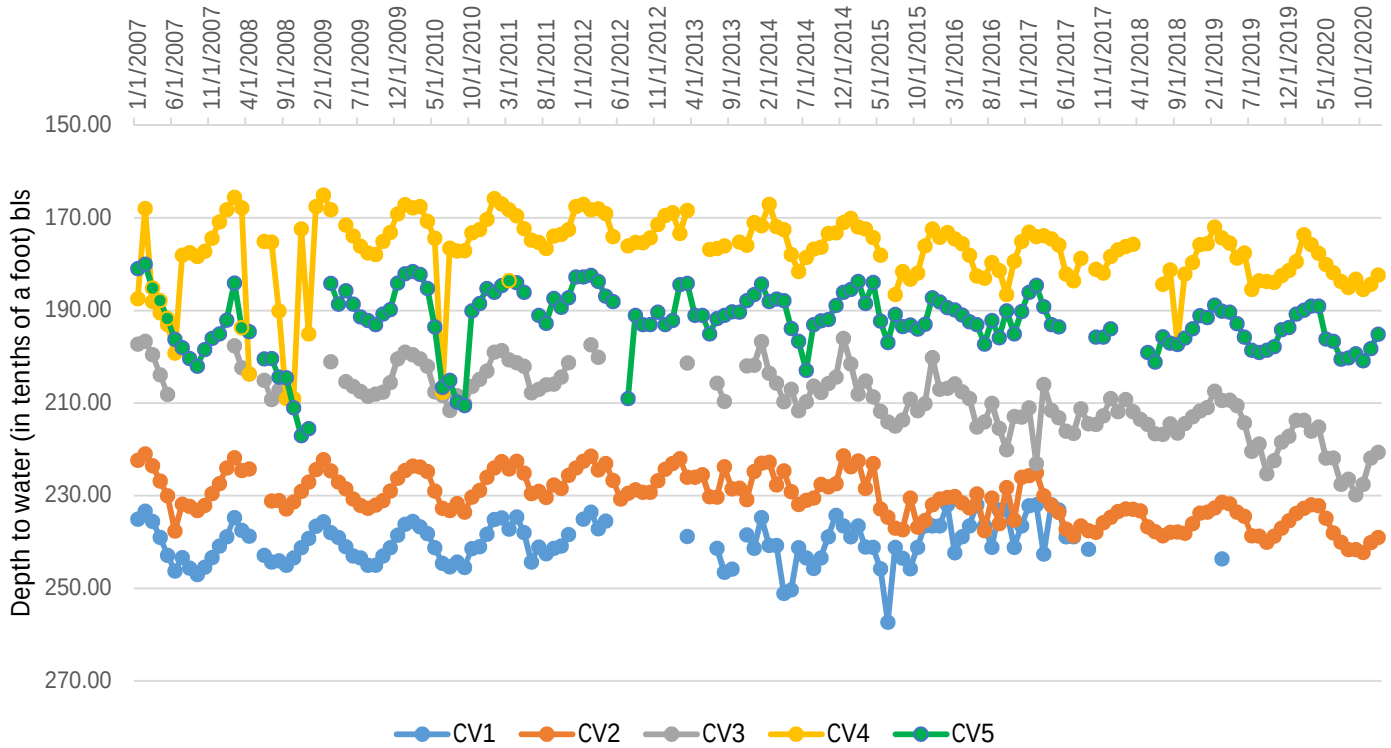
Chino Valley area



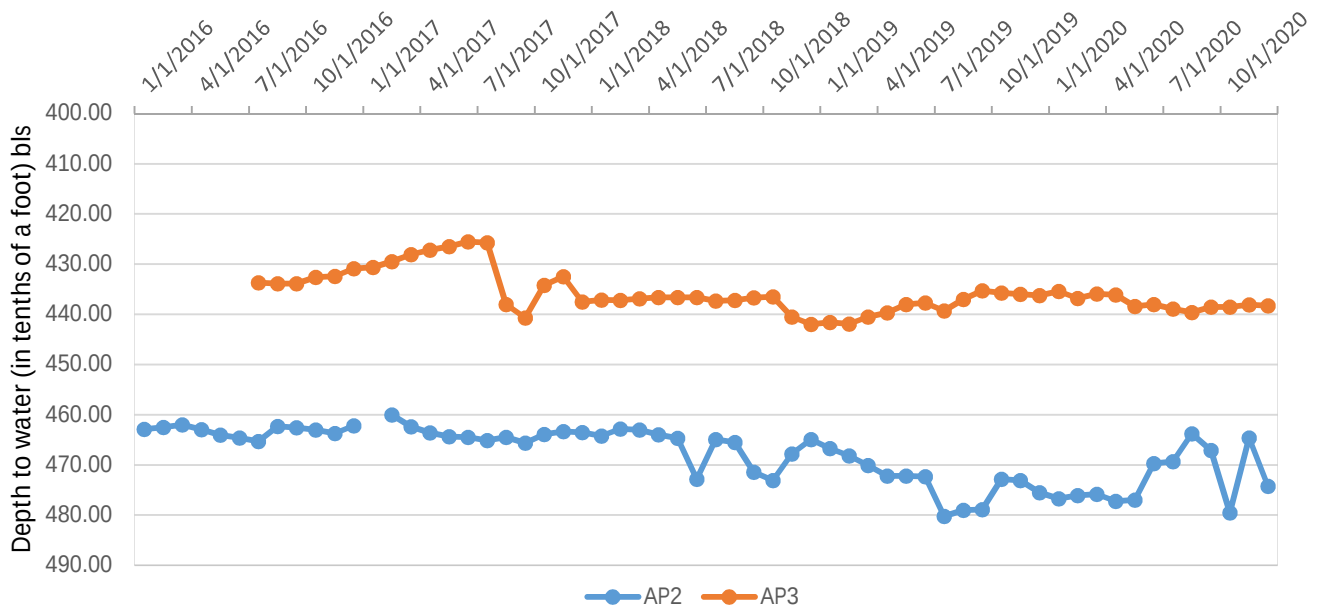
Airport area



Water Levels at City of Prescott Chino Wellfield
January 2007 to December 2020



Water Levels at City of Prescott Airport Area Wellfield
January 2016 to December 2020



**COUNCIL AGENDA MEMO**

MEETING TYPE/DATE: **REGULAR SUBCOMMITTEE MEETING** **03- 2-21**

DEPARTMENT: **Public Works**

AGENDA ITEM: Infrastructure Topic - Pumping vs. Recharge 2021 Update

ITEM SUMMARY

This is a standing item for the Subcommittee agenda that compares pumping from wells to the recharge deliveries at the City's Underground Storage Facility (recharge facility).

BACKGROUND

Every year the City collects daily information on its water and wastewater systems. This data is compiled in various formats and subsequently used to meet Annual Water Withdrawal and Use reporting requirements to the Arizona Department of Water Resources (ADWR).

See attachment for the Calendar Year 2021 pumping vs. recharge graph.

The preliminary total pumped in Calendar Year 2021 (January) is 439.69 AF

The preliminary total delivered to the recharge facility in Calendar Year 2021 (January) is 298.38 AF. This is entirely reclaimed effluent supplies.

FINANCIAL IMPACT

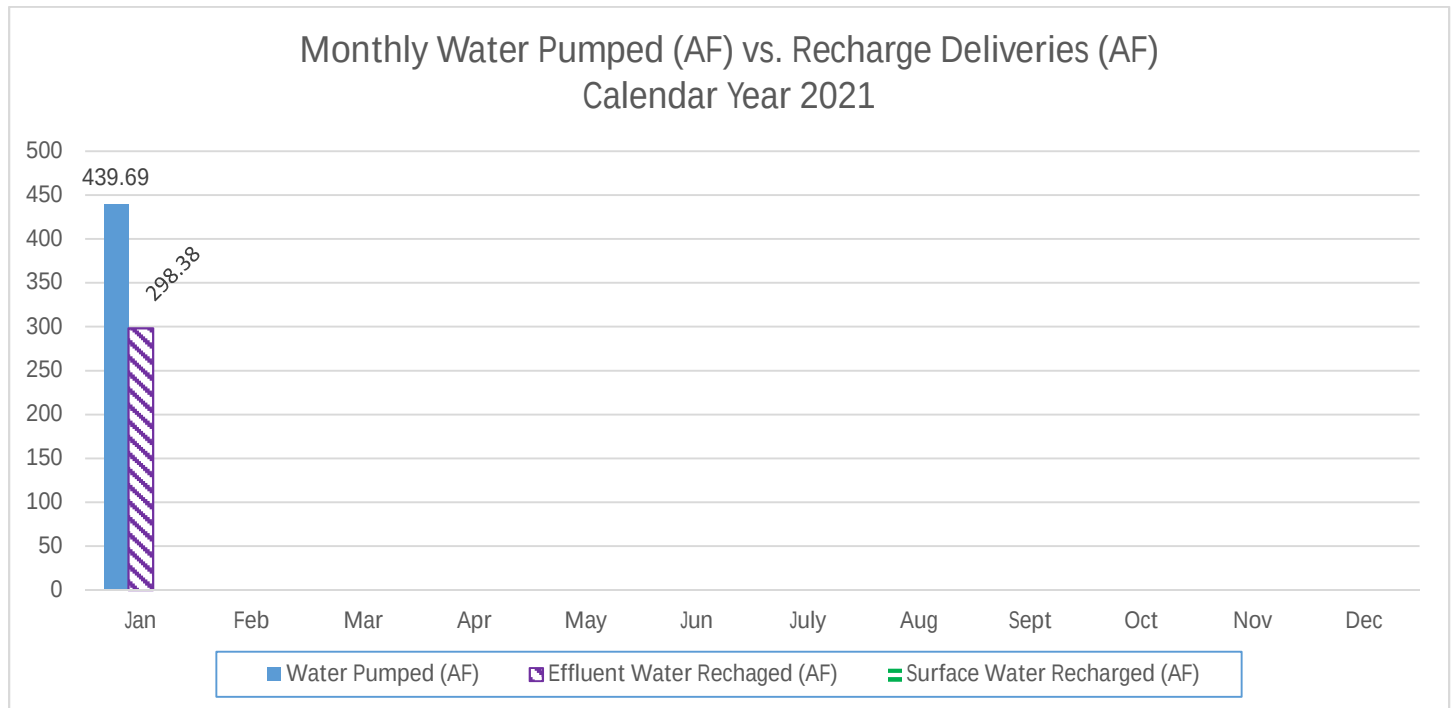
No financial impact is related to this item.

Recommended Action: This item is for discussion only. No formal action will be taken.

ATTACHMENTS

1. [Pumping vs Recharge_2 23 2021.docx](#)

Attachment 1



January total pumped: 439.69 AF

January total delivered to recharge: 298.38 AF (All reclaimed effluent)

Note 1: In accordance with A.R.S. §45-851.01(B), surface water supplies,

*If water is stored pursuant to a water storage permit and its use is based on a decreed or appropriative water right, the approximate recoverable amount of water **stored in a month shall be recovered on or before the last day of the following month or within the same calendar year, whichever is earlier**, unless the water is credited to a long-term storage account as prescribed by section 45-852.01*

Note 2: The City holds a non-recoverable long-term storage account for permanent recharge volumes (City Charter, Article I, Section IV).



COUNCIL AGENDA MEMO

MEETING TYPE/DATE: **REGULAR SUBCOMMITTEE MEETING** **03- 2-21**

DEPARTMENT: **Public Works**

AGENDA ITEM: Northern Arizona Municipal Water Users Association (NAMWUA) and Upper Verde River Watershed Protection Coalition (Coalition) Update

ITEM SUMMARY

The Subcommittee requested bi-yearly updates on groups for which the City has membership and dues. Those two groups are Northern Arizona Municipal Water Users Association (NAMWUA) and Upper Verde River Watershed Protection Coalition (Coalition). Both groups have continued their regular meeting schedules using virtual platforms or meeting in person since March/April 2020.

BACKGROUND

A brief background for each group will be provided with a list of current information from the most recent Board meeting.

The Northern Arizona Municipal Water User's Association (NAMWUA) represents a group of northern Arizona municipalities that cooperate as a collective voice for water policy. Their goal is to work together to develop a sustainable regional water supply. Created in 2002, NAMWUA is managed by an Executive Board of elected officials from 7 northern Arizona municipalities.

NAMWUA Updates

- Board meeting held on January 27, 2021 (agenda attached)
- Councilman Blair continues his leadership role as Secretary/Treasurer
- City membership dues for FY22 (July 1, 2021 to June 30, 2022) are \$4,425.87
- Approved Program Manager Agreement for Calendar Year 2021 with Ron Doba Management Services LLC.
- Next Board meeting will be April 16, 2021 and is currently planned as virtual

The Upper Verde River Watershed Protection Coalition (UVRWPC) is a joint effort among the City of

Prescott, Town of Chino Valley, Town of Prescott Valley, Yavapai County and the Yavapai-Prescott Indian Tribe. Organized in 2007, the coalition is committed to protection of the Upper Verde River base flow while balancing the reasonable water needs of residents who live and businesses that operate within the watershed boundaries.

Coalition Updates

- Board meeting was held on January 27, 2021 (meeting agenda attached)
- Councilman Blair represents the City as a Board Member
- City membership dues for FY22 are \$60,000.00
- Next Board meeting will be April 27, 2021, virtual or in person to be determined.

FINANCIAL IMPACT

The FY22 membership dues have been included in City budget preparations and are subject to Council review and approval in May/June 2021.

Recommended Action: This item is for discussion only. No formal action will be taken.
--

ATTACHMENTS

1. [NAMWUA Board Agenda Packet dated January 15, 2021](#)
2. [Coalition Board Agenda Packet dated January 27, 2021](#)

NORTHERN ARIZONA MUNICIPAL WATER USERS ASSOCIATION AGENDA

BOARD MEETING

January 15, 2021

10:00 AM

The January 2021 board meeting will be a Zoom video conference call due to COVID-19. Please see the following instructions to join:

Please join the meeting from your computer, tablet or smartphone. You can copy and paste the following link into your browser:

Join Zoom Meeting

<https://us02web.zoom.us/j/6160099904>

Meeting ID: 616 009 9904

You can also call in on the following number:

669 900 9128

Meeting ID: 616 009 9904

CALL TO ORDER

As a reminder, if you are carrying a cell phone, electronic pager, computer, two-way radio, or other sound device, we ask that you turn it off at this time to minimize disruption to today's meeting.

1. ROLL CALL:

Chino Valley	Mark Holmes	_____
Clarkdale	Lisa O'Neill	_____
Cottonwood	Tim Elinski	_____
Flagstaff	Becky Daggett	_____
Prescott	Steve Blair	_____
Prescott Valley	Lora Lee Nye	_____
Sedona	Tom Lamkin	_____
Arizona Water Company	Terri Sue Rossi	_____

2. MINUTES

Consideration of Minutes - Board Meeting of October 16, 2020

RECOMMENDED ACTION: Approve the minutes as submitted/corrected.

3. PUBLIC PARTICIPATION

Public Participation enables the public to address the Association about an item that is not on the agenda. If you wish to address the Association during Public Participation please put your name in the chat room and indicate you would like to speak.

If you wish to address the Association at today's meeting on an item that is on the agenda, please put your name in the chat room and indicate you would like to speak on a particular item. Your name will be called when it is your turn to speak.

Please limit your remarks to five minutes per item to allow everyone an opportunity to speak.

4. NON-ACTION ITEMS

- a. Presentation: Waters of Arizona, Proposed Legislation – Bob Hollander, City of Peoria, Environmental Resources Manager**

5. ACTION ITEMS

- a. Consideration of NAMWUA Budget for FY2022 – Ron Doba**
- b. Consideration of Program Manager Agreement for 2021 – Ron Doba**
- c. Consideration of Water Reuse Rules Letter of Support – Erin Young**
- d. Consideration of Insurance for Water Utilities Leadership Forum – Ron Doba**

6. INFORMATIONAL ITEMS

- a. GWAICC Report – Ron Doba**
- b. Water Utilities Leadership Forum Update – Ron Doba**
- c. NAMWUA Meeting Schedule for 2021 – Ron Doba**
- d. Financial Report – Ron Doba**
- e. Informational Items to/from Board and TAC Members**



NOTICE OF PUBLIC MEETING AND AGENDA

UPPER VERDE RIVER WATERSHED PROTECTION COALITION BOARD MEETING

Wednesday, January 27 – 2:00 PM – Webinar

<https://global.gotomeeting.com/join/845352957>

You can also dial in using your phone if your computer does not support voice+audio

United States: [+1 \(571\) 317-3122](tel:+15713173122)

Access Code: 845-352-957

New to GoToMeeting? Get the app now and be ready when your first meeting starts:

<https://global.gotomeeting.com/install/845352957>

ITEM NO 1. *Call to Public (Chairman)*

Consideration and discussion of general unscheduled comments from the public: Those wishing to address the Coalition need not request permission in advance. Any such remarks shall be addressed to the Coalition as a whole and not to any member thereof. Such remarks shall be limited to three (3) minutes unless additional time is granted by the Chair. At the conclusion of the unscheduled comments, individual members of the Coalition may respond to the item addressed at the discretion of the Chair, or they may ask Staff to review the matter or ask that the matter be placed on a future agenda.

ITEM NO 2. Welcome and Introductions (Chairman)

ITEM NO 3. Discussion & Possible Action – Approval of Board Meeting Minutes of October 28th, 2020 (Chairman)

ITEM NO 4. Presentation, Discussion & Possible Action – FY21/22 Budget Proposal and Member Dues

ITEM NO 5. Discussion and Possible Action – Grant Projects

i. Grant Award Updates

- 1. ADWR WMAP Rainwater Harvest/Recharge Grant**
- 2. Regional Conservation Cooperative Partnership Grant**

ii. Other Project Updates

ITEM NO 6. Discussion - Board Communication (Board Members)

ITEM NO 7. Next Meeting Day/Time (April 27, 2021) – Location (?) / Agenda Items (Chairman)

ITEM NO 8. Adjourn Meeting



MINUTES OF THE UPPER VERDE RIVER WATERSHED PROTECTION COALITION
BOARD HELD ON OCTOBER 28, 2020 AT PRESCOTT CITY COUNCIL CHAMBERS
201 S. CORTEZ, PRESCOTT, AZ

Chairman Nye called the meeting to order at 2:00 p.m.

Members Present:

Board Chairman Lora Lee Nye, Prescott Valley Vice-Mayor and Chairman
Peter Bourgois sitting for President Robert Ogo, Yavapai Prescott Indian Tribe President
Board Member Steve Blair, City of Prescott Representative
Board Member Craig Brown; Yavapai County Board of Supervisors

Staff Members:

Leslie Graser, City of Prescott
Tony Angueira, Yavapai County Flood Control District (via web)
John Munderloh, Town of Prescott Valley
Melody Reifsnyder (Sage Consulting)

ITEM NO 1. Call to Public

No Comments

ITEM NO. 2. Welcome and Introductions (Chairman)

Self-introduction by Board Members listed above.

ITEM NO 3. Discussion & Possible Action – Approval of Board Meeting Minutes – May 27, 2020

Moved and Approved with correction to word “and” after Board Member Steve Blair’s name.

ITEM NO. 4. Presentation, Discussion & Possible Action – Board Resolution to Support Bureau of Reclamation Grants (Reifsnyder)

- a. Drought Contingency Plan**
- b. Water Conservation Plan**

Reifsnyder explained the purpose of the two grants. The Drought Contingency Plan would be incorporated as an update to the Coalition’s existing Watershed Management Plan. Some of the Coalition members have separate Drought Contingency Plans, but there is no overall drought strategy for the watershed. Aside from providing a resource in situations of severe drought, the drought plan would make the Coalition eligible for additional grant funding for watershed restoration projects.

Board member motion to approve the plan, seconded and passed.



The Water Conservation Plan project would be an update to a conservation plan that was completed by the Coalition in 2007. The plan would provide guidance on the most effective allocation of Coalition resources to conserve water.

Board member motion to approve the plan, seconded and passed.

ITEM NO 5. Discussion and Possible Action – Grant Projects

i. Bio-coal Co-fire test, Lab Results, Potential Revision to Grant Scope of Work

Reifsnnyder explained that the Juniper Bio-coal test results did not come back as expected. The process used to densify the material was determined be the problem. The original commitment to test-fire the bio-coal at Drake has be revoked. As a result, Reifsnnyder is working with the USDA Forest Service to amend the grant agreement to work with another contractor and facility to test-fire the material.

ii. Grant Project Completion

1. Aquifer Protection Fund (Juniper Silt Dams)

2. Az Dept. of Forestry & Fire Management (Juniper Wattles)

Reifsnnyder stated that the Juniper Silt Dams project funded by the Arizona Water Protection Fund Juniper is completed and we are applying for the reimbursement of costs from the AWPf. Aside from completion of the actual construction, the Coalition was able to add this as an approved practice to the NRCS list of Approved Practices, making this type of project eligible for funding by the NRCS.

Reifsnnyder stated that the purpose of this project, funded by ADFFM, also was included as an approved practice.

iii. Grant Award Updates

1. ADWR WMAP Rainwater Harvest/Recharge Grant

Reifsnnyder stated that the Coalition has been awarded \$65,000 to install rainwater harvesting and aquifer recharge facilities at the Rowle Simmons Adult Center, the Chino Valley Library, and the Territorial School in Chino Valley. These sites provide high visibility to the public. The goal is to incorporate these types of systems as an approved option in future building permits.

2. Regional Conservation Cooperative Partnership Grant

Reifsnnyder stated that the Coalition has obtained \$2.7 Million from the NRCS for implemented the practices just discussed (RW Harvesting, Juniper Wattles, Juniper Silt Dams, etc.) throughout the watershed. Reifsnnyder provided the following PowerPoint summary on the Coalition's past work leading to successful grant award and project implementation.

iv. Other Project Updates

No additional items discussed



UVRWPC Board Meeting
October 28, 2020

Watershed Initiative

- Catalyst for planning across the watershed
- Passed by Executive Board in March 2012



Three Steps

- Planning and Research
- Demonstration
- Broad Implementation



Planning & Research

- Watershed Plan
- Stakeholder Engagement
- Partnership Development
- Scenario Planning
- Wood Supply Study
- Labor Market Analysis
- Biomass Conversion Facility Feasibility Analysis and Technology Review



Demonstration

- Ponse Equipment Demonstration
- Juniper Silt Dams
- Juniper Chip Wattles
- Juniper Chip Wattles with Biochar
- Juniper Bio-Coal
- Rainwater Harvesting for Aquifer Recharge



Broad Application

Regional Conservation Partnership Program

- **Five-Year \$2.7 Million – Optimize Recharge**
- Critical Conservation Area – Water Quantity Primary Resource Issue of Concern
- Alternative Funding Agreement – Financial Assistance, Technical Assistance
- Federal, State and Private Land

Broad Application (cont.)

Regional Conservation Partnership Program

Grant Components

- **Conservation Planning**
 - Arizona Department of Forestry and Fire Management
 - NEPA Completion
 - Archaeological Surveys
- **Practices**
 - Juniper Silt Dams
 - Juniper Chip Wattles
 - Biochar
 - Rainwater Harvesting for Aquifer Recharge
- **Monitoring**
 - Recharge
 - Grassland Rebound
 - Silt Build-Up



Regional Conservation Partnership Program

• **Leverage - \$5.6 million**

- Leverage vs. Match
- Leverage Partners

ADWR	\$313,000
DFFM	\$1,750,000
SRP Comprehensive Agreement	\$779,000
Town of Prescott Valley	\$2,400,000
City of Prescott	\$100,000
Coalition	\$200,000

- Additional Potential Leverage

Grants/Partnership Agreements	
Grant/Agreement	Amount
Yavapai Community Foundation - Website	\$10,000
Sonoran Institute – Scenario Planning	\$10,000
US Bureau of Reclamation – Watershed Plan	\$86,000
Yavapai RAC – Archaeological Survey	\$25,000
USDA/NRCS RCPP – Vegetation Management	\$1,000,000
AZ Div. of State Forestry & Fire Mgmt. (DFFM) – Feedstock Analysis	\$44,000
Arizona Commerce Authority – Labor Market Analysis	\$25,000
DFFM & Arizona Water Protection Fund – Juniper Silt Dams	\$365,000
USDA Wood Innovations – Feasibility Analysis/Bio-Coal	\$194,000
DFFM Sub-Grant/Wood Innovations – Wattles w/Biochar	\$133,000
ADWR – Rainwater Harvesting for Aquifer Recharge	\$65,000
USDA/NRCS RCPP – Optimize Recharge	\$2,700,000
ADWR/GUAC (Various)	\$28,000
NRCS/BOR Partnership Program	\$3,000,000
TOTAL	\$7,685,000

ITEM NO 6. Discussion - Board Communication (Board Members)

Member Brown commented that the Covid cases indicate a new climb is occurring and the County is closing their buildings to appointment only.

Chair Nye commented that she has been asked to remain as a consultant to the Town of Prescott Valley after her elected term expires in December. She noted that she is pleased that this appointment will allow her to remain Chair of the UVRWPC and is honored to continue serving as chair.

ITEM NO 7. Next Meeting Day/Time (January 27, 2021) – Yavapai County(?) / Agenda Items (Chairman)

No additional items discussed.

ITEM NO. 8 - ADJOURN MEETING

Meeting adjourned at approximately 2:40 PM.

UVRWPC Budget Projection		UVRWPC Budget Projection	
for FY 21/22 (July 1, 2021 through June 30, 2022)		for FY 21/22 (July 1, 2021 through June 30, 2022)	
Projected Account Balance - Current Dues		Projected Account Balance w/ Increased Dues	
Dues		Dues	
City of Prescott Dues	\$52,000	City of Prescott Dues	\$ 60,000
Town of Prescott Valley Dues	\$52,000	Town of Prescott Valley Dues	\$ 65,000
Yavapai Prescott Indian Tribe Dues	\$500	Yavapai Prescott Indian Tribe Dues	\$500
Town of Chino Valley Dues	\$2,000	Town of Chino Valley Dues	\$ 17,000
Yavapai County Grant Match	\$40,000	Yavapai County Grant Match	\$ 60,000
Total Projected Income FY 21/22	\$146,500	Total Projected Income FY 21/22	\$202,500
Estimated Committed & Projected Expenses (FY 21/22)		Estimated Committed & Projected Expenses (FY 21/22)	
Grant Match (Direct and In-kind)	\$ 75,000	Grant Match (Direct and In-kind)	\$ 75,000
Water Smart Outreach (Web, RW Harvesting, eWorkbook)	\$ 30,000	Water Smart Outreach (Web, RW Harvesting, eWorkbook)	\$ 30,000
Publication - Communications (Radio)	\$ 3,600	Publication - Communications (Radio)	\$ 3,600
Stakeholder & Public Relations (Newsletter, Press Release, Partners)	\$ 30,000	Stakeholder & Public Relations (Newsletter, Press Release, Partners)	\$ 30,000
Grants Pursuits/Project Management	\$ 50,000	Grants Pursuits/Project Management	\$ 50,000
Various Expenses (Conservation programs, etc.)	\$ 10,000	Various Expenses (Conservation programs, etc.)	\$ 10,000
Miscellaneous tasks	\$ 2,500	Miscellaneous tasks	\$ 2,500
Total Expenses	\$201,100	Total Expenses	\$201,100
Remaining Balance	(\$54,600)	Remaining Balance	\$1,400

**COUNCIL AGENDA MEMO****MEETING TYPE/DATE: REGULAR SUBCOMMITTEE MEETING 03- 2-21****DEPARTMENT: Public Works****AGENDA ITEM: Focus Topic – Draft Issue Brief on Groundwater and the Assured Water Program dated February 11, 2021****ITEM SUMMARY**

The City will review the key points in this draft issue brief which is intended to guide the State's decision-making on water supplies and the possible formulation of regulations for AMA communities post-2025.

BACKGROUND

The Governor's Water Augmentation, Conservation, and Innovations Council was formed by Executive Order No. 2019-002 on January 31, 2019; it is commonly referred to as the Governor's Water Council. This Council formed four (4) working subgroups including the Post-2025 AMA Committee. This Committee has produced an issue brief titled, *Groundwater and the Assured Water Supply Program*. The latest version of this brief is dated February 11, 2021. It will next be reviewed by the Committee has a whole on February 24, 2021, and then proceed to the Governor's Water Council who will meet on March 19, 2021.

FINANCIAL IMPACT

None

Recommended Action: This item is for discussion only. No formal action will be taken.**ATTACHMENTS**

1. [Draft Issue Brief on Groundwater and the Assured Water Supply Program](#)

GROUNDWATER IN THE ASSURED WATER SUPPLY PROGRAM

ISSUE STATEMENT

Large parts of the Active Management Areas (AMAs) remain groundwater-dependent due to a lack of renewable water supplies and infrastructure, which creates uncertainties as groundwater supplies become more limited.

- What are the role and consequences of the use of groundwater to support new growth after 2025?
- What are the risks to homeowners whose physical groundwater supplies may be depleted after the regulatory Assured Water Supply 100-year timeframe?
- What roadblocks prevent access to renewable supplies and infrastructure in these groundwater-dependent areas?

BACKGROUND

The Assured and Adequate Water Supply Program was designed as a consumer protection law and has evolved into a significant tool for sustaining the state's economic health by preserving groundwater resources and promoting long-term water supply planning.¹ The Assured Water Supply (AWS) Rules for the State's AMAs were developed with stakeholder input over many years, ultimately adopted by the Arizona Department of Water Resources (ADWR) in 1995², and subsequently modified over time. The AWS Program provides consumer and economic protection by requiring a demonstration of a 100-year water supply to serve a new development before lots can be sold in the AMAs.

An AWS can be demonstrated through either a Designation of AWS (Designation) or Certificate of AWS (Certificate). To secure either a Certificate or Designation, a 100-year supply of water must be demonstrated to satisfy the needs of the proposed use, either for an applicant subdivision in the case of a Certificate, or for all of the demands within the service area of a water provider who seeks a Designation. The Director of ADWR must review a Designation at least every 15 years to determine whether the Designation should be modified or revoked.³ The Director does not typically reevaluate a Certificate. Landowners also have the ability to apply for an Analysis of AWS to partially satisfy the regulatory criteria, prior to obtaining a Certificate. Analyses are typically used to prove that water will be physically available for master planned communities.⁴ If an Analysis is issued for groundwater, it reserves a specific volume of water for 10 years (for purposes of other AWS reviews) only for the specific development plan or plat that is the subject of the Analysis.⁵

An AWS for either a Certificate or Designation can be demonstrated based entirely or partially on groundwater. Two of the requirements for demonstrating an AWS are that the water for the proposed Certificate or Designation

¹ <https://new.azwater.gov/aaws>.

² The 1995 rules did not include provisions specific to consistency with the management goal of the Santa Cruz Active Management Area (SCAMA), which was created by the Legislature in 1994 (A.R.S. § 45-411.04). AWS rules have not yet been modified to address consistency with the management goal of the SCAMA, and it is not addressed in this Issue Brief.

³ A.A.C. R12-15-711.

⁴ See *Application for an Analysis of Assured Water Supply*, https://new.azwater.gov/sites/default/files/media/AnalysisofAssured_REV%202-20-2020.pdf.

⁵ A.A.C. R12-15-703. Analyses may be renewed in 5-year increments if certain criteria are met. *Id.*

is physically available for 100 years and that the use of the water is consistent with the management goal of the AMA. Physical availability of groundwater is the regulatory measure of an applicant's ability to demonstrate sufficient groundwater for 100 years. To satisfy the physical availability requirement for groundwater, an applicant must show that its groundwater withdrawals would not cause the depth to groundwater to exceed a regulatory limit (1,000 feet below the land surface in the Phoenix, Tucson, Prescott, and Santa Cruz AMAs; 1,100 feet in the Pinal AMA) and would not negatively affect previously issued AWS Determinations⁶ and existing municipal uses.⁷

The requirement that projected groundwater use be consistent with the management goal may be met if withdrawals are made pursuant to the groundwater allowance or through the use of pledged extinguishment credits (which are added to the groundwater allowance balance).⁸ More detail on these types of groundwater withdrawals is provided in the *Unreplenished Groundwater Withdrawals Issue Brief*.

In the Phoenix, Pinal and Tucson AMAs, the requirement that projected groundwater use be consistent with the management goal may also be satisfied if the subdivision or water provider becomes a member of the Central Arizona Groundwater Replenishment District (CAGRD). The Arizona Legislature authorized the CAGRD as a responsibility of the Central Arizona Water Conservation District (CAWCD), which operates the Central Arizona Project (CAP). Since CAWCD encompasses only Maricopa, Pinal and Pima Counties, the CAGRD does not serve the Prescott or Santa Cruz AMAs. The CAGRD replenishes *excess groundwater*⁹ pumped by or delivered to its members, after that volume is annually calculated and reported to the CAGRD. The CAGRD must submit a Plan of Operation every ten years to ADWR for review and approval. The Director of ADWR must determine whether the Plan is consistent with achieving the management goals of the AMAs in CAGRD's service area.¹⁰

ISSUE DESCRIPTION

Even with the benefits that followed the 1980 Groundwater Management Act, there are numerous pressures placed on groundwater in the AMAs, many of which have been identified in the *Unreplenished Groundwater Withdrawals*, *Hydrologic Disconnect*, and *Exempt Wells* Issue Briefs. The AWS Program has been a significant factor in encouraging municipal water providers to reduce groundwater use in the AMAs over the last 25 years. In the context of all the challenges identified by the Post-2025 AMAs Committee, the State should evaluate the AWS Program and consider how it can be improved well beyond 2025. Three main questions related to groundwater use under the AWS Program provide a starting point for evaluating whether the AWS Program could better provide consumer and economic protection and better aid in achieving the AMA management goals.

What are the role and consequences of the use of groundwater to support new growth after 2025?

Under the current regulatory structure, groundwater will continue to be utilized to serve subdivisions that fall under the jurisdiction of the AWS Program. New Certificates or Designations of AWS may utilize groundwater that

⁶ A.A.C. R12-15-701(31): "Determination of assured water supply" means a certificate, a designation of assured water supply, or an analysis of assured water supply.

⁷ A.A.C. R12-15-716 and ADWR Substantive Policy Statement: *Hydrologic Studies Demonstrating Physical Availability of Groundwater for Assured and Adequate Water Supply Applications* (AWS 7).

⁸ A.A.C. R12-15-722. The Groundwater Allowance is a volume of groundwater which may be calculated for each AWS Certificate or Designation according to rules specific to each AMA. See *Unreplenished Groundwater Withdrawals Issue Brief*.

⁹ "Excess groundwater" is any amount of pumped groundwater beyond what is permitted by the AWS rules. With a few exceptions, this generally means the volume of groundwater pumped that exceeds the groundwater allowance and/or extinguishment credits of a CAWS or DAWS. More detail on CAGRD operations is provided in the *CAGRD Issue Brief*.

¹⁰ A.R.S. § 45-576.03.

is consistent with the management goal through the use of Extinguishment Credits, the Groundwater Allowance, or membership in the CAGR. As groundwater uses expand to serve new development, there is a corresponding reduction to the volume of groundwater that exists in the aquifer. In the Phoenix, Pinal, and Tucson AMAs, localized groundwater depletion can be mitigated when replenishment occurs in close proximity to withdrawals.¹¹ Groundwater withdrawals may impact the ability of new AWS applicants to demonstrate physical availability of groundwater. In the Pinal AMA, ADWR modeling shows insufficient groundwater is physically available to meet the demands of previously issued Analyses, Certificates and Designations over the 100-year modeling period. If left unresolved, additional AWS applications using groundwater or stored water recovered outside the area of impact will not be approved.¹² The Prescott AMA faces similar challenges, with an increasingly reduced volume of groundwater physically available for new AWS Determinations.¹³ Other AMAs are also likely to face reduced physical availability of groundwater after 2025.

In addition to curtailing the ability to subdivide lands for new development, continued groundwater reliance may lead to other adverse impacts. Unless steps are taken to reduce or ameliorate impacts of groundwater drawdown, depths to water in the AMAs would decline, resulting in increased land subsidence, decreased aquifer storage, and the potential deterioration of water quality.¹⁴ The degree to which these adverse impacts may occur when groundwater levels fall to depths of 1,000' below land surface is also unknown.¹⁵ ADWR is in the process of updating its groundwater models for the Phoenix and Tucson AMAs, which should provide better projections of the groundwater supplies in these two AMAs.

What are the risks to homeowners whose physical groundwater supplies may be depleted after the regulatory Assured Water Supply 100-year time frame?

While the water demands of all previously issued Certificates or Designations must be incorporated in future AWS applications, groundwater pumping reduces the amount of groundwater available for all existing municipal water providers serving certificated lands or designated service areas through time. These impacts may be more likely to occur where pumping and replenishment or storage and recovery are hydrologically disconnected. Even with an AWS Determination, other factors, including withdrawals from groundwater users not subject to the AWS requirements, may also affect the availability of groundwater supplies during the 100-year regulatory timeframe of an AWS Certificate or Designation. Ultimately, homeowners rely on the water provider for service, with an expectation of consumer protection by local or state government, no matter the status of the AWS.

What roadblocks prevent access to renewable supplies and infrastructure in these groundwater-dependent areas?

¹¹ The CAGR has the flexibility to replenish in various locations to fulfill its replenishment responsibilities but is not required to replenish within the area of impact of its members' groundwater pumping. The CAGR is not responsible for ensuring groundwater physical availability for its members, but rather to maintain its members' consistency with the AMA management goal.

¹² 2019 Pinal Model and 100-year Assured Water Supply Projection Technical Memorandum, October 11, 2019, http://infoshare.azwater.gov/docushare/dsweb/Get/Document-11793/2019_Pinal_Model_and_100-Year_AWS_Projection-Technical_Memorandum.pdf; Pinal Model 2019 Update Presentation, November 1, 2019, Slide 53, https://new.azwater.gov/sites/default/files/20191101_Pinal_Model_2019_Presentation.pdf.

¹³ Prescott AMA 4MP, Section 1.5, page 1-4.

¹⁴ "Ground-Water Depletion Across the Nation." USGS, 2003. [https://pubs.usgs.gov/fs/fs-103-03/JBartolinoFS\(2.13.04\).pdf](https://pubs.usgs.gov/fs/fs-103-03/JBartolinoFS(2.13.04).pdf).

¹⁵ Phoenix 3MP – Section 8.9; Previous scholarship has demonstrated that the 1,000 foot depth limit was not based upon hydrological or technical considerations (see, Rita Pearson Maguire, *Patching the Holes in the Bucket: Safe Yield and the Future of Water Management in Arizona*, 49 Ariz. L. Rev. 361 (2007)).

Groundwater-dependent municipal water providers face obstacles in their ability to acquire renewable water supplies, to become Designated, to extend their existing Designations, or to reduce or eliminate their reliance on the groundwater. There are 276 undesignated municipal water providers in the five AMAs. Since 1999, no undesignated municipal water providers have successfully been newly Designated in the Phoenix AMA, which illustrates the difficulty of building a renewable water supply portfolio and reducing dependence on groundwater.

One of the primary challenges to reducing groundwater reliance is the lack of available renewable supplies. With fewer renewable supplies available for acquisition, competition for those supplies will increase in the future. The 2019 *Long-Term Water Augmentation Options for Arizona* report concluded that, for the most part, Arizona's water augmentation options have already been identified and additional water supplies coming from outside of Arizona are not expected except for the potential opportunity of a desalination project with Mexico.¹⁶ The report also emphasized the importance of working with the water resources we have to meet our future needs.¹⁷

Additional obstacles faced by groundwater-dependent municipal water providers include the lack of institutional structures to facilitate the acquisition of renewable supplies, constraints on the marketability of surface water rights, costs of such supplies, certain restrictions imposed on private utilities by the Arizona Corporation Commission, resistance to and/or limitations on water transfers, obstacles to accessing infrastructure to move renewable supplies, and the AWS Rules, which emphasize the acquisition of permanent renewable water supplies well in advance of actual water use. These obstacles compound an overarching challenge for water providers to finance renewable water supplies, particularly those with smaller customer bases or greater geographical distance from augmentation opportunities. These challenges are even more acute in the Pinal, Prescott and Santa Cruz AMAs.

The recent effort by the Town of Queen Creek to acquire renewable supplies to obtain a Designation and eliminate the replenishment obligation of the CAGR member lands it serves, demonstrates the difficult financial and logistical hurdles municipal water providers face. Understanding the Town's challenges and motivations, as well as those of the City of Buckeye, which has also pursued for years a Designation, could deepen the understanding of these issues and present opportunities for improvement moving forward.

¹⁶ *Long-Term Water Augmentation Options for Arizona*, Prepared for the Long-Term Water Augmentation Committee of the GWAICC by Carollo Engineers, Montgomery & Associates and WestLand Resources, Inc., p. 2, <https://new.azwater.gov/sites/default/files/Long-Term%20Water%20Augmentation%20Options%20final.pdf>.

¹⁷ *Ibid.*