Henry P. Roybal
Commissioner, District 1

Miguel M. Chavez
Commissioner, District 2

Robert A. Anaya
Commissioner, District 3

Kathleen Holian
Commissioner, District 4

Liz Stefanics
Commissioner, District 5

Katherine Miller
County Manager

May 9, 2016

SANTA FE COUNTY
RFP#2016-0318-PW/MM
AGUA FRIA WATER/WASTEWATER INFRASTRUCTURE EXPANSION PLAN

ADDENDUM #1

Dear Proponents,

This addendum is issued to reflect the following immediately. It shall be the responsibility of interested Offerors to adhere to any changes or revisions to the RFP as identified in this Addendum No. 1. This documentation shall become permanent and made part of the departmental files.

ATTACHMENT A: DELIVERABLES
ATTACHMENT B: UNITED STATES DEPARTMENT OF AGRICULTURE BULETIN 1780-2
ATTACHMENT C: WATER MAP
ATTACHMENT D: WASTEWATER MAP
ATTACHMENT E: 2008 AGUA FRIA TRADITIONAL HISTORIC COMMUNITY AREA SEWER SYSTEM MASTER PLAN (INFORMATIONAL PURPOSES ONLY)

CLARIFICATION: THE 2008 AGUA FRIA TRADITIONAL HISTORIC COMMUNITY AREA SEWER SYSTEM MASTER PLAN IS FOR INFORMATIONAL PURPOSES ONLY. SANTA FE COUNTY IS NOT LIABLE FOR ANY INFORMATION PROVIDED IN THIS DOCUMENT.

Question #1: Is the current water system storage adequate? Should we include water system storage as part of the PER?

Answer #1: ***Additional storage is not anticipated, but it is possible that inclusion of additional storage will become necessary.***

Question #2 This RFP requires two PERS. What is the total amount of funding?

Answer #2: ***The County has two legislative grants in the amount of $190,000. This funding is intended to provide for all phases of this project which includes, the study, design and construction services.***

Question #3: If we are required to follow the USDA format, should the PER contain environmental and cultural considerations?

Answer #3: ***Yes to the extent that the environment and cultural consideration must be addressed under USDA Bulletin 1780-2, both of these issues should be evaluated.***

Question #4: What is the estimated value (construction value) of the project?

Answer# 4: ***The estimated value is unknown at this time. The purpose of the PER will help define this.***

Question# 5: What is the estimated period of performance for the project?

Answer# 5: ***The PER period of performance is 180 from Notice to Proceed for Phase I and 90 days for Phase II. The performance period for the construction project is not defined (PER will inform this)***

Question# 6: The RFP states that the community is underserved by sewers with many residents relying on septic tanks which pose a threat to ground water. Regarding water supply, the Village needs to provide safe a water supply to residents who rely on domestic wells that may be compromised. Is there a regulatory requirement to perform the project?

Answer# 6 ***No. However, the existence of septic tanks (and sometimes cesspools) creates the potential for impacts to ground water quality and frequently impairs resident's ability to sell their properties.***

Question# 7: Is the Village in violation of regulatory requirements?

Answer #7: ***No.***

Question# 8: Is there a consent order to perform the work?

Answer# 8: ***No.***

Question# 9: Are there any problems with the existing sewer system that may need to be addressed?

Answer# 9: ***There are no known problems with the existing sewer system in Agua Fria that need to be addressed as part of this work.***

Question# 10: Does the Village have their sewer system in GIS form?

Answer# 10: ***The "Village" is not involved, this is a Santa Fe County project. Santa Fe County does have GIS information about the existing sewer lines (refer to Attachment D)***

Question# 11: Does the Village have any previous reports regarding population and growth projections?

Answer# 11: ***None that Santa Fe County Utilities is aware of. These are normally part of the data collect by a consultant as part of the PER.***

Question# 12: The RFP indicates evaluation of "statements of qualifications and performance data." Is the Village expecting a detailed proposed approach?

Answer# 12: ***Santa Fe County is expecting a detailed proposed approach that is consistent with the USDA Bulletin 1780-2 template.***

Question# 13: Does the Village foresee the need for field reconnaissance such as survey, GPS of manholes, etc.?

Answer# 13: ***Field investigation is anticipated, but GPS and survey work is not.***

Question#14: Does the Village have water conservation regulations and plans for future conservation; can we get copies of any documents?

Answer# 14: ***Santa Fe County Utilities has water conservation ordinances and resolutions. Copies of these are publically available, and will be made available to the selected firm.***

Question# 15: How is water delivered to the Agua Fria area?

Answer# 15: ***There are three providers in this area: Santa Fe County, the Agua Fria Community Water System and the City of Santa Fe. There are jurisdictional issues that continue to be worked on between the City and County. The County has a Joint Powers Agreement with the Agua Fria Community Water System that allows them the first right of refusal for providing service within the Traditional Historic District. The Agua Fria system has their own source of supply (a well) and the City and County are supplied from the City's lines on Agua Fria and Rufina Streets. The Agua Fria system also has a master meter connection with the City system (as a County customer).***

Question #16: Should the focus be on the historical boundaries?

Answer# 16: ***This project deals exclusively with infrastructure expansion within the historic boundaries of the Village of Agua Fria.***

Question# 17- What are the font size and margin limits?

Answer# 17- ***The document shall be typewritten on standard 8 ½ x 11 paper, with a font no smaller than 12 pt., with nominal 1" margins and normal line spacing.***

Question# 18- What is the date for the selection of the notification?

Answer# 18- ***The date is to be determined as the procurement requires NMED approval.***

Question# 19- Is page 16 applicable to this RFP?

Answer# 19- ***No.***

Please add this Addendum #1 to the original proposal documents and refer to proposal documents, hereto as such. This and all subsequent addenda will become part of any resulting contract documents and have effects as if original issued. All other unaffected sections will have their original interpretation and remain in full force and effect.

Responders are reminded that any questions or need for clarification must be addressed to Maricela Martinez, Senior Procurement Specialist at mcmartinez@santafecountnm.gov.

Attachment A

Deliverables:

1. Deliver a Wastewater Preliminary Engineering Report.
    a. The report will provide the areas within the Traditional Community targeted for sewer service expansion by priority and project phasing, including sequential implementation where applicable.
    b. The report will identify the basic concept of the sewer infrastructure expansion (i.e. gravity sewer, liftstation/forcemain, low pressure sewer) for each proposed project phase, including maps showing proposed public (and possibly private) sewer system expansions.
    c. The report will identify areas where utility easement dedications will be necessary to complete the projects outlined.
    d. The report will contain maps showing the existing sewer infrastructure within Community, the proposed budget phases and the areas where easement dedications are necessary to complete the projects.
    e. The report will identify the estimated cost of individual project phases, including engineering, construction, right of way/easement acquisitions costs and other costs associated with the individual projects. The estimate of costs will be itemized in the form of an engineer's opinion of probable costs.
    f. The report will follow current USDA guidelines for Preliminary Engineering Reports to allow the greatest opportunity for project funding sources possible.

    Drafts of the deliverables shall be submitted to the County for review at the 30% (outline for the report), 60%, and 90% completion phase. The selected firm will be required to participate in public meetings with members of the affected community at the 60% and 90% review phases to take input from community members and answer questions. The selected firm shall consider and address comments from County staff and the public in the deliverables at each review stage (as applicable).

    Deliverables will include three (3) hard copies of the final report and three (3) CDs/thumb drive/other electronic media storage devices (as may be identified by the County) with all project files (in original electronic format -e.g. Word, Excel, GIS, etc. and in final pfd format). The final report will be delivered to the County upon completion of the project.

2. Deliver a Water Preliminary Engineering Report

a. The report will provide the areas within the Traditional Agua Fria Community targeted for water infrastructure service expansion by priority and project phasing.

b. The report will identify the basic concept of the water infrastructure expansion including fire protection for each proposed project phase, including maps showing County and Agua Fria Community water infrastructure expansions.

c. The report will identify areas where utility easement dedications will be necessary to complete the projects outlined.

d. The report will contain maps showing the existing water infrastructure system within the Agua Fria Community, the proposed project phases and the areas where easement dedications are necessary to complete the projects.

e. The report will identify the estimated cost of individual project phases, including engineering, construction, right of way/easement acquisitions costs and any other cost associated with the individual projects. The estimate of costs will be itemized in the form of an engineer's opinion of probable costs.

f. The report will follow USDA guidelines for Preliminary Engineering Reports to allow the greatest opportunity for project funding sources possible.

g. Drafts of the deliverables shall be submitted to the County for review at the 30% (outline for the report), 60%, and 90% completion phase. The selected firm will be required to participate in public meetings with members of the affected community at the 60% and 90% review phases to take input from Community members and answer technical questions. The selected firm shall consider and address comments from County staff and the public in the deliverables at each review stage as applicable.

h. Deliverables will include three (3) hard copies of the final report and three (3) CDs/thumb drive/other electronic media storage devices (as may be identified by the County) with all project files (in original electronic format -e.g. Word, Excel, GIS, etc. and in final .pdf format). The final report will be delivered to the County upon completion of the project.

Drafts of the deliverables shall be submitted to the County for review at the 30% (outline for the report), 60%, and 90% completion phase. The selected firm will be required to participate in public meetings with members of the affected community at the 60% and 90% review phases to take input from Community members and answer technical questions. The selected firm shall consider and address comments from County staff and the public in the deliverables at each review stage as applicable.

Deliverables will include three (3) hard copies of the final report and three (3) CDs/thumb drive/other electronic media storage devices (as may be identified by the

County) with all project files (in original electronic format -e.g. Word, Excel, GIS, etc. and in final .pdf format). The final report will be delivered to the County upon completion of the project.

Attachment B

UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Utilities Service

BULLETIN 1780-2

SUBJECT: **Preliminary Engineering Reports for the Water and Waste Disposal Program**

TO: Rural Development State Directors, RUS Program Directors, and State Engineers

EFFECTIVE DATE: Date of approval.

OFFICE OF PRIMARY INTEREST: Engineering and Environmental Staff, Water and Environmental Programs

INSTRUCTIONS: This bulletin replaces existing RUS Bulletins 1780-2 (September 10, 2003), 1780-3 (October 2, 2003), 1780-4 (October 2, 2003), and 1780-5 (October 2, 2003).

AVAILABILITY: This bulletin and all the exhibits, as well as any Rural Development instruction or Rural Utilities Service instructions, regulations, or forms referenced in this bulletin are available at any Rural Development State Office. The State Office staff is familiar with the use of the documents in their States and can answer specific questions on Agency requirements.

This bulletin is available on the Rural Utilities Service website at http://www.rurdev.usda.gov/RDU_Bulletins_Water_and_Environmental.html.

PURPOSE: This bulletin assists applicants and their consultants with instructions on how to prepare a Preliminary Engineering Report as part of an application for funding as required by 7 CFR 1780.33(c) and 7 CFR 1780.55.

MODIFICATIONS: Rural Development State Offices may modify this guidance when appropriate to comply with State statutes and regulations in accordance with the procedures outlined at Rural Development Instruction 2006-B (2006.55).

4/4/13

JACQUELINE M. PONTI-LAZARUK
Assistant Administrator
Water and Environmental Programs

Date

TABLE OF CONTENTS

1 GENERAL
2 PURPOSE
3 HOW TO USE THE INTERAGENCY TEMPLATE

Exhibit One Interagency Preliminary Engineering Report Template

INDEX:

Application Document
Preliminary Engineering Report
Project Planning
Water and Waste Disposal Facilities

ABBREVIATIONS

CDBG – Community Development Block Grant
CFR – Code of Federal Regulations
EDU – Equivalent Dwelling Unit
EPA – Environmental Protection Agency
GAO – Government Accountability Office
GPCD – Gallons per Capita per Day
HUD – Department of Housing and Urban Development
O & M – Operations and Maintenance
PER – Preliminary Engineering Report
RD – Rural Development
RUS – Rural Utilities Service
SRF – State Revolving Fund
USDA – United States Department of Agriculture
WEP – Water and Environmental Programs
WWD – Water and Waste Disposal

1 GENERAL

A PER is a planning document required by many state and federal agencies as part of the process of obtaining financial assistance for development of drinking water, wastewater, solid waste, and stormwater projects. An applicant for funding from the WWD program must submit a PER as required by 7 CFR 1780.33(c) and 1780.55. The PER describes the proposed project from an engineering perspective, analyzes alternatives to the proposal, defines project costs, and provides information critical to the underwriting process.

In 2012 the USDA, Rural Development (RD), Rural Utilities Service, Water and Environmental Programs formed a working group to develop an interagency template for PERs for use by both federal agencies and state administering agencies. The USDA-led working group included 36 individuals representing 4 federal agencies, 16 state agencies, the Border Environment Cooperation Commission, and the North Carolina Rural Center. Also, the effort was supported by the Small Community Water Infrastructure Exchange. On January 16, 2013, the principals of the federal participants executed an interagency memorandum supporting use of the interagency template, attached as Exhibit One.

2. PURPOSE

This bulletin provides information and guidance for applicants and professional consultants in developing a PER for submittal with an application for funding. RD State Offices should provide a copy of the Bulletin to applicants and consulting engineers upon request or refer them to the website listed on the Bulletin's cover sheet for an electronic copy.

3 HOW TO USE THE INTERAGENCY TEMPLATE

There has been increasing interest throughout the government at both state and federal levels to improve coordination between funding agencies in the processes involved in applications for infrastructure funding. A recent GAO report, "Rural Water Infrastructure: Additional Coordination Can Help Avoid Potentially Duplicative Application Requirements" (GAO-13-111), released October 16, 2012, called the effort of the working group led by USDA to develop the attached Interagency PER Template "encouraging" and stated that it would "help communities".

Content of a PER: The attached Interagency PER Template describes the content of a PER and should be used without modification, except for items noted below. Often an applicant will initially consider only a single funding source and later determine that an application to additional funding agencies is necessary. To avoid having to revise the PER to meet the additional agencies' needs, the consulting engineer should provide

responses to all sections of the PER outline, unless specific sections do not apply to a proposed project.

Short-Lived Assets: The short-lived asset table in Appendix A is a list of examples of short-lived assets. Depending on local practices and applicants, some of these items may not be considered short-lived assets if they are considered part of O&M or long-term capital financing. Consulting engineers and applicants should coordinate with each other and with the Agency to determine which items should be considered short-lived assets for specific projects.

Engaging State Partners: State Offices should engage funding partners to encourage state-wide adoption of the attached template as a standard for all state leveraging partners. Existing state-level agreements resulting from previous coordinated efforts for adopting a standard PER outline must be modified or replaced with this template. Efforts underway to adopt new state-level PER outlines must use this template. State-level agreements implementing this template between various leveraging partners should keep additional requirements to a minimum, but should not remove any required sections from the template.

Income Projections for Underwriting Purposes:

The State Office uses some of the information from the PER, especially Sections 6 (e) and (f), for underwriting purposes. Note that for income projection purposes, every effort should be made to identify actual data regarding water usage or wastewater generation. For metered systems, actual data should be used.

When financing construction of a new system or improvements to an existing system without any existing usage data, water use and wastewater generation approximations for income projection purposes should, if at all possible, be based on information from surrounding similar communities and systems. The source of data used should be documented in the PER.

The value of 100 GPCD shown in Section 6 is a general value and may not be appropriate for many rural systems financed with WWD funds, so in the absence of reliable data, a value of 5000 gallons per EDU per month (approximately 67 GPCD or 167 GPD per EDU) should be used.

Exhibit One: Interagency Preliminary Engineering Report Template

January 16, 2013

INTERAGENCY MEMORANDUM

Attached is a document explaining recommended best practice for the development of Preliminary Engineering Reports in support of funding applications for development of drinking water, wastewater, stormwater, and solid waste systems.

The best practice document was developed cooperatively by:

- US Department of Agriculture, Rural Development, Rural Utilities Service, Water and Environmental Programs;
- US Environmental Protection Agency (EPA), Office of Water, Office of Ground Water and Drinking Water and Office of Wastewater Management;
- US Department of Housing and Urban Development (HUD), Office of Community Planning and Development;
- US Department of Health and Human Services, Indian Health Service (IHS);
- Small Communities Water Infrastructure Exchange;

Extensive input from participating state administering agencies was also very important to the development of this document.

Federal agencies that cooperatively developed this document strongly encourage its use by funding agencies as part of the application process or project development. State administered programs are encouraged to adopt this document but are not required to do so, as it is up to a state administering agency's discretion to adopt it, based on the needs of the state administering agency.

A Preliminary Engineering Report (Report) is a planning document required by many state and federal funding agencies as part of the process of obtaining financial assistance for development of drinking water, wastewater, solid waste, and stormwater facilities. The attached Report outline details the requirements that funding agencies have adopted when a Report is required.

In general the Report should include a description of existing facilities and a description of the issues being addressed by the proposed project. It should identify alternatives, present a life cycle cost analysis of technically feasible alternatives and propose a specific course of action. The Report should also include a detailed current cost estimate of the recommended alternative. The attached outline describes these and other sections to be included in the Report.

Projects utilizing direct federal funding also require an environmental review in accordance with the National Environmental Policy Act (NEPA). The Report should indicate that environmental issues were considered as part of the engineering planning and include environmental information pertinent to engineering planning.

For state administered funding programs, a determination of whether the outline applies to a given program or project is made by the state administering agency. When a program or agency adopts this outline, it may adopt a portion or the entire outline as applicable to the program or project in question at the discretion of the agency. Some state and federal funding agencies will not require the Report for every project or may waive portions of the Report that do not apply to their application process, however a Report thoroughly addressing all of the contents of this outline will meet the requirements of most agencies that have adopted this outline.

The detailed outline provides information on what to include in a Report. The level of detail required may also vary according to the complexity of the specific project. Reports should conform substantially to this detailed outline and otherwise be prepared and presented in a professional manner. Many funding agencies require that the document be developed by a Professional Engineer registered in the state or other jurisdiction where the project is to be constructed unless exempt from this requirement. Please check with applicable funding agencies to determine if the agencies require supplementary information beyond the scope of this outline.

Any preliminary design information must be written in accordance with the regulatory requirements of the state or territory where the project will be built.

Information provided in the Report may be used to process requests for funding. Completeness and accuracy are therefore essential for timely processing of an application. Please contact the appropriate state or federal funding agencies with any questions about development of the Report and applications for funding as early in the process as practicable.

Questions about this document should be referred to the applicable state administering agency, regional office of the applicable federal agency, or to the following federal contacts:

Agency	Contact	Email Address	Phone
USDA/RUS	Benjamin Shuman, PE	ben.shuman@wdc.usda.gov	202-720-1784
EPA/DWSRF	Kirsten Anderer, PE	anderer.kirsten@epa.gov	202-564-3134
EPA/CWSRF	Matt King	king.matt@epa.gov	202-564-2871
HUD	Stephen Rhodeside	stephen.m.rhodeside@hud.gov	202-708-1322
IHS	Dana Baer, PE	dana.baer@ihs.gov	301-443-1345

Sincerely,

1/16/13

Jacqueline M. Ponti-Lazaruk, Assistant Administrator
USDA, Rural Development, Rural Utilities Service, Water and Environmental Programs

Sheila E. Frace 01/16/13

Sheila Frace, Acting Deputy Director
US EPA, Office of Water, Office of Wastewater Management

1/16/13

Andrew Sawyers, Deputy Director
US EPA, Director, Office of Water, Office of Ground Water and Drinking Water

1/16/13

Ronald Ferguson, PE, RADM, Director
Division of Sanitation Facilities Construction, Indian Health Service

1-16-13

Stanley Gimont, Director
Office of Block Grant Assistance, US Department of Housing and Urban Development

Attachment

WORKING GROUP CONTRIBUTORS

Federal Agency Partners	
USDA, Rural Development, Rural Utilities Service (Chair)	Benjamin Shuman, PE
EPA, Office of Water, Office of Ground Water and Drinking Water	Kirsten Anderer, PE
EPA, Office of Water, Office of Ground Water and Drinking Water	CAPT David Harvey, PE
EPA, Office of Water, Office of Wastewater Management	Matt King
EPA, Office of Water, Office of Wastewater Management	Joyce Hudson
EPA, Region 1	Carolyn Hayek
EPA, Region 9	Abimbola Odusoga
HUD, Office of Community Planning and Development	Stephen M. Rhodeside
HUD, Office of Community Planning and Development	Eva Fontheim
Indian Health Service	CAPT Dana Baer, PE
Indian Health Service	LCDR Charissa Williar, PE
USDA, Rural Development, Florida State Office	Michael Langston
USDA, Rural Development, Florida State Office	Steve Morris, PE

State Agency and Interagency Partners	
Arizona Water Infrastructure Finance Authority	Dean Moulis, PE
Border Environment Cooperation Commission	Jbel Mora, PE
Colorado Department of Local Affairs	Barry Cress
Colorado Department of Public Health & Environment	Michael Beck
Colorado Department of Public Health & Environment	Bret Icenogle, PE
Georgia Office of Community Development	Steed Robinson
Idaho, Department of Environmental Quality	Tim Wendland
Indiana Finance Authority	Emma Kottlowski
Indiana Finance Authority	Shelley Love
Indiana Finance Authority	Amanda Rickard, PE
Kentucky Division of Water	Shafiq Amawi
Kentucky Department of Local Government	Jennifer Peters
Louisiana Department of Environmental Quality	Jonathan McFarland, PE
Maine Department of Health and Human Services	Norm Lamie, PE
Minnesota Pollution Control Agency	Amy Douville
Minnesota Pollution Control Agency	Corey Mathisen, PE
Missouri Department of Natural Resources	Cynthia Smith
Montana Department of Commerce	Kate Miller, PE
North Carolina Department of Commerce	Olivia Collier
North Carolina Rural Center	Keith Krzywicki, PE
North Carolina Department of Commerce	Vickie Miller, CPM
Rhode Island Department of Health	Gary Chobanian, PE
Rhode Island Department of Health	Geoffrey Marchant

ABBREVIATIONS

NEPA – National Environmental Policy Act
NPV – Net Present Value
O&M – Operations and Maintenance
OMB – Office of Management and Budget
Report – Preliminary Engineering Report
SPPW – Single Payment Present Worth
USPW – Uniform Series Present Worth

GENERAL OUTLINE OF A PRELIMINARY ENGINEERING REPORT

1) PROJECT PLANNING
   a) Location
   b) Environmental Resources Present
   c) Population Trends
   d) Community Engagement

2) EXISTING FACILITIES
   a) Location Map
   b) History
   c) Condition of Existing Facilities
   d) Financial Status of any Existing Facilities
   e) Water/Energy/Waste Audits

3) NEED FOR PROJECT
   a) Health, Sanitation, and Security
   b) Aging Infrastructure
   c) Reasonable Growth

4) ALTERNATIVES CONSIDERED
   a) Description
   b) Design Criteria
   c) Map
   d) Environmental Impacts
   e) Land Requirements
   f) Potential Construction Problems
   g) Sustainability Considerations
      i) Water and Energy Efficiency
      ii) Green Infrastructure
      iii) Other
   h) Cost Estimates

5) SELECTION OF AN ALTERNATIVE
   a) Life Cycle Cost Analysis
   b) Non-Monetary Factors

6) PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)
   a) Preliminary Project Design
   b) Project Schedule
   c) Permit Requirements
   d) Sustainability Considerations
      i) Water and Energy Efficiency
      ii) Green Infrastructure

iii) Other

e) Total Project Cost Estimate (Engineer's Opinion of Probable Cost)

f) Annual Operating Budget

i) Income

ii) Annual O&M Costs

iii) Debt Repayments

iv) Reserves

7) CONCLUSIONS AND RECOMMENDATIONS

DETAILED OUTLINE OF A PRELIMINARY ENGINEERING REPORT

1) PROJECT PLANNING

Describe the area under consideration. Service may be provided by a combination of central, cluster, and/or centrally managed individual facilities. The description should include information on the following:

a) Location. Provide scale maps and photographs of the project planning area and any existing service areas. Include legal and natural boundaries and a topographical map of the service area.

b) Environmental Resources Present. Provide maps, photographs, and/or a narrative description of environmental resources present in the project planning area that affect design of the project. Environmental review information that has already been developed to meet requirements of NEPA or a state equivalent review process can be used here.

c) Population Trends. Provide U.S. Census or other population data (including references) for the service area for at least the past two decades if available. Population projections for the project planning area and concentrated growth areas should be provided for the project design period. Base projections on historical records with justification from recognized sources.

d) Community Engagement. Describe the utility's approach used (or proposed for use) to engage the community in the project planning process. The project planning process should help the community develop an understanding of the need for the project, the utility operational service levels required, funding and revenue strategies to meet these requirements, along with other considerations.

2) EXISTING FACILITIES

Describe each part (e.g. processing unit) of the existing facility and include the following information:

a) Location Map. Provide a map and a schematic process layout of all existing facilities. Identify facilities that are no longer in use or abandoned. Include photographs of existing facilities.

b) History. Indicate when major system components were constructed, renovated, expanded, or removed from service. Discuss any component failures and the cause for the failure. Provide a history of any applicable violations of regulatory requirements.

c) Condition of Existing Facilities. Describe present condition; suitability for continued use; adequacy of current facilities; and their conveyance, treatment, storage, and disposal capabilities. Describe the existing capacity of each component. Describe and reference compliance with applicable federal, state, and local laws. Include a brief analysis of overall current energy consumption. Reference an asset management plan if applicable.

d) Financial Status of any Existing Facilities. (Note: Some agencies require the owner to submit the most recent audit or financial statement as part of the application package.) Provide information regarding current rate schedules, annual O&M cost (with a breakout of current energy costs), other capital improvement programs, and tabulation of users by monthly usage categories for the most recent typical fiscal year. Give status of existing debts and required reserve accounts.

e) Water/Energy/Waste Audits. If applicable to the project, discuss any water, energy, and/or waste audits which have been conducted and the main outcomes.

3) NEED FOR PROJECT

Describe the needs in the following order of priority:

a) Health, Sanitation, and Security. Describe concerns and include relevant regulations and correspondence from/to federal and state regulatory agencies. Include copies of such correspondence as an attachment to the Report.

b) Aging Infrastructure. Describe the concerns and indicate those with the greatest impact. Describe water loss, inflow and infiltration, treatment or storage needs, management adequacy, inefficient designs, and other problems. Describe any safety concerns.

c) Reasonable Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

4) ALTERNATIVES CONSIDERED

This section should contain a description of the alternatives that were considered in planning a solution to meet the identified needs. Documentation of alternatives considered is often a Report weakness. Alternative approaches to ownership and management, system design (including resource efficient or green alternatives), and sharing of services, including various forms of partnerships, should be considered. In addition, the following alternatives should be considered, if practicable: building new centralized facilities, optimizing the current facilities (no construction), developing centrally managed decentralized systems, including small cluster or individual systems, and developing an optimum combination of centralized and decentralized systems. Alternatives should be consistent with those considered in the NEPA, or state equivalent, environmental review. Technically infeasible alternatives that were considered should be mentioned briefly along with an explanation of why they are infeasible, but do not require full analysis. For each technically feasible alternative, the description should include the following information:

a) Description. Describe the facilities associated with every technically feasible alternative. Describe source, conveyance, treatment, storage and distribution

facilities for each alternative. A feasible system may include a combination of centralized and decentralized (on-site or cluster) facilities.

b) Design Criteria. State the design parameters used for evaluation purposes. These parameters should comply with federal, state, and agency design policies and regulatory requirements.

c) Map. Provide a schematic layout map to scale and a process diagram if applicable. If applicable, include future expansion of the facility.

d) Environmental Impacts. Provide information about how the specific alternative may impact the environment. Describe only those unique direct and indirect impacts on floodplains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to each specific alternative evaluated. Include generation and management of residuals and wastes.

e) Land Requirements. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired, leased, or have access agreements.

f) Potential Construction Problems. Discuss concerns such as subsurface rock, high water table, limited access, existing resource or site impairment, or other conditions which may affect cost of construction or operation of facility.

g) Sustainability Considerations. Sustainable utility management practices include environmental, social, and economic benefits that aid in creating a resilient utility.

i) Water and Energy Efficiency. Discuss water reuse, water efficiency, water conservation, energy efficient design (i.e. reduction in electrical demand), and/or renewable generation of energy, and/or minimization of carbon footprint, if applicable to the alternative. Alternatively, discuss the water and energy usage for this option as compared to other alternatives.

ii) Green Infrastructure. Discuss aspects of project that preserve or mimic natural processes to manage stormwater, if applicable to the alternative. Address management of runoff volume and peak flows through infiltration, evapotranspiration, and/or harvest and use, if applicable.

iii) Other. Discuss any other aspects of sustainability (such as resiliency or operational simplicity) that are incorporated into the alternative, if applicable.

h) Cost Estimates. Provide cost estimates for each alternative, including a breakdown of the following costs associated with the project: construction, non-construction, and annual O&M costs. A construction contingency should be included as a non-construction cost. Cost estimates should be included with the descriptions of each technically feasible alternative. O&M costs should include a rough breakdown by O&M category (see example below) and not just a value for each alternative. Information from other sources, such as the recipient's accountant or other known technical service providers, can be incorporated to assist in the development of this section. The cost derived will be used in the life cycle cost analysis described in Section 5 a.

Example O&M Cost Estimate	
Personnel (i.e. Salary, Benefits, Payroll Tax, Insurance, Training)	
Administrative Costs (e.g. office supplies, printing, etc.)	
Water Purchase or Waste Treatment Costs	
Insurance	
Energy Cost (Fuel and/or Electrical)	
Process Chemical	
Monitoring & Testing	
Short Lived Asset Maintenance/Replacement*	
Professional Services	
Residuals Disposal	
Miscellaneous	
Total	

* See Appendix A for example list

5) SELECTION OF AN ALTERNATIVE

Selection of an alternative is the process by which data from the previous section, "Alternatives Considered" is analyzed in a systematic manner to identify a recommended alternative. The analysis should include consideration of both life cycle costs and non-monetary factors (i.e. triple bottom line analysis: financial, social, and environmental). If water reuse or conservation, energy efficient design, and/or renewable generation of energy components are included in the proposal provide an explanation of their cost effectiveness in this section.

a) Life Cycle Cost Analysis. A life cycle present worth cost analysis (an engineering economics technique to evaluate present and future costs for comparison of alternatives) should be completed to compare the technically feasible alternatives. Do not leave out alternatives because of anticipated costs; let the life cycle cost analysis show whether an alternative may have an acceptable cost. This analysis should meet the following requirements and should be repeated for each technically feasible alternative. Several analyses may be required if the project has different aspects, such as one analysis for different types of collection systems and another for different types of treatment.

1. The analysis should convert all costs to present day dollars;
2. The planning period to be used is recommended to be 20 years, but may be any period determined reasonable by the engineer and concurred on by the state or federal agency;
3. The discount rate to be used should be the "real" discount rate taken from Appendix C of OMB circular A-94 and found at (www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html);
4. The total capital cost (construction plus non-construction costs) should be included;

5. Annual O&M costs should be converted to present day dollars using a uniform series present worth (USPW) calculation;
6. The salvage value of the constructed project should be estimated using the anticipated life expectancy of the constructed items using straight line depreciation calculated at the end of the planning period and converted to present day dollars;
7. The present worth of the salvage value should be subtracted from the present worth costs;
8. The net present value (NPV) is then calculated for each technically feasible alternative as the sum of the capital cost (C) plus the present worth of the uniform series of annual O&M (USPW (O&M)) costs minus the single payment present worth of the salvage value (SPPW(S)):

$$NPV = C + USPW\ (O\&M) - SPPW\ (S)$$

9. A table showing the capital cost, annual O&M cost, salvage value, present worth of each of these values, and the NPV should be developed for state or federal agency review. All factors (major and minor components), discount rates, and planning periods used should be shown within the table;
10. Short lived asset costs (See Appendix A for examples) should also be included in the life cycle cost analysis if determined appropriate by the consulting engineer or agency. Life cycles of short lived assets should be tailored to the facilities being constructed and be based on generally accepted design life. Different features in the system may have varied life cycles.

b) Non-Monetary Factors. Non-monetary factors, including social and environmental aspects (e.g. sustainability considerations, operator training requirements, permit issues, community objections, reduction of greenhouse gas emissions, wetland relocation) should also be considered in determining which alternative is recommended and may be factored into the calculations.

6) PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)

The engineer should include a recommendation for which alternative(s) should be implemented. This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. Include a schematic for any treatment processes, a layout of the system, and a location map of the proposed facilities. At least the following information should be included as applicable to the specific project:

a) Preliminary Project Design.

i) Drinking Water:

Water Supply. Include requirements for quality and quantity. Describe recommended source, including site and allocation allowed.

Treatment. Describe process in detail (including whether adding, replacing, or rehabilitating a process) and identify location of plant and site of any process discharges. Identify capacity of treatment plant (i.e. Maximum Daily Demand).

Storage. Identify size, type and location.

Pumping Stations. Identify size, type, location and any special power requirements. For rehabilitation projects, include description of components upgraded.

Distribution Layout. Identify general location of new pipe, replacement, or rehabilitation: lengths, sizes and key components.

ii) Wastewater/Reuse:

Collection System/Reclaimed Water System Layout. Identify general location of new pipe, replacement or rehabilitation: lengths, sizes, and key components.

Pumping Stations. Identify size, type, site location, and any special power requirements. For rehabilitation projects, include description of components upgraded.

Storage. Identify size, type, location and frequency of operation.

Treatment. Describe process in detail (including whether adding, replacing, or rehabilitating a process) and identify location of any treatment units and site of any discharges (end use for reclaimed water). Identify capacity of treatment plant (i.e. Average Daily Flow).

iii) Solid Waste:

Collection. Describe process in detail and identify quantities of material (in both volume and weight), length of transport, location and type of transfer facilities, and any special handling requirements.

Storage. If any, describe capacity, type, and site location.

Processing. If any, describe capacity, type, and site location.

Disposal. Describe process in detail and identify permit requirements, quantities of material, recycling processes, location of plant, and site of any process discharges.

iv) Stormwater:

Collection System Layout. Identify general location of new pipe, replacement or rehabilitation: lengths, sizes, and key components.

Pumping Stations. Identify size, type, location, and any special power requirements.

Treatment. Describe treatment process in detail. Identify location of treatment facilities and process discharges. Capacity of treatment process should also be addressed.

Storage. Identify size, type, location and frequency of operation.

Disposal. Describe type of disposal facilities and location.

Green Infrastructure. Provide the following information for green infrastructure alternatives:

- ☐ Control Measures Selected. Identify types of control measures selected (e.g., vegetated areas, planter boxes, permeable pavement, rainwater cisterns).
- ☐ Layout: Identify placement of green infrastructure control measures, flow paths, and drainage area for each control measure.
- ☐ Sizing: Identify surface area and water storage volume for each green infrastructure control measure. Where applicable, soil infiltration rate, evapotranspiration rate, and use rate (for rainwater harvesting) should also be addressed.
- ☐ Overflow: Describe overflow structures and locations for conveyance of larger precipitation events.

b) Project Schedule. Identify proposed dates for submittal and anticipated approval of all required documents, land and easement acquisition, permit applications, advertisement for bids, loan closing, contract award, initiation of construction, substantial completion, final completion, and initiation of operation.

c) Permit Requirements. Identify any construction, discharge and capacity permits that will/may be required as a result of the project.

d) Sustainability Considerations (if applicable).

i) Water and Energy Efficiency. Describe aspects of the proposed project addressing water reuse, water efficiency, and water conservation, energy efficient design, and/or renewable generation of energy, if incorporated into the selected alternative.

ii) Green Infrastructure. Describe aspects of project that preserve or mimic natural processes to manage stormwater, if applicable to the selected alternative. Address management of runoff volume and peak flows through infiltration, evapotranspiration, and/or harvest and use, if applicable.

iii) Other. Describe other aspects of sustainability (such as resiliency or operational simplicity) that are incorporated into the selected alternative, if incorporated into the selected alternative.

e) Total Project Cost Estimate (Engineer's Opinion of Probable Cost). Provide an itemized estimate of the project cost based on the stated period of construction. Include construction, land and right-of-ways, legal, engineering, construction program management, funds administration, interest, equipment, construction contingency, refinancing, and other costs associated with the proposed project. The construction subtotal should be separated out from the non-construction costs. The non-construction subtotal should be included and added to the

construction subtotal to establish the total project cost. An appropriate construction contingency should be added as part of the non-construction subtotal. For projects containing both water and waste disposal systems, provide a separate cost estimate for each system as well as a grand total. If applicable, the cost estimate should be itemized to reflect cost sharing including apportionment between funding sources. The engineer may rely on the owner for estimates of cost for items other than construction, equipment, and engineering.

f) Annual Operating Budget. Provide itemized annual operating budget information. The owner has primary responsibility for the annual operating budget, however, there are other parties that may provide technical assistance. This information will be used to evaluate the financial capacity of the system. The engineer will incorporate information from the owner's accountant and other known technical service providers.

i) Income. Provide information about all sources of income for the system including a proposed rate schedule. Project income realistically for existing and proposed new users separately, based on existing user billings, water treatment contracts, and other sources of income. In the absence of historic data or other reliable information, for budget purposes, base water use on 100 gallons per capita per day. Water use per residential connection may then be calculated based on the most recent U.S. Census, American Community Survey, or other data for the state or county of the average household size. When large agricultural or commercial users are projected, the Report should identify those users and include facts to substantiate such projections and evaluate the impact of such users on the economic viability of the project.

ii) Annual O&M Costs. Provide an itemized list by expense category and project costs realistically. Provide projected costs for operating the system as improved. In the absence of other reliable data, base on actual costs of other existing facilities of similar size and complexity. Include facts in the Report to substantiate O&M cost estimates. Include personnel costs, administrative costs, water purchase or treatment costs, accounting and auditing fees, legal fees, interest, utilities, energy costs, insurance, annual repairs and maintenance, monitoring and testing, supplies, chemicals, residuals disposal, office supplies, printing, professional services, and miscellaneous as applicable. Any income from renewable energy generation which is sold back to the electric utility should also be included, if applicable. If applicable, note the operator grade needed.

iii) Debt Repayments. Describe existing and proposed financing with the estimated amount of annual debt repayments from all sources. All estimates of funding should be based on loans, not grants.

iv) Reserves. Describe the existing and proposed loan obligation reserve requirements for the following:

Debt Service Reserve – For specific debt service reserve requirements consult with individual funding sources. If General Obligation bonds are proposed to be used as loan security, this section may be omitted, but this should be clearly stated if it is the case.

Short-Lived Asset Reserve – A table of short lived assets should be included for the system (See Appendix A for examples). The table should include the asset, the expected year of replacement, and the anticipated cost of each. Prepare a recommended annual reserve deposit to fund replacement of short-lived assets, such as pumps, paint, and small equipment. Short-lived assets include those items not covered under O&M, however, this does not include facilities such as a water tank or treatment facility replacement that are usually funded with long-term capital financing.

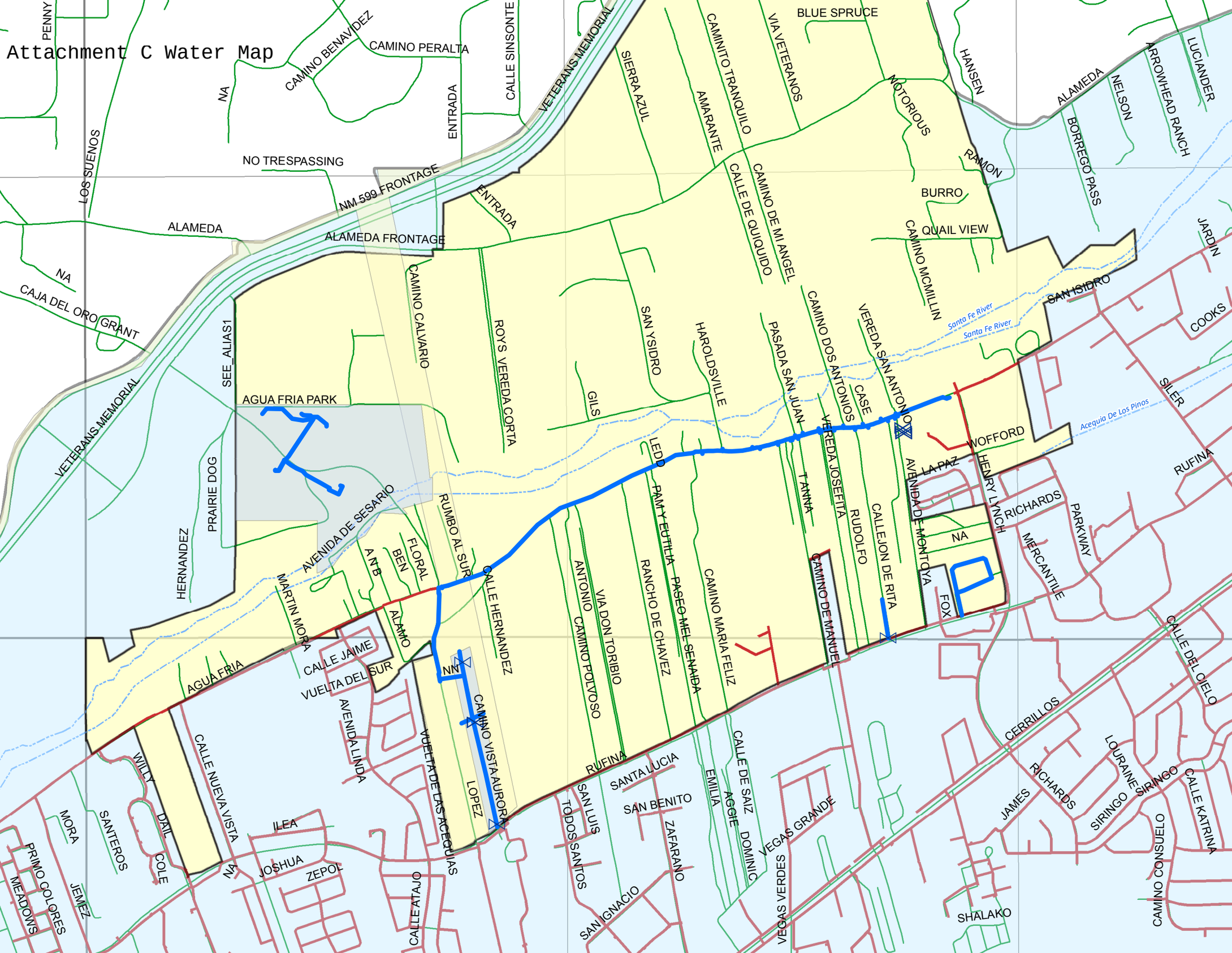
7. CONCLUSIONS AND RECOMMENDATIONS

Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlighting of the need for special coordination, a recommended plan of action to expedite project development, and any other necessary considerations.

Appendix A: Example List of Short-Lived Asset Infrastructure

Estimated Repair, Rehab, Replacement Expenses by Item within up to 20 Years from Installation)	
Drinking Water Utilities	Wastewater Utilities
Source Related Pumps Pump Controls Pump Motors Telemetry Intake/ Well screens Water Level Sensors Pressure Transducers	Treatment Related Pump Pump Controls Pump Motors Chemical feed pumps Membrane Filters Fibers Field & Process Instrumentation Equipment UV lamps Centrifuges Aeration blowers Aeration diffusers and nozzles Trickling filters, RBOs, etc. Belt presses & driers Sludge Collecting and Dewatering Equipment Level Sensors Pressure Transducers Pump Controls Back-up power generator Chemical Leak Detection Equipment Flow meters SCADA Systems
Treatment Related Chemical feed pumps Altitude Valves Valve Actuators Field & Process Instrumentation Equipment Granular filter media Air compressors & control units Pumps Pump Motors Pump Controls Water Level Sensors Pressure Transducers Sludge Collection & Dewatering UV Lamps Membranes Back-up power generators Chemical Leak Detection Equipment Flow meters SCADA Systems	Collection System Related Pump Pump Controls Pump Motors Trash racks/ bar screens Sewer line rodding equipment Air compressors Vaults, lids, and access hatches Security devices and fencing Alarms & Telemetry Chemical Leak Detection Equipment
Distribution System Related Residential and Small Commercial Meters Meter boxes Hydrants & Blow offs Pressure reducing valves Cross connection control devices Altitude valves Alarms & Telemetry Vaults, lids, and access hatches Security devices and fencing Storage reservoir painting/ patching	

Attachment C Water Map



Attachment D Wastewater Map

Attachment E

AGUA FRIA TRADITIONAL HISTORIC COMMUNITY AREA SEWER SYSTEM MASTER PLAN

Developed By:
Santa Fe County
Growth Management Department
Public Works Division
Water/Wastewater Operations Section

July 11, 2008

AGUA FRIA TRADITIONAL HISTORIC COMMUNITY AREA
SEWER SYSTEM MASTER PLAN

At the request of the County Manager's Office and the Growth Management Director, James Lujan, the Water/ Wastewater Operations Section has completed a sewer system master plan addressing the feasibility of areas within the Traditional Historic Community of Agua Fria connecting to the existing interceptor sewer mains which transport wastewater to the City of Santa Fe's Wastewater Treatment Plant just north of the Municipal Airport. The area studied for feasible connections was from County Road 62 or Lopez Lane on the west to San Ysidro Crossing on the East and from the Santa Fe River on the North to Rufina Street on the South which encompasses the majority of the western portion of the Agua Fria Traditional Historic Community.

The area is relatively flat in that the slope from east to west is about 2 percent but with very little elevation difference between Agua Fria Road and Rufina Street going north to south. The land does begin to slope fairly rapidly towards the north as one proceeds from Agua Fria Street to the Santa Fe River.

Two main interceptor sewers exist within the study area; a 12-inch polyvinyl chloride (PVC) sewer line which was constructed in Agua Fria Street in recent years as part of the Agua Fria street upgrades by the County and an 18-inch interceptor in Rufina Street constructed in the 1960's. Both of these sewer lines have adequate slope and capacity to handle the proposed wastewater from the study area but the problem is that the Rufina street sewer line is relatively shallow being only about 6 feet deep at most locations from west to east under Rufina. The 12" PVC sewer in Agua Fria is considerably deeper being 10 to 12 feet deep at most locations. This means that connecting residential areas via north or south sloping sewer lines is much more feasible to the Agua Fria sewer main due to its depth. Normally sewer lines up to 1800 to 2000 feet can be connected to the Agua Fria Trunk sewer while sewer lines of only 800 to 1000 feet can be readily connected into Rufina.

On the attached aerial map which follows, the study area is shown as covering from Lopez Lane on the west to San Ysidro Crossing and the new elementary school on the east and from the Santa Fe River on the north to Rufina Street on the south. Existing sanitary residential sewer lines recently constructed or proposed for construction in the near future are shown as green lines. Proposed gravity sewer lines are indicated in red.

Recently constructed sewer lines in the area are:

Rumbo al Sur
Camino Polvoso

Sewer lines proposed for construction this year:

Paseo de Tercero/Via Don Toribio (Northern Portion)

Agua Fria Sanitary Sewer Line Master Plan

Sewer lines proposed for construction for early 2009:

Ben Lane
Lopez Lane – from Vista Aurora to Alamo Lane
La Junta Del Alamo (Western Portion)
Alamo Lane (Eastern Portion) – from Lopez Lane to Alamo Lane

Sewer lines that can be constructed North or South from Agua Fria Road:

Manuelito Lane
La Junta Del Alamo (Eastern Portion)
Calle Hernandez
Village Mobile Home Community
Paige LLC Area
Antonio Lane
Ledd Drive
Pam Y Eutilia Lane

Sewer lines that can be constructed North from Rufina Street:

Paseo de Tercero (South Portion)
Paseo Mel Senaida

Detailed maps of each of the above sewer lines follow as well as detailed 2008 costs for each of the proposed lines. A table summarizing the lengths, sizes and costs is also attached.

The Water/Wastewater Operations Section looked at serving mainly existing residential areas. Additional sewer lines can be considered where and when additional development is proposed in the area. Sewer lines could also be proposed for the areas south of Rufina Street which can be easily sewered but are presently outside the Agua Fria Traditional Historic Community and therefore require connection reviews by the City of Santa Fe Technical staff with a recommendation for approval by the City Council.

SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST SUMMARY - JULY 2008

Street Name	Gravity Sewer[1]		Estimated Cost	Funding Received	Funding Required
	Size	Length (ft)			
Agua Fria					
Ben Lane	8-inch	710	$ 124,900	$ 50,000.00	$ 74,900
Lopez Lane	10-inch	455	$ 117,300		$ 117,300
La Junta Del Alamo (1)	8-inch	685	$ 123,100		$ 123,100
Alamo Lane	10-inch	385	$ 74,300		$ 74,300
Manuelito Lane	8-inch	610	$ 113,200		$ 113,200
La Junta Del Alamo (2)	8-inch	300	$ 72,700		$ 72,700
Calle Hernandez	8-inch	300	$ 58,500		$ 58,500
Village Mobile Home Community	8-inch	900	$ 245,800		$ 245,800
Paige LLC Property	8-inch	675	$ 106,000		$ 106,000
Antonio Lane	8-inch	1200	$ 168,500		$ 168,500
Ledd Drive	10-inch	460	$ 107,300		$ 107,300
Pam Y Eutilia Lane	8-inch	1200	$ 149,600		$ 149,600
Rufina					
Paseo de Tercero	8-inch	1200	$ 154,200		$ 154,200
Paseo Mel Senaida	8-inch	1600	$ 204,600		$ 204,600

Notes:

1) 8-inch gravity sewer was calculated at 0.6% minimum slope. 10-inch gravity sewer was calculated at 0.4% minimum slope.

Ben Lane

RANCHITOS DE BACAS
CAJA DEL ORO GRANT RD
BEN LN
FLORAL DR
AN B LN
DEL ROSS LN
AGUA FR ALAMO ST
TRES LOBOS
Feet
0
50
100
200
300

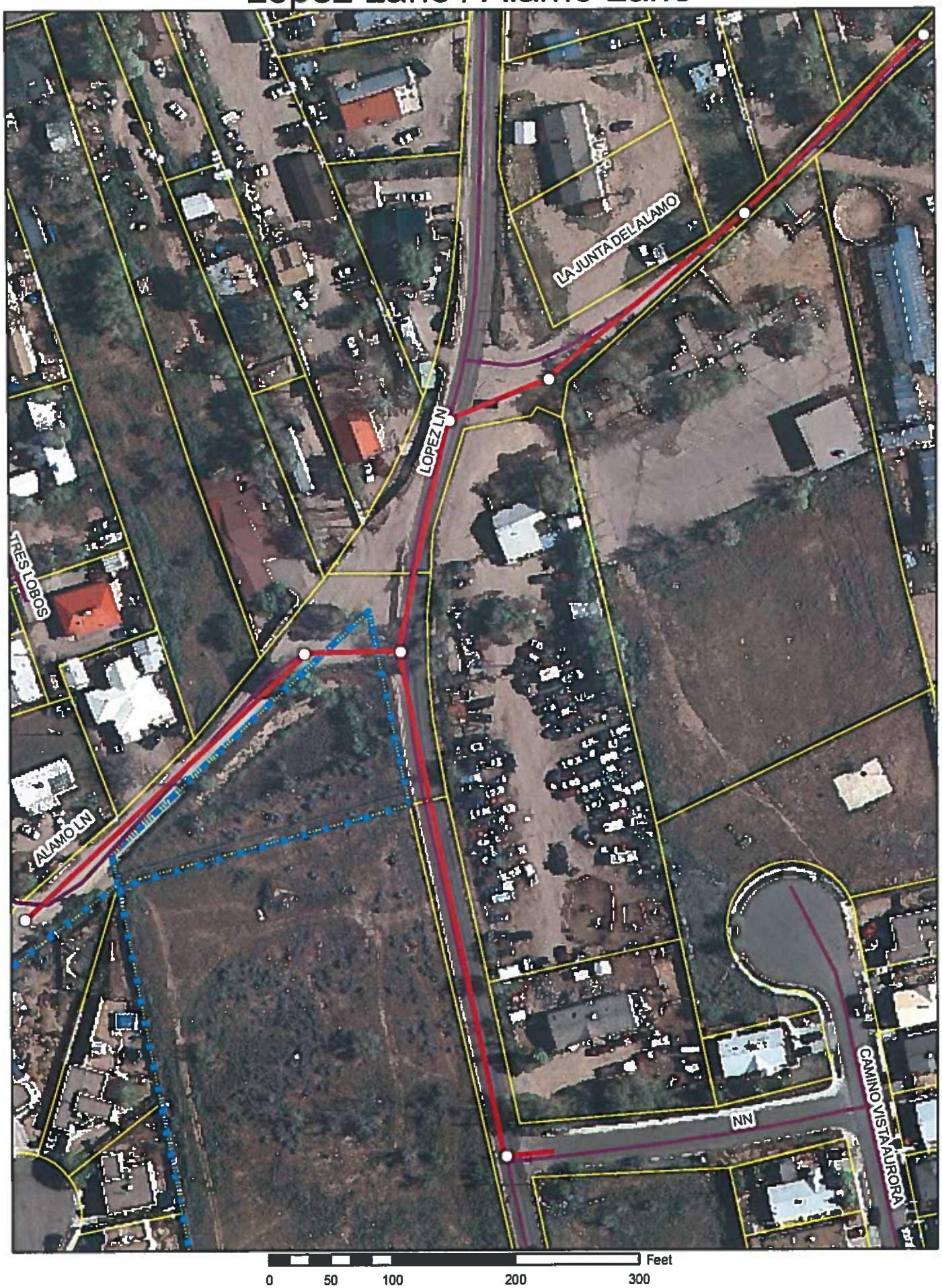
SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
Ben Lane Sewer System Improvements

710' of 8" Sewer Line Extension on Ben Lane
From Agua Fria North to Last Property Near Santa Fe River

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 10" dia. Sewer Pipe	LF	$ 17	710	$ 12,070
2	T & B, 0-6' depth	LF	$ 24	390	$ 9,360
3	T & B, 6-10' depth	LF	$ 30	285	$ 8,550
4	T & B, 10-14' depth	LF	$ 35	25	$ 875
5	T & B, 14-18' depth	LF	$ 40	10	$ 400
6	Furnish and Install Manholes	LS	$ 2,700	5	$ 13,500
7	Extra Depth of Manholes	VF	$ 180	8	$ 1,440
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	10	$ 2,400
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	150	$ 2,700
11	Service Line Connections	EA	$ 250	10	$ 2,500
12	Asphalt Removal and Replacement	SY	$ 60	30	$ 1,800
13	Gravel Road Replacement	SY	$ 7	1775	$ 12,425
14	Fence Removal and Replacement	LF	$ 25	250	$ 6,250
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 5,000	1	$ 5,000
17	Mobilization and Demobilization	LS	$ 6,000	1	$ 6,000
18	Traffic Control and Handling Plan	LS	$ 7,500	1	$ 7,500
	ESTIMATED CONSTRUCTION COST				*$ 95,170*
	CONTINGENCIES @ 5%				*$ 4,759*
	ENGINEERING AND SURVEYING @ 12%				*$ 11,420*
	CONSTRUCTION INSPECTION @ 6%				*$ 5,710*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 7,755*
	TOTAL ESTIMATED COST				**$ 124,900**

Lopez Lane / Alamo Lane



SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
Lopez Lane Sewer System Improvements

455' of 10" Sewer Line Extension on Lopez Lane
From Vista Aurora North on Lopez Lane to Alamo Lane

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 10" dia. Sewer Pipe	LF	$ 21	455	$ 9,555
2	T & B, 0-6' depth	LF	$ 24	75	$ 1,800
3	T & B, 6-10' depth	LF	$ 30	300	$ 9,000
4	T & B, 10-14' depth	LF	$ 35	80	$ 2,800
5	T & B, 14-18' depth	LF	$ 40	0	$ -
6	Furnish and Install Manholes	LS	$ 2,700	2	$ 5,400
7	Extra Depth of Manholes	VF	$ 180	6	$ 1,080
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	0	$ -
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	0	$ -
11	Service Line Connections	EA	$ 250	0	$ -
12	Asphalt Removal and Replacement	SY	$ 60	506	$ 30,360
13	Gravel Road Replacement	SY	$ 7	0	$ -
14	Fence Removal and Replacement	LF	$ 25	0	$ -
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 7,500	1	$ 7,500
17	Mobilization and Demobilization	LS	$ 7,500	1	$ 7,500
18	Traffic Control and Handling Plan	LS	$ 12,000	1	$ 12,000
	ESTIMATED CONSTRUCTION COST				*$ 89,395*
	CONTINGENCIES @ 5%				*$ 4,470*
	ENGINEERING AND SURVEYING @ 12%				*$ 10,727*
	CONSTRUCTION INSPECTION @ 6%				*$ 5,364*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 7,285*
	TOTAL ESTIMATED COST				**$ 117,300**

SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
Alamo Lane Sewer System Improvements

385' of 10" Sewer Line Extension on Alamo Lane
From Lopez Lane West

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 10" dia. Sewer Pipe	LF	$ 21	385	$ 8,085
2	T & B, 0-6' depth	LF	$ 24	200	$ 4,800
3	T & B, 6-10' depth	LF	$ 30	100	$ 3,000
4	T & B, 10-14' depth	LF	$ 35	85	$ 2,975
5	T & B, 14-18' depth	LF	$ 40		$ -
6	Furnish and Install Manholes	LS	$ 2,700	1	$ 2,700
7	Extra Depth of Manholes	VF	$ 180	4	$ 720
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	4	$ 960
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	60	$ 1,080
11	Service Line Connections	EA	$ 250	4	$ 1,000
12	Asphalt Removal and Replacement	SY	$ 60	50	$ 3,000
13	Gravel Road Replacement	SY	$ 7	963	$ 6,741
14	Fence Removal and Replacement	LF	$ 25	25	$ 625
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 6,000	1	$ 6,000
17	Mobilization and Demobilization	LS	$ 5,000	1	$ 5,000
18	Traffic Control and Handling Plan	LS	$ 7,500	1	$ 7,500
	ESTIMATED CONSTRUCTION COST				*$ 56,586*
	CONTINGENCIES @ 5%				*$ 2,829*
	ENGINEERING AND SURVEYING @ 12%				*$ 6,790*
	CONSTRUCTION INSPECTION @ 6%				*$ 3,395*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 4,611*
	TOTAL ESTIMATED COST				**$ 74,300**

SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
La Junta Del Alamo Sewer System Improvements

685' of 8" Sewer Line Extension on La Junta Del Alamo
From Lopez Lane/Alamo Lane East on La Junta Del Alamo

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 8" dia. Sewer Pipe	LF	$ 17	685	$ 11,645
2	T & B, 0-6' depth	LF	$ 24	50	$ 1,200
3	T & B, 6-10' depth	LF	$ 30	500	$ 15,000
4	T & B, 10-14' depth	LF	$ 35	100	$ 3,500
5	T & B, 14-18' depth	LF	$ 40	35	$ 1,400
6	Furnish and Install Manholes	LS	$ 2,700	3	$ 8,100
7	Extra Depth of Manholes	VF	$ 180	8	$ 1,440
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	8	$ 1,920
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	120	$ 2,160
11	Service Line Connections	EA	$ 250	8	$ 2,000
12	Asphalt Removal and Replacement	SY	$ 60	225	$ 13,500
13	Gravel Road Replacement	SY	$ 7	1225	$ 8,575
14	Fence Removal and Replacement	LF	$ 25	100	$ 2,500
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 6,000	1	$ 6,000
17	Mobilization and Demobilization	LS	$ 5,000	1	$ 5,000
18	Traffic Control and Handling Plan	LS	$ 7,500	1	$ 7,500
	ESTIMATED CONSTRUCTION COST				*$ 93,840*
	CONTINGENCIES @ 5%				*$ 4,692*
	ENGINEERING AND SURVEYING @ 12%				*$ 11,261*
	CONSTRUCTION INSPECTION @ 6%				*$ 5,630*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 7,647*
	TOTAL ESTIMATED COST				**$ 123,100**

Manuelito Lane

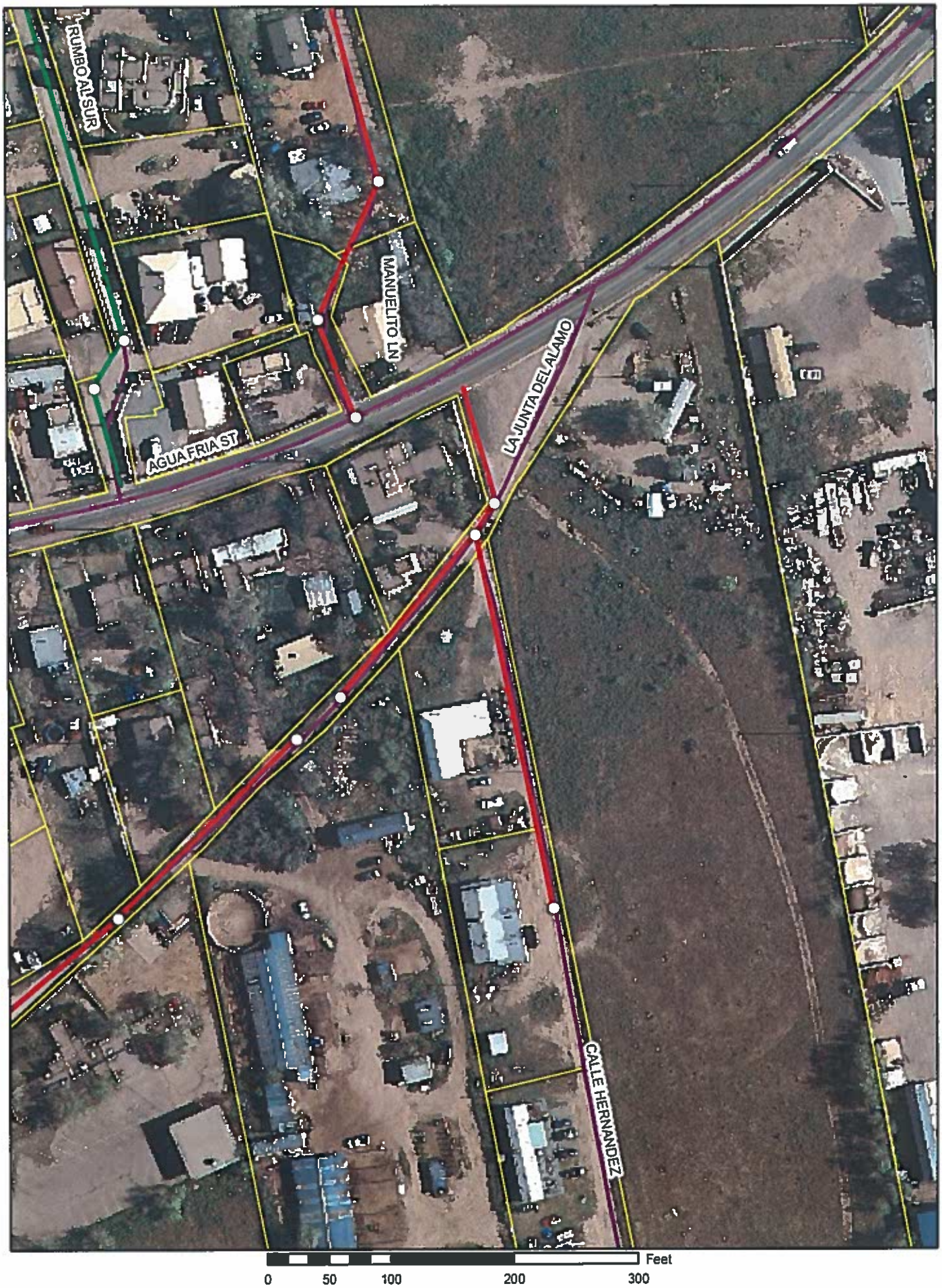
SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
Manuelito Lane Sewer System Improvements

610' of 8" Sewer Line Extension on Manuelito Lane
From Agua Fria North Towards the Santa Fe River

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 8" dia. Sewer Pipe	LF	$ 17	610	$ 10,370
2	T & B, 0-6' depth	LF	$ 24	150	$ 3,600
3	T & B, 6-10' depth	LF	$ 30	360	$ 10,800
4	T & B, 10-14' depth	LF	$ 35	100	$ 3,500
5	T & B, 14-18' depth	LF	$ 40		$ -
6	Furnish and Install Manholes	LS	$ 2,700	4	$ 10,800
7	Extra Depth of Manholes	VF	$ 180	10	$ 1,800
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	5	$ 1,200
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	75	$ 1,350
11	Service Line Connections	EA	$ 250	5	$ 1,250
12	Asphalt Removal and Replacement	SY	$ 60	50	$ 3,000
13	Gravel Road Replacement	SY	$ 7	1525	$ 10,675
14	Fence Removal and Replacement	LF	$ 25	100	$ 2,500
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 6,000	1	$ 6,000
17	Mobilization and Demobilization	LS	$ 5,000	1	$ 5,000
18	Traffic Control and Handling Plan	LS	$ 12,000	1	$ 12,000
	ESTIMATED CONSTRUCTION COST				*$ 86,245*
	CONTINGENCIES @ 5%				*$ 4,312*
	ENGINEERING AND SURVEYING @ 12%				*$ 10,349*
	CONSTRUCTION INSPECTION @ 6%				*$ 5,175*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 7,028*
	TOTAL ESTIMATED COST				**$ 113,200**

La Junta Del Alamo / Calle Hernandez



SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
La Junta Del Alamo Sewer System Improvements

300' of 8" Sewer Line Extension on La Junta Del Alamo
From Agua Fria Southwest Towards Lopez Lane

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 8" dia. Sewer Pipe	LF	$ 17	300	$ 5,100
2	T & B, 0-6' depth	LF	$ 24	180	$ 4,320
3	T & B, 6-10' depth	LF	$ 30	120	$ 3,600
4	T & B, 10-14' depth	LF	$ 35		$ -
5	T & B, 14-18' depth	LF	$ 40		$ -
6	Furnish and Install Manholes	LS	$ 2,700	3	$ 8,100
7	Extra Depth of Manholes	VF	$ 180	4	$ 720
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	5	$ 1,200
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	75	$ 1,350
11	Service Line Connections	EA	$ 250	5	$ 1,250
12	Asphalt Removal and Replacement	SY	$ 60	10	$ 600
13	Gravel Road Replacement	SY	$ 7	750	$ 5,250
14	Fence Removal and Replacement	LF	$ 25	100	$ 2,500
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 4,000	1	$ 4,000
17	Mobilization and Demobilization	LS	$ 5,000	1	$ 5,000
18	Traffic Control and Handling Plan	LS	$ 10,000	1	$ 10,000
	ESTIMATED CONSTRUCTION COST				*$ 55,390*
	CONTINGENCIES @ 5%				*$ 2,770*
	ENGINEERING AND SURVEYING @ 12%				*$ 6,647*
	CONSTRUCTION INSPECTION @ 6%				*$ 3,323*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 4,514*
	TOTAL ESTIMATED COST				**$ 72,700**

SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
Calle Hernandez Sewer System Improvements

300' of 8" Sewer Line Extension on Calle Hernandez
From La Junta Del Alamo South Towards Rufina

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 8" dia. Sewer Pipe	LF	$ 17	300	$ 5,100
2	T & B, 0-6' depth	LF	$ 24	200	$ 4,800
3	T & B, 6-10' depth	LF	$ 30	100	$ 3,000
4	T & B, 10-14' depth	LF	$ 35	0	$ -
5	T & B, 14-18' depth	LF	$ 40	0	$ -
6	Furnish and Install Manholes	LS	$ 2,700	1	$ 2,700
7	Extra Depth of Manholes	VF	$ 180	0	$ -
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	3	$ 720
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	45	$ 810
11	Service Line Connections	EA	$ 250	3	$ 750
12	Asphalt Removal and Replacement	SY	$ 60	0	$ -
13	Gravel Road Replacement	SY	$ 7	750	$ 5,250
14	Fence Removal and Replacement	LF	$ 25	100	$ 2,500
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 4,000	1	$ 4,000
17	Mobilization and Demobilization	LS	$ 5,000	1	$ 5,000
18	Traffic Control and Handling Plan	LS	$ 7,500	1	$ 7,500
	ESTIMATED CONSTRUCTION COST				*$ 44,530*
	CONTINGENCIES @ 5%				*$ 2,227*
	ENGINEERING AND SURVEYING @ 12%				*$ 5,344*
	CONSTRUCTION INSPECTION @ 6%				*$ 2,672*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 3,629*
	TOTAL ESTIMATED COST				**$ 58,500**

Village Mobile Home Park

SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
Village Mobile Home Community Sewer System Improvements

900' of 8" Sewer Line Extension for the Village Mobile Home Park
From Agua Fria South Towards Rufina

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 8" dia. Sewer Pipe	LF	$ 17	900	$ 15,300
2	T & B, 0-6' depth	LF	$ 24	300	$ 7,200
3	T & B, 6-10' depth	LF	$ 30	300	$ 9,000
4	T & B, 10-14' depth	LF	$ 35	300	$ 10,500
5	T & B, 14-18' depth	LF	$ 40	0	$ -
6	Furnish and Install Manholes	LS	$ 2,700	3	$ 8,100
7	Extra Depth of Manholes	VF	$ 180	8	$ 1,440
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	42	$ 10,080
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	630	$ 11,340
11	Service Line Connections	EA	$ 250	42	$ 10,500
12	Asphalt Removal and Replacement	SY	$ 60	1300	$ 78,000
13	Gravel Road Replacement	SY	$ 7	0	$ -
14	Fence Removal and Replacement	LF	$ 25	0	$ -
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 6,000	1	$ 6,000
17	Mobilization and Demobilization	LS	$ 7,500	1	$ 7,500
18	Traffic Control and Handling Plan	LS	$ 10,000	1	$ 10,000
	ESTIMATED CONSTRUCTION COST				*$ 187,360*
	CONTINGENCIES @ 5%				*$ 9,368*
	ENGINEERING AND SURVEYING @ 12%				*$ 22,483*
	CONSTRUCTION INSPECTION @ 6%				*$ 11,242*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 15,267*
	TOTAL ESTIMATED COST				**$ 245,800**

Paige LLC Property

SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
Paige LLC Sewer System Improvements

675' of 8" Sewer Line Extension for Paige LLC
From Agua Fria North Towards The Santa Fe River

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 8" dia. Sewer Pipe	LF	$ 17	675	$ 11,475
2	T & B, 0-6' depth	LF	$ 24	50	$ 1,200
3	T & B, 6-10' depth	LF	$ 30	600	$ 18,000
4	T & B, 10-14' depth	LF	$ 35	25	$ 875
5	T & B, 14-18' depth	LF	$ 40	0	$ -
6	Furnish and Install Manholes	LS	$ 2,700	4	$ 10,800
7	Extra Depth of Manholes	VF	$ 180	12	$ 2,160
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	6	$ 1,440
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	90	$ 1,620
11	Service Line Connections	EA	$ 250	6	$ 1,500
12	Asphalt Removal and Replacement	SY	$ 60	10	$ 600
13	Gravel Road Replacement	SY	$ 7	1688	$ 11,816
14	Fence Removal and Replacement	LF	$ 25	75	$ 1,875
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 4,000	1	$ 4,000
17	Mobilization and Demobilization	LS	$ 5,000	1	$ 5,000
18	Traffic Control and Handling Plan	LS	$ 6,000	1	$ 6,000
	ESTIMATED CONSTRUCTION COST				*$ 80,761*
	CONTINGENCIES @ 5%				*$ 4,038*
	ENGINEERING AND SURVEYING @ 12%				*$ 9,691*
	CONSTRUCTION INSPECTION @ 6%				*$ 4,846*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 6,581*
	TOTAL ESTIMATED COST				**$ 106,000**

Antonio Lane

SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
Antonio Lane Sewer System Improvements

1200' of 8" Sewer Line Extension for Antonio Lane
From Agua Fria South Towards Rufina

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 8" dia. Sewer Pipe	LF	$ 17	1200	$ 20,400
2	T & B, 0-6' depth	LF	$ 24	600	$ 14,400
3	T & B, 6-10' depth	LF	$ 30	400	$ 12,000
4	T & B, 10-14' depth	LF	$ 35	200	$ 7,000
5	T & B, 14-18' depth	LF	$ 40	0	$ -
6	Furnish and Install Manholes	LS	$ 2,700	6	$ 16,200
7	Extra Depth of Manholes	VF	$ 180	10	$ 1,800
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	12	$ 2,880
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	180	$ 3,240
11	Service Line Connections	EA	$ 250	12	$ 3,000
12	Asphalt Removal and Replacement	SY	$ 60	10	$ 600
13	Gravel Road Replacement	SY	$ 7	3000	$ 21,000
14	Fence Removal and Replacement	LF	$ 25	100	$ 2,500
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 6,000	1	$ 6,000
17	Mobilization and Demobilization	LS	$ 7,500	1	$ 7,500
18	Traffic Control and Handling Plan	LS	$ 7,500	1	$ 7,500
	ESTIMATED CONSTRUCTION COST				*$ 128,420*
	CONTINGENCIES @ 5%				*$ 6,421*
	ENGINEERING AND SURVEYING @ 12%				*$ 15,410*
	CONSTRUCTION INSPECTION @ 6%				*$ 7,705*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 10,465*
	TOTAL ESTIMATED COST				**$ 168,500**

Ledd Drive

LEDD DR
AGUA FRIA ST
PASEO MEL SENAIDA
PAM Y EUTILIA LN
RANCHO DE CHAVEZ
Feet
0
50
100
200
300

SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
Ledd Drive Sewer System Improvements

460' of 10" Sewer Line Extension on Ledd Drive
From Agua Fria North Towards Santa Fe River

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 10" dia. Sewer Pipe	LF	$ 21	460	$ 9,660
2	T & B, 0-6' depth	LF	$ 24	400	$ 9,600
3	T & B, 6-10' depth	LF	$ 30	60	$ 1,800
4	T & B, 10-14' depth	LF	$ 35	0	$ -
5	T & B, 14-18' depth	LF	$ 40	0	$ -
6	Furnish and Install Manholes	LS	$ 2,700	3	$ 8,100
7	Extra Depth of Manholes	VF	$ 180	6	$ 1,080
8	Connect to Existing Sewer Line	LS	$ 1,000	2	$ 2,000
9	Service Saddles	EA	$ 240	10	$ 2,400
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	150	$ 2,700
11	Service Line Connections	EA	$ 250	10	$ 2,500
12	Asphalt Removal and Replacement	SY	$ 60	50	$ 3,000
13	Gravel Road Replacement	SY	$ 7	1150	$ 8,050
14	Fence Removal and Replacement	LF	$ 25	100	$ 2,500
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 7,500	1	$ 7,500
17	Mobilization and Demobilization	LS	$ 7,500	1	$ 7,500
18	Traffic Control and Handling Plan	LS	$ 12,000	1	$ 12,000
	ESTIMATED CONSTRUCTION COST				*$ 81,790*
	CONTINGENCIES @ 5%				*$ 4,090*
	ENGINEERING AND SURVEYING @ 12%				*$ 9,815*
	CONSTRUCTION INSPECTION @ 6%				*$ 4,907*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 6,665*
	TOTAL ESTIMATED COST				**$ 107,300**

Pam Y Eutilia Lane

SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
Pam Y Eutilia Lane Sewer System Improvements

1200' of 8" Sewer Line Extension for Pam Y Eutilia Lane
From Agua Fria South Towards Rufina

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 8" dia. Sewer Pipe	LF	$ 17	1200	$ 20,400
2	T & B, 0-6' depth	LF	$ 24	500	$ 12,000
3	T & B, 6-10' depth	LF	$ 30	400	$ 12,000
4	T & B, 10-14' depth	LF	$ 35	200	$ 7,000
5	T & B, 14-18' depth	LF	$ 40	100	$ 4,000
6	Furnish and Install Manholes	LS	$ 2,700	3	$ 8,100
7	Extra Depth of Manholes	VF	$ 180	5	$ 900
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	12	$ 2,880
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	180	$ 3,240
11	Service Line Connections	EA	$ 250	12	$ 3,000
12	Asphalt Removal and Replacement	SY	$ 60	10	$ 600
13	Gravel Road Replacement	SY	$ 7	3000	$ 21,000
14	Fence Removal and Replacement	LF	$ 25	100	$ 2,500
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 4,000	1	$ 4,000
17	Mobilization and Demobilization	LS	$ 5,000	1	$ 5,000
18	Traffic Control and Handling Plan	LS	$ 5,000	1	$ 5,000
	ESTIMATED CONSTRUCTION COST				*$ 114,020*
	CONTINGENCIES @ 5%				*$ 5,701*
	ENGINEERING AND SURVEYING @ 12%				*$ 13,682*
	CONSTRUCTION INSPECTION @ 6%				*$ 6,841*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 9,291*
	TOTAL ESTIMATED COST				**$ 149,600**

Paseo de Tercero

SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
Paseo de Tercero Sewer System Improvements

1200' of 8" Sewer Line Extension for Paseo de Tercero
From Rufina North Towards Agua Fria

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 8" dia. Sewer Pipe	LF	$ 17	1200	$ 20,400
2	T & B, 0-6' depth	LF	$ 24	200	$ 4,800
3	T & B, 6-10' depth	LF	$ 30	800	$ 24,000
4	T & B, 10-14' depth	LF	$ 35	200	$ 7,000
5	T & B, 14-18' depth	LF	$ 40	0	$ -
6	Furnish and Install Manholes	LS	$ 2,700	4	$ 10,800
7	Extra Depth of Manholes	VF	$ 180	8	$ 1,440
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	6	$ 1,440
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	90	$ 1,620
11	Service Line Connections	EA	$ 250	6	$ 1,500
12	Asphalt Removal and Replacement	SY	$ 60	30	$ 1,800
13	Gravel Road Replacement	SY	$ 7	3000	$ 21,000
14	Fence Removal and Replacement	LF	$ 25	75	$ 1,875
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 5,000	1	$ 5,000
17	Mobilization and Demobilization	LS	$ 5,000	1	$ 5,000
18	Traffic Control and Handling Plan	LS	$ 7,500	1	$ 7,500
	ESTIMATED CONSTRUCTION COST				*$ 117,575*
	CONTINGENCIES @ 5%				*$ 5,879*
	ENGINEERING AND SURVEYING @ 12%				*$ 14,109*
	CONSTRUCTION INSPECTION @ 6%				*$ 7,055*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 9,581*
	TOTAL ESTIMATED COST				**$ 154,200**

Paseo Mel Senaida

SANTA FE COUNTY
GROWTH MANAGEMENT DEPARTMENT
PUBLIC WORKS DIVISION
WATER/WASTEWATER OPERATIONS SECTION

PROJECT COST ESTIMATE - JULY 2008
Paseo Mel Senaida Sewer System Improvements

1600' of 8" Sewer Line Extension for Paseo Mel Senaida
From Rufina North Towards Agua Fria

Item	Description	Unit	Unit Cost	Est. Quant.	Total
1	Furnish and Install 8" dia. Sewer Pipe	LF	$ 17	1600	$ 27,200
2	T & B, 0-6' depth	LF	$ 24	100	$ 2,400
3	T & B, 6-10' depth	LF	$ 30	400	$ 12,000
4	T & B, 10-14' depth	LF	$ 35	1000	$ 35,000
5	T & B, 14-18' depth	LF	$ 40	100	$ 4,000
6	Furnish and Install Manholes	LS	$ 2,700	5	$ 13,500
7	Extra Depth of Manholes	VF	$ 180	20	$ 3,600
8	Connect to Existing Sewer Line	LS	$ 1,000	1	$ 1,000
9	Service Saddles	EA	$ 240	8	$ 1,920
10	Furnish and Install 4" dia. Sewer Pipe	LF	$ 18	120	$ 2,160
11	Service Line Connections	EA	$ 250	8	$ 2,000
12	Asphalt Removal and Replacement	SY	$ 60	30	$ 1,800
13	Gravel Road Replacement	SY	$ 7	4000	$ 28,000
14	Fence Removal and Replacement	LF	$ 25	100	$ 2,500
15	Landscaping Replacement	LS	$ 7,000	0.2	$ 1,400
16	Materials, Sewer Line Inspect., Testing	SA	$ 5,000	1	$ 5,000
17	Mobilization and Demobilization	LS	$ 5,000	1	$ 5,000
18	Traffic Control and Handling Plan	LS	$ 7,500	1	$ 7,500
	ESTIMATED CONSTRUCTION COST				*$ 155,980*
	CONTINGENCIES @ 5%				*$ 7,799*
	ENGINEERING AND SURVEYING @ 12%				*$ 18,718*
	CONSTRUCTION INSPECTION @ 6%				*$ 9,359*
	NM GROSS RECEIPTS TAX @ 6.625%				*$ 12,710*
	TOTAL ESTIMATED COST				**$ 204,600**