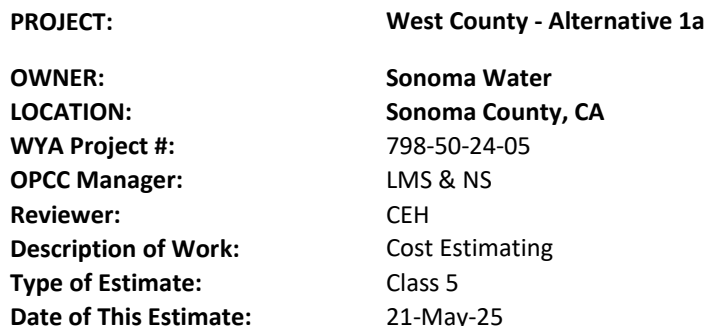


Appendix B

Phase 1 Capital Costs

DRAFT



Sonoma Water
West County Water Quality and Recycled Water Supply Feasibility Study
Last Revised: 9-2-25



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Eff Pond Fill @FWD
Element #: 1

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Effluent Pond Fill	16,100	CY	\$120	\$1,932,000	\$0	\$1,932,000
2							
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$1,932,000
Plant Paving, Grading, and Yard Piping					10%		\$193,000
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$2,130,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$320,000
Mobilization and Demobilization					5%		\$107,000
Contractor's General Conditions					10%		\$213,000
SUBTOTAL							\$2,770,000
Project Phase-Level OPCC Contingency					30%		\$831,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$3,600,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$900,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$4,500,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: SAF @FWD
Element #: 2

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Concrete Pad	28	CY	\$550	\$15,400	\$15,400	\$31,000
2	Secondary Effluent Junction Box	0	0	\$0	\$98,000	\$0	\$98,000
3	Suspended Air Floatation System (1.5 mgd capacity - includes tank, flocculation tubes, generator)	1	LS	\$589,625	\$589,625	\$589,625	\$1,179,000
4	Canopy	820	SF	\$85	\$69,700	\$0	\$70,000
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$1,378,000
Plant Paving, Grading, and Yard Piping					10%		\$138,000
Mechanical and Piping					10%		\$138,000
Electrical					25%		\$345,000
Instrumentation and Controls					15%		\$207,000
SUBTOTAL							\$2,210,000
Tax on Materials					9.3%		\$71,000
Contractor's Markup on Sub-Contractors' Work					10%		\$55,000
Contractor's Overhead and Profit					15%		\$332,000
Mobilization and Demobilization					5%		\$111,000
Contractor's General Conditions					10%		\$221,000
SUBTOTAL							\$3,000,000
Project Phase-Level OPCC Contingency					30%		\$900,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$3,900,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$975,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$4,880,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: FIPS @FWD
Element #: 3

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	1.5 mgd pump station before SAF and cloth disk filters	1	LS	\$1,960,000	\$1,960,000	\$0	\$1,960,000
2							
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$1,960,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$1,960,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					0%		\$0
Contractor's Overhead and Profit					0%		\$0
Mobilization and Demobilization					0%		\$0
Contractor's General Conditions					0%		\$0
SUBTOTAL							\$1,960,000
Project Phase-Level OPCC Contingency					30%		\$588,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$2,550,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$638,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$3,190,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Tert.Filt. @FWD
Element #: 4

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

	DESCRIPTION	MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Concrete Pad (under two 4-Disk filter unit tanks)	21	CY	\$550	\$11,550	\$11,550	\$23,000
2	Cloth Media Filters (two (2) 4-Disk AquaDisk filters in steel tanks treating a max. flow of 1.5 MGD, with full redundancy)	1	LS	\$600,000	\$600,000	\$300,000	\$900,000
3	Canopy	671	SF	\$85	\$57,069	\$0	\$57,000
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$980,000
	Plant Paving, Grading, and Yard Piping				10%		\$98,000
	Mechanical and Piping				10%		\$98,000
	Electrical				25%		\$245,000
	Instrumentation and Controls				15%		\$147,000
SUBTOTAL							\$1,570,000
	Tax on Materials				9.3%		\$62,000
	Contractor's Markup on Sub-Contractors' Work				10%		\$39,000
	Contractor's Overhead and Profit				15%		\$236,000
	Mobilization and Demobilization				5%		\$79,000
	Contractor's General Conditions				10%		\$157,000
SUBTOTAL							\$2,140,000
	Project Phase-Level OPCC Contingency				30%		\$642,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$2,780,000
	Construction Contingency				0%		\$0
	Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin				25%		\$695,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$3,480,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: CCB @FWD
Element #: 5

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

	DESCRIPTION	MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Excavation for two new chlorine contact basins	1,174	CY	\$45	\$52,830	\$0	\$53,000
2	Concrete basins for two (2) new chlorine contactors (match existing)	395	CY	\$550	\$217,250	\$217,250	\$435,000
3	Additional chemical storage building for gas cylinders for the two new CCBs.	216	SF	\$450	\$97,200	\$0	\$97,000
4	Metal grating over chlorine contact basin inlets	86	SF	\$35	\$2,993	\$0	\$3,000
5	Surface Mounted Fiberglass Slide Gate and Frame (2 per chlorine contact basin)	4	EA	\$5,000	\$20,000	\$10,000	\$30,000
6	Chlorine Ejector (Chlorination) Assembly (1 per chlorine contact basin)	2	EA	\$10,000	\$20,000	\$10,000	\$30,000
7	Sulfur Dioxide Ejector (Dechlorination) Assembly (1 per chlorine contact basin)	2	EA	\$10,000	\$20,000	\$10,000	\$30,000
8							
9							
10							
	SUBTOTAL						\$678,000
	Plant Paving, Grading, and Yard Piping				10%		\$68,000
	Mechanical and Piping				10%		\$68,000
	Electrical				25%		\$170,000
	Instrumentation and Controls				15%		\$102,000
	SUBTOTAL						\$1,090,000
	Tax on Materials				9.3%		\$40,000
	Contractor's Markup on Sub-Contractors' Work				10%		\$27,000
	Contractor's Overhead and Profit				15%		\$164,000
	Mobilization and Demobilization				5%		\$55,000
	Contractor's General Conditions				10%		\$109,000
	SUBTOTAL						\$1,490,000
	Project Phase-Level OPCC Contingency				30%		\$447,000
	ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST						\$1,940,000
	Construction Contingency				0%		\$0
	Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin				25%		\$485,000
	ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST						\$2,430,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: GCSD Headworks
Element #: 6

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	ROTAMAT Micro Strainer Ro9	1	LS	\$136,782	\$136,782	\$136,782	\$274,000
2	Bin	1	LS	\$50,000	\$50,000	\$0	\$50,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$324,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					5%		\$16,000
Electrical					25%		\$81,000
Instrumentation and Controls					15%		\$49,000
SUBTOTAL							\$470,000
Tax on Materials					9.3%		\$17,000
Contractor's Markup on Sub-Contractors' Work					10%		\$13,000
Contractor's Overhead and Profit					15%		\$71,000
Mobilization and Demobilization					5%		\$24,000
Contractor's General Conditions					10%		\$47,000
SUBTOTAL							\$640,000
Project Phase-Level OPCC Contingency					30%		\$192,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$830,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$208,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$1,040,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Aer.Ponds @GCSD
Element #: 7

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

	DESCRIPTION	MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Blower Building (houses three (3) 100HP blowers for pond aeration system)	1,053	SF	\$550	\$579,150	\$0	\$579,000
2	Ares Aeration® Pond Aeration System (in treatment ponds) & Floating Cover (on settling pond)	1	EA	\$1,468,680	\$1,468,680	\$1,468,680	\$2,937,000
3							
4							
5							
6							
7							
8							
9							
10							
	SUBTOTAL						\$3,516,000
	Plant Paving, Grading, and Yard Piping				10%		\$352,000
	Mechanical and Piping				10%		\$294,000
	Electrical				25%		\$734,000
	Instrumentation and Controls				15%		\$441,000
	SUBTOTAL						\$5,340,000
	Tax on Materials				9.3%		\$136,000
	Contractor's Markup on Sub-Contractors' Work				10%		\$118,000
	Contractor's Overhead and Profit				15%		\$801,000
	Mobilization and Demobilization				5%		\$267,000
	Contractor's General Conditions				10%		\$534,000
	SUBTOTAL						\$7,200,000
	Project Phase-Level OPCC Contingency				30%		\$2,160,000
	ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST						\$9,360,000
	Construction Contingency				0%		\$0
	Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin				25%		\$2,340,000
	ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST						\$11,700,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Eff.Stor.Pond @GCSD
Element #: 8

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Excavation	182,000	CY	\$45	\$8,190,000	\$0	\$8,190,000
2	Rip rap	6,000	ton	\$375	\$2,250,000	\$0	\$2,250,000
3	Gravel	2,000	ton	\$210	\$420,000	\$0	\$420,000
4	Misc Structure	2	EA	\$100,000	\$200,000	\$0	\$200,000
5	Fencing	3,966	LF	\$75	\$300,000	\$0	\$300,000
6							
7							
8							
9							
10							
SUBTOTAL							\$11,360,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					5%		\$570,000
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$11,930,000
Tax on Materials					9.3%		\$150,000
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$1,790,000
Mobilization and Demobilization					5%		\$600,000
Contractor's General Conditions					10%		\$1,190,000
SUBTOTAL							\$15,660,000
Project Phase-Level OPCC Contingency					30%		\$4,700,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$20,360,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$5,090,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$25,450,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Pipeline-Treatment
Element #: 9

OPPC PROVIDED BY: NS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	6 inch Pipeline	240	LF	\$180	\$43,200	\$0	\$43,000
2	8 inch Pipeline	1,250	LF	\$240	\$300,000	\$0	\$300,000
3	10 inch Pipeline	270	LF	\$300	\$81,000	\$0	\$81,000
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$424,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$420,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$63,000
Mobilization and Demobilization					5%		\$21,000
Contractor's General Conditions					10%		\$42,000
SUBTOTAL							\$550,000
Project Phase-Level OPCC Contingency					30%		\$165,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$720,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$180,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$900,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Pipeline-Conveyance
Element #: 10

OPPC PROVIDED BY: NS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Rehab 8 inch Pipe	8,980	LF	\$120	\$1,077,600	\$0	\$1,078,000
2	6 inch Pipeline	13,180	LF	\$180	\$2,372,400	\$0	\$2,372,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$3,450,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$3,450,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$518,000
Mobilization and Demobilization					5%		\$173,000
Contractor's General Conditions					10%		\$345,000
SUBTOTAL							\$4,490,000
Project Phase-Level OPCC Contingency					30%		\$1,347,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$5,840,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$1,460,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$7,300,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Conveyance PS
Element #: 11

OPPC PROVIDED BY: NS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

	DESCRIPTION	MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	GCSD Secondary Effluent Pump Station	1	EA	\$1,890,000	\$1,890,000	\$0	\$1,890,000
2	GCSD Tertiary Effluent Pump Station	1	EA	\$1,960,000	\$1,960,000	\$0	\$1,960,000
3	FWD Tertiary Effluent Pump Station	1	EA	\$1,840,000	\$1,840,000	\$0	\$1,840,000
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$5,690,000
	Plant Paving, Grading, and Yard Piping				0%		\$0
	Mechanical and Piping				0%		\$0
	Electrical				0%		\$0
	Instrumentation and Controls				0%		\$0
SUBTOTAL							\$5,690,000
	Tax on Materials				0%		\$0
	Contractor's Markup on Sub-Contractors' Work				0%		\$0
	Contractor's Overhead and Profit				0%		\$0
	Mobilization and Demobilization				0%		\$0
	Contractor's General Conditions				0%		\$0
SUBTOTAL							\$5,690,000
	Project Phase-Level OPCC Contingency				30%		\$1,707,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$7,400,000
	Construction Contingency				0%		\$0
	Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin				25%		\$1,850,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$9,250,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: RRCSD Hydraulic
Element #: 12

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	18" UV Effluent Pipe	150	LF	\$540	\$81,000	\$0	\$81,000
2	16" Mixed Liquor Pipe	450	LF	\$480	\$216,000	\$0	\$216,000
3	14" Secondary Effluent Pipe	60	LF	\$420	\$25,200	\$0	\$25,000
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$322,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$320,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$48,000
Mobilization and Demobilization					5%		\$16,000
Contractor's General Conditions					10%		\$32,000
SUBTOTAL							\$420,000
Project Phase-Level OPCC Contingency					30%		\$126,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$550,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$138,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$690,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: RRCSD CIP
Element #: 13

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

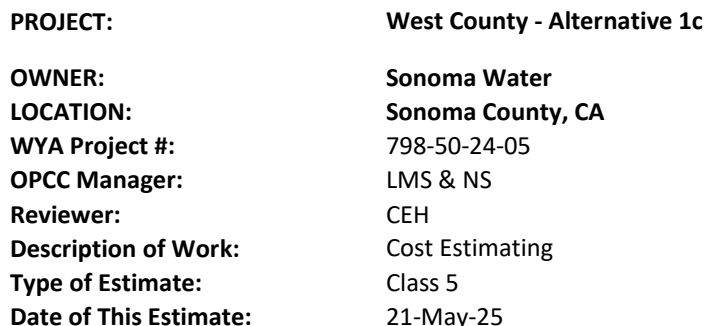
DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Capital Improvement Programs	1	LS	\$8,000,000	\$8,000,000	\$0	\$8,000,000
2	Headworks Improvement	1	LS	\$1,991,434	\$1,991,434	\$0	\$2,000,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$10,000,000
Plant Paving, Grading, and Yard Piping					5%		\$500,000
Mechanical and Piping					5%		\$500,000
Electrical					10%		\$1,000,000
Instrumentation and Controls					10%		\$1,000,000
SUBTOTAL							\$13,000,000
Tax on Materials					9.3%		\$900,000
Contractor's Markup on Sub-Contractors' Work					10%		\$200,000
Contractor's Overhead and Profit					15%		\$2,000,000
Mobilization and Demobilization					5%		\$700,000
Contractor's General Conditions					10%		\$1,300,000
SUBTOTAL							\$18,000,000
Project Phase-Level OPCC Contingency					30%		\$5,400,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$23,000,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$5,800,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$29,000,000



PROJECT: West County - Alternative 1a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Land Application
Element #: 14

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Land Application Area	5	acres	\$25,000	\$125,000	\$0	\$125,000
2							
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$125,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$130,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					0%		\$0
Contractor's Overhead and Profit					0%		\$0
Mobilization and Demobilization					0%		\$0
Contractor's General Conditions					0%		\$0
SUBTOTAL							\$130,000
Project Phase-Level OPCC Contingency					30%		\$39,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$170,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$43,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$210,000



Sonoma Water
West County Water Quality and Recycled Water Supply Feasibility Study
Last Revised: 9-2-25



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Eff Pond Fill @FWD
Element #: 1

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Effluent Pond Fill	15,700	CY	\$120	\$1,884,000	\$0	\$1,884,000
2							
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$1,884,000
Plant Paving, Grading, and Yard Piping					10%		\$188,000
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$2,070,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$311,000
Mobilization and Demobilization					5%		\$104,000
Contractor's General Conditions					10%		\$207,000
SUBTOTAL							\$2,690,000
Project Phase-Level OPCC Contingency					30%		\$807,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$3,500,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$875,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$4,380,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: MBR IPS
Element #: 2

OPPC PROVIDED BY: LMS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

	DESCRIPTION	MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	4.5 mgd pump station combining and conveying flow from all regional partners into MBR system	1	EA	\$2,470,000	\$2,470,000	\$0	\$2,470,000
2							
3							
4							
5							
6							
7							
8							
9							
10							
	SUBTOTAL						\$2,470,000
	Plant Paving, Grading, and Yard Piping				0%		\$0
	Mechanical and Piping				0%		\$0
	Electrical				0%		\$0
	Instrumentation and Controls				0%		\$0
	SUBTOTAL						\$2,470,000
	Tax on Materials				0%		\$0
	Contractor's Markup on Sub-Contractors' Work				0%		\$0
	Contractor's Overhead and Profit				0%		\$0
	Mobilization and Demobilization				0%		\$0
	Contractor's General Conditions				0%		\$0
	SUBTOTAL						\$2,470,000
	Project Phase-Level OPCC Contingency				30%		\$741,000
	ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST						\$3,210,000
	Construction Contingency				0%		\$0
	Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin				25%		\$803,000
	ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST						\$4,010,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Fine Screens
Element #: 3

OPPC PROVIDED BY: LMS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

	DESCRIPTION	MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Concrete platform for elevated fine screens (dumpster below)	119	CY	\$550	\$65,450	\$65,450	\$131,000
2	Aluminum stairs up to fine screen platform	1	LS	\$5,000	\$5,000	\$0	\$5,000
3	Fine Screen (2mm) System with Washer/Compactor, 2 units (1 duty + 1 standby), each 4.5 mgd capacity	LS	1	\$666,000	\$666,000	\$333,000	\$999,000
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$1,135,000
	Plant Paving, Grading, and Yard Piping				10%		\$114,000
	Mechanical and Piping				10%		\$114,000
	Electrical				25%		\$284,000
	Instrumentation and Controls				15%		\$170,000
SUBTOTAL							\$1,820,000
	Tax on Materials				9.3%		\$68,000
	Contractor's Markup on Sub-Contractors' Work				10%		\$45,000
	Contractor's Overhead and Profit				15%		\$273,000
	Mobilization and Demobilization				5%		\$91,000
	Contractor's General Conditions				10%		\$182,000
SUBTOTAL							\$2,480,000
	Project Phase-Level OPCC Contingency				30%		\$744,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$3,220,000
	Construction Contingency				0%		\$0
	Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin				25%		\$805,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$4,030,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: MBR System
Element #: 4

OPPC PROVIDED BY: LMS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Concrete for process basins and membrane basins	1,671	CY	\$550	\$919,050	\$919,050	\$1,838,000
2	Cinderblock building for blowers next to MBR process basins.	1,350	SF	\$450	\$607,500	\$0	\$608,000
3	Cinderblock building for permeate pumps next to MBR membrane basins.	1,288	SF	\$450	\$579,375	\$0	\$579,000
4	MBR Treatment System (4.5 mgd capacity)	1	LS	\$4,571,100	\$4,571,100	\$4,571,100	\$9,142,000
5	Bridge crane system above membrane basins	1	EA	\$80,000	\$80,000	\$40,000	\$120,000
6							
7							
8							
9							
10							
SUBTOTAL							\$12,287,000
Plant Paving, Grading, and Yard Piping					10%		\$1,229,000
Mechanical and Piping					10%		\$1,229,000
Electrical					25%		\$3,072,000
Instrumentation and Controls					15%		\$1,843,000
SUBTOTAL							\$19,660,000
Tax on Materials					9.3%		\$625,000
Contractor's Markup on Sub-Contractors' Work					10%		\$492,000
Contractor's Overhead and Profit					15%		\$2,949,000
Mobilization and Demobilization					5%		\$983,000
Contractor's General Conditions					10%		\$1,966,000
SUBTOTAL							\$26,680,000
Project Phase-Level OPCC Contingency					30%		\$8,004,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$34,680,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$8,670,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$43,350,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: UV
Element #: 5

OPPC PROVIDED BY: LMS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Concrete for two UV channels	68	CY	\$550	\$37,400	\$37,400	\$75,000
2	Concrete pads for control panels (one dedicated to each channel)	11	CY	\$550	\$6,050	\$6,050	\$12,000
3	Aluminum grating over channels	178	SF	\$35	\$6,230	\$0	\$6,000
4	Canopy over channels and concrete pads	1,058	SF	\$85	\$89,930	\$0	\$90,000
5	UV Treatment System (two channels, 4.5 mgd total capacity, 80 mJ/cm2 @65%UVT)	1	LS	\$733,000	\$733,000	\$733,000	\$1,466,000
6							
7							
8							
9							
10							
SUBTOTAL							\$1,649,000
Plant Paving, Grading, and Yard Piping					10%		\$165,000
Mechanical and Piping					10%		\$165,000
Electrical					25%		\$412,000
Instrumentation and Controls					15%		\$247,000
SUBTOTAL							\$2,640,000
Tax on Materials					9.3%		\$81,000
Contractor's Markup on Sub-Contractors' Work					10%		\$66,000
Contractor's Overhead and Profit					15%		\$396,000
Mobilization and Demobilization					5%		\$132,000
Contractor's General Conditions					10%		\$264,000
SUBTOTAL							\$3,580,000
Project Phase-Level OPCC Contingency					30%		\$1,074,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$4,650,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$1,163,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$5,810,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Aerobic Digestion
Element #: 6

OPPC PROVIDED BY:
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Slab, Roof, Walls - Aerobic Digesters	1,097	CY	\$550	\$603,566	\$603,566	\$1,207,000
2	Slab, Roof Walls - TWAS Storage	152	CY	\$550	\$83,801	\$83,801	\$168,000
3	Solids and Electrical Building	7,000	SF	\$400	\$2,800,000	\$0	\$2,800,000
4	WAS Pumps	2	EA	\$35,000	\$70,000	\$14,000	\$84,000
5	Rotary Drum Thickener	1	EA	\$187,462	\$187,462	\$74,985	\$262,000
6	Thickener Feed Pump	1	EA	\$19,975	\$19,975	\$7,990	\$28,000
7	TWAS Tank Mixer	1	EA	\$50,000	\$50,000	\$20,000	\$70,000
8	TWAS Tank Blower	1	EA	\$60,700	\$60,700	\$24,280	\$85,000
9	TWAS Pumps	1	EA	\$19,975	\$19,975	\$7,990	\$28,000
10	Centrifuge	1	EA	\$477,726	\$477,726	\$191,090	\$669,000
11	Conveyors	1	LS	\$54,440	\$54,440	\$21,776	\$76,000
12	Digester Blowers and Diffusers	1	EA	\$121,400	\$121,400	\$48,560	\$170,000
SUBTOTAL							\$5,647,000
Plant Paving, Grading, and Yard Piping					10%		\$565,000
Mechanical and Piping					10%		\$565,000
Electrical					25%		\$1,412,000
Instrumentation and Controls					15%		\$847,000
SUBTOTAL							\$9,040,000
Tax on Materials					9.3%		\$405,000
Contractor's Markup on Sub-Contractors' Work					10%		\$226,000
Contractor's Overhead and Profit					15%		\$1,356,000
Mobilization and Demobilization					5%		\$452,000
Contractor's General Conditions					10%		\$904,000
SUBTOTAL							\$12,380,000
Project Phase-Level OPCC Contingency					30%		\$3,714,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$16,090,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$4,023,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$20,110,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Outfall
Element #: 7

OPPC PROVIDED BY:
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Outfall	1	LS	\$3,800,000	\$3,800,000	\$0	\$3,800,000
2	24" Pipeline	21,400	LF	\$720	\$15,408,000	\$0	\$15,408,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$19,208,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$19,210,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$2,882,000
Mobilization and Demobilization					5%		\$961,000
Contractor's General Conditions					10%		\$1,921,000
SUBTOTAL							\$24,970,000
Project Phase-Level OPCC Contingency					30%		\$7,491,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$32,460,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					40%		\$12,984,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$45,440,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: FWD EQ Facilities
Element #: 8

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Flow Control Structure	1	EA	\$98,000	\$98,000	\$0	\$98,000
2	4" Pipeline	210	0	\$120	\$25,200	\$0	\$25,000
3	8" Pipeline	140	0	\$240	\$33,600	\$0	\$34,000
4	16" Pipeline	560	0	\$480	\$268,800	\$0	\$269,000
5	FWD Ponds Drain Pump	1	EA	\$1,760,000	\$1,760,000	\$0	\$1,760,000
6							
7							
8							
9							
10							
SUBTOTAL							\$2,186,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$2,190,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$329,000
Mobilization and Demobilization					5%		\$110,000
Contractor's General Conditions					10%		\$219,000
SUBTOTAL							\$2,850,000
Project Phase-Level OPCC Contingency					30%		\$855,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$3,710,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$928,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$4,640,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: GCSD Headworks
Element #: 9

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	ROTAMAT Micro Strainer Ro9	1	LS	\$136,782	\$136,782	\$136,782	\$274,000
2	Bin	1	LS	\$50,000	\$50,000	\$0	\$50,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$324,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					5%		\$16,000
Electrical					25%		\$81,000
Instrumentation and Controls					15%		\$49,000
SUBTOTAL							\$470,000
Tax on Materials					9.3%		\$17,000
Contractor's Markup on Sub-Contractors' Work					10%		\$13,000
Contractor's Overhead and Profit					15%		\$71,000
Mobilization and Demobilization					5%		\$24,000
Contractor's General Conditions					10%		\$47,000
SUBTOTAL							\$640,000
Project Phase-Level OPCC Contingency					30%		\$192,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$830,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$208,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$1,040,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: GCSD EQ Facilities
Element #: 10

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Flow Control Structure	1	EA	\$98,000	\$98,000	\$0	\$98,000
2	8" Pipeline	30	0	\$240	\$7,200	\$0	\$7,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$105,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$110,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$17,000
Mobilization and Demobilization					5%		\$6,000
Contractor's General Conditions					10%		\$11,000
SUBTOTAL							\$140,000
Project Phase-Level OPCC Contingency					30%		\$42,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$180,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$45,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$230,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Pipelines-FWD GCSD
Element #: 11

OPPC PROVIDED BY: NS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Rehab 8" Pipe	2,760	LF	\$120	\$331,200	\$0	\$331,000
2	8" Pipeline	1,300	LF	\$240	\$312,000	\$0	\$312,000
3	16" Pipeline	2,760	LF	\$480	\$1,324,800	\$0	\$1,325,000
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$1,968,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$1,970,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$296,000
Mobilization and Demobilization					5%		\$99,000
Contractor's General Conditions					10%		\$197,000
SUBTOTAL							\$2,560,000
Project Phase-Level OPCC Contingency					30%		\$768,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$3,330,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$833,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$4,160,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: RRCSD EQ Facilities
Element #: 12

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Flow Control Structure	1	EA	\$98,000	\$98,000	\$0	\$98,000
2	16" Pipeline	190	0	\$480	\$91,200	\$0	\$91,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$189,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$190,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$29,000
Mobilization and Demobilization					5%		\$10,000
Contractor's General Conditions					10%		\$19,000
SUBTOTAL							\$250,000
Project Phase-Level OPCC Contingency					30%		\$75,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$330,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$83,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$410,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Pipelines-RRCS
Element #: 13

OPPC PROVIDED BY: NS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

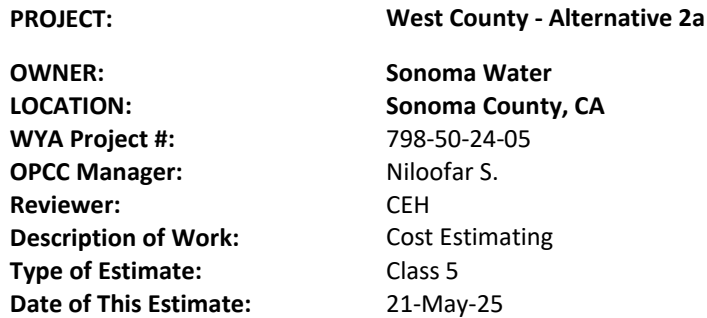
DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Creek Crossing	2	EA	\$3,800,000	\$7,600,000	\$0	\$7,600,000
2	Rehab 8" Pipe	6,220	LF	\$120	\$746,400	\$0	\$746,000
3	8" Pipeline	2,920	LF	\$240	\$700,800	\$0	\$701,000
4	16" Pipeline	6,220	LF	\$480	\$2,985,600	\$0	\$2,986,000
5	20" Pipeline	54,910	LF	\$600	\$32,946,000	\$0	\$32,946,000
6							
7							
8							
9							
10							
SUBTOTAL							\$44,979,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$44,980,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$6,747,000
Mobilization and Demobilization					5%		\$2,249,000
Contractor's General Conditions					10%		\$4,498,000
SUBTOTAL							\$58,470,000
Project Phase-Level OPCC Contingency					30%		\$17,541,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$76,010,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$19,003,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$95,010,000



PROJECT: West County - Alternative 1c
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Conveyance PS
Element #: 14

OPPC PROVIDED BY: NS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	RRCSD Raw Water Effluent Pump Station	1	EA	\$2,700,000	\$2,700,000	\$0	\$2,700,000
2	GCSD Raw Water Effluent Pump Station	1	EA	\$1,810,000	\$1,810,000	\$0	\$1,810,000
3	GCSD Tertiary Water Pump Station	1	EA	\$1,860,000	\$1,860,000	\$0	\$1,860,000
4	FWD Tertiary Effluent Pump Station	1	EA	\$2,470,000	\$2,470,000	\$0	\$2,470,000
5	FWD Outfall Pump Station	1	EA	\$2,920,000	\$2,920,000	\$0	\$2,920,000
6							
7							
8							
9							
10							
SUBTOTAL							\$11,760,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$11,760,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					0%		\$0
Contractor's Overhead and Profit					0%		\$0
Mobilization and Demobilization					0%		\$0
Contractor's General Conditions					0%		\$0
SUBTOTAL							\$11,760,000
Project Phase-Level OPCC Contingency					30%		\$3,528,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$15,290,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$3,823,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$19,110,000



Sonoma Water
West County Water Quality and Recycled Water Supply Feasibility Study
Last Revised: 8-28-25



PROJECT: West County - Alternative 2a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: FWD EQ Facilities
Element #: 1

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Flow Control Structure	1	EA	\$98,000	\$98,000	\$0	\$98,000
2	4" Pipeline	210	LF	\$120	\$25,200	\$0	\$25,000
3	8" Pipeline	480	LF	\$240	\$115,200	\$0	\$115,000
4	FWD Ponds Drain Pump	1	EA	\$1,760,000	\$1,760,000	\$0	\$1,760,000
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$1,998,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$2,000,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$300,000
Mobilization and Demobilization					5%		\$100,000
Contractor's General Conditions					10%		\$200,000
SUBTOTAL							\$2,600,000
Project Phase-Level OPCC Contingency					30%		\$780,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$3,380,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$845,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$4,230,000



PROJECT: West County - Alternative 2a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: GCSD Headworks
Element #: 2

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	ROTAMAT Micro Strainer Ro9	1	LS	\$136,782	\$136,782	\$136,782	\$274,000
2	Bin	1	LS	\$50,000	\$50,000	\$0	\$50,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$324,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					5%		\$16,000
Electrical					25%		\$81,000
Instrumentation and Controls					15%		\$49,000
SUBTOTAL							\$470,000
Tax on Materials					9.3%		\$17,000
Contractor's Markup on Sub-Contractors' Work					10%		\$13,000
Contractor's Overhead and Profit					15%		\$71,000
Mobilization and Demobilization					5%		\$24,000
Contractor's General Conditions					10%		\$47,000
SUBTOTAL							\$640,000
Project Phase-Level OPCC Contingency					30%		\$192,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$830,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$208,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$1,040,000



PROJECT: West County - Alternative 2a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: GCSD EQ Facilities
Element #: 3

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Flow Control Structure	1	EA	\$98,000	\$98,000	\$0	\$98,000
2	8" Pipeline	30	LF	\$240	\$7,200	\$0	\$7,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$105,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$110,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$17,000
Mobilization and Demobilization					5%		\$6,000
Contractor's General Conditions					10%		\$11,000
SUBTOTAL							\$140,000
Project Phase-Level OPCC Contingency					30%		\$42,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$180,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$45,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$230,000



PROJECT: West County - Alternative 2a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Pipelines-FWD GCSD
Element #: 4

OPPC PROVIDED BY: Niloofer S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Creek Crossing	1	EA	\$3,800,000	\$3,878,832	\$0	\$3,879,000
2	Rehab 8 inch Pipe	8,980	LF	\$120	\$1,077,600	\$0	\$1,078,000
3	8 inch Pipeline	8,450	LF	\$240	\$2,028,000	\$0	\$2,028,000
4	24 Inch Pipeline	8,623	LF	\$720	\$6,208,744	\$0	\$6,209,000
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$13,194,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$13,190,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$1,979,000
Mobilization and Demobilization					5%		\$660,000
Contractor's General Conditions					10%		\$1,319,000
SUBTOTAL							\$17,150,000
Project Phase-Level OPCC Contingency					30%		\$5,145,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$22,300,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$5,575,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$27,880,000



PROJECT: West County - Alternative 2a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: RRCSD EQ Facilities
Element #: 5

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Flow Control Structure	1	EA	\$98,000	\$98,000	\$0	\$98,000
2	16" Pipeline	190	LF	\$480	\$91,200	\$0	\$91,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$189,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$190,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$29,000
Mobilization and Demobilization					5%		\$10,000
Contractor's General Conditions					10%		\$19,000
SUBTOTAL							\$250,000
Project Phase-Level OPCC Contingency					30%		\$75,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$330,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$83,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$410,000



PROJECT: West County - Alternative 2a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Pipelines-RRCSD
Element #: 6

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Creek Crossing	6	EA	\$3,800,000	\$22,721,168	\$0	\$22,721,000
2	20 inch Pipeline	52,270	LF	\$600	\$31,362,000	\$0	\$31,362,000
3	24 Inch Pipeline	33,617	LF	\$720	\$24,204,056	\$0	\$24,204,000
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$78,287,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$78,290,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$11,744,000
Mobilization and Demobilization					5%		\$3,915,000
Contractor's General Conditions					10%		\$7,829,000
SUBTOTAL							\$101,780,000
Project Phase-Level OPCC Contingency					30%		\$30,534,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$132,310,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$33,078,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$165,390,000



PROJECT: West County - Alternative 2a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Conveyance PS
Element #: 7

OPPC PROVIDED BY: Niloofer S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

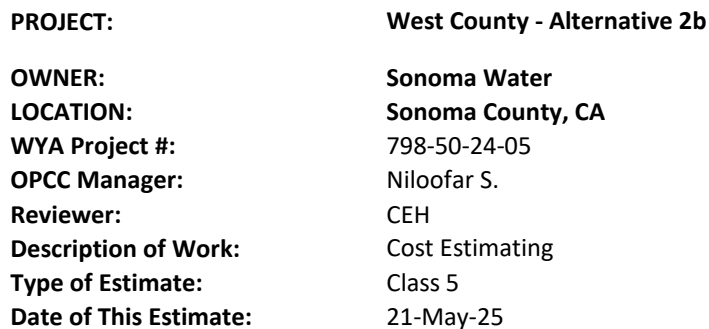
DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	GCSD Raw Wastewater Pump Station	1	EA	\$1,810,000	\$1,810,000	\$0	\$1,810,000
2	FWD Raw Wastewater Pump Station	1	EA	\$2,050,000	\$2,050,000	\$0	\$2,050,000
3	RRCSD Raw Wastewater Pump Station	1	EA	\$2,700,000	\$2,700,000	\$0	\$2,700,000
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$6,560,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$6,560,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					0%		\$0
Contractor's Overhead and Profit					0%		\$0
Mobilization and Demobilization					0%		\$0
Contractor's General Conditions					0%		\$0
SUBTOTAL							\$6,560,000
Project Phase-Level OPCC Contingency					30%		\$1,968,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$8,530,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$2,133,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$10,660,000



PROJECT: West County - Alternative 2a
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Connection fee
Element #: 8

OPPC PROVIDED BY: Niloofer S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Connection fee to Windsor	1	LS	\$69,556,000	\$69,556,000	\$0	\$69,556,000
2							
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$69,556,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$69,560,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					0%		\$0
Contractor's Overhead and Profit					0%		\$0
Mobilization and Demobilization					0%		\$0
Contractor's General Conditions					0%		\$0
SUBTOTAL							\$69,560,000
Project Phase-Level OPCC Contingency					0%		\$0
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$69,560,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					0%		\$0
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$69,560,000



Sonoma Water
West County Water Quality and Recycled Water Supply Feasibility Study
Last Revised: 8-28-25



PROJECT: West County - Alternative 2b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: FWD EQ Facilities
Element #: 1

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Flow Control Structure	1	EA	\$98,000	\$98,000	\$0	\$98,000
2	4" Pipeline	210	LF	\$120	\$25,200	\$0	\$25,000
3	8" Pipeline	480	LF	\$240	\$115,200	\$0	\$115,000
4	FWD Ponds Drain Pump	1	EA	\$1,760,000	\$1,760,000	\$0	\$1,760,000
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$1,998,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$2,000,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$300,000
Mobilization and Demobilization					5%		\$100,000
Contractor's General Conditions					10%		\$200,000
SUBTOTAL							\$2,600,000
Project Phase-Level OPCC Contingency					30%		\$780,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$3,380,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$845,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$4,230,000



PROJECT: West County - Alternative 2b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: GCSD Headworks
Element #: 2

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	ROTAMAT Micro Strainer Ro9	1	LS	\$136,782	\$136,782	\$136,782	\$274,000
2	Bin	1	LS	\$50,000	\$50,000	\$0	\$50,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$324,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					5%		\$16,000
Electrical					25%		\$81,000
Instrumentation and Controls					15%		\$49,000
SUBTOTAL							\$470,000
Tax on Materials					9.3%		\$17,000
Contractor's Markup on Sub-Contractors' Work					10%		\$13,000
Contractor's Overhead and Profit					15%		\$71,000
Mobilization and Demobilization					5%		\$24,000
Contractor's General Conditions					10%		\$47,000
SUBTOTAL							\$640,000
Project Phase-Level OPCC Contingency					30%		\$192,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$830,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$208,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$1,040,000



PROJECT: West County - Alternative 2b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: GCSD EQ Facilities
Element #: 3

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Flow Control Structure	1	EA	\$98,000	\$98,000	\$0	\$98,000
2	8" Pipeline	30	LF	\$240	\$7,200	\$0	\$7,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$105,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$110,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$17,000
Mobilization and Demobilization					5%		\$6,000
Contractor's General Conditions					10%		\$11,000
SUBTOTAL							\$140,000
Project Phase-Level OPCC Contingency					30%		\$42,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$180,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$45,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$230,000



PROJECT: West County - Alternative 2b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Pipelines-FWD GCSD
Element #: 4

OPPC PROVIDED BY: Niloofer S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Creek Crossing	0.4	EA	\$3,800,000	\$1,551,533	\$0	\$1,552,000
2	8 inch Pipe	5,810	LF	\$240	\$1,394,400	\$0	\$1,394,000
3	16 inch Pipe	607	LF	\$480	\$291,224	\$0	\$291,000
4	24 Inch Pipe	8,193	LF	\$720	\$5,898,601	\$0	\$5,899,000
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$9,136,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$9,140,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$1,371,000
Mobilization and Demobilization					5%		\$457,000
Contractor's General Conditions					10%		\$914,000
SUBTOTAL							\$11,880,000
Project Phase-Level OPCC Contingency					30%		\$3,564,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$15,440,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$3,860,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$19,300,000



PROJECT: West County - Alternative 2b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: RRCSD EQ Facilities
Element #: 5

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Flow Control Structure	1	EA	\$98,000	\$98,000	\$0	\$98,000
2	16" Pipeline	190	LF	\$480	\$91,200	\$0	\$91,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$189,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$190,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$29,000
Mobilization and Demobilization					5%		\$10,000
Contractor's General Conditions					10%		\$19,000
SUBTOTAL							\$250,000
Project Phase-Level OPCC Contingency					30%		\$75,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$330,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$83,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$410,000



PROJECT: West County - Alternative 2b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Pipelines-RRCS
Element #: 6

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Creek Crossing	4	EA	\$3,800,000	\$13,648,467	\$0	\$13,648,000
2	16 inch Pipe	8,373	LF	\$480	\$4,019,176	\$0	\$4,019,000
3	20 inch Pipe	54,910	LF	\$600	\$32,946,000	\$0	\$32,946,000
4	24 Inch Pipe	31,937	LF	\$720	\$22,994,999	\$0	\$22,995,000
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$73,608,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$73,610,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$11,042,000
Mobilization and Demobilization					5%		\$3,681,000
Contractor's General Conditions					10%		\$7,361,000
SUBTOTAL							\$95,690,000
Project Phase-Level OPCC Contingency					30%		\$28,707,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$124,400,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$31,100,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$155,500,000



PROJECT: West County - Alternative 2b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Conveyance PS
Element #: 7

OPPC PROVIDED BY: Niloofer S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

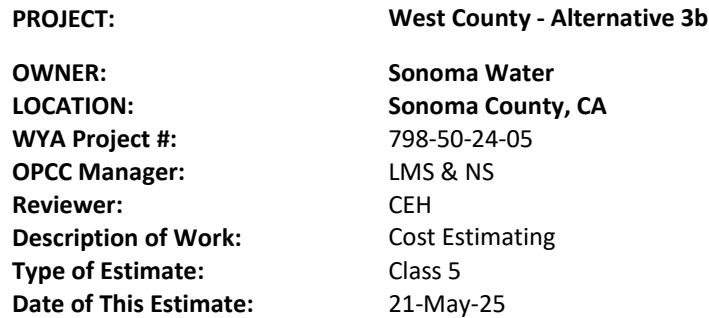
DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	RRCSD Raw Wastewater Pump Station	1	EA	\$2,700,000	\$2,700,000	\$0	\$2,700,000
2	FWD Raw Wastewater Pump Station	1	EA	\$2,760,000	\$2,760,000	\$0	\$2,760,000
3	GCSD Raw Wastewater Pump Station	1	EA	\$1,990,000	\$1,990,000	\$0	\$1,990,000
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$7,450,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$7,450,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					0%		\$0
Contractor's Overhead and Profit					0%		\$0
Mobilization and Demobilization					0%		\$0
Contractor's General Conditions					0%		\$0
SUBTOTAL							\$7,450,000
Project Phase-Level OPCC Contingency					30%		\$2,235,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$9,690,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$2,423,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$12,110,000



PROJECT: West County - Alternative 2b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Connection fee
Element #: 8

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		MATERIAL QTY	UNIT	MATERIAL UNIT COST	MATERIAL COST	INSTALL COST	TOTAL COST
1	Connection fee to Santa Rosa	1	LS	\$68,800,000	\$68,800,000	\$0	\$68,800,000
2	Recycled Water Stoarge	1	LS	\$5,000,000	\$5,000,000	\$0	\$5,000,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$73,800,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$73,800,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					0%		\$0
Contractor's Overhead and Profit					0%		\$0
Mobilization and Demobilization					0%		\$0
Contractor's General Conditions					0%		\$0
SUBTOTAL							\$73,800,000
Project Phase-Level OPCC Contingency					0%		\$0
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$73,800,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					0%		\$0
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$73,800,000



Sonoma Water
West County Water Quality and Recycled Water Supply Feasibility Study
Last Revised: 9-2-25



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Eff Pond Fill @FWD
Element #: 1

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	Effluent Pond Fill	16,100	CY	\$120	\$1,932,000	\$0	\$1,932,000
2							
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$1,932,000
Plant Paving, Grading, and Yard Piping					10%		\$193,000
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$2,130,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$320,000
Mobilization and Demobilization					5%		\$107,000
Contractor's General Conditions					10%		\$213,000
SUBTOTAL							\$2,770,000
Project Phase-Level OPCC Contingency					30%		\$831,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$3,600,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$900,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$4,500,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: SAF @FWD
Element #: 2

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	Concrete Pad	28	CY	\$550	\$15,400	\$15,400	\$31,000
2	Secondary Effluent Junction Box	0	0	\$0	\$98,000	\$0	\$98,000
3	Suspended Air Floatation System (1.5 mgd capacity - includes tank, flocculation tubes, generator)	1	LS	\$589,625	\$589,625	\$589,625	\$1,179,000
4	Canopy	820	SF	\$85	\$69,700	\$0	\$70,000
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$1,378,000
Plant Paving, Grading, and Yard Piping					10%		\$138,000
Mechanical and Piping					10%		\$138,000
Electrical					25%		\$345,000
Instrumentation and Controls					15%		\$207,000
SUBTOTAL							\$2,210,000
Tax on Materials					9.3%		\$71,000
Contractor's Markup on Sub-Contractors' Work					10%		\$55,000
Contractor's Overhead and Profit					15%		\$332,000
Mobilization and Demobilization					5%		\$111,000
Contractor's General Conditions					10%		\$221,000
SUBTOTAL							\$3,000,000
Project Phase-Level OPCC Contingency					30%		\$900,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$3,900,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$975,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$4,880,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: FIPS @FWD
Element #: 3

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	1.5 mgd pump station before SAF and cloth disk filters	1	LS	\$1,960,000	\$1,960,000	\$0	\$1,960,000
2							
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$1,960,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$1,960,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					0%		\$0
Contractor's Overhead and Profit					0%		\$0
Mobilization and Demobilization					0%		\$0
Contractor's General Conditions					0%		\$0
SUBTOTAL							\$1,960,000
Project Phase-Level OPCC Contingency					30%		\$588,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$2,550,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$638,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$3,190,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Tert.Filt. @FWD
Element #: 4

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

	DESCRIPTION	QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	Concrete Pad (under both tanks)	21	CY	\$550	\$11,550	\$11,550	\$23,000
2	Cloth Media Filters (two (2) 4-Disk AquaDisk filters in steel tanks treating a max. flow of 1.5 MG)	1	LS	\$600,000	\$600,000	\$300,000	\$900,000
3	Canopy	671	SF	\$85	\$57,069	\$0	\$57,000
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$980,000
	Plant Paving, Grading, and Yard Piping				10%		\$98,000
	Mechanical and Piping				10%		\$98,000
	Electrical				25%		\$245,000
	Instrumentation and Controls				15%		\$147,000
SUBTOTAL							\$1,570,000
	Tax on Materials				9.3%		\$62,000
	Contractor's Markup on Sub-Contractors' Work				10%		\$39,000
	Contractor's Overhead and Profit				15%		\$236,000
	Mobilization and Demobilization				5%		\$79,000
	Contractor's General Conditions				10%		\$157,000
SUBTOTAL							\$2,140,000
	Project Phase-Level OPCC Contingency				30%		\$642,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$2,780,000
	Construction Contingency				0%		\$0
	Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin				25%		\$695,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$3,480,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: CCB @FWD
Element #: 5

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

	DESCRIPTION	QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	Excavation for two new chlorine contact basins	1,174	CY	\$45	\$52,830	\$0	\$53,000
2	Concrete basins for two (2) new chlorine contactors (match existing)	395	CY	\$550	\$217,250	\$217,250	\$435,000
3	'Additional chemical storage building for gas cylinders for the two new CCBs.	216	SF	\$450	\$97,200	\$0	\$97,000
4	Metal grating over chlorine contact basin inlets	86	SF	\$35	\$2,993	\$0	\$3,000
5	Surface Mounted Fiberglass Slide Gate and Frame (2 per chlorine contact basin)	4	EA	\$5,000	\$20,000	\$10,000	\$30,000
6	Chlorine Ejector (Chlorination) Assembly (1 per chlorine contact basin)	2	EA	\$10,000	\$20,000	\$10,000	\$30,000
7	Sulfur Dioxide Ejector (Dechlorination) Assembly (1 per chlorine contact basin)	2	EA	\$10,000	\$20,000	\$10,000	\$30,000
8							
9							
10							
SUBTOTAL							\$678,000
	Plant Paving, Grading, and Yard Piping				10%		\$68,000
	Mechanical and Piping				10%		\$68,000
	Electrical				25%		\$170,000
	Instrumentation and Controls				15%		\$102,000
SUBTOTAL							\$1,090,000
	Tax on Materials				9.3%		\$40,000
	Contractor's Markup on Sub-Contractors' Work				10%		\$27,000
	Contractor's Overhead and Profit				15%		\$164,000
	Mobilization and Demobilization				5%		\$55,000
	Contractor's General Conditions				10%		\$109,000
SUBTOTAL							\$1,490,000
	Project Phase-Level OPCC Contingency				30%		\$447,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$1,940,000
	Construction Contingency				0%		\$0
	Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin				25%		\$485,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$2,430,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: GCSD Headworks
Element #: 6

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	ROTAMAT Micro Strainer Ro9	1	LS	\$136,782	\$136,782	\$136,782	\$274,000
2	Bin	1	LS	\$50,000	\$50,000	\$0	\$50,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$324,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					5%		\$16,000
Electrical					25%		\$81,000
Instrumentation and Controls					15%		\$49,000
SUBTOTAL							\$470,000
Tax on Materials					9.3%		\$17,000
Contractor's Markup on Sub-Contractors' Work					10%		\$13,000
Contractor's Overhead and Profit					15%		\$71,000
Mobilization and Demobilization					5%		\$24,000
Contractor's General Conditions					10%		\$47,000
SUBTOTAL							\$640,000
Project Phase-Level OPCC Contingency					30%		\$192,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$830,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$208,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$1,040,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Aer.Ponds @GCSD
Element #: 7

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

	DESCRIPTION	QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	Blower Building (houses three (3) 100HP blowers for pond aeration system)	1,053	CY	\$550	\$579,150	\$0	\$579,000
2	Ares Aeration® Pond Aeration System (in treatment ponds) & Floating Cover (on settling pond)	1	EA	\$1,468,680	\$1,468,680	\$1,468,680	\$2,937,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$3,516,000
Plant Paving, Grading, and Yard Piping					10%		\$352,000
Mechanical and Piping					10%		\$294,000
Electrical					25%		\$734,000
Instrumentation and Controls					15%		\$441,000
SUBTOTAL							\$5,340,000
Tax on Materials					9.3%		\$136,000
Contractor's Markup on Sub-Contractors' Work					10%		\$118,000
Contractor's Overhead and Profit					15%		\$801,000
Mobilization and Demobilization					5%		\$267,000
Contractor's General Conditions					10%		\$534,000
SUBTOTAL							\$7,200,000
Project Phase-Level OPCC Contingency					30%		\$2,160,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$9,360,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$2,340,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$11,700,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Eff.Stor.Pond @GCSD
Element #: 8

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	Excavation	182,000	CY	\$45	\$8,190,000	\$0	\$8,190,000
2	Rip rap	6,000	ton	\$375	\$2,250,000	\$0	\$2,250,000
3	Gravel	2,000	ton	\$210	\$420,000	\$0	\$420,000
4	Misc Structure	2	EA	\$100,000	\$200,000	\$0	\$200,000
5	Fencing	3,966	LF	\$75	\$300,000	\$0	\$300,000
6							
7							
8							
9							
10							
SUBTOTAL							\$11,360,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					5%		\$568,000
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$11,930,000
Tax on Materials					9.3%		\$147,000
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$1,790,000
Mobilization and Demobilization					5%		\$597,000
Contractor's General Conditions					10%		\$1,193,000
SUBTOTAL							\$15,660,000
Project Phase-Level OPCC Contingency					30%		\$4,698,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$20,360,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$5,090,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$25,450,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Pipelines-Treatment
Element #: 9

OPPC PROVIDED BY: NS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	6 inch Pipeline	240	LF	\$180	\$43,200	\$0	\$43,000
2	8 inch Pipeline	1,250	LF	\$240	\$300,000	\$0	\$300,000
3	10 inch Pipeline	270	LF	\$300	\$81,000	\$0	\$81,000
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$424,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$420,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$63,000
Mobilization and Demobilization					5%		\$21,000
Contractor's General Conditions					10%		\$42,000
SUBTOTAL							\$550,000
Project Phase-Level OPCC Contingency					30%		\$165,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$720,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$180,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$900,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: FWD GCSD Pipelines
Element #: 10

OPPC PROVIDED BY: NS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	Rehab 8 inch Pipe	8,976	LF	\$120	\$1,077,120	\$0	\$1,077,000
2	6 inch Pipeline	13,180	LF	\$180	\$2,372,400	\$0	\$2,372,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$3,449,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$3,450,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$518,000
Mobilization and Demobilization					5%		\$173,000
Contractor's General Conditions					10%		\$345,000
SUBTOTAL							\$4,490,000
Project Phase-Level OPCC Contingency					30%		\$1,347,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$5,840,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$1,460,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$7,300,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: RRCSD Pipelines
Element #: 11

OPPC PROVIDED BY: NS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	Creek Crossing	7	EA	\$3,800,000	\$26,600,000	\$0	\$26,600,000
2	20 inch Pipe	99,790	LF	\$600	\$59,874,000	\$0	\$59,874,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$86,474,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$86,470,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$12,971,000
Mobilization and Demobilization					5%		\$4,324,000
Contractor's General Conditions					10%		\$8,647,000
SUBTOTAL							\$112,410,000
Project Phase-Level OPCC Contingency					30%		\$33,723,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$146,130,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$36,533,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$182,660,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: RRCSD EQ Facilities
Element #: 12

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	Flow Control Structure	1	EA	\$98,000	\$98,000	\$0	\$98,000
2	16" Pipeline	190	LF	\$480	\$91,200	\$0	\$91,000
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$189,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$190,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					10%		\$0
Contractor's Overhead and Profit					15%		\$29,000
Mobilization and Demobilization					5%		\$10,000
Contractor's General Conditions					10%		\$19,000
SUBTOTAL							\$250,000
Project Phase-Level OPCC Contingency					30%		\$75,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$330,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$83,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$410,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Conveyance PS
Element #: 13

OPPC PROVIDED BY: NS
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

	DESCRIPTION	QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	GCSD Secondary Effluent Pump Station	1	EA	\$1,890,000	\$1,890,000	\$0	\$1,890,000
2	GCSD Tertiary Effluent Pump Station	1	EA	\$1,960,000	\$1,960,000	\$0	\$1,960,000
3	FWD Tertiary Effluent Pump Station	1	EA	\$1,840,000	\$1,840,000	\$0	\$1,840,000
4	RRCSD Raw Wastewater	1	EA	\$2,700,000	\$2,700,000	\$0	\$2,700,000
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$8,390,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$8,390,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					0%		\$0
Contractor's Overhead and Profit					0%		\$0
Mobilization and Demobilization					0%		\$0
Contractor's General Conditions					0%		\$0
SUBTOTAL							\$8,390,000
Project Phase-Level OPCC Contingency					30%		\$2,517,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$10,910,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					25%		\$2,728,000
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$13,640,000



PROJECT: West County - Alternative 3b
OWNER: Sonoma Water
LOCATION: Sonoma County, CA
WYA Project #: 798-50-24-05
Sheet Title: Connection fee
Element #: 14

OPPC PROVIDED BY: Niloofar S.
OPPC PREPARATION DATE: 21-May-25
REVIEWED BY: CEH

DESCRIPTION		QTY	UNIT	UNIT COST	COST	COST	TOTAL COST
1	Connection fee to Windsor	1	LS	\$44,800,000	\$44,800,000	\$0	\$44,800,000
2							
3							
4							
5							
6							
7							
8							
9							
10							
SUBTOTAL							\$44,800,000
Plant Paving, Grading, and Yard Piping					0%		\$0
Mechanical and Piping					0%		\$0
Electrical					0%		\$0
Instrumentation and Controls					0%		\$0
SUBTOTAL							\$44,800,000
Tax on Materials					0%		\$0
Contractor's Markup on Sub-Contractors' Work					0%		\$0
Contractor's Overhead and Profit					0%		\$0
Mobilization and Demobilization					0%		\$0
Contractor's General Conditions					0%		\$0
SUBTOTAL							\$44,800,000
Project Phase-Level OPCC Contingency					0%		\$0
ENGINEER'S PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST							\$44,800,000
Construction Contingency					0%		\$0
Engineering Design, Environmental Planning and Studies, Construction Management, ESDC, and Legal and Admin					0%		\$0
ENGINEER'S PRELIMINARY OPINION OF PROBABLE TOTAL CAPITAL COST							\$44,800,000