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Planning Commission Staff Report

TO: PLANNING COMMISSION

FROM: ASHLEE MACDONALD, AICP, PRINCIPAL PLANNER *Am*
(480) 503-6748, ASHLEE.MACDONALD@GILBERTAZ.GOV

THROUGH: EVA CUTRO, AICP, PLANNING MANGER *EC*
(480) 503-6782, EVA.CUTRO@GILBERTAZ.GOV

MEETING DATE: DECEMBER 7, 2022

SUBJECT: UP22-66 TOWN OF GILBERT NORTH WATER TREATMENT PLANT: REQUEST TO APPROVE A SPECIAL USE PERMIT FOR APPROXIMATELY 52 ACRES LOCATED AT THE SOUTHWEST CORNER OF HIGLEY AND GUADALUPE ROADS TO ALLOW A WATER TREATMENT FACILITY IN THE PUBLIC FACILITIES/INSTITUTIONAL (PF/I) ZONING DISTRICT.

STRATEGIC INITIATIVE: Strong Environment

To allow for the continued delivery of water to the Town of Gilbert residents and businesses.

RECOMMENDED MOTION

Make the Findings of Fact and approve UP22-66 Town of Gilbert North Water Treatment Plant: Request to approve a Special Use Permit for approximately 52 acres located at the southwest corner of Higley and Guadalupe Roads to allow a water treatment facility in the Public Facilities/Institutional (PF/I) zoning district, subject to conditions.

APPLICANT

Company: Water Works Engineers

OWNER

Company: Town of Gilbert

Name: Benjamin Lee
 Address: 7500 N Dobson Rd. Unit 200
 Scottsdale, AZ 85256
 Phone: 480-744-1374
 Email: benl@wwengineers.com

Name: Jeanne Jensen
 Address: 50 E. Civic Center Dr
 Gilbert, AZ 85296
 Phone: 602-228-5714
 Email: jeanne.jensen@gilbertaz.gov

BACKGROUND/DISCUSSION

History

Date	Description
<i>March 8, 1988</i>	Town Council approved A87-15 (Ord. No. 554) annexing the water treatment plant site into the Town of Gilbert.
<i>February 14, 2007</i>	Design Review Board approved DR07-04 allowing for an expansion of the Water Treatment Facility

Overview

The approximately 52 acre subject site is located south and west of the southwest corner of Higley and Guadalupe Roads and zoned Public Facilities/Institutional (PF/I). The North Water Treatment Plant (NWTP) was initially constructed in 1997. This project proposes reconstruction and expansion of the facility.

The reconstruction of the NWTP, CIP Project WA1589, is a multi-phase, multi-year project that includes the necessary upgrades and expansion to the town's aging water treatment facility to ensure a safe, sustainable, and reliable water supply for Gilbert's residential and commercial customers now and well into the future.

The NWTP treats available surface water to supply customers throughout Gilbert's water system. Gilbert is subdivided into four different pressure zones. Pressure Zones 1, 2, and 4 are supplied by the North Water Treatment Plant and include the majority of Gilbert's water system area.

The facility provides drinking water to most of Gilbert's residents and is also the primary water source for many of the town's commercial districts. It is expected to provide more than 70% of Gilbert's available water supply at build-out.

Surrounding Land Use & Zoning Designations:

	Existing Land Use Classification	Existing Zoning	Existing Use
North	Residential > 1-2 DU/acre	Single Family – 35 (SF-35)	Guadalupe Road then Single Family

South	Residential > 0-1 DU/acre	Single Family – 43 (SF-43)	Tremaine Avenue, then Single Family residential
East	Parks/Open Space	Public Facility / Institutional (PF/I)	Nichols Park/Vacant, then Higley Road
West	Utility/Transportation Corridor and Parks/Open Space	Public Facility / Institutional (PF/I)	Canal, then Riparian Center at Water Ranch
Site	Public Facility / Institutional (PF/I) and Parks/Open Space	Public Facility / Institutional (PF/I)	North Water Treatment Facility and Nichols Park

Project Data Table

Site Development Regulations	Required per LDC
Minimum Building Setback (ft.)	
Front	25'
Side (Non-residential)	15'
Rear (Residential)	20'
Minimum Landscape area (ft.)	
Front	20'
Side (Non-residential)	15'
Rear (Residential)	20'

DISCUSSION

The Gilbert NWTP is located at 2865 East Guadalupe Road. The NWTP treats surface water delivered by Salt River Project (SRP) through the Eastern Canal and is a key part of Gilbert’s drinking water resources.

The complete project site is generally bounded to the north by Guadalupe Road, to the west by SRP’s Eastern Canal, to the south by Tremaine Avenue, and to the east by Higley Road.

There are two primary entrances to the site along Guadalupe Rd and one from Higley Rd. The Town’s Fire Station No. 2 is located on the north side of the facility and has a shared driveway to Guadalupe Rd. The site has a security wall that runs the entire perimeter of the facility. The area located between the east perimeter wall and Higley Rd is also owned by the Town and includes Nichols Park. Nichols Park also serves as a stormwater retention basin for NWTP and offsite stormwater flows.

Since initial construction in 1997 as a 15 million gallons per day (mgd) surface water treatment plant, the NWTP has undergone several expansions that have increased capacity to 45mgd.

The NWTP is undergoing major capital improvements to meet the three primary objectives listed below:

- Address water quality and treatability challenges associated with disinfection byproducts (DBPs) and source water variability.
- Replace and repair existing deficient and failing infrastructure at the end of its useful life.
- Expand the treatment capacity from 45 mgd to 60 mgd and facilitate future capacity expansions.

Although a Special Use Permit is now being sought for the NWTP site, no change is being proposed to the use. The site has been in use as a surface water treatment plant since 1997 and that use will continue upon the project completion.

Staff has made the determination that this use would be considered Utilities Facilities, Large-Scale and Per Land Development Code (LDC) would require a Special Use Permit in the Public Facilities/Institutional (PF/I) zoning district. The Planning Commission is required to make four findings in order to approve a Special Use Permit. The findings are listed here, along with the reasons why staff considers that the findings are or are not met in this case. These findings are:

1. The proposed use will not be detrimental to health, safety, or general welfare of persons living or working in the vicinity, to adjacent property, to the neighborhood, or to the public in general.

The proposed use will not be detrimental to the health, safety, or general welfare of the persons living or working in the vicinity, to adjacent property, to the neighborhood, or to the public in general. In fact, several facility improvements are being implemented to improve water quality and safety. For example, total organic carbon (TOC) concentrations in the NWTP finished water will be reduced, thereby reducing the formation of disinfection by products (DBPs). In addition, low strength sodium hypochlorite (bleach) solutions generated on-site will replace high strength solutions.

2. The proposed use conforms to the purposes, intent, and policies of the General Plan and its policies and any applicable area, neighborhood, or other plan adopted by the Town Council.

Staff has determined the expansion and renovation of the NWTP conforms to the 2020 General Plan's following goals and policies:

GOAL OP-4: Manage our Infrastructure: High quality basic services have been essential to Gilbert's success. The Town's infrastructure assets are valuable and represent generations of investment. They also require continuous maintenance, repair and attention. Today, Gilbert will continue to invest in the Town's long-term infrastructure needs so that the Town can maintain the necessary services and quality of life that residents have come to expect in the future.;

- Policy 67 – Provide safe, reliable water, wastewater and reclaimed systems that support future growth.
- Policy 70 – Support resiliency of all municipal services by identifying potential risks and planning ahead for solutions.
- Policy 72 – Increase efficiency of Town services.

3. The proposed use conforms to the conditions, requirements, or standards required by the Zoning Code and any other applicable local, State, or Federal requirements.

With a valid SUP, the proposed use complies with the Land Development Code standards for the Public Facilities/Infrastructure (PF/I) zoning district. The use shall adhere to any nuisance laws under the Municipal Codes such as, but not limited to, noise and odors.

4. The proposed use, as conditioned, would not unreasonably interfere with the use and enjoyment of nearby properties.

Town staff has not identified any potential negative impacts of the facility and has determined the processes and procedures of the NWTP will appropriately mitigate any external impacts on the surrounding residents and businesses.

5. The proposed location is reasonably necessary to meet the objectives of the proposed use based on technical requirements.

The NWTP has been located on the proposed site since 1997 and is the most appropriate location for expansion and renovation of the plant. Pursuant to the above analysis, Staff is of the opinion that the project meets the four findings required for granting the Special Use Permit.

PUBLIC NOTIFICATION AND INPUT

A notice of public hearing was published in a newspaper of general circulation in the Town, an official notice was posted in all the required public places within the Town and neighborhood notice was provided per the requirements of the Land Development Code Article 5.205.

A neighborhood meeting was held on November 3, 2021, to inform the residents of the project and to answer any questions they might have. Questions from the public were related to funding, water demand, number of employees, impacts to traffic and when construction work will occur.

PROPOSITION 207

An agreement to “Waive Claims for Diminution in Value” pursuant to A.R.S. § 12-1134 was signed by the landowners of the subject site, in conformance with Section 5.201 of the Town of Gilbert Land Development Code. This waiver is located in the case file.

STAFF RECOMMENDATION

Make the Findings of Fact and approve UP22-66 Town of Gilbert North Water Treatment Plant: Request to approve a Special Use Permit for approximately 52 acres located at the southwest corner of Higley and Guadalupe Roads to allow a wastewater treatment facility in the Public Facilities/Institutional (PF/I) zoning district, subject to conditions:

- a. The Project shall be in substantial conformance with the site plan shown on the Exhibits provided under Attachment No. 5.

Respectfully submitted,



Ashlee MacDonald, AICP
Principal Planner

Attachments and Enclosures:

- 1) Findings of Fact
- 2) Notice of Public Hearing/Vicinity Map

- 3) Aerial Photo
- 4) Applicant's Narrative
- 5) Site Plan
- 6) Neighborhood Meeting summary

FINDINGS OF FACT

UP22-66: Town of Gilbert North Water Treatment Plant

1. The proposed use will not be detrimental to health, safety, or general welfare of persons living or working in the vicinity, to adjacent property, to the neighborhood, or to the public in general;
2. The proposed use conforms with the purposes, intent, and policies of the General Plan and its policies and any applicable area, neighborhood, or other plan adopted by the Town Council;
3. The proposed use conforms with the conditions, requirements, or standards required by the Zoning Code and any other applicable local, State, or Federal requirements; and
4. The proposed use, as conditioned, would not unreasonably interfere with the use and enjoyment of nearby properties.
5. The proposed location is reasonably necessary to meet the objectives of the proposed use based on technical requirements.

Notice of Public Hearing

UP22-66 Town of Gilbert North Water Treatment Plant
Attachment 2: Notice of Public Hearing/Vicinity Map

PLANNING COMMISSION DATE:

Wednesday, December 7, 2022* TIME: 6:00 PM

LOCATION: Gilbert Police Department - Amphitheater
75 E Civic Center Dr., Gilbert, AZ 85296

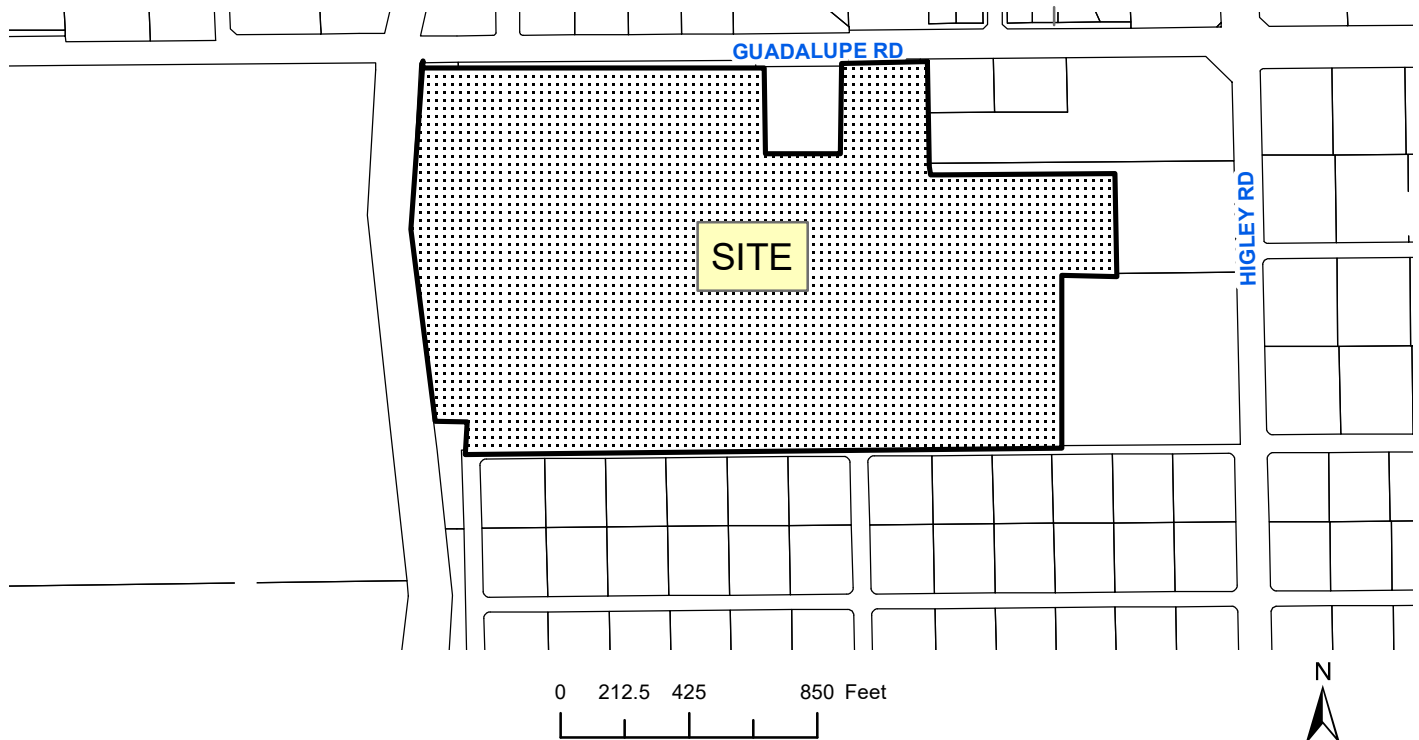
*Call Planning Division to verify date and time: (480) 503-6748

The application is available to the public for review at the Town of Gilbert Planning Division Monday - Thursday 7AM - 6PM. Staff reports and the agenda are available prior to the meeting at www.gilbertaz.gov/departments/development-services/planning/planning-commission

REQUESTED ACTION:

UP22-66 TOWN OF GILBERT NORTH WATER TREATMENT PLANT:
Request to approve a Special Use Permit for approximately 52 acres located at the southwest corner of Higley and Guadalupe Roads to allow a water treatment facility in the Public Facilities/Institutional (PF/I) zoning district, subject to conditions.

SITE LOCATION:



APPLICANT: Water Works Engineers
CONTACT: Benjamin Lee
ADDRESS: 7500 N Dobson RD Unit 200
Scottsdale, AZ 85256

TELEPHONE: (480) 744-1374
E-MAIL: benl@wwengineers.com

UP22-66 Town of Gilbert North Water Treatment Plant
Attachment 3: Aerial Photo

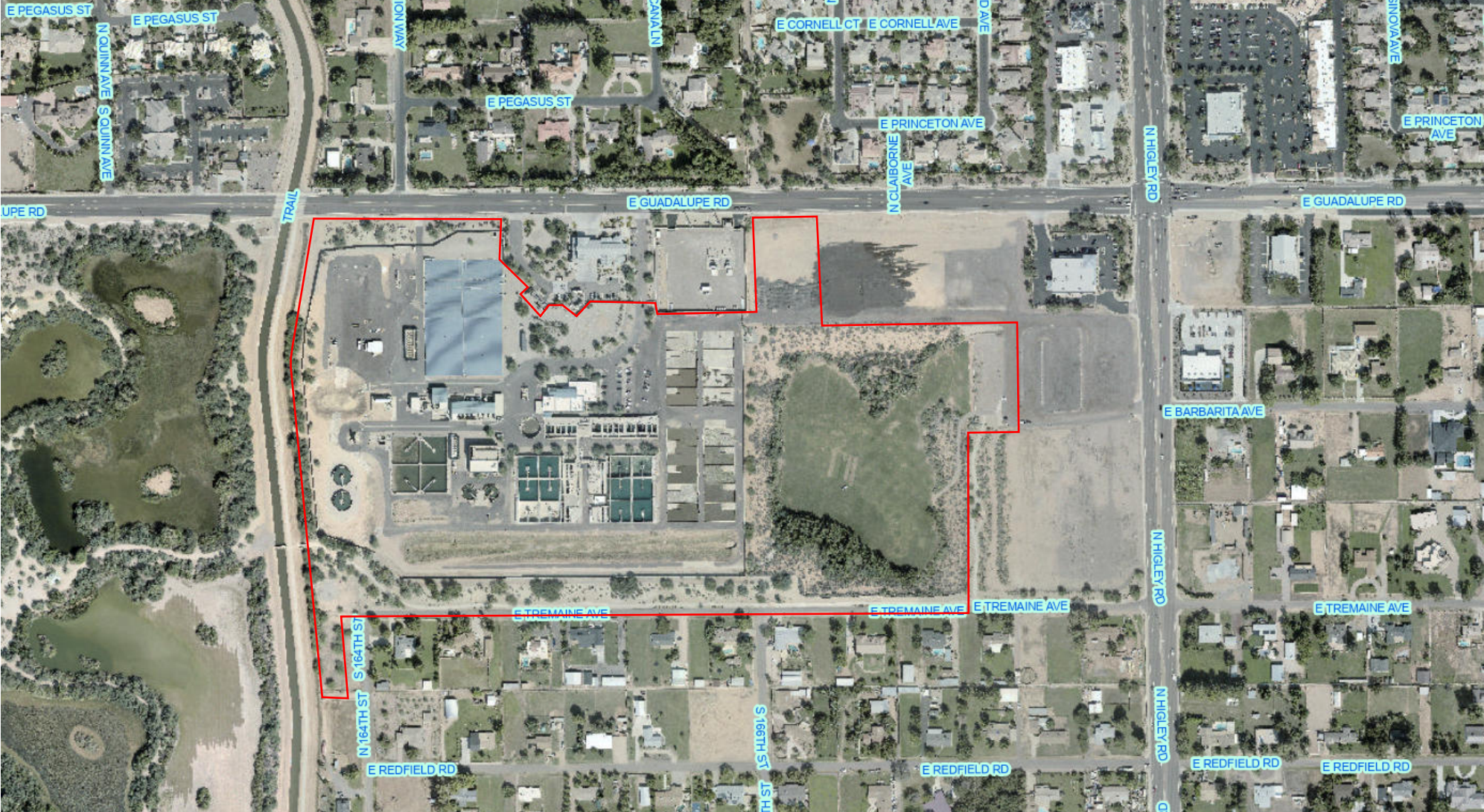
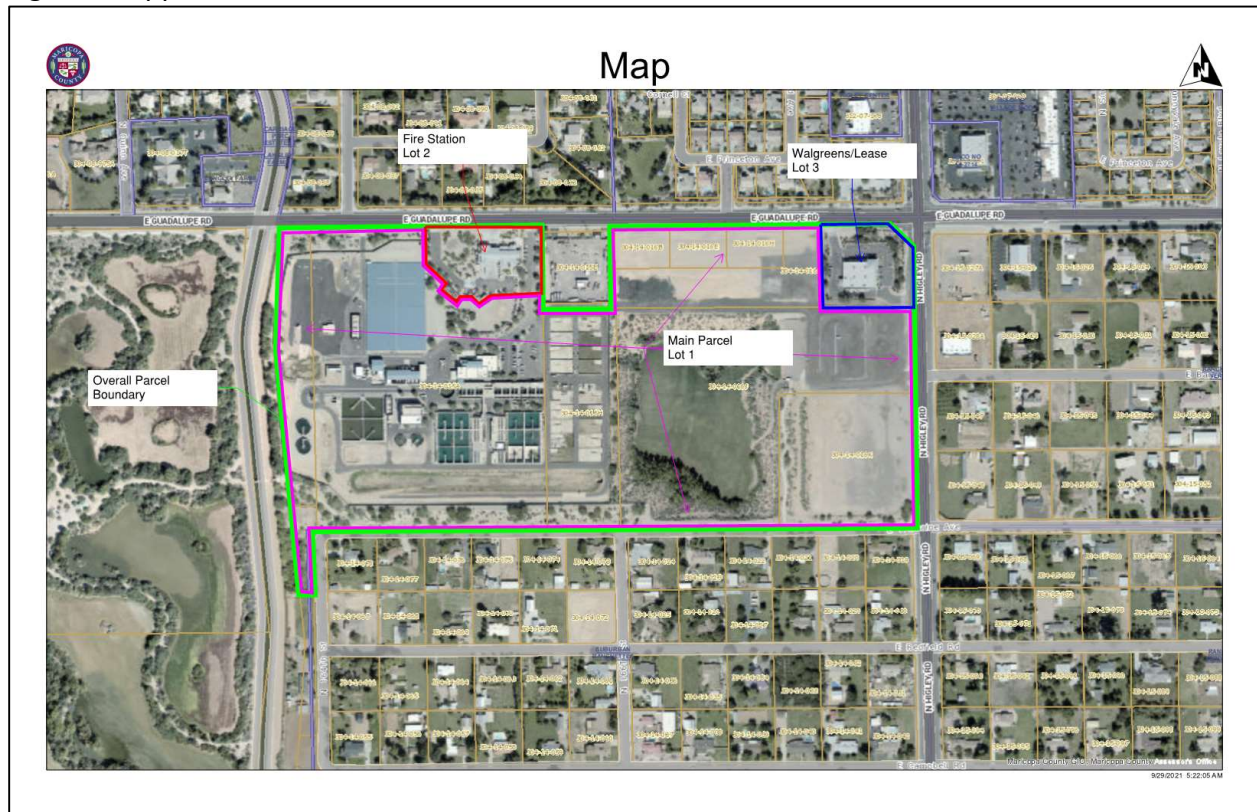


Exhibit 2 Project Narrative

The Town of Gilbert (Gilbert) North Water Treatment Plant (NWTP) is located at 2865 East Guadalupe Road, Gilbert, AZ 85234. The NWTP treats surface water delivered by Salt River Project (SRP) through the Eastern Canal and is a key part of Gilbert's drinking water resources.

The complete project site is generally bounded to the north by Guadalupe Road, to the west by SRP's Eastern Canal, to the south by Tremaine Avenue, and to the east by Higley Road. Gilbert has retained Hubbard Engineering to consolidate existing site parcels into parcels that will generally match the existing Fire Station No. 2, the leased area at the SE corner of Higley and Guadalupe, and the treatment facility and adjacent retention space. These are shown in Figure 1 below:

Figure 1: Approximate Planned Parcel Delineation



There are two primary entrances to the site along Guadalupe Rd and one from Higley Rd. The Town's Fire Station No. 2 is located on the north side of the facility and has a shared driveway to Guadalupe Rd. The site has a security wall that runs the entire perimeter of the facility. The area located between the east perimeter wall and Higley Rd is also owned by the Town and includes Nichols Park. Nichols Park also serves as stormwater retention basin for NWTP and offsite stormwater flows.

The NWTP was originally constructed in 1997 as a 15 million gallons per day (mgd) surface water treatment plant. Since then, the NWTP has undergone several expansions that have increased the capacity to 45 mgd. The NWTP is undergoing major capital improvements to meet the three primary objectives listed below:

- Address water quality and treatability challenges associated with disinfection byproducts (DBPs) and source water variability.
- Replace and repair existing deficient and failing infrastructure at the end of its useful life.
- Expand the treatment capacity from 45 mgd to 60 mgd and facilitate future capacity expansions.

Although a Special Use Permit is now being sought for the NWTP site, no change is being proposed to the use. The site has been in use as a surface water treatment plant since 1997 and that use will continue upon the project completion.

To meet the objectives described previously, a number of new treatment facilities are required. Various site layouts were considered during the preliminary design phase and two primary strategies are used to mitigate potential impacts to adjacent properties.

1. The first strategy is to introduce mechanical dewatering of the treatment residuals. Currently, the NWTP utilizes solar drying beds for dewatering, which utilize a large area on the east side of the site. By constructing a mechanical dewatering facility, the area used for solar drying can be repurposed for the construction of required treatment facilities. This significantly reduced the amount of area that the plant had to be expanded into Nichols Park.
2. The second strategy is to locate the new pre-sedimentation basins in the area of the existing final sedimentation basins and existing filters. This requires an extended construction timeline to commission the new treatment processes fully, then decommission and demolish existing structures to make room for the pretreatment basins. Other layouts would substantially alter the southern fence line, impacting residents and trail users.

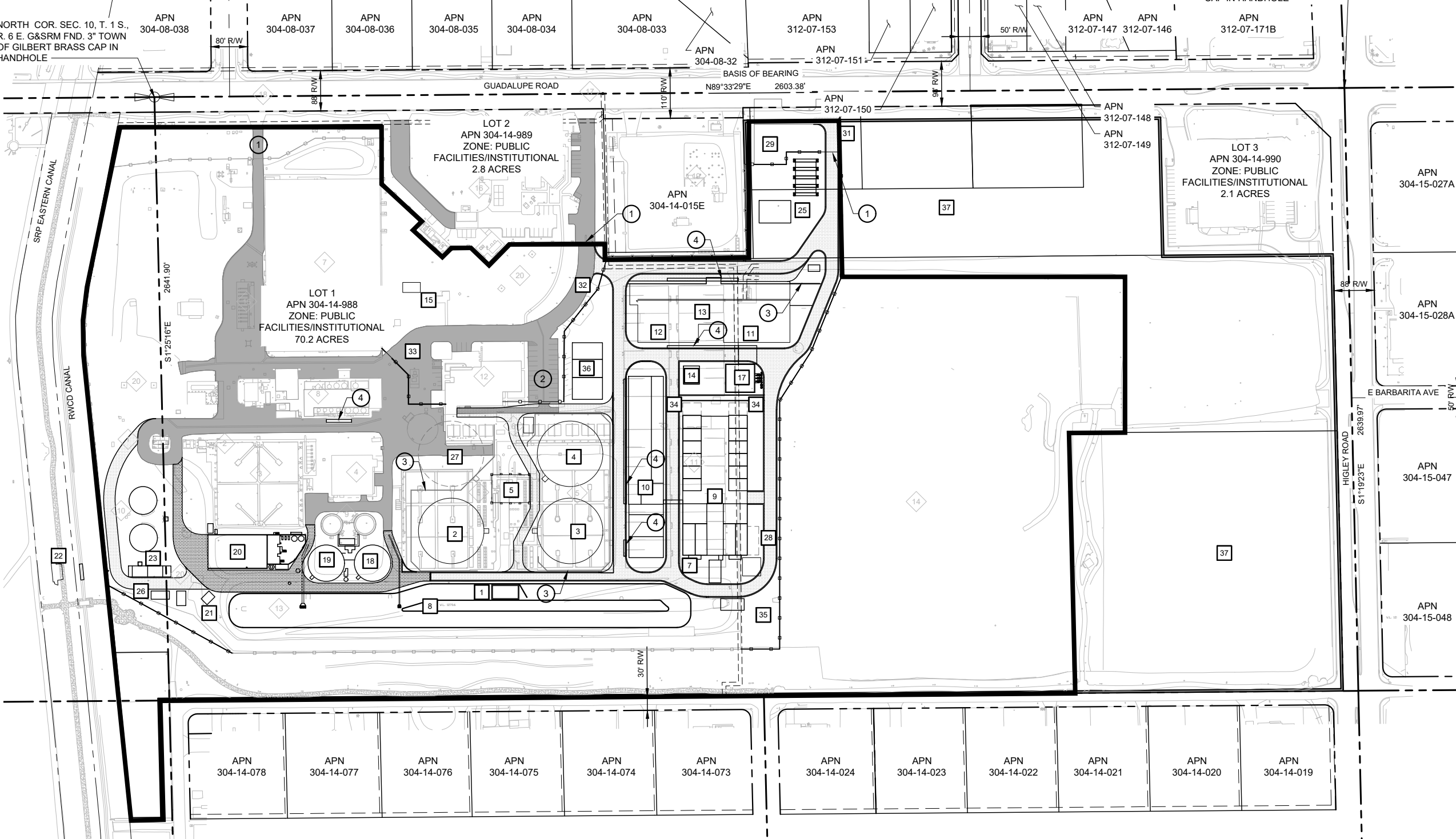
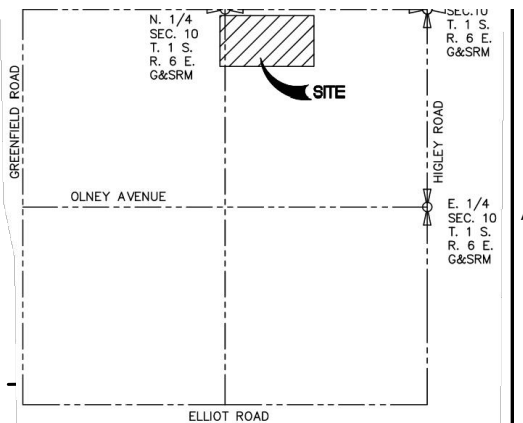
The 2020 General Plan designates the area of the NWTP and Nichols Park as Public Facilities/Institutional (PF/I). This classification designates areas for public and quasi-public ownership, including water treatment plants. Based on this, the use complies with the General Plan and Zoning requirements.

The proposal meets the four (4) Findings of Fact as follows:

1. The proposed use will NOT be detrimental to the health, safety, or general welfare of the persons living or working in the vicinity, to adjacent property, to the neighborhood, or to the public in general. In fact, several facility improvements are being implemented to improve water quality and safety. For example, total organic carbon (TOC) concentrations in the NWTP finished water will be reduced, thereby reducing the formation of disinfection by products (DBPs). In addition, low strength sodium hypochlorite (bleach) solutions generated on-site will replace high strength solutions.
2. As stated previously, the proposed use conforms with the purposes, intent, and policies of the General Plan.

3. As stated previously, the proposed use conforms with the conditions, requirements, or standards prescribed by the Zoning Code.
4. As stated previously, the proposed use remains unchanged and does NOT unreasonably interfere with the use and enjoyment of nearby properties.

- # EXPANDED NWTP FACILITIES
1. PREMIX STRUCTURE
 2. PRESEDIMENTATION BASIN NO. 1
 3. PRESEDIMENTATION BASIN NO. 2
 4. PRESEDIMENTATION BASIN NO. 3
 5. PRESEDIMENTATION PUMP STATION
 6. NOT USED
 7. LOW LIFT PUMP STATION NO. 1
 8. EMERGENCY RETENTION BASIN NO.1
 9. BALLAST/OZONE/FILTER FACILITY
 10. CHEMICAL BUILDING
 11. BACKWASH PUMP STATION
 12. GAC LOW LIFT PUMP STATION
 13. GAC FACILITY
 14. GAC ELECTRICAL BUILDING
 15. BLENDED WATER FLOW METERING AND SPLITTER STRUCTURES
 16. NOT USED
 17. RECOVERED WATER BASIN
 18. GRAVITY THICKENER NO. 2
 19. GRAVITY THICKENER NO. 1
 20. SLUDGE DRYING BED AND BELT FILTER PRESS AREA
 21. OZONE PIPELINE CONTACTOR SIDESTREAM INJECTION
 22. SOUTH INTAKE STRUCTURE
 23. SCREENING FACILITY
 24. NOT USED
 25. ELECTRICAL BUILDING/GENERATOR
 26. SCREENING FACILITY ELECTRICAL BUILDING
 27. FUTURE PRESEDIMENTATION BASIN
 28. BALLASTED FLOCCULATION SYSTEM EXPANSION
 29. SANITARY SEWER ODOR CONTROL (SEPARATE TOWN PROJECT BY OTHERS)
 30. NOT USED
 31. GUADALUPE ROAD SECONDARY ENTRANCE NO. 3
 32. TREATMENT AREA ENTRANCE NO. 4
 33. TREATMENT AREA ENTRANCE NO. 5
 34. FUTURE FILTER EXPANSION
 35. LOW LIFT PUMP STATION NO. 1 ELECTRICAL BLDG
 36. SODIUM HYPOCHLORITE (SHC) BUILDING
 37. STAGING AREA



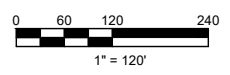
VICINITY MAP
NTS

- KEY NOTES:
- 1 SITE ACCESS.
 - 2 PARKING SPACES.
 - 3 RETAINING WALL.
 - 4 LOADING AREA.

- GENERAL NOTES:
1. ROADS ARE DESIGNED FOR WB-50 TYPE TRUCK ACCESS WITH 20.5 FT TURNING RADIUS.

- # EXISTING NWTP FACILITIES
1. BAR SCREEN
 2. METERING STRUCTURE
 3. PRE-SED BASINS
 4. OZONE
 5. FINAL SED BASINS
 6. FILTERS
 7. FINISHED WATER RESERVOIRS
 8. CHEMICAL BLDG
 9. THICKENERS
 10. WASH WATER CLARIFIERS
 11. SOLAR DRYING BEDS
 12. ADMINISTRATION BLDG
 13. EMERGENCY RETENTION BASIN
 14. NICHOLS PARK BASIN
 15. FINISHED WATER PUMP STATION
 16. FIRE DEPARTMENT BLDG
 17. GUADALUPE RD MAIN ENTRANCE NO. 1
 18. GUADALUPE RD MAIN ENTRANCE NO. 2
 19. SRP POWER SUBSTATION
 20. EXISTING ONSITE STORM WATER RETENTION BASINS

- SECTION LINES
- PROPERTY LINES
- SETBACKS
- 8" SOLID MASONRY WALL
- EXISTING LINES
- PROPOSED LINES
- SITE BOUNDARY



KEY PLAN
1" = 120'

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

NO.	DATE	REVISION	BY	APVD

DESIGN: RZ
DRAWN: GR
CHECKED: RZ
APPROVED: JM

WATERWORKS ENGINEERS



NWTP FACILITY UPGRADES AND RECONSTRUCTION

CIVIL	DATE: NOV 2022
SITE PLAN	PROJECT NUMBER: 20-060 GMP 1
	DRAWING NUMBER: C-A-100
	SHEET:
	SHEET NO. ## OF



UP22-66 Town of Gilbert North Water Treatment Plant Attachment 6: Neighborhood Meeting Summary

Neighborhood Meeting

Please join us at a neighborhood meeting to learn about a project near you:

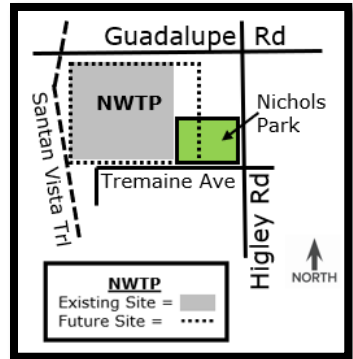
Wednesday, Nov. 3, 2021

**5 – 6:30 p.m. (Open house at 5 p.m.
with presentation at 5:30 p.m.)**

**Southeast Regional Library,
775 N. Greenfield Rd, Gilbert**

Gilbert's North Water Treatment Plant (NWTP) is being reconstructed as an improved, expanded facility to serve the current and future water needs of Gilbert residents and businesses.

Gilbert is applying for a Special Use Permit for the site's existing use. The future site will include part of Nichols Park and during construction, the entire park will be closed for construction staging and storage. Construction is expected to begin in Spring 2022.



Project Info: 480.898.4090 | [GilbertAz.gov/CIP](https://gilbertaz.gov/CIP)



North Water Treatment Plant (NWTP) Expansion – WA1589 Neighborhood Meeting

Southeast Regional Library, 775 N Greenfield Rd, Gilbert
Wednesday, November 3, 2021

Six participants arrived at the meeting and signed in. Jeanne Jensen, Town of Gilbert Project Manager provided an overview on the North Water Treatment Plant. Participant questions/comments are bulleted and responses by project team members are preceded with an "A":

- Is the project already funded? A: Yes, it's in the capital improvement budget and the rest is in the next funding year.*
- Earlier you said the current facility handles 45 million gallons per day (mgd) serving 140,000 residents and that will increase to 60 mgd serving 250,000 residents. How can only 15 mgd serve that many more? A: The new design is much less water intensive. We have a good understanding of how additional properties will impact the water demand.*
- There seems to be a lot of apartment complexes. When you're approving these massive units do you take water use into consideration? A: It's counter-intuitive but each individual in an apartment uses less water than one person in a single-family home. In a home, there are more uses like landscape watering than there are in an apartment. Additionally, complexes use improved design such as low-flow shower heads. So, yes, we do look at that, and it has to be discussed.*
- My only concern is that down the road, water will be gone because of all the other uses. A: We are updating our Water Master Plan now and we refresh the plan every five years. Water in Arizona is extremely important and a valuable, a vital resource.*
- How many people work at the facility now versus after the expansion? A: It won't be a substantial increase, only one to two FTE total. There are twelve people there around the clock currently.*
- What will the work do to traffic over the next five years? A: There will be traffic from workers as well as hauling activities, so southbound on Higley in the mornings and northbound in the afternoons. For the workers and hauling, there will be right-in and right-out restrictions.*
- Will work be Monday through Friday? A: The haul permits include restrictions in hours to off-peak and we prefer Monday through Friday. There will likely be some concrete pours for several hours straight, however.*
- Our HOA uses the park quite a bit so I'll need to advise the residents that there will be a lot of activity. I have some concerns since there are 150 residents in our HOA. A: We will limit the access to right-in and right-out and it is our intention to sign it for that.*

- *Will the tree lot move? A: No, it is our intent to leave it open, but we will revisit it as necessary.*
- *For funding, was it included in the recent bond that passed? A: No, this is from the water fund, this is capital reserve funds.*
- *Will the water taste better than now? A: It likely won't change, while it's filtered, there is still chlorine so there may be a chlorine taste still.*

Jeanne thanked the participants for attending, and asked that they take time to view the exhibits and feel free to ask questions of project team members. In addition, she reminded participants that comment forms are provided for their feedback. The presentation ended.

