COLORADO WATER CONSERVATION BOARD

WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

LAMAR WATER TRANSMISSION LINE REPLACEMENT

Name of Water Activity/Project

City of Lamar Water/Wastewater Department

Name of Applicant

Arkansas Basin Roundtable

Amount from Statewide Account: $150,000

Amount from Basin Account(s): $50,000

Total WSRA Funds Requested: $200,000

Approving Basin Roundtable(s)
(If multiple basins specify amounts in parentheses.)

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Required Exhibits

A. Statement of Work, Budget, and Schedule
B. Project Map
C. As Needed (i.e. letters of support, photos, maps, etc.)

Appendices – Reference Material

1. Program Information
2. Insurance Requirements
3. WSRA Standard Contract Information (Required for Projects Over $100,000)
4. W-9 Form (Required for All Projects Prior to Contracting)

Instructions

To receive funding from the Water Supply Reserve Account (WSRA), a proposed water activity must be approved by the local Basin Roundtable **AND** the Colorado Water Conservation Board (CWCB). The process for Basin Roundtable consideration and approval is outlined in materials in Appendix 1.

Once approved by the local Basin Roundtable, the applicant should submit this application **with a detailed statement of work including budget and schedule as Exhibit A** to CWCB staff by the application deadline.

WSRA applications are due with the roundtable letter of support 60 calendar days prior to the bi-monthly Board meeting at which it will be considered. Board meetings are held in January, March, May, July, September, and November. Meeting details, including scheduled dates, agendas, etc. are posted on the CWCB website at: http://cwcb.state.co.us Applications to the WSRA Basin Account are considered at every board meeting, while applications to the WSRA Statewide Account are only considered at the March and September board meetings.

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf

The application, statement of work, budget, and schedule **must be submitted in electronic format** (Microsoft Word or text-enabled PDF are preferred) and can be emailed or mailed on a disk to:

Greg Johnson – WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
gregory.johnson@state.co.us

If you have questions or need additional assistance, please contact Greg Johnson at: 303-866-3441 x3249 or gregory.johnson@state.co.us.

Water Supply Reserve Account – Application Form
Revised December 2011

Part I. - Description of the Applicant (Project Sponsor or Owner);

1.	Applicant Name(s):	Lamar Water/Wastewater Department		
	Mailing address:	103 North Second Street Lamar, CO 81052		
	Taxpayer ID#:	98-05409		
	Primary Contact:	Josh Cichocki	Position/Title:	Water/Wastewater Director
	Email:	Josh.cichocki@ci.lamar.co.us		
	Phone Numbers:	Cell: 719-688-2298	Office:	719-336-2002
	Alternate Contact:	John Sutherland	Position/Title:	City Administrator
	Email:	John.sutherland@ci.lamar.co.us		
	Phone Numbers:	Cell: 719-688-8320	Office:	719-336-1364

2. Eligible entities for WSRA funds include the following. What type of entity is the Applicant?

[x] Public (Government) – municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities and the local entity should be the grant recipient. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.

[ ] Public (Districts) – authorities, Title 32/special districts, (conservancy, conservation, and irrigation districts), and water activity enterprises.

[ ] Private Incorporated – mutual ditch companies, homeowners associations, corporations.

[ ] Private individuals, partnerships, and sole proprietors are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.

[ ] Non-governmental organizations – broadly defined as any organization that is not part of the government.

3. Provide a brief description of your organization

Lamar is the county seat of Prowers County, and is located on the southeastern plains of Colorado on the banks of the Arkansas River. Located along the Santa Fe Trail, Lamar was founded in 1886. Its early economy was largely based on the cattle business. It was located near two important cattle trails originating in Texas, and became a railhead of livestock shipping facilities.

The City of Lamar Water and Wastewater Department has been providing the city with water and sewer services for over 135 years. Although the city has undertaken numerous upgrades, rehabilitation, and expansion projects over the years, most of the existing infrastructure was funded and built during the New Deal-era programs between 1933-1943.

4. If the Contracting Entity is different then the Applicant (Project Sponsor or Owner) please describe the Contracting Entity here. N/A

5. Successful applicants will have to execute a contract with the CWCB prior to beginning work on the portion of the project funded by the WSRA grant. In order to expedite the contracting process the CWCB has established a standard contract with provisions the applicant must adhere to. A link to this standard contract is included in Appendix 3. Please review this contract and check the appropriate box.

[x] The Applicant will be able to contract with the CWCB using the Standard Contract

[ ] The Applicant has reviewed the standard contract and has some questions/issues/concerns. Please be aware that any deviation from the standard contract could result in a significant delay between grant approval and the funds being available.

6. The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant. N/A

Part II. - Description of the Water Activity/Project

1. What is the primary purpose of this grant application? (Please check only one)

	Nonconsumptive (Environmental or Recreational)
	Agricultural
x	Municipal/Industrial
	Needs Assessment
	Education
	Other Explain:

2. If you feel this project addresses multiple purposes please explain.

There will be several measurable purposes and positive impacts from this project:

a. Replacing this raw water transmission line restores the full capacity of the south well field, which is currently experiencing a water loss estimated at 378-662 acre-feet per year from pin-hole type pipe leaks.
b. The water from the south well field is of a much higher water quality (50% less total dissolved solids/TDS) than the other two well fields. A higher blending ratio from the south well field after this project is complete with the middle and north fields will result in improved water quality, lower levels of disinfection byproducts (DBPs), and an overall reduction in the need to treat and use lesser quality water for potable supplies.
c. Lower TDS in the potable water supply will reduce scaling and the resulting premature failure of water-using equipment in homes and businesses.
d. Internal scale build-up in the transmission line adds to TDS levels.
e. Lamar currently uses ditch water to offset evaporation losses at recreational ponds and to recharge (lower water quality) north well field aquifer. Improved usage from the south well field will decrease need for ditch water augmentation to recharge the north well field aquifer for consumptive use. The unused ditch water allocation can then potentially be available for recreational use and other municipal, industrial or agricultural uses.
f. Internal scale build-up also requires higher pumping energy, so energy savings will also be realized.

3. Is this project primarily a study or implementation of a water activity/project? (Please check only one)

	Study	x	Implementation

4. To catalog measurable results achieved with WSRA funds can you provide any of the following numbers?

	New Storage Created (acre-feet)
	New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet)
	Existing Storage Preserved or Enhanced (acre-feet)
	Length of Stream Restored or Protected (linear feet)
34,800 lf	Length of Pipe/Canal Built or Improved (linear feet)
378-662 af/yr	Efficiency Savings (acre-feet/year OR dollars/year – **circle one**)
	Area of Restored or Preserved Habitat (acres)
	Other -- Explain:

4. To help us map WSRA projects please include a map (Exhibit B) and provide the general coordinates below:

Latitude: 38.038771 Longitude: -102.603630

Coordinates are at north end of transmission line.

5. Please provide an overview/summary of the proposed water activity (no more than one page). Include a description of the overall water activity and specifically what the WSRA funding will be used for. A full **Statement of Work** with a detailed budget and schedule is required as **Exhibit A** of this application.

The City of Lamar is served by 29 wells located in three well fields, identified as "north," "middle" and "south". The average daily production rate is 5.83 ac ft. Most of the north and middle well field wells contain TDS levels that exceed the Secondary MCL (Maximum Contaminant Level) established by the EPA and the CPDWR. For potable use, these waters must be blended with the cleaner water of the south well field. The south well field produces much cleaner water than the middle and north well fields, and can produce 5.19 ac/ft per day; approximately 88% of the average daily demand for the city.

The existing south well field's main water transmission line was constructed around 1933 as a WPA project. It is constructed of cast iron and is in very poor condition. Recent sampling of the pipeline by the City Water Department and Honeywell Building Solutions indicated a significant amount of internal tuberculation (scale build-up), pressure drop and pin-hole leaks. This sampling included water quality tests, pumping (energy) head loss testing and removal of a section of pipe for visual inspection. These conditions contribute to less than desired water quality, excess pumping energy, serious risk for pipeline failures and water loss. It was determined that replacement of this critical infrastructure pipeline is the only viable alternative, and that implementation should proceed immediately. The pipe is approximately 34,800' long.

WSRA funding will be used for design, permitting, construction and project management costs.

See attached photographs.

Part III. – Threshold and Evaluation Criteria

1. This water activity meets the eligibility requirements outlined in Part 2 of the Criteria and Guidelines. This is a structural water project, and the applicant, City of Lamar Water/Wastewater Department, is an eligible entity.

a) The water activity is consistent with Section 37-75-102 Colorado Revised Statutes.[1] The project will not supersede, abrogate, or otherwise impair the State's current system of allocating water within Colorado nor does it in any manner repeal or amend the existing water rights adjudication system. The project does not affect the State Constitution's recognition of water rights as a private usufructuary property right nor is it intended to restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted under Colorado law.

b) The water activity and grant application were approved by the Arkansas Basin Roundtable at their June 10th Needs Assessment Committee meeting and at the June 12th Roundtable meeting. The application was approved by consensus, with no dissenting minority opinion.

c) The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.[2], meeting the following goals.
   - This project restores and protects a water delivery system that delivers approximately 1,894 ac ft per year to over 12,500 residents.
   - An estimated loss of 20 – 35% of water is currently being lost due to leakage, a total of 378-662 ac ft per year.
   - This water, recovered, serves Lamar, reduces the need to purchase water elsewhere, and frees up non-potable water for irrigation/recreational uses.

[1] 37-75-102. Water rights - protections. (1) It is the policy of the General Assembly that the current system of allocating water within Colorado shall not be superseded, abrogated, or otherwise impaired by this article. Nothing in this article shall be interpreted to repeal or in any manner amend the existing water rights adjudication system. The General Assembly affirms the state constitution's recognition of water rights as a private usufructuary property right, and this article is not intended to restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted under Colorado law. (2) The General Assembly affirms the protections for contractual and property rights recognized by the contract and takings protections under the state constitution and related statutes. This article shall not be implemented in any way that would diminish, impair, or cause injury to any property or contractual right created by intergovernmental agreements, contracts, stipulations among parties to water cases, terms and conditions in water decrees, or any other similar document related to the allocation or use of water. This article shall not be construed to supersede, abrogate, or cause injury to vested water rights or decreed conditional water rights. The General Assembly affirms that this article does not impair, limit, or otherwise affect the rights of persons or entities to enter into agreements, contracts, or memoranda of understanding with other persons or entities relating to the appropriation, movement, or use of water under other provisions of law.

[2] 37-75-104 (2)(c). Using data and information from the Statewide Water Supply Initiative and other appropriate sources and in cooperation with the on-going Statewide Water Supply Initiative, develop a basin-wide consumptive and nonconsumptive water supply needs assessment, conduct an analysis of available unappropriated waters within the basin, and propose projects or methods, both structural and nonstructural, for meeting those needs and utilizing those unappropriated waters where appropriate. Basin Roundtables shall actively seek the input and advice of affected local governments, water providers, and other interested stakeholders and persons in establishing its needs assessment, and shall propose projects or methods for meeting those needs. Recommendations from this assessment shall be forwarded to the Interbasin Compact Committee and other basin roundtables for analysis and consideration after the General Assembly has approved the Interbasin Compact Charter.

d) Matching Requirement: For requests from the **Statewide Fund**, the applicants is required to demonstrate a **20 percent** (or greater) match of the request from the Statewide Account. Statewide requests must also include a minimum match of **5 percent** of the total grant amount from Basin Funds. Sources of matching funds include but are not limited to Basin Funds, in-kind services, funding from other sources, and/or direct cash match. Past expenditures directly related to the project may be considered as matching funds if the expenditures occurred within 9 months of the date the application was submitted to the CWCB. Please describe the source(s) of matching funds. (NOTE: These matching funds should also be reflected in your Detailed Budget in **Exhibit A** of this application)

Project funding summarized here:

*DOLA EMIA Grant:	$ 985,000
WSRA Basin Funds:	$ 50,000
WSRA Statewide Funds:	$ 150,000
CWCB Water Loan:	$ 785,000
Total Project Cost:	$1,970,000

* DOLA grant hearings are July 24th and 25th is in late July. If DOLA funds are not received, applicant intends to increase the CWCB loan amount, as discussed with CWCB staff.
* We will be increasing water rates to cover the CWCB debt service. The average monthly ratepayer increase will be $0.83 with WSRA grants or $1.05 without WSRA grants – assuming the DOLA EMIA grant is funded in the full amount of the application. These monthly rate increases go up to $1.88 or $2.10 per month with/without the WSRA grants respectively if the DOLA application is not funded/approved.

2. For Applications that include a request for funds from the **Statewide Account**, describe how the water activity/project meets all applicable **Evaluation Criteria.** (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines and repeated below.) Projects will be assessed on how well they meet the Evaluation Criteria. **Please attach additional pages as necessary.**

Evaluation Criteria – the following criteria will be utilized to further evaluate the merits of the water activity proposed for funding from the Statewide Account. In evaluation of proposed water activities, preference will be given to projects that meet one or more criteria from each of the three "tiers" or categories. Each "tier" is grouped in level of importance. For instance, projects that meet Tier 1 criteria will outweigh projects that only meet Tier 3 criteria. WSRA grant requests for projects that may qualify for loans through the CWCB loan program will receive preference in the Statewide Evaluation Criteria if the grant request is part of a CWCB loan/WSRA grant package. For these CWCB loan/WSRA grant packages, the applicant must have a CWCB loan/WSRA grant ratio of 1:1 or higher. Preference will be given to those with a higher loan/grant ratio.

Tier 1: Promoting Collaboration/Cooperation and Meeting Water Management Goals and Identified Water Needs

a. The water activity addresses multiple needs or issues, including consumptive and/or non-consumptive needs, or the needs and issues of multiple interests or multiple basins.

Consumptive

This structural project replaces an existing water transmission line that is in danger of failing completely. The line serves over 12,551 water users in Lamar with 1,894 ac/ft per year.

Conservation

An estimated 20 – 35% of water is currently being lost due to leakage, a total of 378-662 ac ft per year. Eliminating this waste meets basic conservation goals.

Water Quality

This transmission line serves the cleanest water source; the majority of wells connected to other transmission lines *must* be blended with the water transported by this line in order to meet TDS levels below the Secondary MCL (Maximum Contaminant Level) established by the EPA and the CPDWR. Access to this water source also improves the water served to the customer and increases the potential to reduce DBP's (disinfection byproducts) like THMs and HAAs.

Operations/Energy

Being able to minimize the higher TDS water used by Lamar means less wear and tear on water lines, valves and pump equipment. Replacement of the line will reduce the amount of pumping energy currently needed to overcome the friction losses resulting from significant internal scaling (tuberculation) in the existing pipe lowering energy costs and carbon footprint. There will also be reduced labor and maintenance costs.

Water Management

Restoring full use to this line builds flexibility into Lamar's water system. The new system will enable the department to better audit the production and loss of this portion of the distribution system.

b. The number and types of entities represented in the application and the degree to which the activity will promote cooperation and collaboration among traditional consumptive water interests and/or non-consumptive interests, and if applicable, the degree to which the water activity is effective in addressing intrabasin or interbasin needs or issues.

Lamar has interests and owns shares in the Lamar Canal/ Irrigation Co., Ft. Bent Ditch Co., and Fry-Ark Project Water. These entities will directly benefit from the water activity. Water recovered will allow water to be left in these systems and become available for lease by farmers.

c. The water activity helps implement projects and processes identified as helping meet Colorado's future water needs, and/or addresses the gap areas between available water supply and future need as identified in SWSI or a roundtable's basin-wide water needs assessment.

An estimated loss of 20 – 35% of water is currently being lost due to leakage, a total of 378-662 ac ft per year. Soils in the area are such that leaks are virtually undetectable along the length of the water line, so it is impossible to exactly quantify actual loss, which may be greater than estimated. Recovering this loss goes directly to the current and future water needs of Lamar.

Tier 2: Facilitating Water Activity Implementation

d. Funding from this Account will reduce the uncertainty that the water activity will be implemented. For this criterion the applicant should discuss how receiving funding from the Account will make a significant difference in the implementation of the water activity (i.e., how will receiving funding enable the water activity to move forward or the inability obtaining funding elsewhere).

This critical issue was discovered during the work of an Energy Performance Contract. Due to the size of the project, the City of Lamar does not have the financial resources to fund such a large project on their own. Attempting to recover 100% of the cost of replacing the pipeline through a ratepayer increase would place a difficult financial burden on many already financially challenged ratepayers. Note that the median household income in Lamar, according the most recent US Census Bureau data, is $31,074 – well below the Colorado State average of $57,685.

A CWCB loan application is being made in conjunction with this application for grant funding.

Funding has been sought from DOLA in the form of an Energy and Mineral Impact Assistance Program Tier II application. Notification of funding will be received in late July. These funds will be used as a partner match. If this funding stream is not available, the CWCB loan amount will be increased to complete the project.

The applicant considered CDPHE and USDA funding options, but neither proved viable from a timing perspective, due to the urgent nature of this project.

e. The amount of matching funds provided by the applicant via direct contributions, demonstrable in-kind contributions, and/or other sources demonstrates a significant & appropriate commitment to the project.

The City of Lamar's investment in the Energy Performance Contract that led to the discovery of this critical project demonstrates a significant commitment to the project and to the sustainability of the water supply of Lamar. A revenue pledge and rate increase will be used to fund the loan portion of this project.

Tier 3: The Water Activity Addresses Other Issues of Statewide Value and Maximizes Benefits

f. The water activity helps meet environmental and recreational needs by reducing waste and using water more efficiently, freeing up water for other uses in Lamar, including non-potable irrigation of City parks and open space.

g. The water activity is complimentary to or assists in the implementation of the CWCB loan program.

Part IV. – Required Supporting Material

1. **Water Rights, Availability, and Sustainability** – This information is needed to assess the viability of the water project or activity. Please provide a description of the water supply source to be utilized, or the water body to be affected by, the water activity. This should include a description of applicable water rights, and water rights issues, and the name/location of water bodies affected by the water activity.

The City owns a portfolio of groundwater and surface water rights and utilizes these rights to provide water services obtained from water supply wells completed in the alluvial and bedrock aquifers in the area.

The surface water rights used by the City for irrigation and aquifer recharge or leased for irrigation uses on nearby farms include the ownership of shares in the Fort Bent Ditch Company (3,199.6 shares), Lamar Canal and Irrigation Company (350 shares), and the Lower Arkansas Water Management Association (LAWMA)(290 shares). Lamar is also entitled to purchase Fryingpan-Arkansas Project water from the Southeastern Colorado Water Conservancy District. Lamar is investigating the feasibility of participation in the Arkansas Valley Conduit which is contemplated to bring high quality surface water from Pueblo Reservoir to Colorado cities in the eastern Arkansas River basin.

The City currently has an application before the Water Court seeking to change the type of use and place of use of the City's shares of ownership of the capital stock of the Ft. Bent Ditch Company. New uses to the originally decreed use of agricultural irrigation include potable and non-potable irrigation, domestic and household purposes, commercial, municipal, industrial, generation of electric power and power generally, fire protection, recreation, fish and wildlife preservation and propagation, agricultural uses, livestock water, aqua culture, evaporation, wetlands propagation, ground water recharge, augmentation, replacement and uses in substitute supply plans to replace depletions to the Arkansas River and its tributaries. The City has also requested that the place of use of the Ft. Bent Ditch Shares should be changed from their historical place of use to the municipal service area and customers of the City of Lamar whether inside or outside the city limits of the City of Lamar.

The City's groundwater rights include 43 wells for use in the water supply system. Thirty-four of these 43 wells make up what is known as the "Clay Creek Alluvial well field" and are used to provide the City's potable water via pipelines to the City's above-ground water storage tanks. These wells are completed in the Clay Creek alluvium in a relatively narrow alluvial channel extending south from the Arkansas River. Only 29 of the 34 wells in the Clay Creek well field are currently active. The remaining nine wells are not part of the Clay Creek Alluvial well field and are scattered throughout the City for irrigation of parks, for use at the City's maintenance shop, and for use at the airport.

2. Please provide a brief narrative of any related studies or permitting issues.

2007 Comprehensive Water Plan
The Comprehensive Water Plan completed in 2007 concluded that City's currently owned surface and groundwater rights provide adequate water rights to meet its projected growth. It recognized the need for improvements to infrastructure.

Energy Performance Contract
The City of Lamar contracted with Honeywell Building Solutions to carry out this contract, which was to rehabilitate wells and pumping systems. The original plan was to clean the project transmission line using a "pigging" process that would allow the City to defer replacement until after the city established a viable capital improvement plan. Testing of the line pre-pigging indicated that cleaning would likely cause major pipe failure.

The current $3.47M energy performance contract (now in the construction phase @ ~ 75% complete) includes --

* Improving water availability to the community with better efficiency through blending of poorer quality north and middle well field water with higher quality south well field water
* Using new equipment and technologies to accomplish water and energy conservation
* Savings guaranteed by Honeywell will be used to repay the cost for a 15-year 3rd party loan

Measures currently in construction generally include –

* Rehabilitation of wells (liners, screens, pumps and controls) to improve water quality through better blending of water sources, improve pumping energy efficiency & add real-time monitoring and historical data gathering of system loss from wells to water plant.
* Upgrade of water meters to improve accuracy, revenue capture and data management to coincide with our water conservation plan.
* Other misc water Supervisory Control and Data Acquisition (SCADA) upgrades and well-field piping connections to further improve efficiencies & data collection.

3. Statement of Work, Detailed Budget, and Project Schedule

The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified. **Please note that costs incurred prior to execution of a contract or purchase order are not subject to reimbursement**. All WSRA funds are disbursed on a reimbursement basis after review invoices and appropriate backup material.

Please provide a detailed statement of work using the template in Exhibit A. Additional sections or modifications may be included as necessary. Please define all acronyms and include page numbers.

Exhibit A
Statement of Work

WATER ACTIVITY NAME – Lamar Water Transmission Line Replacement

GRANT RECIPIENT – City of Lamar

FUNDING SOURCE – WSRA Basin/Statewide Funds, CWCB Loan

INTRODUCTION AND BACKGROUND

The City of Lamar is served by 29 wells located in three well fields, identified as "north," "middle" and "south". The average daily production rate is 5.83 ac ft. Most of the north and middle well field wells contain TDS levels that exceed the Secondary MCL (Maximum Contaminant Level) established by the EPA and the CPDWR. The south well field produces much cleaner water than the middle and north well fields, and can produce 5.19 ac/ft per day; approximately 88% of the average daily demand for the city.

The existing south well field's main water transmission line was constructed around 1933 as a WPA project. It is constructed of cast iron and is in very poor condition. Recent sampling of the pipeline by the City Water Department and Honeywell Building Solutions indicated a significant amount of internal tuberculation (scale build-up), pressure drop and pin-hole leaks. This sampling included water quality tests, pumping (energy) head loss testing and removal of a section of pipe for visual inspection. These conditions contribute to less than desired water quality, excess pumping energy, serious risk for pipeline failures and water loss. It was determined that replacement of this critical infrastructure pipeline is the only viable alternative, and that implementation should proceed immediately.

OBJECTIVES

The objective of this project is to finalize design and permitting, and replace the South Wellfield Raw Water Transmission Line, which is approximately 34,800' long, to improve water quality and reduce water loss.

TASKS

Tasks 1-8 Pipeline Installation

Description of Task

- Mobilization
- Locating existing pipeline
- Surveying and locating the new pipeline
- Removal of existing pipe
- Trenching and backfill
- Installation of new pipeline is broken into parts as follows:
  1. 34,800 LF of pipeline
  2. PS2 Tank
  3. Well 22
  4. Air Vent

5. Well 27
6. PS1 Tank
7. Road Crossings
8. Miscellaneous Connections at Existing Piping

Method/Procedure
Honeywell Building Solutions will manage a General Contractor who will perform the work.

Task 8 – General Contractor

Description of Task

- Contractor's overhead & profit
- GC Insurance
- GC Performance Bond

Task 9 – Honeywell Project Management

Description of Task

- Final Design
- Project Management
- Permits
- Overhead/Profit
- Contingency

Task Deliverable: Final Design, Bid Packet, Construction Documents. Project progress will be documented. Completed Pipeline is the final deliverable.

The above statements are true to the best of my knowledge.

Signature of Applicant:

Applicant's Name: City of Lamar Water/Wastewater Department

Project Title: **LAMAR WATER TRANSMISSION LINE REPLACEMENT**

BUDGET - Lamar Water Transmission Line Replacement		
		Total
Task #	Description	Amount
1	**Pipeline**	
1.1	Mobilization to / from job site	$ 7,400.00
1.2	Locating / potholing existing pipeline	$ 4,500.00
1.3	Surveying / locating new pipeline	$ 3,900.00
1.4	Trenching & Backfill - 24" x 6' deep	$ 215,412.00
1.5	16" C-905 D25 PVC piping (to air vent)	$ 358,215.00
1.6	16" C-905 D25 PVC piping (to Well 29)	$ 160,875.00
1.7	12" C-900 D18 PVC Piping (to PS1)	$ 274,434.00
1	**Subtotal Pipeline**	**$ 1,024,736.00**
2	**Sketch No. 1 - Piping at PS2 Tank**	
2.1	Remove existing piping	$ 2,720.00
2.2	14" gate valve	$ 4,503.50
2.3	14" x 14" x 12" DIP Tee	$ 3,087.00
2.4	14" DIP 90 deg bend	$ 1,900.00
2.5	12" gate valve	$ 1,785.50
2.6	12" x 14" DIP increaser	$ 1,525.00
2.7	14" dresser coupling	$ 1,190.50
2.8	14" x 16" DIP increaser	$ 1,830.00
2.9	Bolt kits and restraining kits	$ 6,240.00
2.10	Spool pieces	$ 4,120.00
2	**Subtotal Piping at PS2 Tank**	**$ 28,901.50**
3	**Sketch No. 2 - Piping at Well 22 Connection**	
3.1	Remove existing piping	$ 2,720.00
3.2	8" gate valve	$ 1,090.50
3.3	8" x 12" DIP increaser	$ 907.25
3.4	12" x 12" x 12" DIP tee	$ 2,170.50
3.5	12" gate valve	$ 1,785.50
3.6	12" x 14" DIP increaser	$ 1,525.00
3.7	14" dresser coupling	$ 2,381.00
3.8	16" x 16" x 12" DIP tee	$ 3,863.00
3.9	16" gate valve	$ 4,853.50
3.10	16" dresser coupling	$ 2,781.00
3.11	Bolt kits and restraining kits	$ 7,840.00
3.12	Spool pieces	$ 1,660.00
3	**Subtotal Piping at Well 22 Connection**	**$ 33,577**
4	**Sketch No. 3 - Air Vent**	
4.1	16" x 16" x 12" DIP tee	$ 3,863.00
4.2	12" tapped cap	$ 785.00
4.3	16" dresser coupling	$ 2,781.00
4.4	2" air vent w/ accessories	$ 1,470.00
4.5	Bolt kits and restraining kits	$ 1,470.00
4.6	Access manhole	$ 6,375.00
4	**Subtotal Air Vent**	**$ 16,744.00**
5	**Sketch No. 4 - Piping at Well 27**	
5.1	Trenching & Backfill - 24" x 4' deep	$ 1,916.00
5.2	Remove existing piping	$ 11,800.00
5.3	12" C-900 D18 PVC Piping (to Well 27)	$ 2,589.00
5.4	8" C-900 D18 PVC Piping (to other wells)	$ 4,603.50
5.5	16" x 16" x 12" DIP tee	$ 3,863.00
5.6	16" x 16" x 8" DIP tee	$ 11,589.00
5.7	12" gate valve	$ 1,785.50

5.8	8" gate valve	$	3,271.50
5.9	Misc. dresser couplings	$	2,340.00
5.10	Misc. DIP fittings	$	3,140.00
5.11	16" x 16" x 12" DIP tee	$	3,863.00
5.12	16" x 12" DIP reducer	$	1,830.00
5.13	12" gate valve	$	3,571.00
5.14	12" DIP 90 deg bend	$	1,463.50
5.15	12" x 14" DIP increaser	$	1,525.00
5.16	14" dresser coupling	$	1,190.50
5.17	Bolt kits and restraining kits - small	$	3,430.00
5.18	Bolt kits and restraining kits - large	$	9,800.00
5.19	Spool pieces	$	1,660.00
5	**Subtotal Piping at Well 27**	**$**	**75,230.50**
6	**Sketch No. 5 - Piping at PS1 Tank**		
6.1	Remove existing piping	$	8,160.00
6.2	8" check valves	$	3,721.00
6.3	8" dresser couplings	$	1,170.00
6.4	8" gate valve	$	2,181.00
6.5	8" x 12" DIP increaser	$	1,814.50
6.6	12" x 12" x 12" DIP tee	$	4,341.00
6.7	12" gate valve	$	1,785.50
6.8	12" dresser coupling	$	1,581.00
6.9	12" DIP 22-1/2 deg bend	$	2,827.00
6.10	12" x 14" DIP increaser	$	1,525.00
6.11	14" dresser coupling	$	1,190.50
6.12	12" x 14" DIP increaser	$	1,525.00
6.13	Bolt kits and restraining kits - small	$	3,430.00
6.14	Bolt kits and restraining kits - large	$	9,800.00
6.15	Spool pieces	$	1,660.00
6.16	Pipe painting in vault	$	1,320.00
6	**Subtotal Piping at PS1 Tank**	**$**	**48,031.50**
7	**Sketch No. 6 - Road Crossings**		
7.1	Slightly deeper excavation	$	742.80
7.2	Concrete encasement	$	5,446.99
7.3	Special backfill, fence repair, delays	$	4,300.00
6	**Subtotal Road Crossings**	**$**	**10,489.79**
8	**Misc. Connections at Existing Piping**		
8.1	Remove / repair misc. 3/4" connections	$	17,550.00
8	**Subtotal Misc. Connections at Existing Piping**	**$**	**17,550.00**
	Subtotal	**$**	**1,255,260.54**
9	**General Contractor**		
9.1	Contractor's labor overhead & profit	$	71,474.00
9.2	Contractor's equipment overhead & profit	$	14,507.00
9.3	General contractor's insurance	$	5,834.00
9.4	GC's payment & performance bond	$	13,412.00
9	**Subtotal General Contractor**	**$**	**105,227.00**
	TOTAL	**$**	**1,360,487.54**
10	**Honeywell Project Management & Project Contingency**		
10.1	Design	$	115,641.00
10.2	Project Management	$	95,234.00
10.3	Permits	$	13,605.00
10.4	Overhead/Profit	$	158,496.00
10.5	Project Contingency	$	226,651.00
10	**Subtotal Project Management & Contingency**	**$**	**609,627.00**
	TOTAL	**$**	**1,970,114.54**

TIMELINE - LAMAR WATER TRANSMISSION LINE REPLACEMENT

					2013				2014						
Task #	**Task Description**	**Start**	**Days to complete**	**Finish**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**
	CWCB Grant & Loan	**04/22/13**	**201.0**	**11/09/13**											
	Pre-application meeting	04/11/13	-	04/11/13											
	City approval to apply for CWCB loan	04/11/13	11.0	04/22/13											
	Grant application	04/22/13	45.0	06/06/13											
	Loan application	04/22/13	101.0	08/01/13											
	CWCB Approval	09/24/13		09/25/13											
	CWCB Notice To Proceed	09/25/13	45	11/09/13											
	Site Construction	**11/09/13**	**150.0**	**04/08/14**											
	Notice to proceed & mobilize	11/09/13	30	12/09/13											
	Time to complete	12/09/13	120	04/08/14											
1	Pipeline	12/09/13	120	04/08/14											
2	Piping at PS2 Tank	12/09/13	120	04/08/14											
3	Piping at Well 22 Connection	12/09/13	120	04/08/14											
4	Air Vent	12/09/13	120	04/08/14											
5	Piping At Well 27	12/09/13	120	04/08/14											
6	Piping at PS1 Tank	12/09/13	120	04/08/14											
7	Road Crossings	12/09/13	120	04/08/14											
8	Misc Connections At Existing Pipeline	12/09/13	120	04/08/14											
9	General Contractor - Award	11/09/13	-	11/09/13											
10	**Project Management & Contingency**														
	Concept design & opinion of probable cost	01/28/13	31	02/28/13											
	City Council approval to move forward with development activities	02/28/13	25	03/25/13											
	Schematic design & sub/supplier bidding documentation	06/06/13	45	07/21/13											
	Bidding to pre-qualified constructors & suppliers	07/21/13	21	08/11/13											
	Award to selected contractor(s) & supplier(s)	11/09/13	30	12/09/13											
	Project management & administration by Honeywell	03/25/13	393	04/22/14											

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.

The above statements are true to the best of my knowledge:

Signature of Applicant: _____

Print Applicant's Name: John Sutherland, City Administrator

Project Title: LAMAR WATER TRANSMISSION LINE REPLACEMENT

Return an electronic version (hardcopy may also be submitted) of this application to:

Greg Johnson – WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
gregory.johnson@state.co.us