

February 8th, 2008
CSB070001

Thomas Andrews
Project Engineer
New Mexico Environmental Department
Construction Programs Bureau
1190 St. Francis Drive
PO Box 26110
Santa Fe, NM 87502-6110

Subject: Response to Water PER Comments

Dear Tom:

Nolte Associates, Inc. has received your comments dated November 5, 2007 regarding the Water Preliminary Engineering Report submitted to the Construction Programs Bureau on October 9, 2007 and offers the following responses.

1. *Page 3: Please cite the source of the 20,000 visitors between mid-May and mid-September.*

The source of the 20,000 visitors between mid-May and mid-September is the Village of Cimarron 40-Year Water Plan prepared by Daniel B. Stephens & Associates, Inc. on April 30, 1998. Most of this influx is due to the close proximity of the Philmont Boy Scout Ranch.

2. *Appendix B: Please show the service area/Village boundary to the map*

Please see the revised Water Vicinity Map added to Appendix B of the revised Water PER

3. *Page 5: Please provide the engineering opinion of adequate storage for fire flow and potable storage for the current and 20-year service populations.*

In order to provide a comprehensive opinion of adequate storage for fire flow, current, and 20-year conditions, Nolte suggests as-built survey of the existing water distribution system and the completion of a water modeling study. This will provide the Village with as-built information about their distribution system as well as providing information for an analysis of their storage and delivery capabilities. These items are listed as Priority No. 8-1 and 8-2 on page 18 and added to Appendix F of the revised Water PER.

4. *Page 8: Please comment on the conditions, functioning and capacities of the Cimarron River and Lambert Heights Pump Stations.*

The condition and functioning of these pump stations and the pump stations' ability to properly serve the Village in the future can be determined upon the completion of Priority No. 8-1 and

8-2 seen on page 18 and added to Appendix F of the revised Water PER. The pump station capacities have been added to page 8 and 9 of the Revised Water PER.

5. *Page 11: Please add the citations for the water system 20-year Master Plan, Water Conservation Plan, and the Source Water Protection Plan. If these documents do not exist or require updating, please provide costs and add them in the list of priorities.*

The Village of Cimarron does not currently have any of these three documents. While a 40-year Master Plan, created in 1998, does exist, Nolte's scope of work did not include review of this document for adequacy of its recommendations. The creation of these three documents has been added as Priorities 9, 11, and 12 on pages 18 and 19 and presented in Appendix F of the revised Water PER.

6. *Page 11: Please add to the list of priorities a water audit following the NM Water Use Auditing Manual found on the NMED-CPB website.*

A water audit following the New Mexico Water Use Auditing Manual has been added to the list of priorities as Priority No. 13 on page 19 and presented in Appendix F of the revised Water PER.

7. *Page 17: Please describe the existing and proposed clarifier solids handling piping, valving, and pump equipment.*

Due to the limited scope of services, the clarifier solids handling piping, valving, and pump equipment was not investigated for this Water PER. At this time there are no modifications proposed for the same equipment. This equipment can be evaluated with the Village in an additional task order with Nolte Associates' current contract with the Village.

8. *Page 18: Table 3 is missing.*

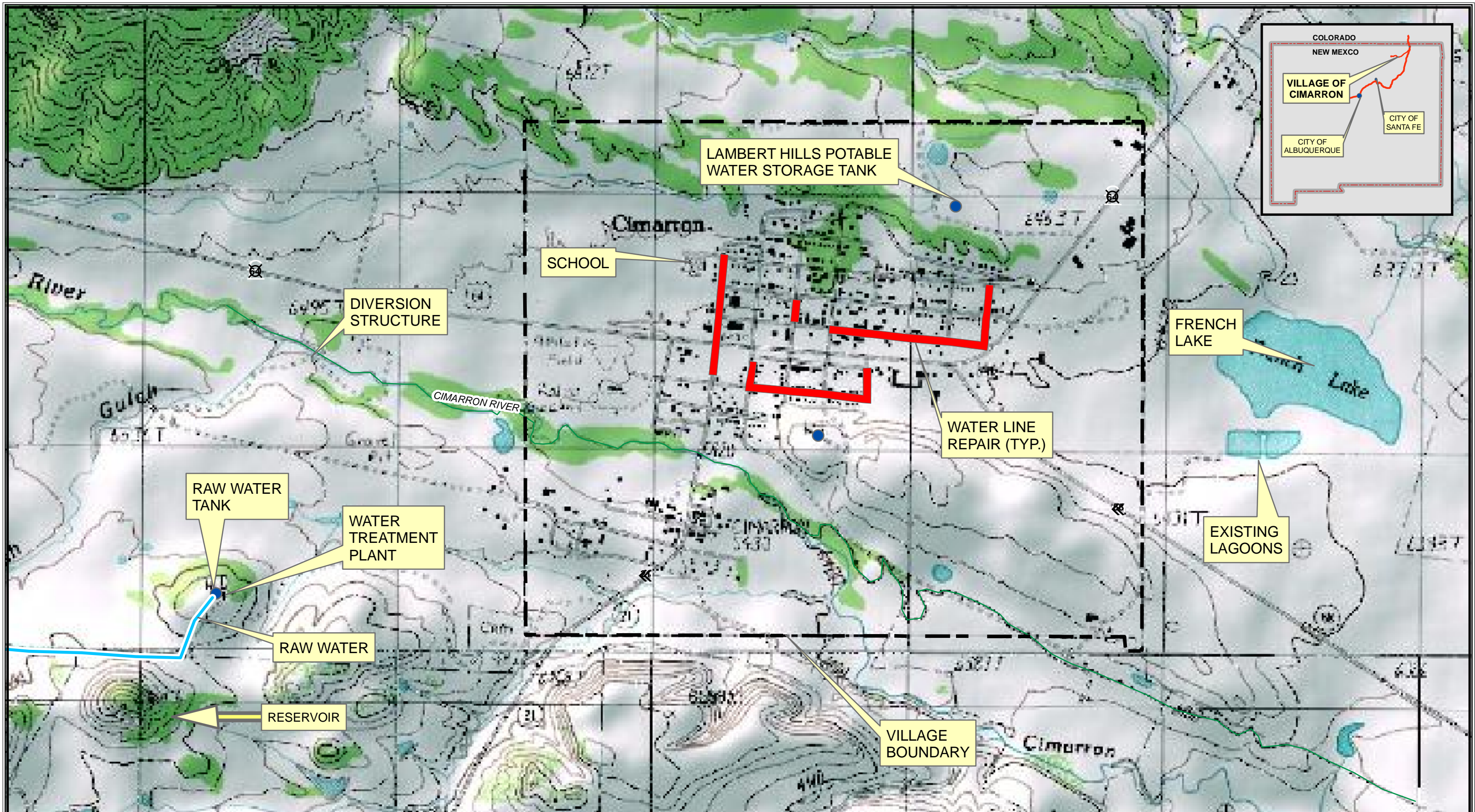
The reference has been changed from Table 3 to Table 2 in the revised PER.

All new or revised information added to Appendices has been attached to this letter for your convenience even though the Revised PER includes this new and revised information.

Sincerely,

Thomas R. Repp, P.E.
Senior Project Manager
719-268-8500

Added to Appendix B:
Revised Water Vicinity Map



DATE: 8/20/07

WATER VICINITY MAP

Legend
█ Water Line Repair

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VILLAGE OF CIMARRON CIMARRON, NEW MEXICO	
WATER ENGINEERING REPORT	
SERVICE AREA MAP Sheet 2 of 2	
Nolte Associates, Inc.	
CHECKED BY: []	DATE: 8/16/07
DESIGNED BY: []	ENGRS. FILE NO. 2007-0001
DRAWN BY: []	SHEET NO. 2 of 2

N:\CSB070001\GIS\EXHIBIT

Added to Appendix F:

Revised Cost Estimates

Cost Estimates for Additional Priorities



BEYOND ENGINEERING

Project: Water System Improvements
Location: Cimarron, New Mexico
Subject: Cost Estimate for Priority 1a
Client: Village of Cimarron

Date: Oct-2007
Job No.: CSB070001
Prep. By: MPT
Ckd. By: TRR

Priority 1a - Replace Steel Filter

Table with 6 columns: ITEM NO., ITEM DESCRIPTION, UNITS, QUANTITY, UNIT PRICE, ITEM COST. Rows include demolition, new steel filter, media replacement, roof removal, installation, subtotal, engineering fees, and total cost of \$397,900.00.

PROFESSIONAL ENGINEERING AND MISC. FEES ARE ROUGH ESTIMATES AND ARE INTENDED FOR BUDGETARY PURPOSES ONLY. A DETAILED COST ANALYSIS AND CONTRACT AGREEMENT SHALL BE COMPLETED FOR THE FINAL PROJECT EXECUTION. UNIT PRICES ARE ONLY GOOD FOR THREE (3) MONTHS FROM DATE OF REVISED PRELIMINARY ENGINEERING REPORT AND SHALL BE REEVALUATED AT THE TIME OF PROJECT EXECUTION.

BEYOND ENGINEERING

Project: Water System Improvements
Location: Cimarron, New Mexico
Subject: Cost Analysis
Client: Village of Cimarron

Date: Oct-2007
Job No.: CSB070001
Prep. By: MPT
Ckd. By: TRR

Cost Analysis

Project Alternative	Capital Cost	Annual O&M Cost	Present Worth of Annual O&M Costs Over 20yrs.*	Present Worth Total (20 Year) Cost
Replace Filter	\$ 397,900	\$ 147,000	\$ 4,041,331	\$ 4,439,231
Repair Filter	\$ 113,900	\$ 147,000	\$ 4,041,331	\$ 4,155,231

*Cost calculated using "Real" federal discount rate from Appendix C of OMB Circular A-94



BEYOND ENGINEERING

Project: Water System Improvements
Location: Cimarron, New Mexico
Subject: Cost Estimate for Water Main Replacement
Client: Village of Cimarron

Date: Oct-2007
Job No.: CSB070001
Prep. By: MPT
Ckd. By: TRR

Water Main Replacement

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	ITEM COST
Replacement A					
1	6-Inch PVC C900	LF	900	\$ 80.00	\$ 72,000.00
2	6-Inch Gate Valve	EA	5	\$ 800.00	\$ 4,000.00
3	Service Connection	EA	8	\$ 2,000.00	\$ 16,000.00
4	Asphalt	TON	1,324	\$ 50.00	\$ 66,200.00
Replacement A Subtotal					\$ 158,200.00
Replacement B					
1	6-Inch PVC C900	LS	850	\$ 80.00	\$ 68,000.00
2	6-Inch Gate Valve	LS	6	\$ 800.00	\$ 4,800.00
3	Service Connection	EA	10	\$ 2,000.00	\$ 20,000.00
Replacement B Subtotal					\$ 92,800.00
Replacement C					
1	6-Inch PVC C900	LS	2,000	\$ 80.00	\$ 160,000.00
2	6-Inch Gate Valve	LS	8	\$ 800.00	\$ 6,400.00
3	Service Connection	EA	30	\$ 2,000.00	\$ 60,000.00
4	Asphalt	TON	2,900	\$ 50.00	\$ 145,000.00
Replacement C Subtotal					\$ 371,400.00
Replacement D					
1	6-Inch PVC C900	LS	2,300	\$ 80.00	\$ 184,000.00
2	6-Inch Gate Valve	LS	12	\$ 800.00	\$ 9,600.00
3	Service Connection	EA	45	\$ 2,000.00	\$ 90,000.00
4	Asphalt	LS	1,200	\$ 50.00	\$ 60,000.00
Replacement D Subtotal					\$ 343,600.00
Installation A, B, C, and D Subtotal					\$ 966,000.00
Engineering & Misc. Fees					
1	Survey	LS	1	\$ 20,000.00	\$ 20,000.00
2	Civil	LS	1	\$ 95,000.00	\$ 95,000.00
3	Construction Observation (3 months @ 40hrs/wk)	LS	1	\$ 65,000.00	\$ 65,000.00
4	Design Locates	LS	1	\$ 25,000.00	\$ 25,000.00
Professional Services Subtotal					\$ 205,000.00
Subtotal					\$ 1,171,000.00
15% Contingency					\$ 176,000.00
Total Cost:					\$ 1,347,000.00

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 A DETAILED COST ANALYSIS AND CONTRACT AGREEMENT SHALL BE COMPLETED FOR THE FINAL PROJECT EXECUTION
 UNIT PRICES ARE ONLY GOOD FOR THREE (3) MONTHS FROM DATE OF REVISED PRELIMINARY ENGINEERING REPORT AND
 SHALL BE REEVALUATED AT THE TIME OF PROJECT EXECUTION.



*Cost Estimate of Services
for The Village of Cimarron, New Mexico*

*Village of Cimarron, New Mexico
As-Built Survey of Water Utilities
January 28, 2007*

**ESTIMATE OF MANHOURS
Priority No. 8-1**

		Group Manager	Senior Engineer	Assistant Engr.	Survey CAD/ CAD Tech III	Survey Crew	Admin	Total \$
		\$151.00	\$132.00	\$104.00	\$95.00	\$155.00	\$58.00	
Item No.	Description	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	
DESIGN PHASE								
1	Provide Clarifications to Surveyors		8	4			2	\$1,588.00
2	Survey All Existing Water Infrastructure			8		120		\$19,432.00
3	Assemble Record Drawings		4	16	40			\$5,992.00
4	Review and Quality Control	8	1	1	1	2		\$1,849.00
5	Meetings, Schedule Coordination		16	8	4		4	\$3,556.00
SUBTOTAL DESIGN PHASE		8	29	37	45	122	6	\$ 32,417.00
REIMBURSABLE								
1	Travel		6	12		24		\$5,760.00
2	Per Diem, 1-2 People							\$4,000.00
3	Mileage							\$500.00
4	Postage, Copying, Etc.							\$750.00
TOTAL REIMBURSABLE								\$11,010.00
TOTAL DESIGN PHASE								\$43,427.00

* Cost Estimate is Prepared for Budgetary Purposes Only



*Cost Estimate of Services
for The Village of Cimarron, New Mexico*

*Village of Cimarron, New Mexico
Water Model and Analysis
January 28, 2007*

**ESTIMATE OF MANHOURS
Priority No. 8-2**

		Group Manager	Senior Engineer	Assistant Engr.	CAD Tech III	Admin	Total \$
		\$151.00	\$132.00	\$104.00	\$95.00	\$58.00	
Item No.	Description	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	
DESIGN PHASE							
1	Gather As-Built Drawings			8	20		\$2,732.00
2	Generate Water Model		32	40	40		\$12,184.00
3	Field Test and Calibrate Water Model		10	20	20		\$5,300.00
4	Analyze the Existing Water Infrastructure		20	20			\$4,720.00
5	Document Findings in an Engineering Report		8	16	24		\$5,000.00
6	Develop Capital Improvement Plan		8	16			\$2,720.00
7	Review and Quality Control	20					\$3,020.00
8	Meetings, Schedule Coordination		8	12	4	4	\$2,916.00
SUBTOTAL DESIGN PHASE		20	86	132	108	4	\$ 38,592.00
REIMBURSABLE							
1	Travel		18	18			\$4,248.00
2	Mileage						\$500.00
3	Postage, Copying, Etc.						\$750.00
TOTAL REIMBURSABLE							\$5,498.00
TOTAL DESIGN PHASE							\$44,090.00

* Cost Estimate is Prepared for Budgetary Purposes Only



*Cost Estimate of Services
for The Village of Cimarron, New Mexico*

*Village of Cimarron, New Mexico
Develop 20-Year Master Plan
January 28, 2007*

**ESTIMATE OF MANHOURS
Priority No. 9**

Item No.	Description	Group Manager	Senior Engineer	Assistant Engr.	CAD Tech III	Admin	Total \$
		Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	
STUDY & REPORT PHASE							
1	Project Setup, Orientation, Coordination		24	24		2	\$5,780.00
2	Research and Analysis of Existing Conditions		40	60			\$11,520.00
3	Development of 20-Year Master Plan		32	60		4	\$10,696.00
4	Create Drawings and Figures for Report			16	60		\$7,364.00
5	Coordination with Client and State		24	16			\$4,832.00
6	Review and Quality Control	16					\$2,416.00
7	Meetings, Schedule Coordination		8	8	4	4	\$2,500.00
SUBTOTAL DESIGN PHASE		16	128	184	64	10	\$ 45,108.00
REIMBURSABLE							
1	Travel		6	6			\$1,416.00
2	Mileage						\$500.00
3	Postage, Copying, Etc.						\$750.00
TOTAL REIMBURSABLE							\$2,666.00
TOTAL DESIGN PHASE							\$47,774.00

* Cost Estimate is Prepared for Budgetary Purposes Only



*Cost Estimate of Services
for The Village of Cimarron, New Mexico*

*Village of Cimarron, New Mexico
Develop 40-Year Master Plan
January 28, 2007*

**ESTIMATE OF MANHOURS
Priority No. 10**

		Group Manager	Senior Engineer	Assistant Engr.	CAD Tech III	Admin	Total \$
		\$151.00	\$132.00	\$104.00	\$95.00	\$58.00	
Item No.	Description	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	
STUDY & REPORT PHASE							
1	Project Setup, Orientation, Coordination		16	8		2	\$3,060.00
2	Analysis of 1998 40-Year Water Plan		24	16			\$4,832.00
3	Research Current and Future Needs		16	20			\$4,192.00
4	Analysis of Current and Future Water Rights (subcontracted)						\$8,050.00
5	Development of 40-Year Master Plan		20	50		4	\$8,072.00
6	Create Drawings and Figures for Report			16	60		\$7,364.00
7	Coordination with Client and State		24	16			\$4,832.00
8	Review and Quality Control	16					\$2,416.00
9	Meetings, Schedule Coordination		8	8	4	4	\$2,500.00
SUBTOTAL DESIGN PHASE		16	108	134	64	10	\$ 45,318.00
REIMBURSABLE							
1	Travel		12	12			\$2,832.00
2	Mileage						\$500.00
3	Postage, Copying, Etc.						\$750.00
TOTAL REIMBURSABLE							\$4,082.00
TOTAL DESIGN PHASE							\$49,400.00

* Cost Estimate is Prepared for Budgetary Purposes Only



*Cost Estimate of Services
for The Village of Cimarron, New Mexico*

*Village of Cimarron, New Mexico
Develop Water Conservation Plan
January 28, 2007*

**ESTIMATE OF MANHOURS
Priority No. 11**

		Group Manager	Senior Engineer	Assistant Engr.	CAD Tech III	Admin	Total \$
		\$151.00	\$132.00	\$104.00	\$95.00	\$58.00	
Item No.	Description	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	
STUDY & REPORT PHASE							
1	Project Setup, Orientation, Coordination		16	16		2	\$3,892.00
2	Research Existing Water Use and Current Conservation Efforts		20	30			\$5,760.00
3	Development of Water Conservation Plan		16	30		4	\$5,464.00
4	Create Drawings and Figures for Report			16	60		\$7,364.00
5	Coordination with Client and State		24	16			\$4,832.00
6	Review and Quality Control	12					\$1,812.00
7	Meetings, Schedule Coordination		8	8		4	\$2,120.00
SUBTOTAL DESIGN PHASE		12	84	116	60	10	\$ 31,244.00
REIMBURSABLE							
1	Travel		18	18			\$4,248.00
2	Mileage						\$500.00
3	Postage, Copying, Etc.						\$750.00
TOTAL REIMBURSABLE							\$5,498.00
TOTAL DESIGN PHASE							\$36,742.00

* Cost Estimate is Prepared for Budgetary Purposes Only



*Cost Estimate of Services
for The Village of Cimarron, New Mexico*

*Village of Cimarron, New Mexico
Develop Source Water Protection Plan
January 28, 2007*

**ESTIMATE OF MANHOURS
Priority No. 12**

		Group Manager	Senior Engineer	Assistant Engr.	CAD Tech III	Admin	Total \$
		\$151.00	\$132.00	\$104.00	\$95.00	\$58.00	
Item No.	Description	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	
STUDY & REPORT PHASE							
1	Project Setup, Orientation, Coordination		16	16		2	\$3,892.00
2	Research and Analysis of Potential Sources of Contamination (subcontracted)						\$7,360.00
3	Development of Source Water Protection Plan		30	40			\$8,120.00
4	Create Drawings and Figures		4	24	40		\$6,824.00
5	Develop Documents for Public Education of Water Protection		24	16	8	4	\$5,824.00
6	Coordination with Client and State		8	4			\$1,472.00
7	Review and Quality Control	8					\$1,208.00
8	Meetings, Schedule Coordination		8	8		4	\$2,120.00
SUBTOTAL DESIGN PHASE		8	90	108	48	10	\$ 36,820.00
REIMBURSABLE							
1	Travel		6	6			\$1,416.00
2	Mileage						\$500.00
3	Postage, Copying, Etc.**						\$750.00
TOTAL REIMBURSABLE							\$2,666.00
TOTAL DESIGN PHASE							\$39,486.00

* Cost Estimate is Prepared for Budgetary Purposes Only

** Copying Costs Assuming Reproduction of Public Education Documents Completed by the Village of Cimarron



*Cost Estimate of Services
for The Village of Cimarron, New Mexico*

*Village of Cimarron, New Mexico
Conduct Water Audit & Recommend Capital Improvements
January 28, 2007*

**ESTIMATE OF MANHOURS
Priority No. 13**

		Group Manager	Senior Engineer	Assistant Engr.	CAD Tech III	Admin	Total \$
		\$151.00	\$132.00	\$104.00	\$95.00	\$58.00	
Item No.	Description	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	
STUDY & REPORT PHASE							
1	Project Setup, Orientation, Coordination		2	4		2	\$796.00
2	Gather and Organize Various Meter Readings for Auditing			6			\$624.00
3	Determine Missing Information and Instruct Village on Meter Installations		4	4			\$944.00
4	Collect Remaining Information from Installed Meters			8			\$832.00
5	Analysis and Completion of Water Audit Table		2	6			\$888.00
6	Develop Report on Findings		4	16	16	2	\$3,828.00
7	Coordination with Client and State		4				\$528.00
8	Develop Capital improvement Plan		8	12			\$2,304.00
9	Review and Quality Control	4					\$604.00
10	Meetings, Schedule Coordination		4	8		2	\$1,476.00
SUBTOTAL DESIGN PHASE		4	28	64	16	6	\$ 12,824.00
REIMBURSABLE							
1	Travel		6	6			\$1,416.00
2	Mileage						\$300.00
3	Postage, Copying, Etc.						\$500.00
TOTAL REIMBURSABLE							\$2,216.00
TOTAL DESIGN PHASE							\$15,040.00

* Cost Estimate is Prepared for Budgetary Purposes Only

** Cost Estimate Assumes Village Personnel Would Conduct Audit with the Assistance of Nolte Associates