



City of Phoenix
OFFICE OF THE CITY MANAGER

January 16, 2024

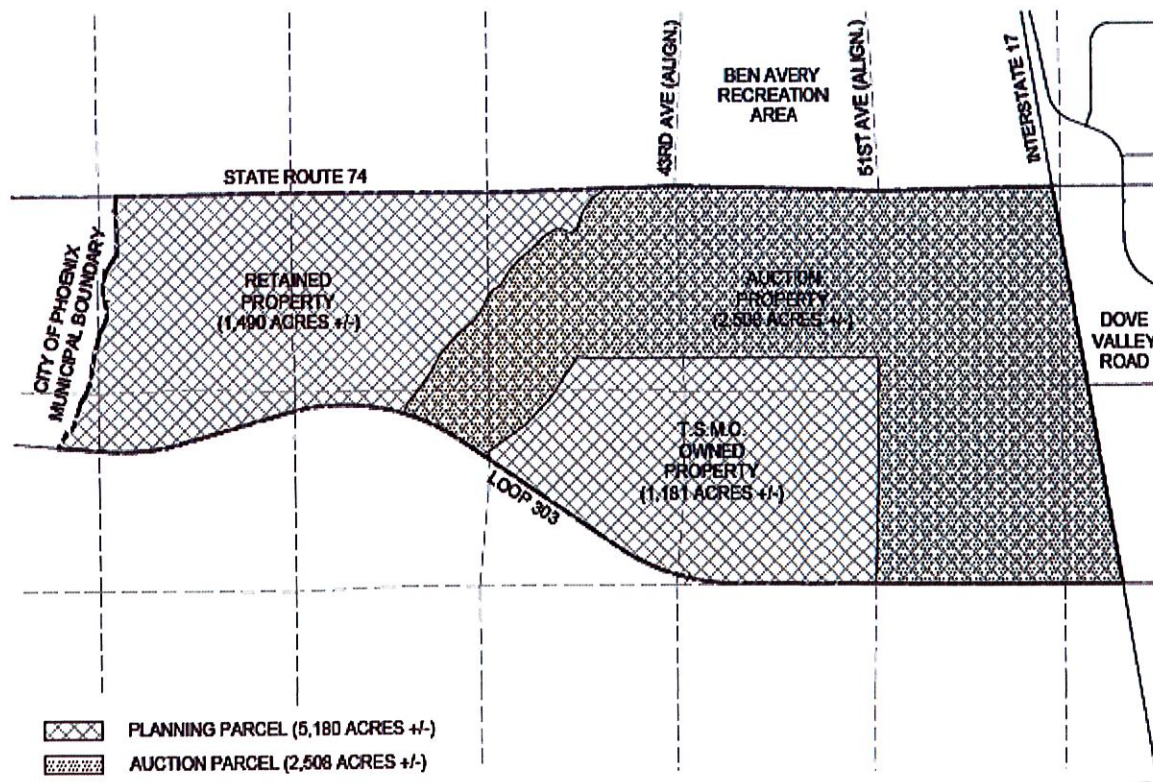
Mr. Mark Edelman, AICP
Executive Consultant, Urban Development
Arizona State Land Department
1616 West Adams Street
Phoenix, AZ 85007

RE: Infrastructure Assessment Study for Sonoran Oasis Tech Park (aka Biscuit Flats North)

Dear Mr. Edelman:

Thank you for the opportunity to comment on your request for information regarding the infrastructure assessment study.

The auction and retained properties are depicted in the exhibit below and is generally described as ± 3998 gross acres located between State Route 74 (Carefree Highway) and Loop 303 to the north and south and I-17 and the City's limits to the east and west. The requirements outlined in this letter only apply to the approximately 2,508-acre auction property shown below with a western boundary of Dead Man's Wash. ASLD has stated that a future infrastructure request letter will be sent for the Retained Property.



GENERAL COMMENTS

Disclaimer:

The Infrastructure Assessment Study (IAS) cannot be construed as meeting the City's requirements for any infrastructure master plans, phasing plans, or funding plans including water, wastewater, streets, and storm drainage, for the proposed development. Additionally, any information contained within the IAS and any comments provided by the City regarding the IAS does not imply agreement with the IAS. Finally, the IAS includes the auction property and the retained property. This letter is focused on the auction property and a future ASLD requested infrastructure letter will be needed for the retained property.

Zoning:

The site is zoned PUD (Planned Unit Development). The approval of Rezoning Case No. Z-37-20 (North Phoenix 3,500 PUD) established the PUD zoning on the property, subject to stipulations. The entire PUD Development Narrative can be accessed at the following link, <https://www.phoenix.gov/pddsite/Documents/PZ/Z-37-20n.pdf>. The zoning allows for a broad range of uses that make it difficult to pre-determine infrastructure requirements until after property auction, and further master planning and infrastructure phasing are known.

Development Impact Fees and other System Development Charges:

Development impact fees and other system development charges apply to this property. For more information contact the City of Phoenix Planning and Development, Growth and Infrastructure Section at: impactfees@phoenix.gov with any questions about the City's Development Impact Fee program or other system development charges collected by the City to pay for necessary infrastructure to serve new development. The City is beginning the process to update the required impact fees and that update will likely be in effect prior to development on the auction property.

FIRE DEPARTMENT

A future fire station will be required in the area of SR 74 and 59th Avenue, within the Retained Property when it develops. Additional fire stations may be required depending on development type and service demands.

PARKS DEPARTMENT

Dead Man's Wash should be dedicated to the City as preserve lands to include sufficient land to construct a trail outside of the wash bottom. Any needed work to reclaim Dead Man's Wash land from the Floodplain should coordinate with City preservation efforts, and any bank reinforcement efforts to reclaim land will need to be approved by the Planning and Development and Parks and Recreation departments. Any land dedicated to the City for part of the Sonoran Preserve that has wash bank reinforcement, must also include liability and maintenance agreements so the City is not negatively impacted by development of the reclaimed land.

STREET TRANSPORTATION DEPARTMENT

The following are Street Transportation Department (STD) comments on the Infrastructure Assessment Study (IAS) for Sonoran Oasis Tech Park, specifically the "Auction Property," as depicted on the RVI exhibit above and prepared for Arizona State Land Department and Biscuit Flats Dev LLC. The STD comments are general (high level) in nature and reflect only elements related to street infrastructure. Specific development proposals, along with required Traffic Impact Studies (including regional improvements), and Development PCD Master Plans will provide further clarity on specific required infrastructure improvements, phasing and financial contributions to area and/or regional Street improvements.

Auction Property:

Rezoning Requirements of G-Ordinance 6756 for Z-37-20 PUD (Nos. 1-4):

1. Developer shall dedicate and construct all right-of-way and roadways per the approved master street plans, as modified and approved by the Street Transportation Department and the Planning and Development Department. All public roadways within the PUD shall be identified by future agreements to determine applicable funding responsibilities associated with infrastructure improvements.
2. The applicant shall submit a Traffic Impact Study (TIS) to the City for each Development Unit, or as modified by the Street Transportation Department. No preliminary approval of plans shall be granted until the study is reviewed and approved by the City of Phoenix Street Transportation Department. Upon completion of the TIS the developer shall submit the completed TIS to the Planning and Development Department counter with instruction to forward the study to the Street Transportation Department Development Coordination Section.

Please Note: Development shall be responsible for any regional infrastructure and signal funding, construction or contribution of funds as required by the approved Traffic Impact Study. Improvements may expand beyond the project site boundary.

3. The developer shall submit Master Street Design and Phasing Plans for each Development Unit as required by the Planned Community District (PCD), Section 636 of the Phoenix Zoning Ordinance, or as modified by the Street Transportation Department and Planning and Development Department.
4. The developer shall construct all streets within and adjacent to the development with paving, curb, gutter, sidewalk, curb ramps, streetlights, landscape median islands, landscaping and other incidentals, as per the Master Street Plans and as modified and approved by the Planning and Development Department. All improvements shall comply with all ADA accessibility standards.
5. Due to size of the North 3,500 PUD, the PUD includes guidelines and requirements for Master Planning and Infrastructure funding process in Section 9: Master Planning and Administration of the PUD (Page Nos. 29-32).

- The “Conceptual Master Plan” exhibits in the Approved PUD including Development Unit Plan, Vehicular Circulation Plan, Pedestrian Circulation, Facilities Plan and Traffic are conceptual and hold no merit and are subject to complete modification based on development plans, Traffic Studies and Master Plans that are reviewed and approved by the City of Phoenix.
 - The PUD identifies “Phase 1 Development” as the TC-A Development Unit. Any proposal outside of TC-A shall be required to follow the “Subsequent Phase/Parcel Development Process” (PUD; Process Flow Chart, Page 31).
 - The first developer within a Development Unit of the “Auction Property” will be required to identify infrastructure necessary to serve the development where needed or appropriate, sized to facilitate service to adjacent Development Units. (PUD; Development Unit and Functional Segment Master Plans, Page 30).
6. In addition to Master Plans, the developer shall provide the following information related to Street Transportation Department Infrastructure for the Development Unit **prior to** the first preliminary site plan approval within the Unit.
- Identification of roadway classification and identification of arterial and collector street network alignments.
 - Roadway construction and tapers (interim and ultimate)
 - Phasing Plan
 - Intersection location and design
 - Traffic signal locations and funding responsibility
 - Utility corridors and relocations
 - Transmission line corridors outside of right-of-way
 - Drainage crossing and locations, identification of constructed infrastructure (i.e. bridges and culverts)
 - Access control and median island locations (interim and ultimate)
 - Street Infrastructure should consider the Northwest Valley Conceptual Transportation Study.

(See PUD; Section 9b. Street Transportation, Page 31)

7. In addition to Master Plans, the initial development within a Development Unit will be required to provide a Conceptual Infrastructure Phasing Plan for the “Auction Property” in its entirety that includes:
- Summary of deficiencies of existing infrastructure as it relates to the project.
 - Summary of infrastructure demand as it relates to the project.
 - Summary of infrastructure improvements needed to support the project.
 - Estimates of infrastructure improvement costs associated with infrastructure improvements needed to support the project with costs broken down into individual phases.
- In addition to the above list, the developer will be required to submit for approval to the Planning and Development Department Director an Infrastructure Funding Plan. The Infrastructure Funding Plan will be provided for the entire “Auction Property” that describes how **all** infrastructure will be financed and then eventually funded from relevant sources including but not limited to developer contributions, impact fees, special districts, City contributions, contributions from other government agencies, or any other sources. This plan should identify any remaining infrastructure costs that have not been covered by a commitment by the City or other government agency and allocate those costs to specific parcels according to an infrastructure sequencing plan that corresponds with the timing specified in the Master Development Plan, the

Development Unit Phasing Schedule, and the relevant Street, Landscape, Water, Wastewater, Drainage or other master plan.

(See PUD; Section 9c. Infrastructure, Pages 31 and 32)

- In addition to the above: The infrastructure Funding Plan will include the ASLD “Retained Property” to identify regional contribution from the “Auction Property” for the construction of Dove Valley Road crossing “Dead Man’s Wash” between the “Auction Property” and “Retained Property”.
8. Development to dedicate and construct the ultimate roadway cross section for:
- Carefree Highway
 - Dove Valley Road
 - 43rd Avenue
 - 51st Avenue
 - Note: Development is responsible to construct the 51st Avenue roadway crossing of the existing drainage channel along the north side of Dove Valley Road.
- Minimum dedications shall be consistent with street cross section “A” as show on the City Council adopted Street Classification Map. Additional dedications for flared intersection shall be required. Additional dedications for roadway capacity shall be provided dependent on the results of the approved TIA. No preliminary approval of development plans may be granted until a TIA and associated Master Street Plans have been approved.
9. Development to dedicate and construct collector roads to the ultimate cross section as identified in the approved Traffic Impact Study and Master Street Plans. Collector roadway are generally located every half mile within every quarter section (between arterial roadways). No preliminary approval of development plans may be granted until the TIA and Master Street Plans have been approved.
10. Development to coordinate with the Arizona Department of Transportation and submit a Traffic Impact Study to address impacts to Traffic Interchanges (TI’s) capacities dependent on proposal. Development will be responsible for all dedication, construction and cost associated to capacity needs and improvements.
11. Developer shall be required to provide additional dedication for any applicable slope and drainage easements.
12. All public sidewalks are required to be detached and shaded a minimum of 75% with shade trees located along both sides of the sidewalk. (See PUD Section 5e. Pedestrian Circulation, Pages 18 and 19).
13. Future access control shall be in conformance with the City of Phoenix Street Planning and Design Guideline Manual.
14. Development is responsible to establish phasing and funding responsibility between the “Auction Property” and “Retained Property” for the ultimate 100-year storm event dry crossing of Dead Man Wash to its full limits and contribute funding to help cover the eventual bridge improvement.

15. Development will be responsible for acquiring any applicable rights-of-way or access easements needed for maintenance of roadway bridges and/or culverts.
16. Development to perform applicable environmental and archeological clearances on all stipulated right-of-way or easements prior to dedication to the city.
17. In accordance with City Council Resolution 22048, development is responsible for addressing project impacts on Sonoran Desert Drive through an expanded Traffic Impact Analysis and provide a level of compensation proportionate to the identified impacts to the Corridor.

FLOODPLAIN

Auction Property:

1. The initial development is responsible to build both State Route 74 Earthen Channel and Deadman Wash Bank Protection as a single infrastructure improvement project. Approvals from FEMA shall be obtained through the CLOMR and LOMR process before any development takes place within the floodplain.
2. Temporary drainage channel along the north side of Dove Valley Road shall remain in place until stipulated facilities from #1 above are complete and accepted.

WATER SERVICES DEPARTMENT

The following are the Water Services Departments (WSD) comments on the Infrastructure Assessment Study (IAS) for Sonoran Oasis Tech Park prepared for Arizona State Land Department and Biscuit Flats Dev, LLC. The WSD comments are general (high level) in nature and reflect only our review of those elements of the IAS related to water and wastewater infrastructure.

Conceptual Wastewater and Potable Reuse Infrastructure

Figure 1 depicts the conceptual wastewater and potable reuse infrastructure plan for Northwest Phoenix, which includes Biscuit Flats. The Biscuit Flats area is generally subdivided into two planning areas. The first is generally referred to as the Biscuit Flats Residential and is approximately 6,300 acres bounded by the CAP Canal and the 303. The second area is the Sonoran Oasis Tech Park (a.k.a., Biscuit Flats Tech Park) which is approximately 2,500 acres bounded by the 303, SR 74, and Deadman's Wash on the west. Figure 2 shows the City's location to recharge reclaimed water generated at the North Gateway Water Reclamation Plant (NGWRP) and advanced purified water generated at the Advanced Water Treatment Facility (AWTF). The City will perform exploratory borings in the area to determine the best location(s) for recharge (e.g., basins, vadose zone wells, ASR wells) and recovery wells.

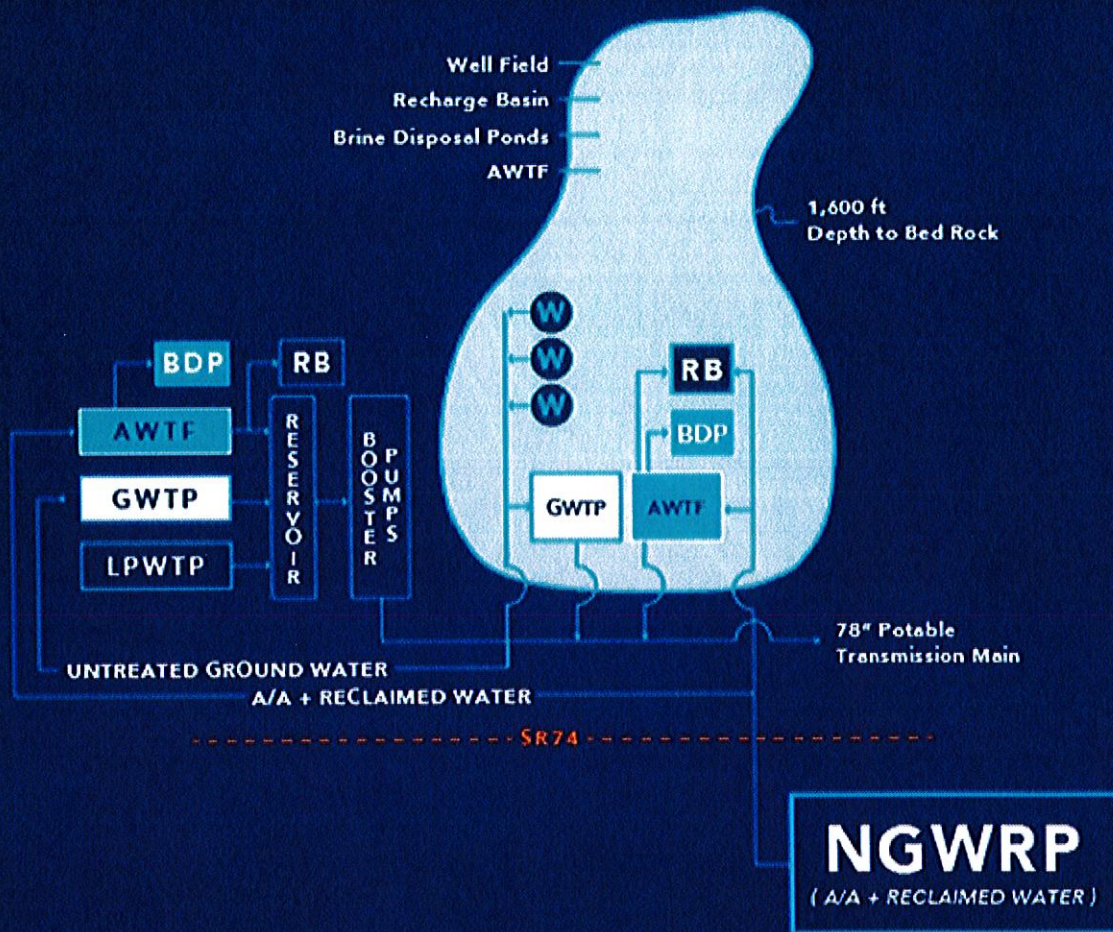
Below is a description of the facilities and infrastructure, depicted in Figure 1, to be used in the development of master plans for Northwest Phoenix and the proposed Sonoran Oasis Tech Park.

1. North Gateway Water Reclamation Plant (NGWRP). The NGWRP serves the entire northwest area of Phoenix. This includes the area north of the CAP canal and west of I-17 and a portion of the area on the eastside of I-17 to the City's northern border. The design of the plant will be similar to that of the Cave Creek WRP (CCWRP) with Biological Nutrient Removal (BNR), Membrane Bioreactor (MBR), and disinfection to produce A/A+ treated reclaimed water; construction of the CCWRP should begin 1QTR2024. Unlike the CCWRP, the NGWRP would be an end of the line plant and would therefore require onsite solids handling (e.g., solids reduction, dewatering, and drying beds). 100% of the reclaimed water will be pumped north of SR-74 to a recharge facility and Advanced Water Treatment Facility (AWTF). There will be no onsite recharge of reclaimed water at the NGWRP.
2. Advanced Water Treatment Facility (AWTF). The AWTF will be located north of SR-74. The final location of the AWTF is still yet to be determined. The AWTF could be located at the Lake Pleasant Water Treatment Plant (LPWTP), which could allow for the AWTF to use existing onsite reservoir(s) and booster pumps at the LPWTP. The AWTF could also be located near the recharge basins and the 78-inch potable transmission main; refer to Figure 1. As part of the master planning process the City will make the final decision on where to locate the AWTF. The design of the AWTF will be similar to that of the Cave Creek AWTF. The AWTF will also be an end of the line plant and therefore all solids must be handled onsite. This includes brine generated from the reverse osmosis (RO) membranes, which could require additional land.
3. Recharge and Recovery. The City has selected the area north of SR-74 for recharge and production/recovery wells (Figure 2, attached). Starting in 1QTR2024, the City will drill exploratory borings in the area to determine the best location for recharge (e.g., basins, vadose zone wells, ASR wells) and recovery wells.
4. Land Requirements and Easements. The land for the NGWRP is already owned by the City, but, is in its raw form; there are no onsite improvements. There is also a wash that runs through the property and it may require a 404 permit to perfect the site. The City owns the land at the LPWTP and it is anticipated that no additional land would be required to locate the AWTF at the LPWTP, however, additional land may be necessary for brine disposal and/or brine concentrators. If the brine ponds cannot be located at the LPWTP, then additional land would need to be provided to the City. Land for the recharge basins will also need to be provided to the City. Easements for the reclaimed water transmission main will also need to be provided to the City. Additionally, the City will require land for the production/recovery wells and possibly additional easement for the untreated well water transmission main from the well field to the

LPWTP. This information is important because the financial contributions required by the eventual developer are based upon the, yet to be determined, final design location.

5. Funding, Permitting, Design, and Construction. Funding of major infrastructure in Northwest Phoenix beyond TSMC Fab 1 and 2 is not in the City's 10-year capital improvement plans (CIP). To this end, the developer will need to fund the permitting, design, and construction of the NGWRP, AWTF, recharge basins, reclaimed water transmission mains, and related infrastructure. The developer will also need to prepare and submit to the City the required master plans, infrastructure phasing plans, and funding plans. Once the funding is secured by the Developer, the permitting, design, and construction of the facilities (e.g., NGWRP, AWTF, recharge basins, pumping stations) will be procured, managed, and delivered by the City. The procurement, management, and delivery of the reclaimed water transmission main could be performed by the developer with City oversight, review, approval, and C&I services.

Figure 1
City of Phoenix
Water Services Department
Northwest Phoenix
Conceptual Infrastructure Plan
March 15, 2023



NGWRP	North Gateway Water Reclamation Plant	BDP	Brine Disposal Ponds
AWTF	Advanced Water Treatment Facility	RB	Recharge Basins
GWTP	Ground Water Treatment Plant	W	Well (Production/Recovery)
LPWTP			

71.6%

Figure 2
City of Phoenix
Water Services Department
Northwest Phoenix
Recharge Area and Exploratory Boring Locations
March 15, 2023



Figure 2
City of Phoenix
Water Services Department
Northwest Phoenix
Recharge Area and Exploratory Boring Locations
March 15, 2023



For any other additional information, please contact David Neal at david.neal@phoenix.gov. To schedule a meeting to further discuss this letter or the City of Phoenix development requirements, please contact me at alan.stephenson@phoenix.gov.

Sincerely,



Alan Stephenson
Deputy City Manager

Attachments:
N/A

- c: Christopher Kowalsky, Street Transportation Department
- Eric Buskirk, Street Transportation Department
- Jim Swanson, Water Services Department
- Alan Stephenson, Planning and Development Department
- Joshua Bednarek, Planning and Development Department
- Adam Miller, Planning and Development Department
- Nathan Wright, Community and Economic Development
- Arizona State Land Department File