



NORTH SAN MATEO COUNTY SANITATION DISTRICT

a subsidiary of the City of Daly City

333 – 90TH STREET, DALY CITY, CALIFORNIA 94015-1895

(650) 991-8127



REGULAR MEETING – BOARD OF DIRECTORS

Monday, September 14, 2015 - 6:45 PM
City Hall Council Chambers – 2nd Floor
333 – 90th Street, Daly City, CA 94015

AGENDA

Persons with disabilities who require auxiliary aids or services in attending or participating in this meeting should call the office of the City Clerk at 991-8078. *We will need **FIVE (5) WORKING DAYS BEFORE ANY FUTURE MEETINGS** to make any necessary accommodations.*

CALL TO ORDER:

ROLL CALL:

APPROVAL OF AGENDA:

CONSENT AGENDA

All items listed on the Consent Agenda are considered to be routine and may be approved by one roll call vote of the Board of Directors. There shall be no separate discussion of the matters on the Consent Agenda unless requested by a member of the Board. If discussion is required, that item will be removed from the Consent Agenda and will be considered separately at the end of the Agenda.

Minutes:

1. Regular Meeting on August 10, 2015

Action Items:

2. Revenue and Expenditure Summary Report - June 2015

END OF CONSENT AGENDA

PUBLIC APPEARANCES/ORAL COMMUNICATIONS:

***“AVAILABILITY OF PUBLIC RECORDS.** All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the City Clerk’s Office, City Hall located at 333 90th Street, Daly City, CA during normal business hours, at the same time that the public records are distributed or made available to the legislative body.”*

NOTE: Speakers are limited to two minutes, unless modified by the Chair. The District cannot take action on any matter raised under this item.

NEW BUSINESS:

3. Execution of Memorandum of Understanding with San Francisco Public Utilities Commission to Examine Feasibility of Expanded Tertiary Recycled Water Facilities

Staff:

Royer

Recommended Action:

Adopt Resolution

REPORTS:

4. Board of Directors
5. Staff
- A Pilot Residential Recycled Water Use Program

Staff:

Royer

Recommended Action:

Information Only (Oral Report)

ADJOURNMENT:

REGULAR MEETING - BOARD OF DIRECTORS

MINUTES

August 10, 2015

The Board of Directors of the North San Mateo County Sanitation District convened in a Regular Meeting on August 10, 2015, in the City Council Chamber, City Hall, 333 - 90th Street, Daly City, California.

The meeting was called to order by Chairman Ray Buenaventura at 6:47 p.m.

ROLL CALL:

Present: Canepa, Christensen, Guingona, Torres & Buenaventura

Absent: none

Staff Present: General Manager Patricia Martel, District Counsel Rose Zimmerman, Assistant City Manager Julie Thuy Underwood, Finance Director Lawrence Chiu, Chief of Operations Kevin Brown and Director of Water and Wastewater Resources Patrick Sweetland serving as Recording Secretary.

APPROVAL OF AGENDA:

Motion was made, seconded (Canepa/Guingona) and unanimously approved.

CONSENT AGENDA:

1. **Minutes of Regular Meeting of June 22, 2015**
2. **Sewer Service Charge Appeals –FY 2015/16**
3. **Revenue and Expenditure Summary Report – May 2015**

Motion was made, seconded (Canepa/Guingona) and unanimously carried to adopt the Consent Agenda.

NEW BUSINESS:

4. **Authorization of Additional Funds Associated with Digester #2 Cleaning and Rehabilitation**

Chief of Operations Kevin Brown provided a PowerPoint presentation noting project performance since award of bid in March. The cleaning of the digester was much more involved than originally planned in loading out some 200 cubic yards of digester material to Altamont Hills Landfill. Labor and transportation by EM Environmental increased project costs by \$173,256.25. Roofing work by Universal Coatings Inc. added another \$9,977. Direct purchase of 23 new valves and installation equaled \$31,947.92, and new plexiglass cover at \$985.86. Director of Water and Wastewater Resources Patrick Sweetland noted the importance of getting the digester cleaned in a timely manner so not to impact the scheduled availability of the roofing contractor. Total project authorization sought by staff totaled \$216,167.03 with available funding from savings from Sanitation Fund Project #812, Municipal Regional Permit.

Motion was made, seconded (Christensen/Torres) and unanimously carried to adopt the Resolution No. 15-SD-06, "Authorization of Additional Funds Associated with Digester #2 Cleaning and Rehabilitation" in an additional amount of \$216,167.03.

REPORTS:

5. **Board of Directors**

None.

6. **Staff**

None.

ADJOURNMENT:

Motion was made, seconded (Torres/Guingona) and unanimously carried to adjourn the Regular Meeting at 6:56 p.m.

SANITATION DISTRICT

EXPENDITURES REPORT

FOR THE MONTH OF JUNE 2015

	<u>CURRENT MONTH</u>	<u>YEAR TO-DATE</u>
SALARIES AND BENEFITS	\$ 503,094	6,066,624
SERVICES & SUPPLIES (Includes reimbursements to Sanitation Collection/ Treatment Division)	942,622	7,442,513
OTHER CHARGES	204,543	2,711,117
CAPITAL OUTLAYS LESS ASSETS TO BALANCE SHEET	623,836	2,460,145 (245,026)
TRANSFERS	<u>102,408</u>	<u>1,508,413</u>
TOTAL	\$ <u><u>2,376,503</u></u>	<u><u>19,943,786</u></u>

AUDITED

Lamieru Allen

Director of Finance

APPROVED

Board Chair

APPROVED

General Manager/Secretary

DATE APPROVED

City of Daly City, California

Revenue and Expenditure Summary Report
By Fund
For the Period Ended 06/30/15

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* Fund 87 SANITATION DISTRICT *

Obj Code	Description	Prior Year Actual	Current Year Budget	Current Month Actual	Year-to- date Actual	Encumb- rances	Remaining Balance	Percent To-dat
REVENUES:								
TAXES								
3110	SECRD PRPRTY TX	1,378,943.52	1,422,742.47	29,161.40	1,464,807.61	0.00	(42,065)	103.0
3120	UNSCRD PRPRTY T	72,261.97	80,005.91	0.00	76,155.18	0.00	3,851	95.2
3123	SPLMNTL PRPRTY	40,930.18	23,230.00	6,831.58	47,483.83	0.00	(24,254)	204.4
3180	RPTTF DISTRIBTN	57,843.77	60,000.00	28,192.67	116,790.47	0.00	(56,790)	194.7
3613	HMMNRS PRPRTY T	8,792.61	8,836.73	1,298.65	8,657.64	0.00	179	98.0
	Total TAXES	1,558,772.05	1,594,815.11	65,484.50	1,713,894.73	0.00	(119,080)	107.5
RENTS AND INTEREST								
3510	INVTMNT EARNNGS	164,545.38	169,707.60	0.00	137,620.33	0.00	32,087	81.1
3515	UNRLDZ GN(LSS)N	177,497.34	0.00	9,375.52	9,375.52	0.00	(9,375)	0.0
	Ttl RNTS AND INTRS	342,042.72	169,707.60	9,375.52	146,995.85	0.00	22,712	86.6
CHARGES AND FEES								
3901	SSC TAX ROLL	14,447,279.32	15,566,760.00	218,200.29	15,638,649.84	0.00	(71,890)	100.5
3902	SSC WESTBOROUGH	1,592,109.81	1,624,642.00	875,482.03	1,741,261.60	0.00	(116,620)	107.2
3903	SSC COLMA	31,390.02	30,448.00	0.00	46,578.20	0.00	(16,130)	153.0
3904	SSC SF JAIL	118,476.56	123,216.00	0.00	160,560.37	0.00	(37,344)	130.3
3911	WATER SALES	333,284.36	333,841.50	88,080.76	339,385.31	0.00	(5,544)	101.7
3921	CONNECTIN CHRGs	153,940.00	282,750.00	13,518.00	490,140.00	0.00	(207,390)	173.3
	Total CHRGs AND FS	16,676,480.07	17,961,657.50	1,195,281.08	18,416,575.32	0.00	(454,918)	102.5
MISCELLANEOUS REVENUES								
3810	PROPERTY DSPSLs	5,064.80	0.00	0.00	1,980.35	0.00	(1,980)	0.0
3852	WRKRS CMP - SLF	26,101.87	0.00	4,144.06	68,047.97	0.00	(68,048)	0.0
3860	MISCELLANES RVN	23,555.13	25,000.00	27,953.90	49,743.50	0.00	(24,743)	199.0
	Total MISCLNLS RVNS	54,721.80	25,000.00	32,097.96	119,771.82	0.00	(94,772)	479.1
OPERATING TRANSFERS IN								
3953	IF FM 41-381-37	1,469,738.04	1,503,131.00	125,260.92	1,503,131.04	0.00	(0)	100.0
	Ttl OPTING TRNSFRS	1,469,738.04	1,503,131.00	125,260.92	1,503,131.04	0.00	(0)	100.0
	* Total Revenues	20,101,754.68	21,254,311.21	1,427,499.78	21,900,368.76	0.00	(646,057)	103.0

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City of Daly City, California

Revenue and Expenditure Summary Report
By Fund
For the Period Ended 06/30/15

* Fund 87 SANITATION DISTRICT *

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EXPENDITURES:

SALARIES AND BENEFITS

4101	SALARIES	3,593,896.55	4,150,409.00	299,765.07	3,531,652.26	0.00	618,757	85.1
4102	HOURLY WAGES	35,764.59	42,506.00	10,240.05	51,271.41	0.00	(8,765)	120.6
4103	OVERTIME	92,928.72	102,524.00	4,942.67	81,690.72	0.00	20,833	79.7
4104	PERS RETIREMENT	857,957.05	997,341.00	69,916.17	910,406.31	0.00	86,935	91.3
4105	GROUP INSURANCE	549,180.18	610,363.40	56,460.69	691,888.51	0.00	(81,525)	113.4
4106	WORKERS COMPENSTN	291,509.09	352,500.72	24,726.10	304,154.29	0.00	48,346	86.3
4107	MEDICARE	49,596.14	55,429.00	4,047.98	51,584.46	0.00	4,045	92.7
4108	UNEMPLOYMENT INSURANCE	0.00	0.00	5,056.07	5,056.07	0.00	(5,056)	0.0
4109	COMPENSTD ABSNCES	32,442.29	0.00	0.00	0.00	0.00	0	0.0
4110	TERMINATION PAY	18,362.39	0.00	0.00	84,955.89	0.00	(84,956)	0.0
4112	STANDBY PAY	18,200.00	18,200.00	1,400.00	18,200.00	0.00	0	100.0
4116	INJURY LEAVE	40,909.65	0.00	5,229.23	93,003.06	0.00	(93,003)	0.0
4118	RETIREE HEALTH	233,877.74	257,363.00	21,024.21	242,205.95	0.00	15,157	94.1
4119	SOCIAL SECURITY	63.04	2,700.90	285.41	754.59	0.00	1,946	27.9
4120	OTHR PST EMPLOYM	146,883.00	0.00	0.00	0.00	0.00	0	0.0
	Ttl SLRS AND BNFTS	5,961,570.43	6,589,337.02	503,093.65	6,066,623.52	0.00	522,714	92.1

SERVICES AND SUPPLIES

4209	MIG RMB/CR ALLW	1,800.00	1,950.00	150.00	1,800.00	0.00	150	92.3
4211	ADVERTISING	281.00	19,243.18	64.00	64.00	0.00	19,179	0.3
4212	COMMUNICATIONS	36,134.68	39,417.92	4,574.13	36,141.73	0.00	3,276	91.7
4213	UTILITIES	990,968.05	1,076,307.15	174,774.48	944,976.68	0.00	131,330	87.8
4217	EQUIPMENT MAINTN C	77,317.79	73,650.46	20,521.30	74,031.11	0.00	(381)	100.5
4219	PROFESSNL SVCS	39,102.66	58,967.03	7,010.21	45,271.71	0.00	5,621	90.5
4220	OTHR CNTRL SR	3,998,736.30	4,144,494.29	568,201.60	4,016,302.86	8,074.03	95,462	97.7
4228	PUMP STATION RPR	69,047.22	67,008.21	2,149.11	66,616.33	0.00	392	99.4
4230	OFFICE EXPENSE	19,554.85	15,384.66	2,513.56	22,782.34	0.00	(7,398)	148.1
4231	SAFETY GEAR	27,691.49	43,875.00	5,481.74	33,212.20	0.00	10,663	75.7
4234	SPECIAL DPTMAINTL	3,288.27	20,300.00	1,239.46	9,235.53	0.00	(1,652)	108.1
4235	BUILDING MAINTN C	63,672.46	62,539.43	7,061.72	72,593.38	12,717.00	(10,054)	116.1
4237	CLOTHING	18,986.34	27,293.50	3,603.81	23,227.19	0.00	4,066	85.1
4241	STRTS OPRTNG SP	9,941.96	11,760.80	2,556.89	979,756.11	0.00	2,307	80.4
4243	OPERATING SUPPLS	992,411.42	1,199,335.50	192,316.87	979,756.11	8,437.32	211,142	82.4
4244	REPAIRS & MAINTN C	162,354.53	165,140.44	11,464.87	163,986.32	0.00	1,154	99.3
4246	FUELS & MTR OLS	26,832.45	32,582.20	12,337.15	12,337.15	0.00	20,244	37.9
4253	LANDSCAP MAINTN C	0.00	20,000.00	2,375.50	7,593.98	0.00	12,406	38.0
4255	SMALL EQUIPMENT	25,835.35	24,342.27	6,974.01	19,926.82	0.00	4,415	81.9
4313	INVENTORY ADJUSTM	(66,195.56)	0.00	(160,685.15)	(160,685.15)	0.00	160,685	0.0
	Ttl SVCS AND SUPPL	6,497,761.46	7,103,592.04	853,965.26	6,318,624.65	61,957.35	663,010	90.7

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Revenue and Expenditure Summary Report
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Obj Code	Description	Prior Year Actual	Current Year Budget	Current Month Actual	Year-to-date Actual	Encumbrances	Remaining Balance	Percent To-date
=====								
OTHER CHARGES								
4215	RENTS AND LEASE	0.00	3,700.00	0.00	0.00	0.00	3,700.00	0.0
4302	MEMBERSHIPS & PBL	35,113.43	41,460.63	4,284.89	38,185.03	0.00	3,276.00	92.1
4303	TRAVEL & MEETINGS	1,216.18	7,010.00	249.16	895.27	0.00	6,115.00	12.8
4304	EDUCATION & TRAINING	36,744.70	55,274.00	1,777.15	31,946.15	0.00	23,328.00	57.8
4434	MISCELLANEOUS OTHER CH	162,835.20	185,360.13	0.00	164,144.45	0.00	21,216.00	88.6
	Total OTHER CHARGES	235,909.51	292,804.76	6,311.20	235,170.90	0.00	57,634.00	80.3
=====								
FIXED CHARGES								
4208	TLPN SRVC CHRG	6,467.40	19,579.84	1,631.66	19,579.92	0.00	(0)	100.0
4216	VEHICLE SRVC CHRG	296,710.32	357,329.38	29,777.46	357,329.52	0.00	(0)	100.0
4223	INFORMATION SRVC C	338,666.40	342,053.13	28,504.42	342,053.04	0.00	0	100.0
4226	MAL/MISSING SRVC	3,786.60	3,802.28	316.86	3,802.32	0.00	(0)	100.0
4227	COPYER SERVICES	7,692.00	8,270.59	689.22	8,270.64	0.00	(0)	100.0
4233	POSTAGE	3,720.72	4,421.06	368.42	4,421.04	0.00	0	100.0
4301	GNRL INSRNC CHR	309,065.88	328,432.75	27,369.39	328,432.68	0.00	0	100.0
	Total FIXED CHARGES	966,109.52	1,063,889.03	88,657.43	1,063,889.16	0.00	(0)	100.0
=====								
CAPITAL OUTLAY								
4504	ENGINEERING SRVCS	1,273,998.19	3,548,126.52	112,112.87	822,434.80	1,297,162.86	1,428,529.00	59.7
4507	MAINT CONSTRUCTION	731,512.85	2,622,537.91	52,108.91	130,350.29	15,277.15	2,476,910.00	5.6
4508	STRM DRN CONSTR	43,253.53	1,065,836.62	0.00	0.00	0.00	1,065,837.00	0.0
4516	IN-HS SRVCS / C	38,087.40	232,013.49	2,024.88	49,221.51	0.00	182,792.00	21.2
4518	CONSTRUCTION INSP S	22,297.98	0.00	0.00	252.50	0.00	(252)	0.0
4520	BUILDINGS	439,575.03	627,677.99	18,813.87	274,715.90	277,223.52	75,739.00	87.9
4522	PUMP STATIONS	0.00	18,491.85	0.00	0.00	0.00	18,492.00	0.0
4528	CONSTRUCTION INSPCT	348.00	0.00	0.00	0.00	0.00	0	0.0
4529	SNTN TRMT PL	52,296.90	414,863.13	392,049.95	456,949.95	120,698.92	(162,786)	139.2
4530	SANITATION EQUIPMENT	1,305,283.40	1,655,822.49	33,593.28	574,939.14	292,974.75	787,909.00	52.4
4532	OTHER CONSTRUCTION	170.19	264,586.97	12,813.51	40,446.29	29,825.00	194,316.00	26.6
4550	TLS AND SHIP EOP	37,765.92	37,088.19	318.60	42,207.74	0.00	(5,119)	113.8
4551	COMMUNICATIONS EQUIPMENT	0.00	411.00	0.00	0.00	0.00	411.00	0.0
4552	LIGHTS & FIXTURES	253,931.85	301,095.00	0.00	0.00	1,095.00	300,000.00	0.4
4558	VEHICULAR EQUIPMENT	0.00	277.00	0.00	0.00	0.00	277.00	0.0
4567	COMPUTER EQUIPMENT	56,732.50	225,314.78	0.00	45,026.50	62,595.65	117,693.00	47.8
4571	COMPUTER SOFTWARE	0.00	40,000.00	0.00	0.00	0.00	40,000.00	0.0
4580	FURNITURE	0.00	33,000.00	0.00	23,600.00	0.00	9,400.00	71.5
4597	EXPENSE CENTER ACQUISITION	(1,656,134.50)	0.00	0.00	(245,026.38)	0.00	245,026.00	0.0
	Total CAPITAL OUTLAY	2,599,119.24	11,087,142.94	623,835.87	2,215,118.24	2,096,852.85	6,775,172.00	38.9
=====								
OPERATING TRANSFERS OUT								
4640	IF TO 58-038	0.00	20,700.00	0.00	0.00	0.00	20,700.00	0.0

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* Fund 87 SANITATION DISTRICT *

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4651 IF T 01-031-031		1,065,115.92	1,101,570.00	91,797.50	1,101,570.00	0.00	0	100.0
4667 IF T 51-315-453		225,362.00	658,548.85	0.00	392,143.85	0.00	266,405	59.5
4672 IF T 55-035-458		10,152.03	6,118.97	2,029.73	6,118.97	0.00	0	100.0
4685 IF TO 17-312		100,000.00	0.00	0.00	0.00	0.00	0	0.0
4698 IF TO 31-131		0.00	8,580.48	8,580.48	8,580.48	0.00	0	100.0
ttl OPRTNG TRNSFRS		1,400,629.95	1,795,518.30	102,407.71	1,508,413.30	0.00	287,105	84.0
DEBT SERVICE								
4378 NOTE PRINCIPAL		214,797.22	220,167.15	0.00	220,167.15	0.00	0	100.0
4379 NOTE INTEREST		70,949.16	65,500.00	(3,211.00)	65,500.23	0.00	(0)	100.0
4385 PRNCPL PYMT CN		(214,797.22)	(220,167.15)	0.00	(220,167.15)	0.00	0	100.0
Total DEBT SERVICE		70,949.16	65,500.00	(3,211.00)	65,500.23	0.00	(0)	100.0
DEPRECIATION								
4431 DEPRECIATION		2,103,530.36	2,006,930.73	201,443.12	2,410,445.57	0.00	(403,515)	120.1
Total DEPRECIATION		2,103,530.36	2,006,930.73	201,443.12	2,410,445.57	0.00	(403,515)	120.1
* Total Expenditures		19,835,579.43	30,004,714.82	2,376,503.24	19,943,785.57	2,158,810.20	7,902,119	73.7
Nt fr SNITN DISTRCT F		266,175.25	(8,750,403.61)	(949,003.46)	1,956,583.19	(2,158,810.20)	(8,548,177)	

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Total Rev - All Fnds		20,101,754.68	21,254,311.21	1,427,499.78	21,900,368.76	0.00	(646,057)	103.0
Ttl Expnd - All Fnds		19,835,579.43	30,004,714.82	2,376,503.24	19,943,785.57	2,158,810.20	7,902,119	73.7
All Funds Net		266,175.25	(8,750,403.61)	(949,003.46)	1,956,583.19	(2,158,810.20)	(8,548,177)	



North San Mateo County Sanitation District

a subsidiary of the City of Daly City

Meeting Date: September 14, 2015

Subject: Execution of Memorandum of Understanding with San Francisco Public Utilities Commission to Examine Feasibility of Expanded Tertiary Recycled Water Facilities

Recommended Action

Authorize the General Manager to execute Memorandum of Understanding with the San Francisco Public Utilities Commission (SFPUC) to Examine Feasibility of Expanded Tertiary Recycled Water Feasibilities, also as a concurrent action, execute a Professional Services Agreement with Carollo Engineers of Walnut Creek, CA in an amount not to exceed \$2,178,000.

Background

The feasibility study proposal under a negotiated professional services contract intends to build upon the conceptual project evaluation performed by Carollo Engineers in October, 2009 which determined producing and delivering an additional 3.4 million gallons a day of additional tertiary recycled water supply was technically feasible.

Discussion

As proposed, City staff and the SFPUC plan to evaluate the expansion of tertiary treatment facilities for additional capacity and environmental review to serve Colma cemeteries in the south and proposed San Francisco users to the north. With the continued drought conditions confronting California along with planned groundwater management within the Westside Basin Groundwater Aquifer, it is prudent to examine additional recycled water opportunities to offset use of potable surface and groundwater used for irrigation. Much like the offset of groundwater use by local golf clubs through recycled water to preserve the Westside Basin as a municipal water supply source, the same opportunity presents itself with Colma cemeteries to better utilize the groundwater basin as a source of supply during dry years and droughts.

The memorandum of understanding proposed by San Francisco mirrors successful joint work activities dealing with Lake Merced and the Vista Grande Drainage Basin, along with regional water projects undertaken as part of the Water System Improvement Program. Daly City takes the lead role as project manager and consultant services costs are reimbursed by the SFPUC. The City Attorney has reviewed the memorandum of understanding and finds it acceptable.

The negotiated professional services agreement with Carollo Engineers, authors of the conceptual engineering report, covers six work tasks, including public outreach, environmental review and technical engineering assessments to bring the project up to a 30% feasibility design. The scope of work is anticipated to be completed within two-years after issuance of notice to proceed at a not to exceed cost of \$2,178,000. The scope of work has been reviewed and agreed to by the SFPUC and it will be brought forward to the SFPUC Commission at its September 8, 2015 meeting.

Copies of the Draft Memorandum of Understanding and Carollo Engineers' Scope of Work are attached to the staff memorandum.

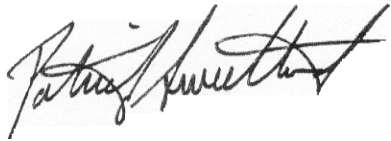
Fiscal Impact

Cost neutral. District costs will be reimbursed directly by the SFPUC.

Summary

Joint effort between Daly City and the SFPUC to offset local groundwater through and expanded recycled water project furthers the preservation of the Westside Basin Groundwater Aquifer as a municipal water source.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Patrick Sweetland", is written over a light gray rectangular background.

Patrick Sweetland
Director of Water and Wastewater Resources

Attachments:

- (1) Draft Memorandum of Understanding
- (2) Carollo Engineers Scope of Work

DRAFT

MEMORANDUM OF UNDERSTANDING
by and between the
SAN FRANCISCO PUBLIC UTILITIES COMMISSION
and
THE NORTH SAN MATEO COUNTY SANITATION DISTRICT,
a subsidiary of the **CITY OF DALY CITY**

for
**CONSULTING SERVICES FOR THE PLANNING AND DESIGN OF THE
DALY CITY RECYCLED WATER EXPANSION PROJECT**

THIS Memorandum of Understanding ("MOU") is entered into this ____ day of September 2015, by and between the North San Mateo County Sanitation District, a subsidiary of the City of Daly City ("Daly City") and the San Francisco Public Utilities Commission ("SFPUC") for the purpose of delineating responsibilities for consulting services for the planning, design and environmental review of the Daly City Recycled Water Expansion Project (Project).

WHEREAS, a preliminary Project feasibility study by Carollo Engineers dated October 2009 concluded that Daly City has sufficient inflows to its Westlake Wastewater Treatment Plant to expand the existing tertiary treatment capacity to provide recycled water to customers in Colma and San Francisco in addition to existing irrigation customers of Daly City; and

WHEREAS, the SFPUC is willing to provide additional funding to Daly City in order to complete more detailed design work and environmental documentation for the proposed Project due to the potential benefits to SFPUC retail and wholesale water customers arising from increased availability of recycled water supplies;

NOW, THEREFORE, it is mutually understood and agreed as follows:

SECTION 1: AUTHORITY OF PARTIES

- 1.1 The SFPUC is responsible for delivering water to Wholesale and Retail Customers.
- 1.2 Daly City currently provides tertiary-treated recycled water for the irrigation of golf courses including Harding/Fleming Golf Course, Olympic Club Golf Course, the San Francisco Golf Club, and the Lake Merced Golf and Country Club.

SECTION 2: DEFINITIONS

The abbreviations and capitalized words and phrases used in this MOU shall have the following meanings:

- 2.1 "Contractor" means Carollo Engineers.

- 2.2 **"Daly City"** means the North San Mateo County Sanitation District, a subsidiary of the City of Daly City.
- 2.3 **"Consulting Services"** means the scope of work identified in the attached Exhibit A.
- 2.4 **"Parties"** means Daly City and the SFPUC.
- 2.5 **"Project"** means a future project to provide recycled water from the Daly City's tertiary treatment plant to irrigation customers in Colma and San Francisco.
- 2.6 **"Retail Customer"** means any customer that purchases water from San Francisco that is not a wholesale customer, whether located within or outside San Francisco.
- 2.7 **"SFPUC" or "San Francisco"** means the San Francisco Public Utilities Commission.
- 2.8 **"Wholesale Customer"** refers to the 26 wholesale customers represented by the Bay Area Water Supply and Conservation Agency (BAWSCA) that purchase water from the SFPUC for distribution in their retail service areas.

SECTION 3: PURPOSES AND GOALS OF THE CONSULTING SERVICES

- 3.1 **Purpose and Goals:** The purpose and goal of the Consulting Services is to provide planning and development support so that the Project is ready for construction through completion of the following tasks:
 - 3.1.1 Conduct field investigations including geotechnical study and surveys and a membrane filtration pilot study for the Project. This may include evaluation of the opportunity to increase the volume of groundwater stored in the South Westside Groundwater Basin to enable its sustainable management.
 - 3.1.2 Prepare a preliminary engineering design for the Project.
 - 3.1.3 Evaluate environmental conditions and issues pertaining to the Project pursuant to the requirements of the California Environmental Quality Act (CEQA).

Prior to design of the distribution system, the Parties will determine which customers will be served by the Project. Contractor may provide support in this determination prior to proceeding with design.

SECTION 4: FUNDING FOR THE CONSULTING SERVICES

- 4.1 **Funding:** The SFPUC will fund the cost of Consulting Services. It is anticipated that the cost of the Consulting Services will not exceed \$2,400,000. In the event that the cost exceeds this amount, the Parties will meet with Contractor to renegotiate the additional funding required.

The SFPUC shall have the right to review and approve all Project related contracts and associated amendments between Daly City and the. Daly City shall provide copies of draft

contract(s) with its Contractor(s) to the SFPUC for review prior to approval. Any changes to the compensation to the Contractor shall be approved by the SFPUC in advance.

- 4.2 **Administration of Contract:** Daly City shall serve as the project manager of the contract and be responsible for managing the contract for Consulting Services. Daly City's contract with the Contractor shall contain language that deems the Contractor to be an independent contractor of Daly City and not an agent or employee of Daly City or the SFPUC. The SFPUC will comment on the draft engineering analyses (e.g. conceptual engineering reports), final plans for the Project, environmental documentation, and other Project-related reports and technical memoranda. If the SFPUC does not provide comments within ten (10) calendar days from the date the SFPUC receives these documents from Daly City or its Contractor, the SFPUC will be deemed to have approved the documents.
- 4.3 **Relationship of Parties With Respect to Funding:** Each of the Parties shall be individually responsible for its own obligations under this MOU. Neither of the Parties shall be under the control of or shall be deemed to control the other party. No party shall be an agent of or have the right or power to bind any other party without such party's express written consent, except as specifically provided in this MOU.
- 4.4 **Fiscal Limitations:** THIS SECTION SUPERSEDES ANY CONFLICTING PROVISION OF THIS MOU. This MOU is subject to the fiscal provisions of the San Francisco charter and the budget decisions of its Mayor and Board of Supervisors. No SFPUC funds will be available hereunder until prior written authorization certified by the City's Controller. The Controller cannot authorize payments unless funds have been certified as available in the budget or in a supplemental appropriation. This MOU shall automatically terminate, without liability to the City, if funds are not properly appropriated by the Mayor and Board of Supervisors or certified by the Controller. The SFPUC's obligations hereunder shall never exceed the amount certified by the Controller for the purpose and period stated in such certification. The SFPUC, its employees and officers are not authorized to request services, materials, equipment or supplies that are beyond the scope of those expressly described herein, unless this MOU is amended in writing and approved as required by law. Without such an amendment or approval, the SFPUC shall not be required to pay Daly City for any Project expenses authorized by Daly City. The SFPUC, its employees and officers are not authorized to offer or promise any additional funding that would exceed the maximum amount specified in Section 4.1. Such additional funding requires lawful approval and certification by the Controller. Without such lawful approval and certification, the SFPUC shall not be required to provide such additional funding.
- 4.5 **Invoices:** Daly City's contract with the Contractor shall require the Contractor to submit monthly invoices. The invoices shall set forth in detail the services provided and the expenses incurred, and shall identify which individual provided such services. The SFPUC shall be given the opportunity to review the Contractor's invoices before payment is made. The SFPUC shall pay invoices within 30 days of receipt from Daly City. Invoices shall include a breakdown of expenses incurred and a description of work completed during the invoice period.
- 4.6 **Insurance:** Daly City's contract with the Contractor shall require the Contractor to maintain in force during the course of the contract insurance in the following amounts and

coverages, with insurers satisfactory to the San Francisco: (i) Commercial General Liability Insurance with limits not less than \$1,000,000 each occurrence Combined Single Limit for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Products and Completed Operations; and (ii) Automobile Liability Insurance with limits not less than \$1,000,000 each occurrence Combined Single Limit for Bodily Injury and Property Damage, including Owned, Non-Owned and Hired auto coverage, as applicable. If any policy includes an aggregate limit or provides that claims investigation or legal defense costs are included in such aggregate limit, the aggregate limit shall be double the occurrence limits specified above. Each policy shall: (i) name as additional insured "the City and County of San Francisco, its officers, agents and employees"; (ii) provide that it is primary to any other insurance available to any additional insured, with respect to any claims arising out of this Agreement; (iii) provide that it applies separately to each insured against whom claim is made or suit is brought; and (iv) provide for at least thirty (30) days' advance written notice to the SFPUC of cancellation or modification.

- 4.7 **Indemnity:** Daly City's contract with the Contractor shall contain language requiring the Contractor to indemnify, defend, and hold harmless the City and County of San Francisco for any and all claims for bodily injury or property damage arising out of the negligence or willful misconduct of the Contractor.
- 4.8 **Cooperation Regarding Public Relations and Outreach:** The Parties will jointly review and approve all press releases created for public consumption concerning the Project.
- 4.9 **Lead Agency Status Under California Environmental Quality Act:** Daly City shall serve as lead agency for preparation of any CEQA documentation required for Project approval. The SFPUC will serve as Responsible Agency and will participate in the planning and review of the document(s) prior to publication, including review of any administrative draft environmental documents for the Project.

SECTION 5: GENERAL PROVISIONS GOVERNING THE MOU

- 5.1 **Term:** The term of this MOU shall be twenty-four (24) months from the date of execution by the Parties.
- 5.2 **Invalidity of Any Term Not to Invalidate Entire Memorandum:** In the event that any of the terms, covenants, or conditions of this MOU or the application of any such term, covenant, or condition shall be held invalid as to any party by any court of competent jurisdiction, all other terms, covenants, or conditions of this MOU and their application shall not be affected thereby, but shall remain in full force and effect unless any such court holds that those provisions are not separable from all other provisions of this MOU.
- 5.3 **Construction of Terms:** This MOU is for the sole benefit of the Parties and shall not be construed as granting rights to or imposing any obligations on any person or entity other than the Parties.

- 5.4 **Good Faith:** Each party shall use its best efforts and work wholeheartedly and in good faith for the expedited completion of the objectives of this MOU and the satisfactory performance of its terms.
- 5.5 **Conflict of Interest:** Through its execution of this MOU, Daly City acknowledges that it is familiar with the provisions of Section 15.103 and Appendix C 8.105 of the San Francisco Charter and Section 87100 et seq. of the Government Code of the State of California, and certifies that it does not know of any facts which constitute a violation of said provisions.
- 5.6 **Liability of San Francisco:** The SFPUC's obligations under this agreement shall be limited to the payment of the compensation provided for in section 4.1 of this MOU. Notwithstanding any other provision of this MOU, in no event shall SFPUC be liable, regardless of whether any claim is based on contract or tort, for any special, consequential, indirect or incidental damages, including, but not limited to, lost profits, arising out of or in connection with this agreement or the services performed in connection with this agreement.
- 5.7 **Termination for Convenience:** The SFPUC may terminate this MOU for San Francisco's convenience and without cause at any time by giving Daly City thirty days written notice of such termination; Daly City may terminate this MOU for Daly City's convenience and without cause at any time by giving the SFPUC thirty day written notice of such termination. In the event of such termination, the SFPUC will pay Daly City for services performed by Contractor pursuant to this MOU, to the satisfaction of the SFPUC up to the date of termination. In no event will the SFPUC be liable for costs incurred by the Contractor after receipt of a notice of termination.
- 5.8 **Amendment:** The Parties may agree to modify the terms of this MOU by written agreement authorized by the governing boards of both Parties.
- 5.9 **Governing Law:** This MOU is made under and shall be governed by the laws of the State of California.

IN WITNESS WHEREOF, the Parties have executed this Memorandum of Understanding by their duly authorized representatives as of the day and year indicated on the first page of this MOU.

CITY AND COUNTY OF SAN
FRANCISCO PUBLIC UTILITIES
COMMISSION

THE NORTH SAN MATEO COUNTY
SANITATION DISTRICT, a subsidiary of
the CITY OF DALY CITY

By: _____
Harlan L. Kelly, Jr.
General Manager

By: _____
Patricia E. Martel
General Manager

Dated: _____

Dated: _____

Authorized by San Francisco Public Utilities
Commission, Resolution No. _____

Authorized by District,
Resolution No. _____

Adopted _____, 2015

Adopted _____, 2015

APPROVED AS TO FORM

APPROVED AS TO FORM

Dennis Herrera, City Attorney

By: _____
Joshua Milstein
Deputy City Attorney

By: _____
Rose Zimmerman
District Counsel

EXHIBIT A

Consulting Services to Daly City for the Planning and Design of the Daly City Recycled Water Expansion Project

Task 1:	Field Investigations	\$1,000,000
Task 2:	Tertiary Treatment Facilities Pre-Design (30%)	\$ 385,000
Task 3:	Delivery & Distribution System Predesign (30%)	\$ 550,000
Task 4:	Preliminary Design Report	\$ 15,000
Task 5:	CEQA Documentation	\$ 150,000
Task 6:	Funding Application Support (SRF or other)	\$ 50,000
Task 7:	Project Meetings, Workshops, Presentations	\$ 250,000

TOTAL:	\$ 2,400,000
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INTRODUCTION

The purpose of this project is to perform a preliminary design of the expansion of Daly City's Recycled Water Treatment and Distribution System to serve portions of San Francisco and the City of Colma. The preliminary design will form the basis for final design and will confirm the economic feasibility of the project. Preliminary design will be completed to the 30 percent level. Our proposed Scope of Services is detailed below.

SCOPE OF SERVICES

Task 1 - Field Investigations

Task 1 includes field investigations required for preliminary design of the treatment facility, pipelines, and storage facilities. The tasks include surveying, geotechnical investigations/report, potholing and utility surveys, a regulatory analysis for expanding tertiary treatment, necessary lab tests, and effluent tests to establish treatment design criteria.

Subtask 1.1 - Surveying

The survey will be performed by our subconsultant, LCC, Inc., and will include the services listed below. Boundary surveys and right-of-way acquisition are not included in this scope and are assumed to be performed during final design, if needed. Limits of survey assumed for budget purposes are defined on the attached figures.

Subtask 1.1.1 - Ground Control Survey and Aerial Targets

Horizontal and vertical ground control points will be located and tied to the same horizontal and vertical datum utilized by the Daly City city-wide mapping project. A combination of GPS and "conventional" land surveying equipment and techniques will be employed.

Subtask 1.1.2 - Aerial Photography, Digital Topographic Mapping, and Digital Orthophotography

Natural color, vertical, and stereo aerial photography of the project will be obtained using a cartographic camera. Digital topographic map data will be collected and compiled to interface directly with a CAD file. Planimetric features, such as buildings, roads, fences, vegetation, etc., will be digitized onto the CAD file. Natural color digital orthography for the project area will be prepared to correspond to the map sheets. Mapping will be provided at 40 scale.

Subtask 1.1.3 - Surface Utility Field Surveys and Construction Control Surveys

Surface features of above- and below-grade utilities will be surveyed (e.g., valve boxes, catch basins, and utility poles). Manholes and storm water inlets will be surveyed and invert elevations sketched on dip sheets. Construction control points will be established along the pipeline route and at the wastewater treatment plant. The data obtained from these field investigations will be imported into the project CAD files. Limits of utility survey will be within public right-of-way.

Subtask 1.2 - Geotechnical Study

A geotechnical study will be performed to identify subsurface soil conditions at the wastewater treatment plant, along the pipeline routes, and at the storage tank site in the Town of Colma. The geotechnical study, to be performed by our subconsultant, Fugro West, Inc., will provide recommendations for the pipeline trench design, a liquefaction/lateral spread evaluation, and structural design criteria for the storage basin. Available previous geologic studies with information on previous soil borings will be reviewed during the geotechnical investigation.

Soil borings will include:

- Three soil borings at approximately 25 to 35 feet deep for the new facilities at the wastewater treatment plant.
- Soils borings along the pipeline route at 500-foot intervals for pipelines over 15 inches in diameter (up to 27 borings). These borings will be between 10 and 35 feet deep.
- Three 50-foot-deep borings at the Colma storage tank site.
- Borings for the distribution system at the Colma cemeteries. These borings will be performed during the design phase of the project when the customer connections are better defined.
- Borings for Parkmerced, San Francisco State, and Lake Merced Hills. These borings will be performed during final design after the facilities are better defined.

Samples will be taken from the borings and tested for standard soil characteristics. Based on the soil boring and testing data, an engineering analysis will be performed to develop geotechnical conclusions and recommendations for the project. Draft and final versions of the report will be prepared.

During the preliminary design phase of the project, a geotechnical report will be prepared for the new facilities at the wastewater treatment plant, the pipeline to Colma, and the storage tank. A geotechnical report for the cemetery distribution system and the Parkmerced/San Francisco State portions of the project will be prepared during final design.

Subtask 1.3 - Utility Survey

A utility survey will be conducted for the pipeline alignments. The survey will consist of reviewing available utility drawings obtained from the utilities and a visual assessment of the alignment. It is assumed that Daly City and the SFPUC (for portions of the project within the City and County of San Francisco) will provide available utility maps for the area of the pipeline alignments. Our subconsultant, Exaro Technologies, will perform up to 30 potholes of key underground facilities along the pipeline route.

The data from the utility survey and potholing will be used to incorporate the utilities into the project CAD files. The utility information is necessary for pipeline routing and facility placement.

Subtask 1.4 - Regulatory Analysis for Expanding Tertiary Capacity

The purpose of this task is make a preliminary assessment of the toxicity/priority pollutant levels in the remaining wastewater treatment plant effluent that is discharged to the ocean. The RWQCB has recently proposed changes to the calculation and reporting of effluent toxicity that will impact the attainability of the NPDES permit requirements for Daly City for increased reuse scenarios. PME, our subconsultant, will conduct a mass balance analysis of those contaminants of concern in the effluent, and the desktop assessment of toxicity using the SWRCB Toxicity

Support Document protocols. In addition, this effort includes performing progressive dilutions of effluent to test the effect on whole effluent toxicity for the analysis. The findings, conclusions, and recommendations as to future alternatives will be included in a draft and final report on the Assessment of WWTP Effluent Toxicity Potential. Lab testing for this regulatory analysis is included under task 1.5.

Subtask 1.5 - Particle Size Distribution, Collimated Beam Testing, and Lab Testing

Effluent characterization is required to determine design criteria for the filtration and disinfection processes. Carollo will review the particle size distribution testing performed during the 2002 Tertiary Treatment Upgrade Project. Carollo will perform additional particle size distribution testing of the secondary effluent to verify that the 2002 data is still valid and to aid in sizing the membrane prefilters. In addition, Carollo will perform collimated beam testing on the recycled water effluent to assist in determining design criteria for the disinfection system.

Lab testing related to expanding the tertiary system, by Alpha Lab, includes TSS, BOD (total and soluble), and TOC. These include daily composites for seven days of the secondary effluent before and after the filters and also the filter backwash.

Subtask 1.6 - Pilot Studies

A pilot study will be conducted to support membrane system procurement. The study will establish membrane hydraulic loading rates (minimum flux), footprint, and cleaning requirements. The data from the study will minimize technical risk associated with the challenging (high fouling) feed water and footprint constraints. The pilot study will take place concurrently with the preliminary design. The pilot data and preliminary design will be the basis for membrane system procurement (bid) documents.

Two pressure-driven membrane systems will be tested. The pilot study will generate design criteria usable by the tested systems as well as manufacturers of similar systems to promote competition and control costs during the subsequent procurement phase.

Carollo will provide the following services associated with the pilot study:

1. Select membrane systems to test.
2. Develop testing protocol.
3. Communicate set-up requirements to the City.
4. Make weekly trips to the site to troubleshoot, collect data, perform quality assurance/quality control tasks, and support pilot operations.
5. Provide the owner weekly updates on the pilot progress.
6. Write draft and final pilot study reports.

It is assumed that the City will:

1. Contract directly with the membrane system suppliers.
2. Unload and place the skid mounted pilot equipment.
3. Provide labor and materials for hydraulic and electrical connections.
4. Participate in training provided by the membrane system suppliers.

5. Perform day-to-day operational tasks, including filling out checklists, troubleshooting (with assistance from the supplier and Carollo), refilling chemical tanks, and reporting equipment issues.
6. Review draft and final pilot test reports.

Task 2 - Tertiary Treatment Facilities Preliminary Design

Preliminary design will be performed for the tertiary treatment facility expansion at the Daly City Wastewater Treatment Plant and recycled water delivery systems to Colma, Lake Merced Hill, Parkmerced, and San Francisco State University. Landscaping is not included in the preliminary design efforts for any of the tasks. Preliminary design of the Colma distribution system and Parkmerced Area distribution system will be performed under Tasks 3 and 4. The tertiary treatment facilities preliminary design includes the following subtasks:

Subtask 2.1 - Process Design Criteria Development and Confirmation

Based on the results of Subtasks 1.5 and 1.6, the filtration and disinfection design criteria will be finalized. Pump flow rates, membrane filtration flux rates, membrane rack configuration, and disinfection design criteria will be determined. Redundancy criteria for pumps, filtration, and disinfection will be determined. Current disinfection technologies (UV and ozonation) will be re-evaluated to reflect recent capabilities and practices.

A process flow diagram will be developed. Equipment "cut sheets" for selected equipment will be included. An analysis of equipment procurement methods for the filtration and disinfection equipment will also be performed.

Subtask 2.2 - Hydraulic Analysis/Profile

A hydraulic profile for the new tertiary treatment facilities will be developed. The profile will tie into the existing hydraulic profile for the plant. A hydraulic analysis will be performed to determine minimum and maximum pumping rates and pressures for pumping to and from the tertiary treatment processes.

Subtask 2.3 - Electrical and Instrumentation

As part of the tertiary facility expansion, the existing main switchgear building will be relocated and replaced. An electrical and instrumentation analysis will take place to determine relocation requirements and challenges. The analysis will include construction sequencing, methods to minimize rewiring and impacts to existing equipment, and impacts on treatment plant operation.

Subtask 2.4 - Tertiary Treatment Facilities Preliminary Drawings

Preliminary design drawings in AutoCAD will be developed. These drawings will form the foundation of the drawings and specifications that will be developed during final design. The following drawings will be included:

- Preliminary civil and yard piping drawings.
- Structure/building plans and elevations.
- Mechanical plans and sections.
- Preliminary electrical design drawings, including single-line drawings and a plan for the new switchgear building.
- Preliminary process and instrumentation diagrams for major unit processes.

Subtask 2.5 - Cost Estimates

The cost estimates from the feasibility study will be updated. Quantities, unit prices, contingencies, and escalation factors will be updated to reflect the more defined project and current economic conditions.

Subtask 2.6 - Technical Memorandum (TM) 1 - Tertiary Treatment

Preliminary design for the tertiary treatment system will be summarized in a TM. TM 1 will be submitted as a draft for the City's review. A final draft will be issued after incorporating the City's comments. TM 1 will include:

- A summary and discussion of the results of Tasks 2.1 to 2.5.
- A discussion of how the distribution system will be owned and operated (based on negotiations between Daly City, Colma, Cal Water, and SFPUC).

Task 3 - Preliminary Design of the Colma Delivery and Distribution System

Task 3 includes preliminary design of the recycled water pipeline from Daly City to Colma, as well as the 3-million-gallon storage tank and pump station that will be located in the Town of Colma. The task includes coordination with potential recycled water customers and definition of the recycled water distribution system for the customers in Colma. Task 3 is comprised of the following subtasks.

Subtask 3.1 - Process Design Criteria Development and Confirmation

Based on the results of the field investigations (Subtasks 1.1, 1.2, 1.3, and 1.4), the route for the pipeline from Daly City to Colma will be finalized. While the street route for the pipeline was selected during the feasibility study for this project, the route within the streets must still be determined. The final design criteria for the pipeline (material, diameter, depth, etc.) will be finalized.

The geometry and type of storage tank will also be determined. It is assumed that Daly City will lead and perform real estate property acquisition efforts, if required. The design criteria and configuration of the pump station will also be developed.

The customer distribution systems will be developed, based on the efforts of Subtask 3.2.

Subtask 3.2 - Recycled Water Customer Outreach - Colma

The purpose of this task is to develop a customer base for accepting recycled water in the Colma area. Carollo and Enviroscpectives, in close coordination with Daly City, will visit identified potential recycled water customers in the Town of Colma. Irrigation system maps and drawings will be requested. Carollo will conduct two public meetings to describe the project to potential recycled water customers. Carollo will coordinate with up to 15 potential customers to determine the preferred recycled water connection point to their existing irrigation systems. Carollo will also provide technical information, including projected water quality, recycled water delivery flows, and the time of day for delivering recycled water.

This task does not include participation in negotiations with potential customers. It is assumed that Daly City/SFPUC will lead negotiations with recycled water customers, the Town of Colma, and Cal Water (the water purveyor). It is also assumed that Daly City will draft recycled water ordinances, if required.

Subtask 3.3 - Hydraulic Analysis for Recycled Water Distribution System

Water demand requirements (flows and delivery timing) for irrigation will be identified for new recycled water customers. Hydraulic calculations will be performed for the pipeline from Daly City to Colma and the Colma distribution system. Minimum and maximum pumping rates and pressures for the pumping systems will be determined. Hydropneumatic pressure sustaining tanks will be sized. Surge analysis for these systems will be performed during final design.

Hydraulic profiles for the delivery pipeline and the distribution system will be developed.

Subtask 3.4 - Electrical and Instrumentation

Carollo will coordinate with PG&E to determine the utility requirements for the new storage tank and pump station. A desktop radio analysis will be performed to determine the preferred method of communicating between the storage tank/pump station and the Daly City Wastewater Treatment Plant.

Subtask 3.5 - Delivery Pipeline, Storage Tank, Pump Station, and Distribution System Drawings

Preliminary design drawings in AutoCAD will be developed to the 30% design level. These drawings will form the foundation of the drawings and specifications that will be developed during final design. The following drawings will be included:

- Preliminary architectural, civil and yard piping drawings for the storage tank/pump station site.
- Pipeline plan view drawings.
- Storage tank plans and elevations.
- Pump station mechanical plans and sections.
- Preliminary electrical single-line drawings.
- Preliminary process and instrumentation diagrams.

Subtask 3.6 - Cost Estimates

The cost estimates from the feasibility study will be updated for the preliminary design. Quantities, unit prices, contingencies, and escalation factors will be updated to reflect the more defined project and current economic conditions.

Subtask 3.7 - TM 2 Colma Delivery System

The preliminary design for the Colma Delivery System will be summarized in TM 2. TM 2 will be submitted as a draft for the City's review. A final draft will be issued after incorporating the City's comments. TM 2 will include the following components:

- A summary and discussion of the results of Tasks 3.1 to 3.6.
- A master schedule, identifying final design time, major equipment lead times, a construction schedule estimate, and project constraints (sequencing requirements).

- A discussion of how the distribution system will be owned and operated (based on negotiations between Daly City, Colma, Cal Water, and SFPUC).
- An analysis of permitting requirements.

Task 4 - Preliminary Design of the Delivery System for Parkmerced/San Francisco State University

Task 4 includes preliminary design of the extension of the Harding Park Recycled Water Pipeline to three new customers within the City and County of San Francisco. Customers include San Francisco State University, Parkmerced, and the Lake Merced Hills development. The task includes coordination with the three potential recycled water customers and further definition of the recycled water distribution system. Task 4 is comprised of the following subtasks.

Subtask 4.1 - Process Design Criteria Development and Confirmation

Based on the results of Subtasks 1.1, 1.2, 1.3, and 1.4, the route for the pipeline extensions will be determined. While the street route for the pipeline was selected during the feasibility study for this project, the route within the streets must still be determined. The final design criteria for the pipeline (material, diameter, depth, etc.) will be finalized.

The geometry and type of storage tanks will also be determined. While the feasibility study assumed that a storage tank would be constructed at both San Francisco State and Parkmerced, the construction of a common storage tank to reduce project costs will be explored.

It is assumed that Daly City or SFPUC will lead and perform real estate property acquisition efforts, if required. The design criteria for the pump stations will also be developed.

Subtask 4.2 - Recycled Water Customer Development - Parkmerced/San Francisco State

Carollo and Envirospectives, in close coordination with Daly City, will visit each of the three potential customers. Irrigation system maps and utility drawings will be requested. Carollo will coordinate with the potential customers to determine the preferred recycled water connection point to their existing irrigation systems.

It is assumed that Daly City will lead negotiations between the City, the Town of Colma, Cal Water (the water purveyor), and the SFPUC. Daly City will also draft recycled water ordinances, if required.

Subtask 4.3 - Hydraulic Analysis for Recycled Water Line to Parkmerced/San Francisco State

Hydraulic calculations performed for the Harding Park pipeline extension will be updated. Minimum and maximum pumping rates and pressures for the pumping systems will be determined. Hydropneumatic pressure sustaining tanks will be sized. Surge analysis for these systems will be performed during final design.

Hydraulic profiles for the delivery pipeline and the distribution system will be updated/developed.

Subtask 4.4 - Electrical and Instrumentation

Carollo will coordinate with PG&E to determine the utility requirements for the new storage tanks and pump stations. The existing electrical systems at each site will be investigated to determine the preferred method of supply power to the new storage tanks and pump stations. A desktop radio analysis will be performed to determine the preferred method of communicating between the storage tanks/pump stations and the Daly City Wastewater Treatment Plant.

Subtask 4.5 - Delivery Pipeline, Storage Tank, Pump Station, and Distribution System Drawings

Preliminary design drawings in AutoCAD will be developed. These drawings will form the foundation of the drawings and specifications that will be developed during final design. The following drawings will be included:

- Preliminary architectural, civil and yard piping drawings for the storage tank (1 storage tank assumed)/pump station sites.
- Pipeline plans.
- Storage tank plans and elevations (1 storage tank assumed).
- Pump station mechanical plans and sections.
- Preliminary electrical design drawings, including single-line drawings.
- Preliminary process and instrumentation diagrams.

Subtask 4.6 - Cost Estimates for Preliminary Design

The cost estimates from the feasibility study will be updated. Quantities, unit prices, contingencies, and escalation factors will be updated to reflect the more defined project and current economic conditions.

Subtask 4.7 - TM 3 - Parkmerced/San Francisco State Delivery System

The preliminary design for the Parkmerced/San Francisco State areas will be summarized in TM 3. The TM will be submitted as a draft for the City's review. A final draft will be issued after incorporating the City's comments. TM 3 will include the following components:

- A summary and discussion of the results of Tasks 4.1 to 4.6.
- A discussion of how the distribution system will be owned and operated (based on negotiations between Daly City, Colma, Cal Water, and SFPUC).
- An analysis of permitting requirements.

Task 5 - Preliminary Design Report

Findings and recommendations developed from TMs 1 - 3 will be summarized in a preliminary design report (PDR). The PDR will include an executive summary, implementation plan and cost estimate. TMs 1 - 3 will be included in an appendix. In addition, the PDR will include the following:

- A master schedule identifying final design time, major equipment lead times, a construction schedule estimate, and identification of project constraints (sequencing requirements).
- A cost estimate summary.

- A review of the Vista Grande Canal planning documents and a discussion of how the project will be integrated with facilities associated with the Vista Grande Canal project.
- An analysis of permitting requirements.

Task 6 - California Environmental Quality Act Clearance

Our subconsultant, SMB, will prepare a CEQA Plus IS/MND for the Daly's City's Recycled Water Project to serve the town of Colma and the San Francisco Lake Merced area a combined total of approximately 3.4 mgd or 3,800 acre-feet afy. The IS/MND will be prepared in accordance with CEQA requirements and will include:

- Project description.
- Initial study, notice of preparation and scoping process.
- Administrative Draft CEQA Plus IS/MND (including biological assessment, section 106 cultural resources report, and clean air act conformity report)
- Public Draft CEQA Plus IS/MND.
- Final CEQA Plus IS/MND.
- State Board Environmental grants/loan application
- Project meetings, management, and coordination.

The IS/MND will be prepared in accordance with the CEQA-Plus requirements and/or the National Environmental Quality Act to meet SRF grant/loan requirements. It is assumed that Daly City will be the lead agency for the CEQA documentation. It is also assumed the San Francisco Planning Department's MEA will not be involved.

Task 7 - Funding Application Support

SRF funding application support for the four packages related to SRF Proposition 1 funding will be developed. This funding will be for California SRF grant and/or loan funding. The application packages consist of general, technical, environmental, and funding applications and are submitted to the SWRCB.

Task 8 - Project Management, Meetings, Workshops, and Presentations

Subtask 8.1 - Progress Reports.

Monthly progress reports will be prepared to accompany invoices.

Subtask 8.2 - Meetings.

The following meetings are included: a kickoff meeting and monthly progress meetings. Meeting agenda, presentation materials, and notes will be prepared.

Subtask 8.3 - Workshops.

Four workshops will be conducted to review project milestones. These include:

- Workshop 1 - Tertiary Treatment Process Selection and Facilities Layout
- Workshop 2 - Colma Recycled Water Delivery System
- Workshop 3 - Parkmerced/San Francisco State Recycled Water Delivery System
- Workshop 4 - PDR Review and Acceptance

Subtask 8.4 - Presentations.

It is assumed that two presentations of the preliminary design will be made:

- North San Mateo Sanitary District (Daly City Council) Board.
- SFPUC Commission Meeting.

Exhibit B - Labor and Budget Estimate
Preliminary Design and CEQA Documentation for the City of Daly City's Recycled Water Treatment and Delivery System for Service to Colma and SF State/Parkmead
City of Daly City (Dated: July 10, 2015)

Task Description	Senior Prof	Lead Prof	Asst Prof	CAD Tech	Support Tech	Total Hours	Labor Subtotal	PECE Subtotal	Other Direct Costs (ODC)				Mileage Amount	ODC Subtotal	TOTAL
									Subcontractors Name	Amount	Printing	Trips			
1.0 Field Investigations															
1.1 Surveying	2	4	0	0	0	22	\$ 5,234	\$ 257	LCC, Inc	\$ 190,920	\$ -	1	\$ 39	\$ 190,927	\$ 196,161
1.2 Geotechnical Study	2	24	0	0	0	42	\$ 383,100	\$ 491	Fugro West	\$ 383,100	\$ -	1	\$ 39	\$ 386,631	\$ 396,905
1.3 Utility Survey	2	24	36	0	0	138	\$ 22,758	\$ 1,474	Edmo Publishing	\$ 33,000	\$ -	2	\$ 78	\$ 34,553	\$ 37,511
1.4 Regulatory Analysis for Expanding Tertiary Capacity	4	0	24	0	4	36	\$ 27,500	\$ 421	PM Engineers	\$ 27,500	\$ -	1	\$ 39	\$ 27,980	\$ 35,772
1.5 Particle Size Dist., Colimated Beam Testing, and Lab Tests	4	24	4	0	0	96	\$ 22,809	\$ 1,123	Alpha Analytical	\$ 3,973	\$ 1,200	2	\$ 78	\$ 5,175	\$ 27,883
1.6 Membrane Filtration Pilot Study	8	80	500	0	0	708	\$ 141,984	\$ 8,284		\$ -	\$ -	2	\$ 78	\$ 151,546	\$ 151,546
Field Investigations Total =	28	136	220	544	60	1030	\$ 210,870	\$ 12,651		\$ 641,203	\$ 1,200	8	\$ 353	\$ 654,807	\$ 855,877
2.0 Tertiary Treatment Facilities Predesign (90%)															
2.1 Process Design Criteria Development and Confirmation	40	80	100	100	24	340	\$ 79,616	\$ 3,978		\$ -	\$ -	1	\$ 39	\$ 4,017	\$ 77,633
2.2 Hydraulic Analysis/Profile	8	24	60	40	16	156	\$ 32,960	\$ 1,625		\$ -	\$ -	1	\$ 39	\$ 1,664	\$ 34,624
2.3 Electrical and Instrumentation	16	24	40	20	8	108	\$ 28,360	\$ 1,538		\$ -	\$ -	2	\$ 78	\$ 1,716	\$ 30,076
2.4 Tertiary Treatment Facilities Preliminary Drawings	13	84	191	63	255	628	\$ 120,059	\$ 7,465	Michael Teuber	\$ 28,644	\$ -	0	\$ -	\$ 38,699	\$ 159,497
2.5 Cost Estimates	4	8	40	24	0	76	\$ 16,954	\$ 869		\$ -	\$ -	1	\$ 39	\$ 5,283	\$ 17,892
2.6 Technical Memo (TM 1) - Tertiary Treatment Facilities Predesign Total =	69	264	531	327	351	1046	\$ 323,175	\$ 18,750		\$ 28,644	\$ 750	6	\$ 235	\$ 48,418	\$ 371,594
3.0 Colma Delivery & Distribution System Predesign (90%)															
3.1 Process Design Criteria Development and Confirmation	16	24	80	24	0	144	\$ 34,320	\$ 1,778		\$ -	\$ -	1	\$ 39	\$ 1,818	\$ 36,138
3.2 Recycled Water Customer Outreach - Colma	24	48	160	40	24	304	\$ 71,552	\$ 3,531	Entropics	\$ 4,400	\$ -	3	\$ 118	\$ 6,449	\$ 80,001
3.3 Hydraulic Analysis for Recycled Water Distribution System	8	24	8	16	8	64	\$ 22,152	\$ 1,147		\$ -	\$ -	1	\$ 39	\$ 1,266	\$ 23,408
3.4 Electrical and Instrumentation	4	8	36	16	8	80	\$ 18,500	\$ 939		\$ -	\$ -	2	\$ 78	\$ 1,014	\$ 17,514
3.5 Pipelines, Storage Tank, and Pump Station Drawings	13	83	188	81	250	629	\$ 117,801	\$ 7,342	Michael Teuber	\$ 11,000	\$ 500	0	\$ -	\$ 18,284	\$ 136,625
3.6 Cost Estimates	4	8	16	8	0	36	\$ 8,340	\$ 421		\$ -	\$ -	1	\$ 39	\$ 8,600	\$ 8,600
3.7 Technical Memo (TM 2) - Colma Delivery System	8	16	76	40	32	164	\$ 37,389	\$ 2,133		\$ -	\$ 250	1	\$ 39	\$ 2,442	\$ 39,810
Colma Delivery System Predesign Total =	77	191	606	217	346	1518	\$ 308,033	\$ 17,781		\$ 15,400	\$ 750	6	\$ 353	\$ 34,283	\$ 342,286
4.0 Parkmead/SF State Delivery System Predesign (90%)															
4.1 Process Design Criteria Development and Confirmation	8	24	80	24	0	116	\$ 28,688	\$ 1,357		\$ -	\$ -	1	\$ 39	\$ 1,396	\$ 28,084
4.2 Recycled Water Customer Outreach - Parkmead/SF State	8	24	80	16	8	96	\$ 20,352	\$ 1,123	Entropics	\$ 4,400	\$ -	3	\$ 118	\$ 5,641	\$ 25,999
4.3 Hydraulic Analysis for Recycled Water Distribution System	4	8	36	16	8	68	\$ 13,740	\$ 796		\$ -	\$ -	1	\$ 39	\$ 1,209	\$ 14,949
4.4 Electrical and Instrumentation	4	8	24	16	8	56	\$ 13,740	\$ 796		\$ -	\$ -	2	\$ 78	\$ 874	\$ 14,614
4.5 Pipelines, Storage Tank, and Pump Station Drawings	4	8	23	70	54	124	\$ 44,034	\$ 2,738	Michael Teuber	\$ 11,000	\$ 500	0	\$ -	\$ 14,238	\$ 59,272
4.6 Cost Estimates	4	8	16	8	0	36	\$ 8,340	\$ 421		\$ -	\$ 250	1	\$ 39	\$ 8,600	\$ 8,600
4.7 Technical Memo (TM 3) - Parkmead/SF State Delivery System	19	111	60	40	32	159	\$ 33,693	\$ 1,566		\$ -	\$ -	1	\$ 39	\$ 2,252	\$ 35,945
SF Delivery System Predesign Total =	45	111	314	142	158	618	\$ 168,074	\$ 8,571		\$ 15,400	\$ 750	6	\$ 353	\$ 26,073	\$ 194,148
5.0 Preliminary Design Report															
5.0 Preparation of Preliminary Design Report (PDR)	4	4	4	40	16	76	\$ 13,548	\$ 889		\$ -	\$ 250	1	\$ 39	\$ 1,178	\$ 15,126
PDR Total =	4	4	4	40	16	76	\$ 13,548	\$ 889		\$ -	\$ 250	1	\$ 39	\$ 1,178	\$ 15,126
6.0 CEQA Documentation															
6.0 Preparation of Environmental Impact Report (EIR)	8	8	8	40	16	80	\$ 16,120	\$ 938	SAB Enviro	\$ 110,000	\$ -	3	\$ 118	\$ 111,054	\$ 127,174
CEQA Documentation Total =	8	8	8	40	16	80	\$ 16,120	\$ 938		\$ 110,000	\$ -	3	\$ 118	\$ 111,054	\$ 127,174
7.0 Funding Application Support															
7.0 Preparation of SF/Grassman Application Packages	16	40	80	20	24	180	\$ 40,208	\$ 2,106		\$ -	\$ -	1	\$ 39	\$ 2,295	\$ 42,503
Funding Support Total =	16	40	80	20	24	180	\$ 40,208	\$ 2,106		\$ -	\$ -	1	\$ 39	\$ 2,295	\$ 42,503
8.0 Project Mgmt., Meetings, Workshops, and Presentations															
8.1 Progress Reports	24	48	0	0	0	72	\$ 18,048	\$ 842		\$ -	\$ -	0	\$ -	\$ 842	\$ 19,490
8.2 Meetings	48	48	96	144	48	432	\$ 87,264	\$ 5,054		\$ -	\$ -	12	\$ 470	\$ 5,725	\$ 92,989
8.3 Workshops	32	48	64	96	64	384	\$ 70,240	\$ 4,300		\$ -	\$ -	4	\$ 157	\$ 4,602	\$ 74,902
8.4 Presentations	32	32	48	0	8	128	\$ 20,656	\$ 1,351		\$ -	\$ -	2	\$ 81	\$ 1,092	\$ 22,048
Project Management Total =	136	176	208	240	128	1008	\$ 208,848	\$ 11,791		\$ -	\$ -	18	\$ 688	\$ 12,481	\$ 219,729
400	870	1,081	1,571	1,081	423	6,316	1,287,278	\$ 73,897	\$ 810,647	\$ 4,250	\$ 2,177	\$ 880,972	\$ 2,178,000		

Exhibit C - Schedule

1.0 Field Investigations

Tertiary Treatment Facilities Predesign (30%)					
2.1	Process Design Criteria Development and Confirmation				
2.2	Hydraulic Analysis/Profile				
2.3	Electrical and Instrumentation				
2.4	Tertiary Treatment Facilities Preliminary Drawings				
2.5	Cost Estimates				
2.6	Technical Memo (TM 1) - Tertiary Treatment			D	F

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5.0	Preparation of Preliminary Design Report (PDR)
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6.0	Preparation of Environmental Impact Report (EIR)
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7.0	Preparation of SRF grant/loan Application Packages
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8.1	Progress Reports
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8.2	Meetings (monthly)	X	X	X	X	X	X	X	X
8.3	Presentations (2)							1	2
8.4	Workshops (4)			1	2	3			