

Texas Water

Development Board

OLA ID 263950

PIF No. 12047

Entity Name: Stephenville

Project Name: Eastside Sewer Project

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General Information

Project Information

Funding Type: CWSRF

Project Category: POTW

CWSRF Entity Type: SUBDIVISION

Contact Information

County: Erath

Entity Contact Information	Engineering Firm Contact Information
Name of Entity: Stephenville	Name of New Entity:
Prefix: Mr.	Prefix: Mr.
First Name: Nick	First Name: Sanford
Last Name: Williams	Last Name: LaHue
Addr 1: 298 W. Washington	Addr 1: 1161 Corporate Drive West
Addr 2:	Addr 2: Suite 200
City: Stephenville	City: Arlington
State: TX	State: TX
Zip: 76401-4257	Zip: 76006-6819
Phone: (254) 918-1223	Phone: (817) 633-0431
Fax: (254) 918-1207	Fax: (817) 649-7645
Suffix: P.E.	Suffix: P.E.
OrgName:	OrgName:
DeptName: Public Works	DeptName:
Title: Director of Public Works	Title: Engineer
Email: nwilliams@stephenvilletx.gov	Email: slahue@sradesign.com
	Firm Name: Schrickel, Rollins & Associates
Make Changes: Y	Make Changes: Y
No Entity TxWISE Id	No Engineering TxWISE Id

Service Area

Population Served: 19,374

Total Household Connections: 5,962



**EASTSIDE SANITARY SEWER
INTERCEPTOR-PHASE 1-4**

October 2015




Project Description

Project Name: Eastside Sewer Project

Project Short Desc: Expansion of the sanitary sewer collection system, opening up approximately 19,000 acres east, north and northwest of the current service area to accommodate increased demand from the growing business industry and Tarleton State University. Due to current expansions within the university, the current sanitary sewer collection system is undersized.

Project Long Desc: The Eastside Sewer Collector is a project to provide a sanitary sewer main and laterals to areas generally east and north in the City of Stephenville. The project will eliminate a critical capacity burden on the existing sanitary sewer collection system and simultaneously serve potential developments of approximately 19,000 acres (30 square miles) east, north and northwest of the current service area. The construction of the proposed collector system will be structured in phases: Phase 1 (Tarleton and Business Park Expansion); Phase 2 (Airport Expansion); and Phase 3 (Residential Expansion).

Background

The 2004 Comprehensive Master Plan identified the existing Stephenville sanitary sewer system as not adequate to support growth in the areas east and north of the city. Recommendations outlined in the plan included enlarging and/or paralleling the existing major sewer lines along the North Bosque River. Since the existing sewer lines are located within developed areas, construction of new or enlarged sewer lines will be highly disruptive and extremely expensive. Shallow depths and inadequate size of the existing sewer lines also limits the potential for extending new sewer lines to future service areas. In 2015, updated sewer system analysis revealed the current collector system as inadequate to support recent additions to the system, primarily due to expansion at Tarleton State University.

Summary and Project Cost

Phase 1 - Tarleton and Business Park Expansion

Phase 1 (Tarleton and Business Park Expansion) includes a dedicated lift station at the wastewater treatment plant (WWTP) and segments of a new collector sewer line, varying in size from 48-inch to 30-inch diameter, extending from the WWTP to FM 8/Lingleville Road. Recent student housing expansions on the Tarleton State University (TSU) main campus have forced the city to upsize existing collection system piping from the campus to an existing 30-inch trunk main in the City Park. Phase 1 will address this critical need and allow two fifteen-inch lateral mains to be tied onto the Eastside Sewer trunk main, relieving a section of old, undersized, clay collection system piping and greatly reducing current inflow and infiltration issues, as well as, reducing the capacity burden on the existing 30-inch trunk main to the WWTP. Additionally, Phase 1 includes lateral lines to service a 400-unit multi-family housing complex currently under construction and future development of Tarleton's College Farm, as well as, and an unserved business park area.

Phase 2 - Airport Expansion

Funded and scheduled to begin in 2016, the city's airport runway will expand from 4,200 feet to 5,000 feet in length. Phase 2 (Airport Expansion) includes the extension of a sanitary sewer main from the WWTP to Highway 67 to encourage and accommodate growth near the Stephenville Clark Regional Airport, along the Highway 67 and Highway 281 corridors. Phase 2 is anticipated to be bid as an alternate with the Phase 1 bid package to capitalize on an economy of scale, if bid prices permit.

Phase 3 - Residential Expansion

Phase 3 includes the extension of the trunk main from FM 8/Lingleville Road, on the north side of and parallel to the Bosque River, to the far west to open vast service basin areas to the north of Stephenville. The city land use plan currently designates this area for primarily residential development.

Wastewater Treatment Plant (WWTP) Water Reuse Line

Construction of the Eastside Sewer will also allow for the simultaneous construction of a non-potable, PVC "purple pipe" reuse line. Phase 1 would initiate at the WWTP and would parallel Segments 1-4 on the attached basin map to provide non-potable water irrigation service to a local golf course as well as provide process water use for potential commercial and industrial business development in the US 281 and FM 8/Lingleville Road corridor. Phase 1 of the reuse project, including piping and remote pressurization is estimated at approximately \$1,000,000. A second phase would be considered, as funding allows, to service an existing golf course and future development on the north side of Stephenville.

Projected Cost

Phase 1 - Tarleton and Business Park Expansion

The preliminary, estimated cost breakdown for Phase 1, including Segments 1-4, Lateral Lines to U.S. 281 and FM 8, the WWTP Lift Station, and Reuse Piping and Pressurization as well as Right-of-Way Acquisition and professional Services is estimated as \$10,200,000.

Phase 2 - Airport Expansion

The preliminary, estimated cost breakdown for Phase 2, including Segments 11-12 as well as Right-of-Way Acquisition and professional Services is estimated as \$1,900,000.

Phase 3 - Residential Expansion

The preliminary, estimated cost breakdown for Phase 3, including Segments 5-10 as well as Right-of-Way Acquisition and professional Services is estimated as \$4,700,000.

The estimated Grand Total project cost is \$16,800,000.

Wastewater Treatment Plant (WWTP) Expansion

As segments of the proposed Eastside Sewer Collector are constructed and development along the newly served basins occurs, the increased flows to the existing Wastewater Treatment Plant (WWTP) will need to be monitored and a phased WWTP expansion will need to be evaluated.

Project Status

An Eastside Sewer Study has been completed showing the preliminary layout and identifying drainage basin areas. The Stephenville City Council approved a Professional Services Agreement to provide plans and specifications for construction of Phases 1 and 2 on January 5, 2016.

What is the need for the proposed project? Please describe any current Health and Compliance Factor and/or MCL Violations and physical deficiencies.: Current sanitary sewer collection system is undersized.

Rating Criteria POTW

A. Enforcement Action

Is the work required by a schedule that is imposed by court order, EPA administrative order, TCEQ Notice of Enforcement or Agreed Order, or participation in the TCEQ's SSO Initiative?: N

B. Unserved Area

1. Does the project involve extending service (centralized or alternative system) to populated areas of an existing developed community that are not served by a centralized collection system?: N

2. Has a public health official found that a nuisance dangerous to public health and safety exists resulting from water supply and sanitation problems in the area to be served by the proposed project?

Only the most recent letters (last ten (10) years) will be accepted. To determine your local designated public health official, you can search a list of public health officials.

If "Yes," attach a letter from a Designated Agent licensed by the TCEQ or a registered sanitarian from the Texas Department of State Health Services that documents the nuisance.: N

3. If the proposed project is providing service to areas currently using on-site sewage facilities (OSSF), please provide the number of on-site systems to be removed from service.: 0

C. Watershed Protection Plan

Is a water body impacted by the proposed project listed in a Watershed Protection Plan that is under development or has been accepted by the TCEQ or TSSWCB?

If "Yes," attach the cover page, table of contents, and highlighted page(s) from the plan that clearly

identify(ies) the water body and how the project will implement an element of the plan.

Please visit the Texas State Soil and Water Conservation Board site for a detailed list of Watershed Protection Plans.:

D. Innovative and Alternative

1. Will the project include innovative or alternative collection or treatment technology, as defined below?

- Alternative Technology Proven wastewater management techniques that provide for the reclaiming and reuse of water, productively recycle wastewater constituents, or recover energy. Specifically, alternative technology includes land application of effluent and sludge, aquifer recharge, aquaculture, direct reuse, horticulture, revegetation of disturbed land, containment ponds, sludge composting and drying prior to land application, self-sustaining incineration, methane recovery, individual and onsite systems, and small diameter pressure and vacuum sewers and small diameter gravity sewers carrying partially or fully treated wastewater.

- Innovative Technology Nonconventional methods of treatment, such as rock reed, root zone, ponding, irrigation, or other technologies, which represent a significant advance in the state of the art.: Y

2. For stormwater projects required under an NPDES permit, will the proposed project treat or minimize urban stormwater pollution discharges using any of the following innovative approaches: decentralized or distributed stormwater controls; low impact development technologies and nonstructural approaches; stream buffers; wetland restoration and enhancement; actions to minimize the quantity of and direct connections to impervious surfaces; or soil, vegetation, or other permeable materials?

Note: Stormwater projects that are not specifically part of a NPDES permit may be considered NPS projects. For additional information, contact Financial Assistance, (512) 463-0991, financial_assistance@twdb.texas.gov.: N

E. More Stringent Effluent Limits

Does the project involve more stringent permit limitations? This can include conversion to a no-discharge or partial reuse facility to avoid a higher level of treatment.

If "Yes," attach a copy of the new discharge permit or a letter from the TCEQ stating the new limits.: N

F. Regional Projects

1. Does the project result in removing one or more existing WWTPs from service, thereby reducing the number of plant outfalls?: N

2. Is the project a trunk sewer that will convey wastewater from a plant that will be removed from service to an existing treatment plant?: N
3. Is the project a trunk sewer to an existing or developing area that will convey wastewater to an existing WWTP, thereby avoiding the construction of a separate treatment facility?: Y
4. Will the project expand an existing regional facility to receive flow from another community rather than create or continue use of a separate wastewater treatment facility?: N

G. Will a majority of the funds being requested from the SRF for the project be used to implement measures to reduce the demand for publically owned treatment works capacity through water conservation, efficiency, or reuse?: N

H. For a qualified nonprofit entity only, (an entity having Federal tax-exempt status), will a majority of the funds being requested from the SRF for the project be used to implement assistance to owners and operators of small and medium publicly owned treatment works to either (a) plan, develop, and obtain financing for eligible CWSRF projects, including planning, design, and associated preconstruction activities; or (B) assist such treatment works in achieving compliance with the Federal Water Pollution Control Act (FWPCA)?: N

I. Wastewater Treatment Plant Parameters

1. Does the project result in abandoning or relieving a WWTP and diverting flow to another facility?: N

WWTP Name: City of Stephenville WWTP

TCEQ Permit #: WQ0010290-001

NPDES #: WQ0010290001

No-Discharge Facility?: N

If "No," identify the Discharge Segment: 1255 Brazos River Basin

	Current Permit Limits	Proposed Permit Limits
Average Daily Flow (million gallons/day - MGD)	3.00	3.00
Peak 2-Hour Flow (gallons/min - gpm)	6250.00	6250.00
CBOD/BOD (mg/l)	10.00	10.00
TSS (mg/l)	15.00	15.00
Chlorination (mg/l)	1.00	1.00
Nitrogen (mg/l)	2.00	2.00
Phosphorus (mg/l)	1.00	1.00
DO (mg/l)	6.00	6.00
Dechlorination (mg/l)	0.10	0.10
Status of Permit Application	None in Progress	None in Progress - No Changes

Additional Rating Criteria

A. Will a majority of the funds being requested from the SRF for the project be used to implement innovative approaches to manage, reduce, treat, or recapture stormwater or subsurface drainage water?: N

B. Will a majority of the funds being requested from the SRF for the project be used to implement reuse or recycling wastewater, stormwater, or subsurface drainage water?: N

Rating Criteria for All Projects - Effective Management

A. Asset Management

1 a. In the past 5 years, has an asset management plan been adopted by the entity's governing body that incorporates an inventory of all assets, an assessment of the criticality and condition of the assets, a prioritization of capital projects needed, and a budget? Note: A Capital Improvement Plan (CIP) alone does not constitute an asset management plan.: N

b. If "No," is the entity planning to prepare an asset management plan as part of the proposed project? If so, include language in the Project Description that states this.:

2. Has asset management training been administered to the entity's governing body and employees?: N

B. Water Conservation

Does the proposed project address specific targets, goals, or measures in a water conservation or drought contingency plan that has been adopted by the entity's governing body within the past five years?: N

C. Energy Efficiency

Does the proposed project address specific goals in a system-wide or plant-wide energy assessment, audit, or optimization study that has been conducted within the past three years?: N

D. Implementation of Water Plans

Does the proposed project implement elements contained in a state or regional water plan, integrated water resource management plan, regional facility plan, regionalization or consolidation plan, finalized Economically Distressed Areas Program (EDAP) facility plan, or a total maximum daily loads (TMDL) implementation plan?: N

Green Project Information

A. Does the proposed project contain, either partially or completely, green elements as defined by the Green Project Information Worksheets?: Y

B. Enter the estimated cost of the green portion of the proposed project.: \$1,000,000

C. Describe and justify in the space below the green elements of the proposed project and, if available, attach a green business case below.: Construction of the Eastside Sewer will also allow for the simultaneous construction of a non-potable, PVC "purple pipe" reuse line. Phase 1 would initiate at the WWTP and would parallel Segments 1-4 on the attached basin map to provide non-potable water irrigation service to a local golf course as well as provide process water use for potential commercial and industrial business development in the US 281 and FM 8/Lingleville Road corridor. Phase 1 of the reuse project, including piping and remote pressurization is estimated at approximately \$1,000,000. A second phase would be considered, as funding allows, to service an existing golf course and future development on the north side of Stephenville.

Refinancing

Will CWSRF funds be used to refinance existing debt related to this project and received from a source other than the TWDB?: N

Readiness to Proceed to Construction

A. Permitting

Have permits necessary for construction been acquired; in particular, TCEQ wastewater discharge permit for wastewater treatment plant construction or wastewater reuse authorization (if applicable)?: N

* If "No," identify in the space below each federal, state, or local permit, license, or other authorizations needed for the project to proceed to construction and the status of each.:

Wastewater Reuse Permit

B. Land Acquisition

Have all land acquisitions and easements necessary to complete the project been obtained?: N

If "No," please explain in the space below and provide an anticipated completion date.:

Stephenville City Council awarded a professional services agreement for the design, including plans and specifications, of the East Side Sewer.

The timeframe for easement acquisition is unknown.

Completion Date: 08-02-2016

1. Have you completed the design process including full development of plans and specifications? (If "No," proceed to Question 2. If "Yes," proceed to Question 4.): N

2. Has design work progressed beyond preliminary design?: Y
If so, please provide the anticipated completion date:: 08-02-2016

C. Design

3. Will design work be initiated after the TWDB releases design funds for this project?: N

D. Environmental Review

1. Have you received a Finding of No Significant Impact (FNSI), Categorical Exclusion (CE), a Record of Decision (ROD), or an environmental determination prepared by another entity in compliance with the National Environmental Policy Act (NEPA) for this project? For projects that may qualify for a FNSI, please review 31 TAC §375.63; or that require a CE, review 31 TAC §375.52 (state) or 31 TAC §375.62 (federal); or that require a ROD, review 31 TAC §375.66; or that have a determination by another entity, review 31 TAC §375.56 (state) or 31 TAC §375.70 (federal): N

2. If an environmental finding has not been issued, does your project meet the criteria to receive Categorical Exclusion as defined at 31 TAC §375.52 (state) or 31 TAC §375.62 (federal)?: N

3. Can you submit an environmental report with the completed loan application that documents coordination with agencies has proceeded sufficiently to determine that no major issues remain?: N

4. Will the environmental review be initiated after the TWDB releases planning funds for this project?: Y

E. Construction Phase

Start Date (mm/dd/yyyy): 10-03-2016

Completion Date (mm/dd/yyyy): 04-02-2018

F. Project Bidding and Contracts

Will the proposed project be ready to advertise for construction bids immediately following a funding commitment for construction costs?: Y

If you are seeking reimbursement for eligible planning and/or design costs, was the work performed in compliance with applicable state law and federal crosscutters, including procurement following Disadvantaged Business Enterprise (DBE) requirements? Please visit the TWDB's DBE web page for more information.: N

How many months will it take to close the loan after receiving a funding commitment? Projects deemed ready to proceed to construction must be able to expend funds quickly after receiving a funding commitment.: 3

Estimated Costs

Seeking planning funding: N

Seeking acquisition funding: N

Seeking design funding: N

Seeking construction funding: Y

Cost Category	(a) Planning	(b) Acquisition	(c) Design	(d) Construction	(e) Total (a)+(b)+(c)+(d)
POTW Project: Treatment Project	\$0	\$0	\$0	\$0	\$0
POTW Project: Collection Project	\$0	\$0	\$0	\$10,200,000	\$10,200,000
NPS Project	\$0	\$0	\$0	\$0	\$0
Estuary Management Project	\$0	\$0	\$0	\$0	\$0
Engineering	\$0	\$0	\$701,000	\$0	\$701,000
General, Legal, Financial	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Other (Describe Cost)	\$0	\$0	\$0	\$0	\$0
Subtotal (Add all rows above)	\$0	\$0	\$701,000	\$10,200,000	\$10,901,000
Financing from Local Funds	\$0	\$0	\$701,000	\$0	\$701,000
Financing from Other Funds	\$0	\$0	\$0	\$0	\$0
Subtotal, SRF-Funded Amount	\$0	\$0	\$0	\$10,200,000	\$10,200,000

Green component costs as a percentage of "Subtotal, SRF-Funded Amount": 10.00%

PIF Estimated Costs - #263950

Entity Name: Stephenville:964
 New Entity Name: null
 Project Name: Eastside Sewer Project

Report generated by: PRODOLA\$, Fri Mar 04 17:36:37 CST 2016

Please review the estimated costs below, then sign and upload.

Signature _____

J. Williams P.E.



Seeking planning funding: N
 Seeking acquisition funding: N
 Seeking design funding: N
 Seeking construction funding: Y

Cost Category	(a) Planning	(b) Acquisition	(c) Design	(d) Construction	(e) Total (a)+(b)+(c)+(d)
POTW Project: Treatment Project	0	0	0	0	0
POTW Project: Collection Project	0	0	0	10200000	10200000
NPS Project	0.00	0.00	0.00	0.00	0.00
Estuary Management Project	0.00	0.00	0.00	0.00	0.00
Engineering	0	0	701000	0	701000
General, Legal, Financial	0	0	0	0	0
Contingency	0	0	0	0	0
Other (Describe Cost)	0	0	0	0	0
Subtotal (Add all rows above)	0.00	0.00	701000.00	10200000.00	10901000.00
Financing from Local Funds	0	0	701000	0	701000.0

Financing from Other Funds	0	0	0	0	0.0
Subtotal, SRF-Funded Amount	0.00	0.00	0.00	10200000.00	10200000.00

Additional Attachments

The following documents are attached after this page:

2016_01-06 Eastside Sewer - Executive Summary.pdf

2015_12-14 Eastside Sewer - Phase I &II - Exhibit.pdf

Eastside Sewer Collector Stephenville, Texas

Executive Summary

The Eastside Sewer Collector is a project to provide a sanitary sewer main and laterals to areas generally east and north in the City of Stephenville. The project will eliminate a critical capacity burden on the existing sanitary sewer collection system and simultaneously serve potential developments of approximately 19,000 acres (30 square miles) east, north and northwest of the current service area. The construction of the proposed collector system will be structured in phases: Phase 1 (Tarleton and Business Park Expansion); Phase 2 (Airport Expansion); and Phase 3 (Residential Expansion).

Background

The 2004 Comprehensive Master Plan identified the existing Stephenville sanitary sewer system as not adequate to support growth in the areas east and north of the city. Recommendations outlined in the plan included enlarging and/or paralleling the existing major sewer lines along the North Bosque River. Since the existing sewer lines are located within developed areas, construction of new or enlarged sewer lines will be highly disruptive and extremely expensive. Shallow depths and inadequate size of the existing sewer lines also limits the potential for extending new sewer lines to future service areas. In 2015, updated sewer system analysis revealed the current collector system as inadequate to support recent additions to the system, primarily due to expansion at Tarleton State University.

Summary and Project Cost

Phase 1 - Tarleton and Business Park Expansion

Phase 1 (Tarleton and Business Park Expansion) includes a dedicated lift station at the wastewater treatment plant (WWTP) and segments of a new collector sewer line, varying in size from 48-inch to 30-inch diameter, extending from the WWTP to FM 8/Lingleville Road. Recent student housing expansions on the Tarleton State University (TSU) main campus have forced the city to upsize existing collection system piping from the campus to an existing 30-inch trunk main in the City Park. Phase 1 will address this critical need and allow two fifteen-inch lateral mains to be tied onto the Eastside Sewer trunk main, relieving a section of old, undersized, clay collection system piping and greatly reducing current inflow and infiltration issues, as well as, reducing the capacity burden on the existing 30-inch trunk main to the WWTP. Additionally, Phase 1 includes lateral lines to service a 400-unit multi-family housing complex currently under construction and future development of Tarleton's College Farm, as well as, and an unserved business park area.

Phase 2 - Airport Expansion

Funded and scheduled to begin in 2016, the city's airport runway will expand from 4,200 feet to 5,000 feet in length. Phase 2 (Airport Expansion) includes the extension of a sanitary sewer main from the WWTP to Highway 67 to encourage and accommodate growth near the Stephenville Clark Regional Airport, along the Highway 67 and Highway 281 corridors. Phase 2 is anticipated to be bid as an alternate with the Phase 1 bid package to capitalize on an economy of scale, if bid prices permit.

Phase 3 - Residential Expansion

Phase 3 includes the extension of the trunk main from FM 8/Lingleville Road, on the north side of and parallel to the Bosque River, to the far west to open vast service basin areas to the north of Stephenville. The city land use plan currently designates this area for primarily residential development.

**Eastside Sewer
Stephenville, Texas
06 JAN 16**

Wastewater Treatment Plant (WWTP) Water Reuse Line

Construction of the Eastside Sewer will also allow for the simultaneous construction of a non-potable, PVC "purple pipe" reuse line. Phase 1 would initiate at the WWTP and would parallel Segments 1-4 on the attached basin map to provide non-potable water irrigation service to a local golf course as well as provide process water use for potential commercial and industrial business development in the US 281 and FM 8/Lingleville Road corridor. Phase 1 of the reuse project, including piping and remote pressurization is estimated at approximately \$1,000,000. A second phase would be considered, as funding allows, to service an existing golf course and future development on the north side of Stephenville.

Projected Cost

Phase 1 - Tarleton and Business Park Expansion

The preliminary, estimated cost breakdown for Phase 1, including Segments 1-4, Lateral Lines to U.S. 281 and FM 8, the WWTP Lift Station, and Reuse Piping and Pressurization as well as Right-of-Way Acquisition and professional Services is estimated as \$10,200,000.

Phase 2 - Airport Expansion

The preliminary, estimated cost breakdown for Phase 2, including Segments 11-12 as well as Right-of-Way Acquisition and professional Services is estimated as \$1,900,000.

Phase 3 - Residential Expansion

The preliminary, estimated cost breakdown for Phase 3, including Segments 5-10 as well as Right-of-Way Acquisition and professional Services is estimated as \$4,700,000.

The estimated Grand Total project cost is \$16,800,000.

Wastewater Treatment Plant (WWTP) Expansion

As segments of the proposed Eastside Sewer Collector are constructed and development along the newly served basins occurs, the increased flows to the existing Wastewater Treatment Plant (WWTP) will need to be monitored and a phased WWTP expansion will need to be evaluated.

Project Status

An Eastside Sewer Study has been completed showing the preliminary layout and identifying drainage basin areas. The Stephenville City Council approved a Professional Services Agreement to provide plans and specifications for construction of Phases 1 and 2 on January 5, 2016.



PROPOSED EASTSIDE SANITARY SEWER INTERCEPTOR - PHASE I & PHASE II

December 2015

