

Texas Water Development Board



City of Robstown

CWSRF GREEN PROJECT RESERVE BUSINESS CASE EVALUATION

STATE FISCAL YEAR 2014 INTENDED USE PLAN

PROJECT NUMBER 73680

COMMITMENT DATE: December 5, 2013

DATE OF LOAN CLOSING: June 17, 2014

GREEN ESTIMATE AT CLOSING: \$786,794

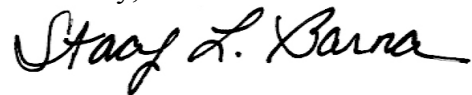
Additional Subsidy: \$119,352

- Therefore, at this time the TWDB considers project costs associated with sewer line replacement in the amount of \$795,684 to be eligible for the CWSRF GPR (see attached Green Project Cost Summary).
- Please note that the City's application for financial assistance must be consistent with the project scope presented on the Green Project Information Worksheets. Inclusion of the green elements within the project will be verified prior to Board commitment.
- Mainstream Equivalency Loan – remainder of total project costs (approximately \$480,000; this amount will be associated with a 1.85% loan origination fee.)

The City's application is currently under technical review by TWDB staff. Based on this funding determination, the financial application may need updating. TWDB staff will notify you of any necessary changes in a subsequent letter. Please respond by the deadlines stated in any requests for information. Delays in responding could result in loss of subsidy. Please direct questions concerning the review of the application to Javier Pena, the Financial Analyst assigned to coordinate review of the City's application. You may contact Mr. Pena at (512) 463-8361 or at Javier.Pena@twdb.texas.gov.

If you have any questions regarding this funding determination letter, please contact Clay Schultz, Program Specialist, at (512) 463-6277. The TWDB appreciates the City's interest in the CWSRF and looks forward to working with the City to complete this project.

Sincerely,



Stacy L. Barna
Director of Program Development
Program and Policy Development

SLB:rf

Green Project Reserve

Green Project Information Worksheets

**Clean Water State Revolving Plan
Intended Use Plan**

The Federal Appropriation Law for the current fiscal year Clean Water and Drinking Water State Revolving Fund programs contains the Green Project Reserve (GPR) requirement. The following Green Project Information Worksheets have been developed to assist TWDB Staff in verifying eligibility of potential GPR projects.

**TEXAS WATER DEVELOPMENT BOARD
CLEAN WATER STATE REVOLVING FUND (CWSRF)
GREEN PROJECT INFORMATION WORKSHEETS**

PART I – GREEN PROJECT INFORMATION SUMMARY

Check all that apply and complete applicable worksheets:

Categorically Eligible

- Green Infrastructure \$ _____
- Water Efficiency \$ _____
- Energy Efficiency \$ _____
- Environmentally Innovative \$ _____

Business Case Eligible

- Green Infrastructure \$ _____
- Water Efficiency \$ _____
- Energy Efficiency \$829,160 _____
- Environmentally Innovative \$ _____

Total Requested Green Amount \$ 829,160 _____

Total Requested Funding Amount \$ 869,160 _____

Type of Funding Requested:

- PAD (Planning, Acquisition, Design)
- C (Construction)

Completed by:

Name: _____

Title: _____

Signature: _____

Date: _____

**TEXAS WATER DEVELOPMENT BOARD
CLEAN WATER STATE REVOLVING FUND (CWSRF)
GREEN PROJECT INFORMATION WORKSHEETS**

PART III - BUSINESS CASE ELIGIBLE

Complete this worksheet for projects being considered for the Green Project Reserve (GPR) as business case eligible. Business case eligible projects or project components are described in the following sections of the EPA GPR guidance (TWDB-0161):

Green Infrastructure	Part A, Section 1.4 and 1.5
Water Efficiency	Part A, Section 2.4 and 2.5
Energy Efficiency	Part A, Section 3.4 and 3.5
Environmentally Innovative	Part A, Section 4.4 and 4.5

Information provided on this worksheet should be of sufficient detail and should clearly demonstrate that the proposed improvements are consistent with EPA and TWDB GPR guidance for business case eligible projects. Refer to **Information on Completing Worksheets** for additional information.

Section 1 – General Project Information

Applicant: City of Robstown, Texas PIF #: _____

Project Name: Matiana Ortiz Sewer Main Replacement

Contact Name: [Click here to enter text.](#)

Contact Phone and e-mail: (361) 387-3554

Total Project Cost: \$869,160 Green Amount: \$829,160
(Business Case Eligible)

Brief Overall Project Description:

The City of Robstown project for which funding is requested are prioritized wastewater pipeline replacement segments originating from the 2013 Wastewater Master Plan and a Sanitary Sewer Overflow Initiative (SSOI) agreement between the City of Robstown and the Texas Commission on Environmental Quality (TCEQ). This request for funding consists of a gravity pipeline segment owned by the City. The total length of the pipeline replacement is 6,469 linear feet with pipe sizes of 8 and 10 inches. The pipe segment was noted to have high amounts of I/I which has resulted in two Sanitary Sewer Overflows. The pipeline segment consists of vitrified clay pipe and brick manholes, all of which are in poor condition. In addition to the pipeline replacement, cleaning and CCTV will be performed along the 5,879 feet of sanitary sewer downstream of replacements in order to remove any debris and identify and detects. The project name for the segment to be replaced references the street in which the main pipeline lies; Matiana Ortiz.

Also, flow monitoring of the entire collection system will be performed and an update to the City's Wastewater Master Plan will be conducted which will assist in identifying and prioritizing wastewater lines for future improvements.

Section 4.3 – Other Energy Efficiency Improvements

Complete this section for energy efficiency improvements other than those listed above. Provide reference to the applicable sections of the EPA GPR guidance (TWDB-0161) that demonstrate GPR eligibility. Provide a detailed description of the proposed energy efficiency improvements of sufficient detail that clearly demonstrates that the proposed improvements are consistent with EPA GPR guidance (TWDB-0161).

Guidance Reference:

TWDB 0161, Part A CWSRF Section 3.5-4, infiltration/inflow correction improvements that save energy from reduced pumping and treatment and are cost effective.

Detailed Description (attach additional pages if necessary):

The City of Robstown's Project Matiana Ortiz is a replacement of a wastewater segment within the City's collection system. The City's wastewater flows are conveyed and discharged to a City-owned treatment facility. The service cost for the treatment of wastewater flows for is approximately \$3.664/1,000 gallons.

As a result of a hydraulic model and master plan developed for the City's wastewater collection system, an evaluation the system, including the proposed replacement segment was performed. This evaluation produced a predicted I/I amount totaling 17,175 gallons per day.

The design criteria to be used for the replacement projects will have a design life of 50 years. It is appropriate to then apply the amount of I/I to be removed with the projects and the period of service life of the proposed pipelines to account for the benefit. As shown in Attachment B, this I/I equates to a cost to the City for transportation and treatment of \$1,148,400 over the service life of the improvements. The cost for implementing the Project is \$829,160. This project cost is less than the cost of the I/I resulting from no action.

TWDB guidance TWDB-0161, Part A - CWSRF, section 3.5-4 establishes that the criteria for the required business case is cost effectiveness, which can be demonstrated with a benefit that exceeds the cost. Attached is a detailed breakdown of each project segment, including the opinion of probable construction costs and the predicted I/I to be removed as a result.

Green amount associated with energy efficiency (business case eligible): \$712,143
(Attach a detailed cost estimate if necessary)

Project No. P-5: Matiana Ortiz Sewer Replacement

Basis for Improvement	US MH ID	DS MH ID	Pipe Length (ft)	Diameter (inch)		Unit Price		Segment Cost		Total Estimated Construction Cost		Total Estimated Project Cost	
				Existing	Proposed	Replacement	Upsized	Replacement	Upsized	Replacement	Upsized	Replacement	Upsized
Matiana Ortiz Main Line	MH-563	MH-545	358.6	10	12	\$80.00	\$96.00	\$28,688	\$34,426				
	MH-545	MH-528	354.8	10	12	\$80.00	\$96.00	\$28,384	\$34,061				
	MH-528	MH-517	263.8	10	12	\$80.00	\$96.00	\$21,104	\$25,325				
	MH-517	MH-497	264.9	10	12	\$80.00	\$96.00	\$21,192	\$25,430	\$119,242	\$143,090	\$135,935	\$163,123
Collector Lines	MH-565	MH-563	697.6	8	8	\$70.00	-	\$48,832	-				
	MH-560	MH-563	679.2	8	8	\$70.00	-	\$47,544	-				
	MH-549	MH-545	655.3	8	8	\$70.00	-	\$45,871	-				
	MH-539	MH-545	673.3	8	8	\$70.00	-	\$47,131	-				
	MH-532	MH-528	705.1	8	8	\$70.00	-	\$49,357	-				
	MH-521	MH-528	674.9	8	8	\$70.00	-	\$47,243	-				
	MH-513	MH-517	553.8	8	8	\$70.00	-	\$38,766	-				
	MH-504	MH-497	587.6	8	8	\$70.00	-	\$41,132	-	\$439,051	\$439,051	\$500,518	\$500,518
	Total		6,469					\$465,244	\$485,118	\$538,419	\$582,141	\$636,454	\$663,641
Cleaning and CCTV Assessment for Remaining Matiana Ortiz Wastewater Lines	Total		5,879				\$7.50	\$44,093	\$44,093	\$44,093	\$44,093	\$48,502	\$48,502
CWSRF 2014 Project Total								\$509,337	\$529,210	\$582,512	\$626,234	\$684,956	\$712,143

I/I (gal) Removed 17,175

I/I Treatment Cost \$/gal
 Years 1-50 (2014-2063) \$3.664

Treatment Cost Savings
\$1,148,400