TO: Dirk Marks (CLWA)
Paul Weghorst (IRWD)

FROM: Eric Averett and Dan Bartel (RRBWSD)

DATE: March 31, 2014

RE: 2014 Drought Relief Project Cost-Share

Performance of wells ?!

RRBWSD along with CLWA and IRWD have been pursuing the construction of eleven (11) wells and conveyance facilities associated with existing groundwater banking projects in anticipation of 2015 water needs. Specifically:

- CLWA desires to construct three (3) of the eight wells anticipated in their RRBWSD Banking Project.
- IRWD desires to construct the three (3) Strand off-site wells within RRBWSD's service area anticipated in the Strand Ranch Integrated Banking Project.
- RRBWSD is looking to construct three (3) wells to further backstop its GLC program and two (2) wells to backstop its other banking projects from the Stockdale East portion of the Stockdale Integrated Banking Project. The cost of the two wells and conveyance on Stockdale East would be reimbursed by IRWD per previous agreement up to $1.5 million.

Considering these project goals we have shaped the 2014 Drought Relief Project to construct eleven (11) wells and associated conveyance infrastructure with a production goal of mid-2015 as shown on Exhibit A. Construction will be broken down into two bid packages which will run simultaneous, one focused on well construction and equipping and the other on conveyance and CVC interconnection. Costs will be broken down into the following categories: Construction, Design, Project Management, Administration, Inspection, Permitting, and Property and Easement Acquisition.

Construction. We suggest that the construction costs of the Project be allocated to the parties as follows:

1.	Western Well Field – (3) wells and pipelines	100% RRB
2.	Stockdale East Well Field (2) wells and pipelines	100% IRWD for RRB*
3.	Superior East Well Field (2) wells and pipelines	50% IRWD, 50% CLWA
4.	Superior West Well Field (4) wells and pipelines	50% IRWD, 50% CLWA
5.	Central Intake (Canal or Pipeline)	50% IRWD, 50% CLWA
6.	Pumping Plant & CVC Tie-in	50% RRB, 25% CLWA, 25% IRWD

The Central Intake would be designed as bi-direction facility both capable of delivery of water to

and from the CVC. RRBWSD may choose to up-size this facility at its incremental cost so as to provide additional capacity for recharge conveyance purposes. Otherwise the cost would be shared 50/50 between CLWA and IRWD with capacity necessary to return groundwater to the CVC. The Pumping Plant/CVC Tie-in facility is required to move water bi-directional and to recharge water on Stockdale East. Because this is one integrated facility it is very difficult to differentiate costs by specific use and entity. Absent an engineer's estimate at this point we have assigned the construction cost at 50% RRBWSD and 25% for each CLWA and IRWD. This recognizes RRBWSD larger capacity requirement for Stockdale East and the required extra pumping capacity.

Design, Admin, Etc. Based on the above allocation of construction costs and considering the level of difficulty of each aspect we could allocate all actual Design, Project Management, Administration, and Inspection costs of the Project should be allocated to the parties as follows:

26% RRB, 32% CLWA, 32% IRWD, 10% IRWD for RRB*

In assigning these costs we combined the construction cost proportions above with an assumed level of difficulty value of (1) for each well, (4) for the Central Intake and (4) for the Pumping Plant & CVC Tie-in.

Permitting. The project will require permitting for ceqa requirement compliance and various encroachments on roadways, railroad, and CVC. Most of these costs are associated with the Central Intake and to a lesser extent the Pumping Plant & CVC Tie-in. Based on above allocation of construction costs these costs should be allocated to the parties as follows:

20% RRB, 40% CLWA, 40% IRWD

Property and Easement Acquisition. All acquisitions of property and easements are associated with the Superior West well field and the Central Intake. Based on the above allocation of construction costs these costs should be allocated to the parties as follows:

50% CLWA, 50% IRWD

*Up to $1,500,000 for item 2.

Rosedale Rio-Bravo Water Storage District
2014 Drought Relief Project

5/8/2014

Phase 1: Extraction

West Wellfield: 3 Wells	=	**$2,710,000**	0%	
Stockdale East Wellfield: 2 Wells	=	**$1,790,000**	0%	
Superior Wellfield: 6 Wells	=	**$5,680,000**	50%	$2.84 m
Wells Overall Subtotal:	=	**$10,180,000**		
CVC Turnout		**$1,020,000**	25%	$255,000
Central Intake (See Attached Sheet)		**$3,180,000 to $5,320,000**	50%	$2.66m
Pumping Plant - Phase 1 (Structure)		**$1,000,000**	25%	$250,000
Phase 1 Total:		**$15,380,000 to $17,520,000**		≈$6m

Phase 2: Recharge

Pumping Plant - Phase 2 (Pumps and Piping)	**$2,210,000**	25%	$1550,000
PHASE 1 & 2 GRAND TOTAL:	**$17,590,000 to $19,730,000**		

≈ $6.5 m

WEST WELLFIELD WELLS AND PIPELINE PROJECT					5/8/2014
Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
Project Wide					
1	General Contract, etc.	1	LS	$15,000.00	$15,000
3	Develop and Provide Water Supply	1	LS	$10,000.00	$10,000
4	Environmental Compliance & Permitting	1	LS	$10,000.00	$10,000
5	Prepare, Maintain, Restore Access	1	LS	$15,000.00	$15,000
6	Finish Grading of Project – Roads, Canal Banks & Sideslopes, Around Structures, Ramps, etc.	1	LS	$12,000.00	$12,000
		Subtotal:			$62,000
Wells					
7	Drilling and Completion	1	LS	$1,186,605.00	$1,186,605
8	Develop Well	1	LS	$115,200.00	$115,200
9	Well Equipping and Discharge	1	LS	$522,513.00	$522,513
		Subtotal:			$1,824,318
Pipeline					
10	Move-in, move-out and clean-up	1	LS	$20,000.00	$20,000
11	Furnish and Install 15" Pipeline	1	LS	$48,804.00	$48,804
12	Furnish and Install 21" Pipeline	1	LS	$106,175.94	$106,176
13	Furnish and Install 24" Pipeline	1	LS	$108,060.70	$108,061
14	Furnish and Install 27" Pipeline	1	LS	$4,694.40	$4,694
15	Furnish and Install Pipeline Fittings and Appurtenances	1	LS	$71,300.00	$71,300
		Subtotal:			$359,035
	Subtotal (Items 1 through 15)				**$2,245,353**
16	Biological Support	1	LS	$ 6,000	$ 6,000
17	Surveying Costs	1	LS	$ 10,000	$ 10,000
18	Soils (compaction) and concrete testing	1	LS	$ 12,000	$ 12,000
19	Design	4.5%			$101,041
20	Construction Management	5%			$112,268
	Subtotal (Items 16 through 20)				**$241,309**
	Contingency	10%			$224,535
	Grand Total				**$2,711,197**

5/8/2014

Rosedale Rio-Bravo Water Storage District
2014 Drought Relief Project

Phase 1: Extraction

West Wellfield: 3 Wells	=	$2,710,000		
Stockdale East Wellfield: 2 Wells	=	$1,790,000		
Superior Wellfield: 6 Wells	=	$5,680,000		
Wells Overall Subtotal:	=	$10,180,000		
CVC Turnout		$1,020,000		
Central Intake (See Attached Sheet)		$3,180,000	to	$5,320,000
Pumping Plant - Phase 1 (Structure)		$1,000,000		
Phase 1 Total:		$15,380,000	to	$17,520,000

Phase 2: Recharge

Pumping Plant - Phase 2 (Pumps and Piping)		$2,210,000		
PHASE 1 & 2 GRAND TOTAL:		$17,590,000	to	$19,730,000

WEST WELLFIELD WELLS AND PIPELINE PROJECT					5/8/2014
Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
Project Wide					
1	General Contract, etc.	1	LS	$15,000.00	$15,000
3	Develop and Provide Water Supply	1	LS	$10,000.00	$10,000
4	Environmental Compliance & Permitting	1	LS	$10,000.00	$10,000
5	Prepare, Maintain, Restore Access	1	LS	$15,000.00	$15,000
6	Finish Grading of Project – Roads, Canal Banks & Sideslopes, Around Structures, Ramps, etc.	1	LS	$12,000.00	$12,000
		Subtotal:			$82,000
Wells					
7	Drilling and Completion	1	LS	$1,186,605.00	$1,186,605
8	Develop Well	1	LS	$115,200.00	$115,200
9	Well Equipping and Discharge	1	LS	$522,513.00	$522,513
		Subtotal:			$1,824,318
Pipeline					
10	Move-in, move-out and clean-up	1	LS	$20,000.00	$20,000
11	Furnish and Install 15" Pipeline	1	LS	$48,804.00	$48,804
12	Furnish and Install 21" Pipeline	1	LS	$106,175.94	$106,176
13	Furnish and Install 24" Pipeline	1	LS	$108,060.70	$108,061
14	Furnish and Install 27" Pipeline	1	LS	$4,694.40	$4,694
15	Furnish and Install Pipeline Fittings and Appurtenances	1	LS	$71,300.00	$71,300
		Subtotal:			$359,035
	Subtotal (Items 1 through 15)				$2,245,353
16	Biological Support	1	LS	$ 6,000	$ 6,000
17	Surveying Costs	1	LS	$ 10,000	$ 10,000
18	Soils (compaction) and concrete testing	1	LS	$ 12,000	$ 12,000
19	Design	4.5%			$101,041
20	Construction Management	5%			$112,268
	Subtotal (Items 16 through 20)				$241,309
	Contingency	10%			$224,535
	Grand Total				$2,711,197

SUPERIOR WELLS AND PIPELINE PROJECT					5/8/2014
Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
Project Wide					
1	General Contract, etc.	1	LS	$30,000.00	$30,000
2	Develop and Provide Water Supply	1	LS	$25,000.00	$25,000
3	Environmental Compliance & Permitting	1	LS	$20,000.00	$20,000
4	Prepare, Maintain, Restore Access	1	LS	$15,000.00	$15,000
5	Mitigation for Existing Wells Within 1/3 Mile Criteria of Project Wells	3	EA.	$50,000.00	$150,000
6	Finish Grading of Project – Roads, Canal Banks & Sideslopes, Around Structures, Ramps, etc.	1	LS	$24,000.00	$24,000
		Subtotal:			$264,000
Wells					
7	Drilling and Completion	1	LS	$2,361,210.00	$2,361,210
8	Develop Well	1	LS	$230,400.00	$230,400
9	Well Equipping and Discharge	1	LS	$1,045,026.00	$1,045,026
		Subtotal:			$3,636,636
Pipeline					
10	Move-in, move-out and clean-up	1	LS	$30,000.00	$30,000
11	Furnish and Install 15" Pipeline	1	LS	$119,046.90	$119,047
12	Furnish and Install 21" Pipeline	1	LS	$37,341.85	$37,342
13	Furnish and Install 24" Pipeline	1	LS	$92,562.80	$92,563
14	Furnish and Install 27" Pipeline	1	LS	$373,204.80	$373,205
15	Furnish and Install Pipeline Fittings and Appurtenances	1	LS	$98,050.00	$98,050
16	Superior Road Crossing	1	LS	$63,606.00	$63,606
		Subtotal:			$813,812
	Subtotal (Items 1 through 16)				**$4,714,448**
17	Biological Support	1	LS	$ 8,000	$ 8,000
18	Surveying Costs	1	LS	$ 16,000	$ 16,000
19	Soils (compaction) and concrete testing	1	LS	$ 25,000	$ 25,000
20	Design	4.5%			$212,150
21	Construction Management	5%			$235,722
	Subtotal (Items 17 through 21)				**$496,873**
	Contingency	10%			$471,445
	Grand Total				**$5,682,766**

STOCKDALE EAST WELLS AND PIPELINE PROJECT					5/8/2014
Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
Project Wide					
1	General Contract, etc.	1	LS	$10,000.00	$10,000
2	Develop and Provide Water Supply	1	LS	$15,000.00	$15,000
3	Environmental Compliance & Permitting	1	LS	$15,000.00	$15,000
4	Prepare, Maintain, Restore Access	1	LS	$10,000.00	$10,000
5	Finish Grading of Project – Roads, Canal Banks & Sideslopes, Around Structures, Ramps, etc.	1	LS	$8,000.00	$8,000
		Subtotal:			$58,000
Wells					
6	Drilling and Completion	1	LS	$795,070.00	$795,070
7	Develop Well	1	LS	$76,800.00	$76,800
8	Well Equipping and Discharge	1	LS	$348,342.00	$348,342
		Subtotal:			$1,220,212
Pipeline					
9	Move-in, move-out and clean-up	1	LS	$20,000	$20,000
10	Furnish and Install 12" Pipeline	1	LS	$6,925	$6,925
11	Furnish and Install 15" Pipeline	1	LS	$32,712.90	$32,713
12	Furnish and Install 21" Pipeline	1	LS	$27,040.65	$27,041
13	Furnish and Install 24" Pipeline	1	LS	$54,773.40	$54,773
14	Furnish and Install Pipeline Fittings and Appurtenances	1	LS	$64,450.00	$64,450
		Subtotal:			$205,902
	Subtotal (Items 1 through 14)				**$1,484,114**
15	Biological Support	1	LS	$ 4,000	$ 4,000
16	Surveying Costs	1	LS	$ 6,000	$ 6,000
17	Soils (compaction) and concrete testing	1	LS	$ 8,000	$ 8,000
18	Design	4.5%			$66,785
19	Construction Management	5%			$74,206
	Subtotal (Items 15 through 19)				**$158,991**
	Contingency	10%			$148,411
	Grand Total				**$1,791,516**

PRELIMINARY COST ESTIMATE: CVC Turnout 30-Apr-14

ITEM NO.	DESCRIPTION	UNIT PRICE	ESTIMATED QUANTITY	UNIT	TOTAL PRICE	COMMENTS
1	Mobilization/Demoblization	$80,000.00	1	L.S.	$80,000	Estimate
2	Develop Water Supply	$15,000.00	1	L.S.	$15,000	Estimate
3	Environmental Compliance and Permitting	$15,000.00	1	L.S.	$15,000	Estimate
4	Right-of-Way Acquisition - KWBA	$20,000.00	1	L.S.	$20,000	Estimate
5	Clearing and Grubbing	$5,000.00	1	L.S.	$5,000	Estimate
6	Sheeting, shoring and bracing	$10,000.00	1	L.S.	$10,000	Estimate
7	Concrete CVC turnout structure	$140,000.00	1	L.S.	$140,000	Estimate
8	Furnish and install 72-inch RCP	$156,000.00	1	L.S.	$156,000	Estimate
9	Furnish and install flowmeter	$75,000.00	1	L.S.	$75,000	Estimate
10	Furnish and install Waterman Gate 72x72 SS-251 w/ motor actuator	$60,000.00	1	L.S.	$60,000	Estimate
11	Furnish and install stoplog	$10,000.00	1	L.S.	$10,000	Estimate
12	Furnish and install electrical equipment	$100,000.00	1	L.S.	$100,000	Estimate
13	Use of KCWA cofferdam	$80,000.00	1	L.S.	$80,000	Estimate
14	Remove and replace CVC lining	$10,000.00	1	L.S.	$10,000	Estimate
			SUBTOTAL		**$776,000**	
	Bond Costs		3	%	$23,280	
			SUBTOTAL		**$799,280**	
	Surveying/Construction Staking		1	%	$7,993	
			SUBTOTAL		**$807,273**	
	Contingency		15	%	$119,892	
			SUBTOTAL		**$927,165**	
	Administration, engineering, etc. (10%)		12	%	$95,914	
	TOTAL AMOUNT				**$1,023,078**	

Summary

ROSEDALE RIO-BRAVO WATER STORAGE DISTRICT

CENTRAL INTAKE PROJECT

PRELIMINARY COST ESTIMATE SUMMARY

			Capacity N		Capacity S	
1	Canal Option (with Poly-Liner)					$3,967,493
		Price per cfs @	150	cfs	150	$26,450
2	Pipeline Option - 72" RCP					$5,318,994
		Price per cfs @	150	cfs	95	$35,460
3	Pipeline Option - 60" RCP					$4,608,701
		Price per cfs @	110	cfs	60	$41,897
4	Pipeline Option - 54" RCP					$3,884,530
		Price per cfs @	80	cfs	45	$48,557
6	Pipeline Option - 60" Ribbed Poly Pipe (ADS)					$3,179,800
		Price per cfs @	130	cfs	70	$24,460
7	Pipeline Option - 63" Solid Wall HDPE					$4,383,284
		Price per cfs @	130	cfs	70	$33,718
8	Pipeline Option - 55" Solid Wall HDPE					$4,003,716
		Price per cfs @	80	cfs	50	$50,046

STOCKDALE EAST WELLS AND PIPELINE PROJECT					5/8/2014
Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
Project Wide					
1	General Contract, etc.	1	LS	$10,000.00	$10,000
2	Develop and Provide Water Supply	1	LS	$15,000.00	$15,000
3	Environmental Compliance & Permitting	1	LS	$15,000.00	$15,000
4	Prepare, Maintain, Restore Access	1	LS	$10,000.00	$10,000
5	Finish Grading of Project – Roads, Canal Banks & Sideslopes, Around Structures, Ramps, etc.	1	LS	$8,000.00	$8,000
		Subtotal:			$58,000
Wells					
6	Drilling and Completion	1	LS	$795,070.00	$795,070
7	Develop Well	1	LS	$76,800.00	$76,800
8	Well Equipping and Discharge	1	LS	$348,342.00	$348,342
		Subtotal:			$1,220,212
Pipeline					
9	Move-in, move-out and clean-up	1	LS	$20,000	$20,000
10	Furnish and Install 12" Pipeline	1	LS	$6,925	$6,925
11	Furnish and Install 15" Pipeline	1	LS	$32,712.90	$32,713
12	Furnish and Install 21" Pipeline	1	LS	$27,040.65	$27,041
13	Furnish and Install 24" Pipeline	1	LS	$54,773.40	$54,773
14	Furnish and Install Pipeline Fittings and Appurtenances	1	LS	$64,450.00	$64,450
		Subtotal:			$205,902
	Subtotal (Items 1 through 14)				$1,484,114
15	Biological Support	1	LS	$ 4,000	$ 4,000
16	Surveying Costs	1	LS	$ 6,000	$ 6,000
17	Soils (compaction) and concrete testing	1	LS	$ 8,000	$ 8,000
18	Design	4.5%			$66,785
19	Construction Management	5%			$74,206
	Subtotal (Items 15 through 19)				$158,991
	Contingency	10%			$148,411
	Grand Total				$1,791,516

SUPERIOR WELLS AND PIPELINE PROJECT					5/8/2014
Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
Project Wide					
1	General Contract, etc.	1	LS	$30,000.00	$30,000
2	Develop and Provide Water Supply	1	LS	$25,000.00	$25,000
3	Environmental Compliance & Permitting	1	LS	$20,000.00	$20,000
4	Prepare, Maintain, Restore Access	1	LS	$15,000.00	$15,000
5	Mitigation for Existing Wells Within 1/3 Mile Criteria of Project Wells	3	EA.	$50,000.00	$150,000
6	Finish Grading of Project – Roads, Canal Banks & Sideslopes, Around Structures, Ramps, etc.	1	LS	$24,000.00	$24,000
		Subtotal:			$284,000
Wells					
7	Drilling and Completion	1	LS	$2,361,210.00	$2,361,210
8	Develop Well	1	LS	$230,400.00	$230,400
9	Well Equipping and Discharge	1	LS	$1,045,026.00	$1,045,026
		Subtotal:			$3,636,636
Pipeline					
10	Move-in, move-out and clean-up	1	LS	$30,000.00	$30,000
11	Furnish and Install 15" Pipeline	1	LS	$119,046.90	$119,047
12	Furnish and Install 21" Pipeline	1	LS	$37,341.85	$37,342
13	Furnish and Install 24" Pipeline	1	LS	$92,562.80	$92,563
14	Furnish and Install 27" Pipeline	1	LS	$373,204.80	$373,205
15	Furnish and Install Pipeline Fittings and Appurtenances	1	LS	$98,050.00	$98,050
16	Superior Road Crossing	1	LS	$63,606.00	$63,606
		Subtotal:			$813,812
	Subtotal (Items 1 through 16)				**$4,714,448**
17	Biological Support	1	LS	$ 8,000	$ 8,000
18	Surveying Costs	1	LS	$ 16,000	$ 16,000
19	Soils (compaction) and concrete testing	1	LS	$ 25,000	$ 25,000
20	Design	4.5%			$212,150
21	Construction Management	5%			$235,722
	Subtotal (Items 17 through 21)				**$496,873**
	Contingency	10%			$471,445
	Grand Total				**$5,682,766**

PRELIMINARY COST ESTIMATE: CVC Turnout						30-Apr-14
ITEM NO.	DESCRIPTION	UNIT PRICE	ESTIMATED QUANTITY	UNIT	TOTAL PRICE	COMMENTS
1	Mobilization/Demoblization	$80,000.00	1	L.S.	$80,000	Estimate
2	Develop Water Supply	$15,000.00	1	L.S.	$15,000	Estimate
3	Environmental Compliance and Permitting	$15,000.00	1	L.S.	$15,000	Estimate
4	Right-of-Way Acquisition - KWBA	$20,000.00	1	L.S.	$20,000	Estimate
5	Clearing and Grubbing	$5,000.00	1	L.S.	$5,000	Estimate
6	Sheeting, shoring and bracing	$10,000.00	1	L.S.	$10,000	Estimate
7	Concrete CVC turnout structure	$140,000.00	1	L.S.	$140,000	Estimate
8	Furnish and install 72-inch RCP	$156,000.00	1	L.S.	$156,000	Estimate
9	Furnish and install flowmeter	$75,000.00	1	L.S.	$75,000	Estimate
10	Furnish and install Waterman Gate 72x72 SS-251 w/ motor actuator	$60,000.00	1	L.S.	$60,000	Estimate
11	Furnish and install stoplog	$10,000.00	1	L.S.	$10,000	Estimate
12	Furnish and install electrical equipment	$100,000.00	1	L.S.	$100,000	Estimate
13	Use of KCWA cofferdam	$80,000.00	1	L.S.	$80,000	Estimate
14	Remove and replace CVC lining	$10,000.00	1	L.S.	$10,000	Estimate
			SUBTOTAL		$776,000	
	Bond Costs		3	%	$23,280	
			SUBTOTAL		$799,280	
	Surveying/Construction Staking		1	%	$7,993	
			SUBTOTAL		$807,273	
	Contingency		15	%	$119,892	
			SUBTOTAL		$927,165	
	Administration, engineering, etc. (10%)		12	%	$95,914	
	TOTAL AMOUNT				$1,023,078	

ROSEDALE RIO-BRAVO WATER STORAGE DISTRICT

CENTRAL INTAKE PROJECT

PRELIMINARY COST ESTIMATE SUMMARY

				Capacity N		Capacity S	
1	Canal Option (with Poly-Liner)						$3,967,493
		Price per cfs	@	150	cfs	150	$26,450
2	Pipeline Option - 72" RCP						$5,318,994
		Price per cfs	@	150	cfs	95	$35,460
3	Pipeline Option - 60" RCP						$4,608,701
		Price per cfs	@	110	cfs	60	$41,897
4	Pipeline Option - 54" RCP						$3,884,530
		Price per cfs	@	80	cfs	45	$48,557
6	Pipeline Option - 60" Ribbed Poly Pipe (ADS)						$3,179,800
		Price per cfs	@	130	cfs	70	$24,460
7	Pipeline Option - 63" Solid Wall HDPE						$4,383,284
		Price per cfs	@	130	cfs	70	$33,718
8	Pipeline Option - 55" Solid Wall HDPE						$4,003,716
		Price per cfs	@	80	cfs	50	$50,046

PRELIMINARY COST ESTIMATE: Pump Station - Phase 1

ITEM NO.	DESCRIPTION	UNIT PRICE	ESTIMATED QUANTITY	UNIT	TOTAL PRICE	COMMENTS
1	Mobilization/Demoblization	$100,000.00	1	L.S.	$100,000	Estimate
2	Earthwork	$40,000.00	1	L.S.	$40,000	Estimate
4	Reinforced Concrete Transition (4,300 S.F.)	$43,000.00	1	L.S.	$43,000	Estimate
5	Pumping Plant Structure - 6 Bays, 5 Pumps	$510,000.00	1	L.S.	$510,000	Estimate
6	Waterman AC-31 gate tie in for pumping plant bypass	$40,000.00	1	L.S.	$40,000	Estimate
			SUBTOTAL		**$733,000**	
	Bond Costs		3	%	$21,990	
			SUBTOTAL		**$754,990**	
	Surveying/Construction Staking		1	%	$7,550	
			SUBTOTAL		**$762,540**	
	Contingency		20	%	$150,998	
			SUBTOTAL		**$913,538**	
	Administration, engineering, etc. (10%)		12	%	$90,599	
	TOTAL AMOUNT				**$1,004,137**	

PRELIMINARY COST ESTIMATE: Pump Station - Phase 2

ITEM NO.	DESCRIPTION	UNIT PRICE	ESTIMATED QUANTITY	UNIT	TOTAL PRICE	COMMENTS
1	Mobilization/Demoblization	$150,000.00	1	L.S.	$150,000	Estimate
2	Pump - 20 cfs	$90,000.00	2	EA.	$180,000	Estimate
3	Pump - 40 cfs	$160,000.00	2	EA.	$320,000	Estimate
4	Pump - 60 cfs	$240,000.00	1	EA.	$240,000	Estimate
5	PG&E service	$30,000.00	1	L.S.	$30,000	Estimate
6	Electrical facilities (includes panels, controls, etc.)	$400,000.00	1	L.S.	$400,000	Estimate
7	Manifold and discharge piping - 2x50, 2x75, 1x100	$350,000.00	1	L.S.	$350,000	Estimate
8	Gravel surfacing/drainage	$15,000.00	1	L.S.	$15,000	Estimate
9	Fencing	$20,000.00	1	L.S.	$20,000	Estimate
			SUBTOTAL		$1,705,000	
	Bond Costs		3	%	$51,150	
			SUBTOTAL		$1,756,150	
	Surveying/Construction Staking		1	%	$17,562	
			SUBTOTAL		$1,773,712	
	Contingency		15	%	$263,423	
			SUBTOTAL		$2,037,134	
	Administration, engineering, etc. (10%)		10	%	$175,615	
	TOTAL AMOUNT				$2,212,749	