

Design & Construction Scope of Work for City of Douglas Point-of-Entry Modernization Project

December 21, 2023

1. Purpose

The purpose of this Scope of Work is for providing water and wastewater infrastructure for the new dedicated commercial land Point-of-Entry (POE) for the City of Douglas. The Project being considered for implementation under authority of Section 595 of the Water Resources Development Act of 1999, Public Law 106-53, as amended, is located in City of Douglas, Cochise County, Arizona.

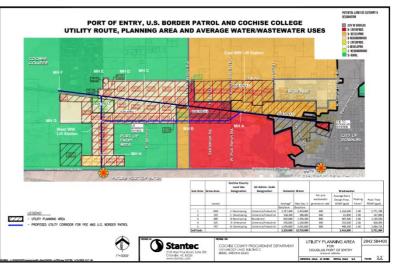
2. Project Location

The project is located in the City of Douglas, a small rural city with a population of 16,534 that sits on the US and Mexico border.



3. Background

Through the Infrastructure Investment and Jobs Act (IIJA) that was signed into law on November 15, 2021, the General Services Administration (GSA) was awarded \$400 million to construct a new commercial LPOE and modernize/expand the existing LPOE in Douglas, AZ. GSA began the environmental reviews and





architectural design while the Arizona Department of Transportation initiated a Design Concept Report for the design and build of a new connector road from the commercial LPOE to Highway 80.

The City of Douglas is in the process of executing a Donation Acceptance Agreement with GSA for the donation of 80 acres to the federal government for the construction of a new LPOE. Cochise County and the city are partners and have finalized 30% design for the water, sewer and broadband conduit to extend the City's water and wastewater services from the city's service to the LPOE site.

4. Project Summary

The project will consist of the completion of 100% design and the construction of water and sewer facilities. For the water conveyance system, it is proposed to install a new well, construct a 500,000-gallon storage tank with distribution pumps and fire flow pump, and install 8,200 linear feet of piping. For wastewater service delivery, it is proposed to connect to the City's newly expanded wastewater treatment plant by installing 16,850 linear feet of piping, construct 42 manholes and a large lift station and install 350 linear feet of six-inch force main pipe. When completed, this project will service a new commercial LPOE that will drive commercial and industrial development along its corridor. It will also provide service to Cochise Community College and the Border Patrol Station.

5. Initial Increment of Work Summary

The initial increment of work will consist of the design, construction, and installation of production Well No. 19. The increment of work is summarized as follows:

- Environmental Compliance & Permitting
- Bidding & Contract Award
- Construction
- Construction Administration & Monitoring

Detailed Breakdown:

O Environmental Compliance & Permitting will involve an initial Environmental Information Document (EID) prepared by Stantec Consultants that is currently underway and scheduled to finish by end of December 2023 for the entire new commercial port of entry water/sewer service area. The EID will identify the existing environmental conditions, review project alternatives, and identify potential impacts of the project. The EID is used by the U.S Environmental Protection

Agency (EPA) as the lead federal agency to develop EPA's Environmental Assessment (EA) to satisfy their requirements under the National Environmental Policy Act (NEPA). In addition, the Project must assess the effects of the undertaking on cultural resources in accordance with Section 106 of the National Historic Preservation Act (NHPA).



- Bidding & Contract Award will consist of separate bid packages
 - Drilling of Well #19,
 - Equipping of Well #19 to include treatment facilities, pump and associated equipment
 - Construction and installation of 500,000 elevated storage tank
 - Construction of water piping to and from Well #19

The bidding process entails a public bid process advertised in local media. Bids that are greater than \$100,000 are considered formal bid procurements prepared to include technical specifications with standard legal contract language. For this project, the City will include federal language to include compliance with Davis-Bacon Act. After reviewing the bids, staff make a recommendation to our Mayor and Council for their approval to execute a contract. Contracts less than \$100,000 require an informal bid process of at least three quotes without a required public advertising or approval of Mayor and Council. This process requires approval by the City Manager.

- Construction activities will require preconstruction planning meeting. Oversight by the Public Works Director/City Engineer along with contracted engineers over all construction. Submittals required by construction contractor and reviewed and approved by the City. Construction activities will include mobilization and demobilization of heavy equipment, drilling 1,000 feet and well casing and gravel packing installation. Equipping and installation that includes vertical line shaft pump and chlorination treatment and possibly other treatment facilities. Other construction includes trenching for underground water piping, electrical connections, SCADA system and control room and development of pump to waste area. Also include security of the groundwater well premises is also included such as cameras and security fencing.
- Construction Administration and Monitoring are necessary and will require construction engineers to provide weekly or monthly reports. Onsite monitoring of contractor will be required. In addition, equipment and water quality testing will be involved. Compliance with Arizona Department of Water Resources and Arizona Department of Environmental Quality permitting.



6. Total Project Cost Estimate

The Total Project Cost estimated costs for the components can be seen in the below table.

		Cost Breakdown	
Costs Incurred by the Non-Federal Sponsor	Total Costs	Federal Partner	Non-Federal Sponsor
Design & Construction Costs: Projected Costs incurred after PPA execution	\$2,263,700	\$1,697,775	\$565,925
Pre-Scope of Work Design Costs: Projected Costs incurred prior PPA execution	\$0	\$0	\$0
Real Property Interest Projected Costs	\$0	\$0	\$0
Relocations Projected Costs	\$0	\$0	\$0
Permitting Work Projected Costs	\$100,000	\$75,000	\$25,000
Non-Federal Sponsor Total Projected Costs	\$2,363,700	\$1,772,775	\$590,925
Costs Incurred by the Federal Government			
Coordination, Management, Technical, NEPA	\$236,300	\$177,225	\$59,075
Aggregated subtotal	\$2,600,000	\$1,950,000	\$650,000
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Total Project - Performance Share	\$2,600,000	\$1,950,000	\$650,000
Theoretical Share (75% / 25%)		\$1,950,000	\$650,000

7. Non-Federal Sponsor Financing Capability

The City of Douglas was awarded \$8,900,000 from the State of Arizona American Rescue Plan Act funds towards design or construction of water/sewer/broadband conduit facilities, \$325,215.49 from the North American Development Bank for the 60% preliminary engineering tasks, \$79,879.46 from the North American Development Bank for the Environmental Information Document, \$500,000 from the North American Development Bank towards 60% engineering final design. The City already received \$305,000 for the water/sewer/broadband conduit masterplan, \$353,266 for the 30% design of the water/sewer/broadband conduit and the County is currently considering awarding the City \$5,000,000 of its American Rescue Plan Act funds towards this project. The City is currently working through this 595 grant program for an additional \$2,175,000 towards the groundwater well and \$1,950,000 towards the construction of the water/sewer facilities. To complete the entire projected cost of \$28 million the City will seek North American Development Bank Border Environment Infrastructure Fund for construction of the water and sewer facilities and funding from the newly released Environmental Protection Agency Community Change Grant.



8. Real Estate

The City of Douglas will apply for right of way permits along the project area. Right of Way is needed along Highway 80 corridor and along the POE connector road alignment from the Arizona Department of Transportation (ADOT). The City will need to acquire property to construct Well #19 and the elevated storage tank, currently projected in existing Cochise College property. It also needs to acquire property for a lift station along the connector road and Puzzi Ranch Road. If the 60% engineering recommends a second lift station, the City will need to acquire land for a second lift station along Highway 80 and Copper Avenue. Land acquisition costs will be absorbed by the City.

9. Coordination

The City of Douglas is anticipating the 60% design plans & specifications available for review by November 2024. Prior to finalizing the design plans & specifications, the City of Douglas intends to provide 95% design set to the US Army Corps of Engineers (USACE) for a technical review and Applicable Environmental Laws & Regulation Compliance confirmation by USACE.

10. Environmental Compliance

The applicable environmental requirements for this Project have been coordinated through the North American Development Bank (NADBank) and the Environmental Protection Agency (EPA) and the statuses are as follows:

- Environmental Information Document (EID) began August 24, 2023. Project is expected to finish at the end of December 2023. EID will be submitted to the NADBank for review and approval.
- NEPA The NADBank will submit to EPA to complete the NEPA process expected to be completed within 3 months.

The costs for the compliances with the above clearances have been included in the Total Project Cost table.

11. Conceptual Project Milestone Schedules

Proposed Project Schedule

Task	Activities	Target Date
Initial Increment		
NFS acknowledges Model PPA	Willing to sign PPA	December 2023
30% Design Review Submission	30% Design Package available now	December 2023
PPA execution	NFS & USACE signs PPA	May 2024
Design Review Submission to USACE	60% Design Package for review	November 2024
Environmental Submission to USACE	NEPA Completion	April 2024
Final Design	Final Design submitted to USACE	May 2025



Compliance	All relative approvals/permits	August 2025
Construction Contract Advertised	NFS advertises Construction Contract to	September 2025
	through procurement tool	
Construction Contract Awarded	NFS awards contract to Construction	November 2025
	Contractor	
Start Construction		February 2026
Construction Substantially Complete	As-builts, Red Zone, Turn-over	February 2027
Completion of Initial Increment		February 2027

Note: Dates above are conceptual estimates only and are subject to change