

City of Sandy

Agenda

City Council Meeting

Meeting Location: City Hall- Council Chambers, 39250
Pioneer Blvd., Sandy, Oregon 97055

Meeting Date: Tuesday, February 18, 2020

Meeting Time: 7:00 PM



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1. WORK SESSION - 6:00 PM

1.1. Special District Alternatives

2. REGULAR MEETING - 7:00 PM

3. PLEDGE OF ALLEGIANCE

4. ROLL CALL

5. CHANGES TO THE AGENDA

6. PUBLIC COMMENT

7. PRESENTATION

7.1. Fiscal Year 2019 Financial Audit Presentation

7.2. Friends of Sandy Library Presentation

8. CONSENT AGENDA

8.1. City Council Minutes

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9. OLD BUSINESS

9.1. City Council Goals Adoption

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10. NEW BUSINESS

- 10.1. Transit Master Plan Draft 14
[Transit Master Plan Draft - Pdf](#)
- 10.2. Amendment to Existing Agreement for Engineering Services 15 - 47
[Amendments to the Existing Agreement for Engineering Services with Murraysmith - Pdf](#)

11. REPORT FROM THE CITY MANAGER

12. COMMITTEE /COUNCIL REPORTS

13. STAFF UPDATES

- 13.1. [Monthly Reports](#)

14. ADJOURN

15. CITY COUNCIL EXECUTIVE SESSION

The Sandy City Council will meet in executive session pursuant to ORS 192.660(2)(f) to consider information or records that are exempt by law from public inspection.



MINUTES
City Council Meeting
Monday, February 3, 2020 City Hall- Council Chambers, 39250
Pioneer Blvd., Sandy, Oregon 97055 6:00 PM

COUNCIL PRESENT: Stan Pulliam, Mayor, Jeremy Pietzold, Council President, John Hamblin, Councilor, Laurie Smallwood, Councilor, Jan Lee, Councilor, Carl Exner, Councilor, and Bethany Shultz, Councilor

COUNCIL ABSENT:

STAFF PRESENT: Jordan Wheeler, City Manager, Jeff Aprati, City Recorder, Tyler Deems, Finance Director, Tanya Richardson, Community Services Director, Mike Walker, Public Works Director, and Ernie Roberts, Police Chief

MEDIA PRESENT:

1. WORK SESSION WITH PARKS & TRAILS ADVISORY BOARD - 6:00 PM

1.1. Special District Discussion

Mayor Pulliam delivered opening remarks emphasizing everyone's shared commitment to quality parks, trails, and aquatics in Sandy. He stressed the value of the input the Parks and Trails Advisory Board provides to the Council. The Mayor recounted the history of the City's purchase of the Community Campus property, and the relative increase in public support for aquatics over the ensuing years. The Mayor indicated that attempting to gain access to the ballot through a petition process will be infeasible due to time limitations. It will thus be necessary to gain the support of the County Commission to put the question to voters in November 2020. The Mayor also cited the risk of pool support erosion if district formation is delayed.

Jordan Wheeler, City Manager, recapped the district formation information presented at the Council's work session on January 29. Staff produced budgetary estimates based on the cost of maintaining current operations (and opening the pool as-is) in the first year, and facility improvements by the third year. The estimates are based on a number of assumptions, which may need to be adjusted as the process moves forward. The tax rate necessary to support operations will depend on the specific district boundaries and configuration of services. The proposed district is also anticipated to be governed by a board elected by zones. It is unclear to what extent the future

board would choose to contract with the City for services or enter into intergovernmental agreements. The district borders being considered at this point largely mirror the Sandy Library service area, which includes approximately \$2 billion of assessed value. It is currently anticipated that the City would retain the annex building for future use as a community center, possibly with the use of urban renewal funds. The next step will be to conduct more polling regarding the specific rate and service configurations voters would support. The Council intends to avoid any overlap with the Hoodland community park effort; the Sandy district would be a project of regional significance and would need everyone's support.

Discussion

The Council invited the Parks and Trails Advisory Board's questions and feedback regarding the district formation project. The Board raised concerns regarding the limited time available before the ballot deadline, and the possible impact of devoting substantial staff time to the project given the other pressing needs of the City.

The Council explained the urgency stems from a desire to seize the momentum generated by the pool closing, which is likely to diminish over time along with public trust in the City's ability to resolve the situation satisfactorily.

Don Robertson, Board Member, emphasized the importance of robust public polling to gauge support, recounting the lessons learned from the formation of the North Clackamas Parks and Recreation District.

Kathleen Walker, Board Chair, raised concerns about the projected budgets and tax rates not including the variety of potential Community Campus amenities that were presented to respondents in the recent public surveys, which could negatively impact voter support.

Staff discussed the facility visioning and planning efforts developed by Opsis when the property was acquired by the City. The district budget estimates are built around the first phase of the Opsis plan only. Staff confirmed that the district would need to seek more revenue than is included in the budget estimates to develop any additional facilities. This could potentially be achieved through district revenue bonds. The City may also elect to contribute some of its urban renewal funds.

Concerns were raised over establishing a new governmental entity and possible duplication of functions and staffing, though decisions regarding

possible contracting for administrative services will be made by the future district board.

Susan Drew, Board Member, raised concerns about the relative amount of proposed spending directed toward aquatics rather than parks, which are in need of attention and resources.

Makoto Lane, Board Member, questioned what could prevent the sidelining of Sandy's priorities under the district zone system.

Kathleen Walker, Board Chair, suggested that a district proposal including only aquatics and recreation would minimize the risk of losing parks funding through dispersed priorities and resources.

Mayor Pulliam asked what the harm could be in sprinting toward the May deadline, even if the effort is unsuccessful. The City still will have learned a great deal and made progress toward the next effort. **Don Robertson, Board Member**, identified the risks as (1) the possible fallout from a failed ballot measure, or (2) a successful ballot measure that results in a district with inadequate funding due to incomplete preparation and analysis.

The Council emphasized that realization of the ambitions identified through the Parks Master Plan process would not be possible in a reasonable time frame without the resources that could be brought to bear by a special district.

Staff stated that if the ballot measure fails development of the Parks Master Plan can continue, and the City's existing urban renewal and SDC funds will still be available to allow the City to pursue future options.

Mayor Pulliam urged everyone to not underestimate the community. He invited Board members to attend the presentation of subsequent survey results and thanked them for their input.

2. **REGULAR MEETING - 7:30 PM**
3. **Pledge of Allegiance**
4. **Roll Call**
5. **Changes to the Agenda**
6. **Public Comment**

7. Consent Agenda

- 7.1. January 6, 2020 Council Meeting Minutes
- 7.2. January 13, 2020 Council Work Session Meeting Minutes
- 7.3. January 15, 2020 Council Goal Setting Minutes
- 7.4. January 29, 2020 Council Work Session Minutes
- 7.5. Parks and Trails Advisory Board Member Appointment

Staff Report - 0223

- 7.6. DEQ Planning Loan Amendment

Staff Report - 0222

Moved by Jan Lee, seconded by Bethany Shultz

Approval of the Consent Agenda

CARRIED.

8. Resolutions

- 8.1. Resolution 2020-01 Customer Assistance Program Rate for Sewer Service

Staff Report - 0220

Mike Walker, Public Works Director, indicated the City has received a number of inquiries from residents regarding the new wastewater rates, and several requests to enter a financial assistance program. Staff has already begun collecting applications. The program proposed to Council is based off existing programs in other local communities. Staff expects budgetary impacts to be minimal. The program would apply retroactively to the utility bill that has recently been sent out.

Councilor Hamblin asked about people who live in multi-family buildings and do not pay bills directly. Staff suggested that the program be revisited after 90 days to address special circumstances and unexpected consequences.

Council President Pietzold asked what the previous fee levels were, and whether the assistance program essentially returns subject customers to the previous levels. Staff confirmed this to be the case.

Councilor Exner asked about the amount of staff time dedicated to evaluating applications, and whether staff would be investigating claims for possible malfeasance. Staff responded that official tax documents would be examined, and beyond that due to staff capacity levels a reliance on the honor system will be necessary.

Moved by Bethany Shultz, seconded by Carl Exner

Staff Report - 0220

Approve Resolution 2020-01 amending the Master Fees and Charges Schedule

CARRIED.

9. New Business

9.1. City Recorder Appointment

Staff Report - 0221

Staff stated that the City Charter requires formal Council appointment of the City Recorder, and that Jeff Aprati was hired by the City to serve in that capacity.

Moved by John Hamblin, seconded by Jeremy Pietzold

Staff Report - 0221

Appoint Jeff Aprati as City Recorder

CARRIED.

9.2. DEQ Planning Loan Amendment

Though this item was approved on the consent agenda, staff explained that DEQ requires a separate motion.

Moved by John Hamblin, seconded by Jeremy Pietzold

Move to authorize the City Manager to sign the Amendment to the existing Loan Agreement and set aside funds in the Sewer Bond Reserve Fund annually in the amount of \$91,000 as a reserve for the loan.

CARRIED.

10. Report from the City Manager

Jordan Wheeler, City Manager, reported that the 10th anniversary of Sandy Area Metro transit is approaching, and current and former leaders are invited to the celebration. Proposals on the 362nd Drive project are due back Thursday. The February 18th Council meeting will involve development of next steps on special district polling, and the polling work group will need to convene afterward, ideally with **Don Robertson** included.

11. Committee /Council Reports

Councilor Shultz highlighted the January library task force meeting in Oregon City, as well as the recent childcare policy meeting, which included County officials, City staff, and community members. Representative Williams continues to be a great partner.

Councilor Exner pointed to the effective electronic communications from the Portland Water Bureau and suggested that Sandy could emulate their efforts to help explain the projects underway at the City and the challenges being faced. The mural outside City Hall is close to completion and reinstallation, and volunteers should be recognized.

Councilor Lee reiterated the invitation to the transit celebration, and indicated the childcare event was very successful.

Councilor Smallwood indicated the Parks TAC meeting resulted in similar stakeholder feedback to what was gathered in the Community Campus survey process. She expressed confidence in the Parks and Trails Advisory Board's newest member; only one more vacant position remains. She thanked the staff for all their efforts recently.

Council President Pietzold also thanked the staff. He pointed to a recent ransomware attack at Tillamook County, and emphasized the need to make electronic security a high priority.

Mayor Pulliam discussed his meetings at the recent US Mayors Conference, including with Oregon's US senators. Topics discussed included wastewater system funding and a Highway 26 bypass. He also discussed opportunities with other mayors to secure police grants. He stressed cooperation with the Hoodland Community Park group and the importance of inviting them to a future Council meeting. He also thanked the staff for their efforts.

12. Staff updates

12.1. [Monthly Reports](#)

13. Adjourn



Mayor, Stan Pulliam



City Recorder, Jeff Aprati

Draft



Staff Report

Meeting Date: February 18, 2020
From Jordan Wheeler, City Manager
SUBJECT: City Council Goals

Background:

The City Council held a work session on [January 15](#) to review progress on existing goals and set new Council goals for the 2019-21 biennium. The Council updated or added goals for transportation, urban renewal and economic development, communications, wastewater system facilities plan, sustainability, childcare, and affordable housing. The amended goals are attached for the Council's review.

Recommendation:

Review the modified City Council Goals for 2019-21, make changes, and adopt City Council Goals as amended.

Proposed Motion: Move to adopt the modified 2019-21 City Council Goals as amended.



2019-21 City Council Goals
(as amended 1/15/2020)

1. **Transportation. Improve the connectivity, mobility, and safety of the city's transportation network through planning and implementation of priority projects.**
 - Complete the Transportation System Plan update.
 - Implement plans for the extension of 362nd and Bell Street.
 - Complete a feasibility assessment of a Highway 26 bypass.
 - Continue to invest in multimodal options to provide choices for efficient means of travel.
 - Complete the transfer of jurisdiction of Highway 211 within city limits.

2. **City Finances. Sustainably manage the city's finances to ensure we meet the needs of our residents through the efficient and effective delivery of public programs and services.**
 - Establish a General Fund reserve policy.
 - Enhance the city's budget to be more accessible and understandable to the public.
 - Study options for generating additional revenue including cost recovery and alternative sources of funding.
 - Conduct a workshop on the Sandy Urban Renewal Plan.
 - Prioritize projects and develop a capital improvement plan for the Urban Renewal Agency.

3. **Sandy Community Campus. Make a decision on the future of the Sandy Community Campus (SCC).**
 - Implement a strategy, including a financing plan, for the ongoing operation and maintenance of the aquatic center.
 - Depending on the Council's decision on the aquatic center, begin the design and construction of the phase one improvements.
 - Adopt a plan for the SCC.
 - Conduct polling and consider placing a special district formation measure on the ballot.

4. Communications. Enhance the city's communications to its residents and public.

- Through the budget process, consider the creation of a city communications position.
- Actively communicate with the public, using existing staff capacity as effectively as possible. Implement a communications action plan that includes but is not limited to the following:
 - Redesign the City website.
 - Improve the City's social media strategy.
 - Develop a Sandy e-newsletter.
 - Develop a brochure or other related materials to promote tourism.
 - Electronically publicize proposed developments and annexations.

5. Comprehensive Plan. Initiate an update of the City's Comprehensive Plan.

- Review options and approve an implementation strategy to update the Comprehensive Plan. Depending on the implementation strategy, begin the public engagement process for the Comprehensive Plan update
- Complete and adopt or make progress on current city master plan updates including the Parks & Trails Master Plan, Transportation System Plan, Pleasant Street Master Plan, Water Master Plan, and Wastewater System Facilities Plan.

6. Wastewater System Facilities Plan. Begin necessary and essential improvements to the city's wastewater conveyance and treatment infrastructure.

- Select preferred alternative and adopt the Wastewater System Facilities Plan.
- Implement Phase 1 of the facilities plan.
- Complete the discharge alternatives analysis and amend the adopted Wastewater System Facilities Plan.
- Develop a legislative funding request for the 2021 Oregon Legislative Session.

7. Sustainability. Develop a resiliency action plan for the City of Sandy.

- Establish an ad hoc committee to begin discussing relevant policy ideas for An Action Plan for a Resilient and Green Sandy.

8. Childcare. Increase the availability of childcare services for Sandy residents.

- Hold a Council work session to develop strategies or programs for increasing the availability of childcare services.
- Participate in county-wide efforts to increase and support childcare services.

9. Affordable Housing. Study solutions to create more affordable housing options in Sandy.

- Invite County staff to brief the Council on affordable housing options.

10. Economic Development. Actively attract and recruit new businesses to Sandy.

- Develop an action plan for business recruitment and attraction for economic development.
- Continue convening the Ad Hoc Economic Development Committee for input into recruitment strategies and targeted industries.

DRAFT



Staff Report

Meeting Date: February 18, 2020
From Andi Howell, Transit Director
SUBJECT: Transit Master Plan Draft

Background:

Michelle Poyourow, Principal Associate with Jarrett Walker and Associates and the lead consultant with the Transit Master Plan will present the Transit Draft Plan.

The Transit Master Plan update began in late February 2019. To date, the Master Plan team have conducted stakeholder meetings, public outreach events, web surveys, an on-board survey, 2 presentations to the Planning Commission and 2 presentations to City Council.

The draft plan consists of existing conditions, potential service additions and changes, possible capital investments, future internal practices, plans related to the Transit Plan, Transit goals, policies and actions, financial scenarios and additional resources.

The Draft Plan documents (small version and print quality) can be found here:

<https://www.dropbox.com/sh/dl6ls1o70zr3alt/AABYohQtPDjV6l4LRxdDCjOGa?dl=0>

City Council will have until March 17 to submit comments before the Draft Plan moves into the final adoption phase.

Recommendation:

None.

Budgetary Impact:

None.



Staff Report

Meeting Date: February 18, 2020

From Mike Walker, Public Works Director
Amendments to the Existing Agreement for Engineering Services
SUBJECT: with Murraysmith

Background:

Before the holidays staff asked Murraysmith to develop a Scope of Work and Fee Estimate for the Detailed Discharge Alternatives Analysis for the Sandy River (aka Green Alternatives Analysis) and for the preliminary work necessary to complete a funding application for the existing WWTP Condition Assessment improvements.

The Detailed Discharge Alternatives Analysis will include review and analysis of options and locations for a Sandy River discharge (pipe in river, indirect discharge, wetlands treatment, treated water reuse, etc.); vetting of export alternatives (to Gresham WWTP or to Tri-Cities WWTP) and some preliminary water quality and temperature analysis necessary to begin the discharge permit process with DEQ. The estimated fee for these tasks is \$496,165. This work will be funded with the \$500K lottery bond proceeds allocation from the 2019 legislative session.

The other project consists of the environmental review work necessary to complete our SRF loan application with DEQ, submit another WIFIA loan application this summer, negotiate an acceptable overall project timeline with DEQ, and work to verify capacity in the collection system and pump stations. The estimated fee for these tasks is \$198,266. This work will be funded with the \$300K amendment to our existing SRF loan approved by the Council at their February 3rd meeting.

Staff consulted the City Attorney regarding the procurement process for these services and as long as the services are part of or amendments to the original agreement with Murraysmith, we can amend the agreement without going through a new procurement process.

Recommendation:

Authorize the City Manager to amend the existing agreement with Murraysmith to include the scope and fee for these two projects.

Budgetary Impact:

The Detailed Discharge Alternatives Analysis is funded with money from the Legislature on a reimbursement basis. There will be no impact to the Sewer Fund budget. The other work is funded with the amendment to our existing Planning loan with DEQ. The first

payment is not due until the next biennial budget cycle. Debt service for this loan is programmed into the current utility rate model and will be budgeted in the FY 21-23 budget cycle.

EXHIBIT B
SANDY WASTEWATER SYSTEM MASTER PLAN CONTINUING SUPPORT SERVICES
PROPOSED FEE ESTIMATE
CITY OF SANDY, OREGON

	LABOR CLASSIFICATION (HOURS)										Estimated Fees								
	PIC Principal Engineer V	PM Principal Engineer V	PE Professional Engineer IV	QA/QC Principal Engineer III	Staff Professional Engineer VII	Professional Engineer V	Staff Professional Engineer III	CAD Technician IV	Admin. III	Hours	Labor	Subconsultants		Subconsultant Multiplier	Subconsultant Total with Markup	Expenses	CADD Units \$18/hr	GIS Units \$10/hr	Total
	\$248 Hickey	\$248 Van Meter	\$153 Moman	\$228	\$182 Flowers	\$163 Murphy	\$149 Cawley	\$148 Estep	\$105	PHS		ISI							
Task 1 - Project Management																			
Task 1.1 - Team Management and Coordination	8	16							8	32	\$ 6,792			1.1	\$ -	\$ 50	\$ -	\$ -	\$ 6,842
Task 1.2 - Monthly Project Status Reports and Invoices (8 invoices)	8	8	16						16	48	\$ 8,096			1.1	\$ -	\$ 75	\$ -	\$ -	\$ 8,171
Task 1 Subtotal	16	24	16	0	0	0	0	0	24	80	\$ 14,888	\$ -	\$ -		\$ -	\$ 125	\$ -	\$ -	\$ 15,013
Task 2 - WSFP Continuing Support Services																			
Task 2.1 - Continuing DEQ MAO Renegotiation Support Services	2	16	24						4	62	\$ 10,940			1.1	\$ -	\$ 100	\$ -	\$ -	\$ 11,040
Task 2.2 - Project Funding Technical Support Services	2	12	24						8	106	\$ 16,924			1.1	\$ -	\$ 25	\$ -	\$ -	\$ 16,949
Task 2.3 - Environmental Review and Cross-Cutters for CWSRF Funding	2	12	16						6	60	\$ 10,126	\$ 26,125		1.1	\$ 28,738	\$ 500	\$ -	\$ -	\$ 39,364
Task 2.4 - Existing WWTP Immediate Needs Upgrades PreDesign Report	4	12	28	4	28				8	328	\$ 49,148		\$ 16,000	1.1	\$ 17,600	\$ 50	\$ 1,152	\$ -	\$ 67,950
Task 2.5 - Collection System Hydraulic Model Update TM-1	2	8	4	4	2	120			4	176	\$ 29,108			1.1	\$ -	\$ 65	\$ -	\$ -	\$ 29,173
Task 2.6 - Flow Data Collection Assistance	2	4	16						4	46	\$ 7,512			1.1	\$ -	\$ 165	\$ -	\$ -	\$ 7,677
Task 2.7 - Pump Station Upgrades Recommendations Review TM-2	2	8	16	4	2	8			4	64	\$ 10,900			1.1	\$ -	\$ 200	\$ -	\$ -	\$ 11,100
Task 2 Subtotal	16	72	128	12	32	128	272	84	34	842	\$ 134,658	\$ 26,125	\$ 16,000		\$ 46,338	\$ 1,105	\$ 1,152	\$ -	\$ 183,253
TOTAL - ALL TASKS	32	96	144	12	32	128	272	84	58	922	\$ 149,546	\$ 26,125	\$ 16,000		\$ 46,338	\$ 1,230	\$ 1,152	\$ -	\$ 198,266



February 10, 2020

Mr. Mike Walker
Public Works Director
City of Sandy
39250 Pioneer Boulevard
Sandy, OR 97055-8001

Re: Proposal for Sandy River Detailed Discharge Alternatives Study

Dear Mr. Walker:

Please find attached Murraysmith's proposal for the Sandy River Detailed Discharge Alternatives Study, also known as the "Green Discharge Study", completion of which was requested by Sandy City Council as part of the adoption of the Sandy Wastewater System Facilities Plan (WSFP) Recommended Plan. Following is an overview of our proposed Scope of Work, Budget and Schedule.

Scope of Work Overview

The Scope of Work, included as Exhibit A, includes support services related to further refinement and definition of the WSFP Recommended Plan as the Draft WSFP is finalized. The following tasks are included in the Scope of Work:

- Task 1** – Project Management
- Task 2** – Alternative Wastewater System Connection Options
- Task 3** – Sandy WWTP Basis of Design
- Task 4** – Sandy River WQ Data Collection and Temperature Evaluation
- Task 5** – Sandy River Outfall Siting Study
- Task 6** – Water Recycling Market Assessment
- Task 7** - Indirect Discharge Alternatives Evaluation
- Task 8** – Sandy River Outfall Anti-Degradation Evaluation
- Task 9** – Final Documentation and Presentations

Budget

Murraysmith's proposed project budget is **\$496,165** as summarized in Exhibit B consistent with the funding obtained by the City from the Oregon State Legislature for completion of the "Green Alternatives Study" requested by City Council as condition of the approval and adoption of the WSFP Recommended Plan in October 2019.

Schedule

It is anticipated the project will be complete in nine (9) months. A detailed project schedule will be developed early in the project and coordinated with the City and DEQ to assure key milestone dates meet the requirements of the City's Mutual Agreement and Order (MAO), which is currently being renegotiated with the Oregon Department of Environmental Quality.

Thank you for the opportunity to continue working in this important project for the City of Sandy. Our team is available and ready to begin immediately following Notice-to-Proceed from the City.

Sincerely,

MURRAYSMITH



Matt Hickey, PE
Principal-in-Charge

MURRAYSMITH



Preston Van Meter, PE
Project Manager

PLVM:mrs

Enclosures:

Exhibit A Scope of Work
Exhibit B Budget

EXHIBIT A

SCOPE OF WORK

DETAILED DISCHARGE ALTERNATIVES EVALUATION

CITY OF SANDY, OREGON

Introduction

The City of Sandy (City) Detailed Discharge Alternatives Study provides for a comprehensive evaluation of discharge alternatives building on the adopted Recommended Plan contained in the City’s Wastewater System Facilities Plan (WSFP) dated January 2019 and adopted by the Sandy City Council in October 2019. In addition to rehabilitation of the City’s sewer collection system and upgrades at the existing Wastewater Treatment Plant (Existing WWTP), the WSFP Recommended Plan includes the construction of the Eastside Membrane Bioreactor Satellite Treatment Facility (Eastside MBR Facility) and diversion pump station along with a new year-round Sandy River Outfall.

The goal of the Detailed Discharge Alternatives Evaluation Project, otherwise known as the “Green Discharge Study” is to identify other discharge options in lieu of or in combination with a direct year-round discharge as proposed in the WSFP Recommended Plan. This Scope of Work includes the following tasks:

- Task 1 – Project Management
- Task 2 – Alternative Wastewater System Connection Options
- Task 3 – Sandy WWTP Basis of Design
- Task 4 – Sandy River WQ Data Collection and Temperature Evaluation
- Task 5 – Sandy River Outfall Siting Study
- Task 6 – Water Recycling Market Assessment
- Task 7 - Indirect Discharge and Roslyn Lake Alternatives Evaluation
- Task 8 – Sandy River Outfall Anti-Degradation Evaluation
- Task 9 – Final Documentation and Presentations

Following is a detailed breakdown of the tasks and Tasks that comprise the Scope of Work, which aligns with the tasks included in the Fee Estimate included as **Exhibit B**.

Task 1 Project Management

The objective of the Project Management task is to lead the project team to deliver the project relative to schedule and budget constraints. As part of this task, Murraysmith will coordinate team activities and prepare Monthly Project Status Reports with invoices for review and approval.

Task 1.1 Team Management and Coordination

Task includes coordination of activities of Murraysmith's internal team and sub-consultants throughout the project. Activities will include initial contracting, coordination of field activities, check-in calls as needed and other activities to assure the project is delivered on budget and schedule.

Task 1.2 Bi-Weekly Conference Calls

Participate in regularly scheduled, bi-weekly conference calls. Calls are anticipated to be about one-hour duration and will be attended by Murraysmith's Principal-in-Charge, Project Manager and one staff engineer.

Task 1.3 Monthly Project Status Reports and Invoices

Included in this Task are monthly invoicing, budget and schedule review, updates, and general administrative tasks. The project will be managed to maintain the scope, schedule, and budget. A monthly project status report will be prepared providing updates on current completion status, outstanding issues, out-of-scope work items, and other issues to be addressed.

Task 1 Deliverables

1. Electronic (PDF) copies of Monthly Project Status Reports with invoices for services provided.

Task 1 Assumptions

- A. Bi-weekly conference calls will not involve travel to the City.
- B. Project duration is assumed to be approximately nine (9) months; therefore, 9 Monthly Progress Reports are included in the Scope of Work.
- C. Eighteen (18) bi-weekly conference calls are budgeted assuming a duration of 1 hour. Bi-weekly conference calls will be attended by Murraysmith's Principal-in-Charge (PIC), Project Manager and one staff engineer.

- D. All cost estimates developed as part of the project will be AACE (Association for the Advancement of Cost Engineering) Level 5 planning-level estimates with a range of accuracy of -30% to +40%.

Task 2 Alternate Wastewater System Connection Options

Develop options, alignments and costs for pumping raw wastewater from the City of Sandy to Clackamas County Water Environment Services (WES) or the City of Gresham for treatment. These options would effectively convert the City's existing WWTP to a pump station with wastewater treatment provided by another wastewater agency.

Task 2.1 Meetings with WES and Gresham

Schedule and conduct meetings with representatives from Clackamas County WES and the City of Gresham to discuss the availability of capacity and potential capitalization costs associated with accepting, treating and discharging the City's raw wastewater. As part of each task, correspondence will be obtained from each agency documenting the terms on which connection of the City of Sandy to each system.

For budgetary purposes, two meetings with each agency are assumed including an introductory discussion and a follow-up discussion to review details and costs.

Task 2.2 Alternate Wastewater System Connection Alternatives Evaluation

Develop alternatives, including preliminary pipeline alignments and costs, for pumping and transmission of raw wastewater from the City of Sandy to either WES or Gresham. Preliminary pump station sizing will be developed for each alternative. Connection requirements for the pipeline connection to an alternate sewer collection system or WWTP will be included in the cost estimates. It is assumed two alternatives will be developed for both WES and Gresham connections. Capital and 20-year lifecycle costs will be developed for each alternative.

For budgetary purposes, it is assumed two pipeline alignments will be developed for both the connection to Clackamas County WES and the City of Gresham based on feedback from the initial discussions with each agency.

Task 2.3 Alternate Wastewater System Connection Options Technical Memorandum

Prepare the Sandy Alternate WWTP Pumping Alternatives Technical Memorandum (TM-3) summarizing the pumping alternatives, pipeline alignment drawings, capital and lifecycle costs and connection/capitalization costs for each alternative. TM-3 will include correspondence and summaries of meetings with WES and Gresham. Costs for each alternative will include

capitalization and treatment costs for connection to an alternate treatment facility provided by WES and Gresham.

Task 2 Deliverables

1. One electronic (PDF) copy of meeting agendas and minutes from meetings with Clackamas County WES and the City of Gresham.
2. One electronic (PDF) copy of Draft Sandy Alternate WWTP Pumping Alternatives TM-3.
3. Three hard copies and one electronic (PDF) copy of Final Sandy Alternate WWTP Pumping Alternatives TM-3 incorporating City comments.

Task 2 Assumptions

- A. City staff will take the lead in scheduling meetings with Clackamas County WES and the City of Gresham.

Task 3 Sandy Wastewater Treatment Facilities Basis of Design

Develop the Basis of Design for Diversion Pump Station and Eastside Satellite MBR Facility and evaluate the City's Existing WWTP process design assuming flows both facilities are operated year-round and flows are split between both facilities. Develop monthly flow and load projections for the both treatment facilities in 5-year increments, develop the preliminary process design for the Eastside Satellite MBR Facility and evaluate the biological process for the Existing WWTP using the biological process model developed by Murraysmith as part of the WSFP. The location of the planned Diversion Pump Station will be evaluated as part of this task.

Task 3.1 Existing and Satellite WWTP Flow and Load Projections

Prepare monthly flow and load projections in 5-year increments for the City's existing WWTP and Eastside MBR Facility based on the preliminary location of the collection system diversion pump station as well as monthly DMR data and modeled collection system flows. The incremental flow and load projections will assume the recommended Phase 1 collection system rehabilitation work is being implemented and successfully reducing peak wastewater flows to both facilities, as captured by continuing flow monitoring being implemented by the City.

Flows for each facility will include current and project monthly average and peak flows for 2020, 2025, 2030, 2035 and 2040. Wastewater characterization data for the existing WWTP collected in preparation of the Sandy WSFP will be utilized for evaluations of both treatment facilities.

Task 3.2 Existing WWTP Biological Process Design Review

Use monthly flow and load projections from Task 4.1, WQ characterization and Murraysmith's biological process model to evaluate treatment capacity and performance on a monthly basis for

the Existing WWTP for the 20-year planning horizon. The process evaluation will investigate potential concerns early in the planning period associated with splitting flows between the two treatment facilities and identify potential challenges associated with the current plant to operate both treatment facilities year-round.

Task 3.3 Collect Reference MBR Facility Effluent Quality Data

Collect reference MBR effluent quality data from various sources to support development of anticipated effluent quality from the Eastside Satellite MBR Facility that would be discharged to the Sandy River. These data will be obtained by contacting MBR equipment suppliers and representatives and from direct contact with other communities with MBR facilities who would be willing to provide several years of water quality data from MBR facilities. Data collected will include information on the biological process design, as well as influent and effluent flow and water quality. It is not anticipated that sampling and testing of effluent at reference facilities will be required in collecting reference WQ data.

Task 3.4 Preliminary Eastside MBR Facility Biological Process Design

Prepare conceptual layouts for the Eastside Satellite MBR Facility based on the flow and load projections prepared in Task 4.1 and complete preliminary biological process modeling to determine estimated effluent water quality characteristics for the facility based on the biological process upstream of the membranes. The biological process design will summarize estimated effluent water quality for BOD, ammonia-nitrogen, nitrate-nitrogen, total nitrogen, phosphorus and other water quality characteristics to be treated biologically in the facility.

Task 3.5 WWTP Basis of Design Workshop

Conduct workshop with City staff to review the Basis of Design (BOD) for the Existing WWTP and Eastside Satellite MBR Facility. Review estimated flows and loads for both facilities, anticipated treatment performance, effluent quality based on WWTP flows and loads and biological process modeling for both treatment facilities, unit process design data and process schematics for both treatment facilities, design criteria and key issues and challenges to be considered for each facility (e.g. year-round operation of both facilities in the near-term). The workshop presentation will present information to be included in the WWTP Basis of Design Technical Memorandum

Task 3.6 WWTP Basis of Design Technical Memorandum

Prepare the Sandy WWTP Basis of Design Technical Memorandum (TM-4) summarizing incremental flow and load projections for the Existing WWTP and Eastside Satellite MBR Facility, biological process evaluation of the Existing WWTP, preliminary biological process design for the Eastside Satellite MBR Facility and related design criteria required for further investigation of discharge alternatives.

Task 3 Deliverables

1. One electronic (PDF) copy of meeting agendas and minutes for the WWTP Basis of Design Workshop.
2. One electronic (PDF) copy of Draft Sandy WWTP Basis of Design TM-4.
3. Three hard copies and one electronic (PDF) copy of Final Sandy WWTP Basis of Design TM-4 incorporating City comments.

Task 3 Assumptions

- A. The WWTP Basis of Design Workshop will be held at Murraysmith's Portland office.

Task 4 Sandy River WQ Data Collection & Discharge Temperature Compliance Evaluation

Collect temperature and water quality data on the Sandy River and assess temperature compliance based on river and effluent temperature data from the City's existing WWTP. Prepare the Sandy River Outfall Temperature Compliance Evaluation TM updating temperature evaluations completed as part of the WSFP. This evaluation will be a key component of the detailed river discharge alternatives evaluation.

Task 4.1 Sandy River Ambient Temperature Monitoring Program

Murraysmith and Waterways Consulting will provide continuous temperature monitoring in the Sandy River from approximately April through October 2020. Actual timing of data collection is dependent upon river flows. Thermistors will be placed at four locations in the Sandy River in proximity to the City's currently proposed outfall location at Sandy River Park. Temperature monitoring locations include:

1. Approximately one river mile upstream of Sandy River Park;
2. Sandy River Park upstream of Cedar Creek;
3. Sandy River Park downstream of Cedar Creek; and
4. Approximately one river mile downstream of Sandy River Park.

Data will be collected from thermistors on a quarterly basis, after which data will be reviewed (QC) and temperature charts showing ambient river temperature compared with temperature standard requirements will be prepared. Summary tables and charts highlighting Sandy River temperatures will be prepared following each data download.

Task 4.2 Sandy River Outfall Temperature Compliance Evaluation Technical Memorandum Update

Prepare the Sandy River Temperature Evaluation Technical Memorandum (TM-5), which will be updated from the original TM prepared in a previous phase of the project. The evaluation will utilize the Sandy River temperature data collected as part of Task 5.1 as well as estimated Eastside Satellite MBR Facility monthly effluent flows and temperatures developed in Task 4.1. TM-5 will include an estimate of monthly excess thermal loads proposed to be discharged to the Sandy River from the Eastside Satellite MBR Facility, comparing the excess thermal load against the Sandy River Temperature TMDL temperature reserve allocation. The evaluation will be based on historical temperatures from the City's Existing WWTP.

Task 4.3 Sandy River Ambient WQ Sampling and Testing Program

The proposed Sandy River ambient water quality sampling and testing program will provide detailed information on existing river characteristics in support of the preparation of the Anti-Degradation Evaluation for the City's new Sandy River outfall. The WQ data collection is based on near- and long-term goals as follows:

- **Near-Term Goal:** conduct river water quality sampling and testing events once per month in August, September and October of 2019 during low flows to establish a strong baseline of WQ data for the initial anti-degradation evaluation. Two of these events are complete, so only one WQ sampling event is included in this Scope and the associated budget.
- **Long-Term Goal:** continue monitoring river water quality through quarterly sampling events in 2020 and 2021 to validate assumptions in the river anti-degradation evaluation. Four river sampling events will be conducted each year. Two of these long-term events are included in the Scope and associated budget since the project duration is 9 months.

Testing is being conducted both upstream and downstream of Cedar Creek, allowing an assessment of the impact of the Cedar Creek fish hatchery seasonally on Sandy River water quality.

The WQ parameters recommended to be monitored on the Sandy River is summarized the Sandy River Anti-degradation Evaluation WQ Sampling and Testing Program Technical Memorandum prepared by Murraysmith and dated August 7, 2019.

Near-term and partial Long-term Sandy River WQ data will be reviewed and summarized in the Sandy River WQ Sampling and Testing Program Data Compilation Technical Memorandum (TM-6).

Task 4.4 DEQ Review Meeting

Provide copies of TM-5 and TM-6 to Oregon DEQ for review and conduct a meeting with DEQ staff to discuss temperature compliance as well as the potential for the City to utilize a portion of the Sandy River TMDL temperature reserve allocation in support of a new Sandy River outfall. The

meeting will include a discussion of permitting requirements and next steps to be followed as the formal permitting process for the new outfall is implemented.

Task 4 Deliverables

1. Agenda and minutes from the DEQ Review Meeting to discuss temperature compliance and the new Sandy River outfall.
2. One electronic (PDF) copy of Sandy River ambient river temperature data tables and charts from the four temperature monitoring locations.
3. One electronic (PDF) copy of Draft Sandy River Outfall Temperature Compliance Evaluation TM-5.
4. Three hard copies and one electronic (PDF) copy of Final Sandy River Outfall Temperature Compliance Evaluation TM-5 incorporating City comments.
5. One electronic (PDF) copy of Draft Sandy River WQ Sampling and Testing Program Data Compilation TM-6.
6. Three hard copies and one electronic (PDF) copy of Final Sandy River WQ Sampling and Testing Program Data Compilation TM-6 incorporating City comments.

Task 4 Assumptions

- A. City staff will coordinate and schedule the meeting with DEQ, which will be held in the Portland DEQ office.
- B. Outfall permitting activities are not included in this task.

Task 5 Sandy River Outfall Siting Study

Complete a stream survey on the Sandy River in the vicinity of the City of Sandy to identify potential locations for the new outfall from the Eastside Satellite MBR Facility. For potential outfall locations, develop pipeline alignments along with capital and lifecycle costs. Three potential outfall alignments will be carried forward for further investigation.

Task 5.1 Sandy River Stream Survey

Complete a stream survey of the Sandy River from approximately the City's Sandy River Park upstream to bridge at Ten Eyek Road. The stream survey will identify potential outfall locations in the river recommended for further investigation. Key considerations will include channel stability; flood extent; river depth; fish habitat; recreational fishing areas; general constructability and hydraulic conditions to promote mixing.

Prior to the field survey, the following background information sources will be reviewed: Flood Insurance Rate Maps (FEMA); Sandy River channel migration zone study (DOGAMI); and, previous biological studies and creel reports (ODFW). Following review, the Sandy River will be characterized in the study reach and potential river outfall locations will be identified and ranked. This field survey will provide a basic characterization of the potential sites, including:

- Specific observation for geomorphic processes
- Riverbank stability and instability
- sediment transport
- hydraulic conditions
- fish habitat and high fishing use areas

Task 5.2 Outfall Siting Desktop Study

Complete a desktop study to evaluate the suitability of the potential outfall sites identified during the field survey. Desktop analyses will include:

- Historic aerial photograph analysis to inform river dynamics and stability (instability) through time.
- Biological desktop analysis to identify areas of prime fish use and habitat (if appropriate, may include communication with ODFW and local watershed and fisheries groups to better understand key fish habitats).
- Geomorphic and terrain analysis – Valley and floodplain terrain documented in existing high-resolution LiDAR data) will be key to informing relative feasibility of the considered outfall locations.
- Hydraulics analysis will include evaluation of existing information such as river bathymetry, hydraulic models, and seasonal hydrology in the river relative to the annual production of wastewater. The team will also generally evaluate channel migration and river sediment dynamics to inform relative stability at the considered sites.

Three (3) preferred Sandy River outfall locations will be identified as part of the stream survey and desktop study for further evaluation. One outfall location will be on City-owned property at Sandy River Park and two other outfall locations will be identified. Drone imagery for each site will be provided in a seamless aerial, high-resolution image.

Task 5.3 Develop Outfall Pipeline Alignments and Costs

Preliminary pipeline alignments will be developed from the Eastside Satellite MBR Facility site to the three preferred Sandy River outfall locations. These locations will include the currently proposed location at Sandy River Park and two other locations identified during the stream survey and desktop study. In addition, two pipeline alignments will be developed for delivering water from the Eastside Satellite MBR Facility to Roslyn Lake: These include the following:

1. Under the Sandy River via Sandy River Park; and
2. Easterly and over the bridge or under the river at Ten Eyck Road.

For each alternative and pipeline alignment, developed estimated capital and 20-year lifecycle costs. Capital cost estimates will include effluent pump station, pipeline and river outfall costs. 20-year Lifecycle costs will include annual pumping costs, equipment O&M and replacement.

Task 5.4 Sandy River Watershed Council Meetings

Meet with representatives from the Sandy River Watershed Council as part of the outfall siting study to discuss potential options along the study corridor for potentially installing a new river outfall. Two meetings with the Sandy River Watershed Council are assumed, including one at the start of the outfall siting study and one at the end to present findings and recommendations resulting from the study.

Task 5.5 Sandy River Outfall Siting Study Workshop

Conduct workshop with City staff to review the Sandy River outfall stream survey and desktop study, pipeline alternatives and costs for the new outfall and Roslyn Lake alternatives and associated recommendations to be summarized in a technical memorandum.

Task 5.6 Sandy River Outfall Siting Study Technical Memorandum

Prepare the Sandy River Outfall Siting Study Technical Memorandum (TM-7) summarizing the Sandy River stream survey and desktop study, field observations, pipeline alignments for three Sandy River outfall alternatives and two Roslyn Lake alternatives, along with capital and 20-year lifecycle costs for each alternative. TM-7 will include a recommendation for the preferred Sandy River outfall location.

Task 5 Deliverables

1. One electronic (PDF) copy of the agenda and minutes from the Sandy River Outfall Siting Workshop.
2. One electronic (JPG or GIF) copy of the aerial images for the three preferred outfall locations identified in the siting study.
3. One electronic (PDF) copy of meeting agendas and minutes from two (2) meetings with the Sandy River Watershed Council.
4. One electronic (PDF) copy of Draft Sandy River Outfall Siting Study TM-7.
5. Three hard copies and one electronic (PDF) copy of Final Sandy River Outfall Siting Study TM-4 incorporating City comments.

Task 5 Assumptions

- A. City will assist in obtaining background information from outside agencies, if required.
- B. City will assist in scheduling meetings with the Sandy River Watershed Council, which will be held in the City of Sandy.
- C. City to assist in any negotiations required for the project team to gain access to the Sandy River study reach.

Task 6 Water Recycling Market Assessment

Conduct an evaluation of potential options and opportunities to expand the City's successful water recycling program associated with both the Existing WWTP and the new Eastside Satellite MBR Facility. The evaluation will include a desktop study of potential water recycling customers and uses, outreach to property and business owners to gauge interest and an assessment of potential demands. The study area will focus on opportunities near the existing WWTP and Iseli Nursery, as well as along preferred pipeline alignments from the Eastside Satellite MBR Facility to preferred discharge locations.

Task 6.1 Water Recycling Program Customer Outreach

Conduct outreach to potential water recycling customers to expand the City's existing WWTP Class B Water Recycling Program and to expand the program to include Class A Water Recycling from the Eastside Satellite MBR Facility along potential pipeline alignments identified in a separate task. Customer outreach activities will include:

- **Prepare Talking Points:** Develop information and talking points for potential water recycling customers about the City's water recycling program and opportunities with a goal of attracting interest from farmers and other potential customers.
- **Characterize Potential Customers:** Gather data to characterize potential water recycling customers and demands in proximity to current customers and preferred outfall pipeline alignments. Priority will be considered by assessing factors such as the current water demand quantity, timing of demands, water costs and other factors.
- **Inventory Current Water Sources:** Evaluate current water sources available to landowners in proximity to current Class B Recycled Water customers and preferred outfall pipeline alignments that could be augmented with Class A Recycled Water. The inventory will identify the primary existing water sources used by irrigators along pipeline alignments, reliability of those water sources and the potential for recycled water to be used for expansion of existing water sources.
- **Customer Interviews:** Interview up to 15 potential water recycling customers to identify issues and opportunities for using recycled water produced by the City's existing WWTP

and the Eastside Satellite MPB Facility. Interviews will include local farmers along potential outfall pipeline routes, organizations such as the Oregon Farm Bureau, conservation agencies, local soil and water conservation districts, irrigation equipment supply companies, Oregon State University Extension agents, researchers, watershed councils and other interested parties.

Task 6.2 Water Recycling Opportunities Mapping

Based on customer outreach responses, quantify potential water recycling demands on a monthly basis by developing a map consolidating potential customer interest in a final report summarizing potential customers, recycled water demand, timing of demands, cost sensitivity and other factors identified during the customer outreach process. The mapping will be used to identify options to serve potential customers as part of a cost-benefit analysis.

Task 6.3 Water Recycling Opportunities Cost-Benefit Analysis

Based on customer outreach responses, quantify potential water recycling demands on a monthly basis based on customer outreach efforts. Water recycling demands will be calculated on a monthly basis for the existing WWTP and Eastside Facility. Options for providing recycled water to potential customers will be evaluated including pumping requirements, pipeline alignments, permitting and other requirements. Capital and 20-year lifecycle costs will be estimated for providing service to four “major” customers or areas associated with the existing WWTP and Eastside MBR Facility.

Task 6.4 Water Recycling Market Assessment Technical Memorandum

Prepare the Sandy River Outfall Alternatives Technical Memorandum (TM-8) summarizing the Sandy River stream survey and desktop study, field observations, pipeline alignments for three Sandy River outfall alternatives and two Roslyn Lake alternatives, along with capital and 20-year lifecycle costs for each alternative. TM-8 will include a recommendation for the preferred Sandy River outfall location and a preferred alignment for a pipeline to Roslyn Lake.

Task 6 Deliverables

1. One electronic (JPG or GIF) copy of the map showing potential water recycling opportunities near existing customers or along preferred outfall alignments for the Eastside Satellite MBR Facility.
2. One electronic (PDF) copy of Draft Sandy Water Recycling Market Assessment TM-8.
3. Three hard copies and one electronic (PDF) copy of Final Sandy Water Recycling Market Assessment TM-8 incorporating City comments.

Task 6 Assumptions

- A. City to assist in any negotiations required for the project team to gain access to the Sandy River study reach.

Task 7 Indirect Discharge and Roslyn Lake Alternatives Evaluation

Conduct an evaluation of options to implement seasonal or year-round indirect discharge as part of the project. Options to be evaluated will include infiltration basins with shallow groundwater discharge, hyporheic discharge along the Sandy River or other stream corridors, constructed treatment wetlands and evaporation ponds.

Task 7.1 Indirect Discharge Overview and Regulations Technical Memorandum

Review and summarize potential in the Indirect Discharge Overview and Regulations Technical Memorandum (TM-9) summarizing indirect discharge options and regulatory requirements for indirect discharges including hyporheic discharge to shallow groundwater connected to the Sandy River, infiltration ponds to discharge to shallow groundwater further away from the Sandy River, “leaky” wetlands and other potential options. Summarize potential indirect discharge options in proximity to preferred outfall pipeline alignments, identify regulatory requirements for potential options and conduct a high-level screening of indirect discharge options to be considered as part of the indirect discharge evaluation.

Task 7.2 Indirect Discharge Desktop Study

Complete a desktop study to evaluate potential opportunities for indirect discharge of Class A Recycled Water produced by the Eastside Satellite MBR Facility through include hyporheic discharge to the Sandy River, groundwater infiltration ponds, “leaky” wetlands or other opportunities in proximity to the Sandy River. The desktop study will include:

- Review of historic aerial photographs used in the outfall siting study to identify potential options for hyporheic river discharge in the defined Sandy River study corridor.
- Review of soil survey maps, well logs, anecdotal and other information to identify potential opportunities for constructing infiltration basins for discharge to shallow groundwater.
- Discussions with the local soil and water conservation service, watershed council representatives and other local groups with knowledge of local soil conditions and opportunities.
- Hydraulic analysis will development of annual or seasonal water balances for up to 3 indirect discharge options identified, not including Roslyn Lake alternatives. Groundwater

analyses will be conducted at each potential indirect discharge site to identify capacity and potential discharge constraints.

Task 7.3 Roslyn Lake Alternatives Evaluation

Meet with the current owners of the property including the former Roslyn Lake site to discuss options for utilizing the former lakebed as part of the City's planned discharge from the Eastside Satellite MBR Facility. Options to be considered will include infiltration ponds, constructed treatment wetlands and "leaky" wetlands.

Task 7.4 Develop Roslyn Lake Pipeline Alignments and Costs

Preliminary pipeline alignments will be developed from the Eastside Satellite MBR Facility site to Roslyn Lake. Two potential pipeline alignments to Roslyn Lake will be developed:

1. Under the Sandy River via Sandy River Park; and
2. Easterly and over the bridge at Ten Eyck Road.

Task 7.5 Roslyn Lake Treatment Wetlands Conceptual Plan

Develop a conceptual plan for a potential treatment wetlands complex developed using all or a portion of the lakebed of what was formerly Roslyn Lake and utilizing Class A Recycled Water from the Eastside Satellite MBR Facility. The conceptual plan will include shallow wetlands for cooling effluent along with potential infiltration ponds, a infiltration ponds, evaporation ponds, "leaky" wetlands, similar to the Fernhill Wetlands owned and operated by Clean Water Services will be developed.

Task 7.6 Indirect Discharge Alternatives Cost-Benefit Analysis

Conduct a cost-benefit analysis for up to four indirect discharge alternatives, including one to evaluate a potential treatment wetland complex at Roslyn Lake. Demands for each alternative will be quantified on a monthly basis. Options for providing recycled water to potential customers will be evaluated including pumping requirements, pipeline alignments, permitting and other requirements. Capital and 20-year lifecycle costs will be estimated for each alternative.

Task 7.7 Property Owner Outreach and Meetings

Meet with potential property owners to discuss potential indirect discharge site development. Five property owner meetings are included in the scope, including two meetings with the current owners of Roslyn Lake. For budgetary purposes, 4 half-day site visits are assumed attended by Murraysmith's Project Manager and Staff Engineer.

Task 7.8 Indirect Discharge Alternatives Workshop

Conduct workshop with City staff to review the indirect discharge alternatives regulations, desktop study findings, Roslyn Lake alternatives and concept plan and review results of the indirect discharge cost benefit analysis. The workshop presentation will summarize information included in the Indirect Discharge Alternatives Technical Memorandum.

Task 7.9 Indirect Discharge Alternatives Technical Memorandum

Prepare the Indirect Discharge Alternatives Technical Memorandum (TM-10) summarizing indirect discharge options and regulations, potential indirect discharge options and the Roslyn Lake Treatment Wetland Concept Plan, cost benefit analyses for various indirect discharge options and other information pertinent to the study.

Task 7 Deliverables

1. One electronic (PDF) copy of meeting agendas and minutes Indirect Discharge Alternatives Workshop.
2. One electronic (PDF) copy of meeting agendas and minutes from up to five (5) meetings with property owners to discuss indirect discharge site development.
3. Two full-size (22x24) copies, five half-size (11x17) copies and one electronic (PDF) copy of the Roslyn Lake Treatment Wetlands Concept Plan.
4. One electronic (PDF) copy of the Draft Indirect Discharge Overview and Regulations Technical Memorandum (TM-9).
5. Three hard copies and one electronic (PDF) copy of the Final Indirect Discharge Overview and Regulations Technical Memorandum (TM-9).
6. One electronic (PDF) copy of the Draft Indirect Discharge Alternatives Technical Memorandum (TM-10).
7. Three hard copies and one electronic (PDF) copy of Final Indirect Discharge Alternatives Technical Memorandum (TM-10).

Task 7 Assumptions

- A. City to assist in coordinating meetings with potential indirect discharge property owners.

Task 8 Sandy River Outfall Anti-Degradation Evaluation

Conduct an anti-degradation evaluation associated with potential discharge scenarios for the proposed new Sandy River outfall and as investigated hroughout the project. Discharge scenarios

will consider up to four river discharge scenarios based on the potential alternate demands identified for recycled water or indirect discharge. Utilize information and evaluations summarized in previous tasks to complete the Reasonable Potential Analysis (RPA) and Anti-degradation evaluations, such as anticipated effluent quality from the Eastside Satellite MBR Facility (Task 4), Sandy River WQ data (Task 5), preferred outfall locations (Task 6). Consolidate all information and complete evaluations in accordance with Oregon DEQ requirements. Lastly, present findings to Oregon DEQ in a workshop and prepare a technical memorandum.

Task 8.1 Develop Sandy River Discharge Scenarios

Develop up to four (4) direct and indirect discharge flow scenarios from the Eastside Satellite MBR Facility based on the results of the Sandy River WQ Data (Task 5), water recycling market assessment (Task 7) and indirect discharge alternatives evaluation (Task 8). Flows and loads for all four scenarios will be developed on a monthly basis. Discharge scenarios may consider year-round or seasonal Sandy River discharge in the near and long-term. Long-term considerations will also be given the future plan to pump flows from the Existing WWTP to the new Sandy River outfall.

Task 8.2 Sandy River Discharge Alternatives Development

Identify all potential direct and indirect discharge alternatives from the Eastside Satellite MBR Facility. It will be assumed that the treatment facility will produce Class A Recycled Water to maximize potential for recycling and indirect discharge. Up to 10 alternatives will be developed incorporating direct Sandy River discharge, indirect discharge and water recycling as informed by previous completed tasks. Alternatives will be developed around the discharge flow scenarios developed in Task 9.1.

Task 8.3 Sandy River Discharge Alternatives Evaluation

Complete a matrix-based evaluation of direct and indirect discharge alternatives incorporating economic and non-economic factors. Develop estimated capital and 20-year lifecycle costs for up to 10 discharge alternatives. The matrix evaluation will also consider non-economic factors and weightings developed in consultant with City staff. A brief memo summarizing alternatives evaluation criteria and weightings will be provided to City staff prior to completion of the alternative's evaluation.

Task 8.4 Sandy River Discharge Alternatives Evaluation Technical Memorandum

Prepare the Sandy River Discharge Alternatives Evaluation Technical Memorandum (TM-11) summarizing discharge scenarios, evaluation and recommended outfall location on the Sandy River along with estimated cost, permitting requirements and implementation next steps. The outfall location will coincide with and be informed by recommendations related to other study elements (e.g. Roslyn Lake wetland concept).

Task 8.5 Sandy River Discharge Alternatives Workshop

Conduct workshop with City staff to review the Sandy River discharge alternatives evaluation and recommendations, estimated costs, permitting requirements and implementation next steps. The workshop presentation will summarize information included in the Sandy River Discharge Alternatives Technical Memorandum.

Task 8 Deliverables

1. One electronic (PDF) copy of the meeting agendas and minutes from two (2) anti-degradation workshops with City staff and Oregon DEQ.
2. One electronic (PDF) copy of alternative criteria and weightings to be used for the alternatives evaluation.
3. One electronic (PDF) copy of the Draft Sandy River Anti-degradation evaluation Technical Memorandum (TM-11).
4. Three hard copies and one electronic (PDF) copy of Final Sandy River Anti-degradation evaluation Technical Memorandum (TM-11).

Task 8 Assumptions

- A. Sandy River RPA evaluations will be completed utilizing the most recent RPA spreadsheet provided by Oregon DEQ and will be completed in accordance with the RPA IMD.
- B. Sandy River anti-degradation evaluations will be in compliance the Oregon DEQ Anti-degradation Evaluation IMD.

Task 9 Final Documentation and Presentations

Combine all evaluations and technical memoranda into the final Sandy Detailed Discharge Alternatives Evaluation Final Report. Each technical memorandum will be developed as a chapter for the final report and an executive summary consolidating all information and studies will be developed. The findings and recommendations in the study will be presented in a series of presentations to City staff, Oregon DEQ and Sandy City Council.

Task 9.1 Prepare Detailed Discharge Alternatives Evaluation Executive Summary

Consolidate information, including evaluations, findings and recommendations contained in the various technical memoranda included in the project in a concise format that consolidates all information developed into a single report. The Executive Summary will document the Sandy River Discharge Recommended Plan along with amendments to the adopted WSFP Recommended Plan.

Task 9.2 Compile Final Report and TMs

Consolidate the executive summary and 11 technical memoranda developed as part of the Detailed Discharge Alternatives Evaluation into a single final report for submittal to the City and Oregon DEQ. Technical memoranda developed during the study will be formatted in a report format with a TM cover to facilitate report consolidation.

Task 9.3 City and Oregon DEQ Review Meetings

Submit the Draft Sandy Detailed Discharge Alternatives Evaluation Final Report to the City and DEQ for final review. Conduct one meeting with City and Oregon DEQ staff to review the Recommended Plan and Implementation Schedule and address any comments in finalizing the Plan.

Task 9.4 Recommended Plan Presentations

Attend presentations at two (2) City Council meetings and two (2) watershed council meetings to deliver a summary presentation of the evaluation and recommended discharge alternative. The summary presentation developed include an overview of the various elements of the study along with the alternative's evaluation, costs and the alternative recommended for implementation. will be identified as well as any potential impacts on overall project cost and rates for implementation of the recommended discharge alternative. Murraysmith's Project Manager and staff engineer will attend all presentations. It is anticipated that each presentation will be approximately 2 hours in duration.

Task 9 Deliverables

1. Three hard copies and one electronic (PDF) copy of draft Sandy Detailed Discharge Alternatives Evaluation Final Report.
2. Murraysmith will prepare and submit ten bound copies of the final Sandy Detailed Discharge Alternatives Evaluation Final Report to the City, once the plan is adopted.

Task 9 Assumptions

- A. Evaluation of sanitary sewer rates and SDCs for the recommended discharge alternative will be completed by others.
- B. Any potential modifications to the adopted WSFP Recommended Plan resulting from the final Sandy Detailed Discharge Alternatives Evaluation Final Report are not included in this scope of work.



February 10, 2020

Mr. Mike Walker
Public Works Director
City of Sandy
39250 Pioneer Boulevard
Sandy, OR 97055-8001

Re: Proposal for Sandy WSFP Continuing Support Services

Dear Mr. Walker:

Please find attached Murraysmith's proposal for Continuing Planning Services related to the Sandy Wastewater System Facilities Plan (WSFP). Following is an overview of our proposed Scope of Work, Budget and Schedule.

Scope of Work Overview

The Scope of Work, included as Exhibit A, includes continuing support services for implementing the City's WSFP Recommended Plan adopted by City Council in October 2019. The following tasks are included in the Scope of Work:

Task 1 Project Management

Task 2 WSFP Continuing Services

Budget

Murraysmith's proposed project budget of **\$198,266** is detailed in Exhibit B.

Schedule

The proposed project duration is anticipated to be eight (8) months. Our Sandy WSFP team is available to begin work immediately following Notice-to-Proceed from the City.

Mr. Mike Walker
February 10, 2020

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Thank you again for the opportunity to continue working with the City on this important project for your community.

Sincerely,

MURRAYSMITH



Matt Hickey, PE
Principal-in-Charge

MURRAYSMITH



Preston Van Meter, PE
Project Manager

PLVM:mrs

Enclosures:

Exhibit A Scope of Work
Exhibit B Budget

EXHIBIT A

SCOPE OF WORK WSFP CONTINUING SUPPORT SERVICES CITY OF SANDY, OREGON

Introduction

The City of Sandy (City) Wastewater System Facility Plan (WSFP) Project provided a Recommended Plan that involves sanitary sewer collection system rehabilitation to reduce peak system flows, upgrades to the City's existing WWTP, and construction of a new Diversion Pump Station, Eastside Satellite Treatment Facility and new Sandy River outfall.

This Scope of Work for WSFP Continuing Services provides for continuing support of the City's program, including environmental permitting services to support the City's Clean Water State Revolving Fund (CWSRF) loan request, preparation of a preliminary design report for immediate needs upgrades and the City's existing WWTP, collection system model updates based on additional flow data being collected by the City and other support services.

Following is a detailed breakdown of the tasks and subtasks that comprise the Scope of Work, which aligns with the tasks included in the Fee Estimate included as **Exhibit B**.

Task 1 Project Management

The objective of the Project Management task is to lead the project team to deliver the project relative to schedule and budget constraints. As part of this task, Murraysmith will coordinate team activities and prepare Monthly Project Status Reports with invoices for review and approval.

Task 1.1 Team Management and Coordination

Task includes coordination of activities of Murraysmith's internal team and sub-consultants throughout the project. Activities will include initial contracting, coordination of field activities, check-in calls as needed and other activities to assure the project is delivered on budget and schedule.

Task 1.2 Monthly Project Status Reports and Invoices

Included in this subtask are monthly invoicing, budget and schedule review, updates, and general administrative tasks. The project will be managed to maintain the scope, schedule, and budget. A

monthly project status report will be prepared providing updates on current completion status, outstanding issues, out-of-scope work items, and other issues to be addressed.

Task 1 Deliverables

1. Electronic (PDF) copies of Monthly Project Status Reports with invoices for services provided.

Task 1 Assumptions

- A. Project duration is assumed to be approximately eight (8) months; therefore, 8 Monthly Progress Reports are included in the Scope of Work.

Task 2 WSFP Continuing Support Services

In this task, Murraysmith will continue to provide ongoing support to City Staff for implementation of the WSFP Recommended Plan. Activities include, but are not limited to, participation in bi-weekly conference calls, review of the timing for specific plan elements, funding support services and other activities requested by the City. Additional services may be requested or required under this task based on actual WSFP implementation needs, so some adjustment of the subtasks and budget may be required as the project is completed.

Subtask 2.1 Continuing DEQ MAO Re-negotiation Support Services

Provide ongoing support for City staff in negotiations with DEQ regarding the City's Mutual Agreement and Order (MAO), including modifications to the overall project schedule, review of MAO updates proposed by DEQ. Attendance at two (2) meetings with DEQ in Portland is included in this subtask.

Subtask 2.2 Project Funding Technical Support Services

Provide technical support to City staff for pursuing project funding. Activities will include attending two meetings with EPA related to the City's unsuccessful WIFIA funding application submittal, modifications to the City's WIFIA application to re-submit the application for funding in 2020, providing technical information and documents associated with funding requests and other general support requested by the City.

Subtask 2.3 Environmental Review and Cross Cutters for CWSRF Funding

Pacific Habitat Services (PHS) will analyze existing conditions associated with City's current \$6.9M CWSRF funding for completing upgrades at the City's existing WWTP and completing the Phase 1 of the planned collection system rehabilitation upgrades. An Environmental Review (ER) document

will be prepared in accordance with the *“Cross-Cutting Federal Authorities: A Handbook on their application in the Clean Water and Drinking Water State Revolving Fund Programs.”*

Following completion of the ER, PHS will coordinate with appropriate federal and state environmental regulatory and natural resources agencies. PHS will evaluate if any environmental resources will be affected by the proposed project and any reasonable alternatives that have been considered. If required, a summary of analysis and a determination regarding the potential effects to the agencies that have regulatory jurisdiction over those resources will be provided.

It is assumed the ER will result in a Finding of No Significant Impact (FONSI) for the project because it is related to the City’s existing WWTP and sanitary sewer collection system. Murraysmith and PHS will coordinate for advertising the findings of the ER and FONSI and provide responses to any public comments received during the public comment period.

Subtask 2.4 Existing WWTP Immediate Needs Upgrades Preliminary Design Report

Prepare a Preliminary Design Report (PDR) outlining planned upgrades at the City’s existing wastewater treatment plant (WWTP) that will be implemented utilizing the City’s CWSRF loan. The PDR will provide enough design detail to establish the overall project budget for the existing WWTP immediate needs upgrades, including further developing of WSFP recommendations, estimated budget for various project elements, O&M considerations and schedule. Up to 10 drawing sheets will be developed as part of the PDR. The PDR will be submitted to DEQ for review and approval.

The PDR will include a section related to recommended Control System Assessment at the existing WWTP by Industrial Systems Inc. (ISI) in accordance with their initial evaluation and proposal dated February 14, 2019.

The task includes three meetings with City staff and the City’s WWTP operations contractor (Veolia) to refine the scope of work outlined in the WSFP.

Subtask 2.5 Flow Data Collection Assistance

Provide assistance with flow monitoring equipment installation and data quality control to ensure quality data for future use. Services provided will include assisting the City with site selection and flow meter resolution based on previous modeling work, field assessment of initial flow monitoring installations for accuracy, and working with City staff to develop flow monitoring procedures including flow meter maintenance, data downloading, and bi-weekly data quality control.

Subtask 2.6 Collection System Hydraulic Model Update

Review and update the City’s collection system model based on additional information (e.g. additional flow monitoring data), inflow repairs or other upgrades completed in the city’s

wastewater collection system that could impact projected system flows. Model updates may include adjusting unit hydrographs or pump operations. Review timing of planned collection system upgrades and the anticipated impact of collection system rehabilitation efforts on WWTP design flows. Prepare a Sandy WSFP Collection System Modeling Refinement Technical Memorandum (TM-1) summarizing the collection system mode update and results to be used for other evaluations.

Subtask 2.6 Pump Station Upgrades Recommendations Review

Review WSFP recommendations for pump station upgrades and evaluate the potential for phasing or delaying Phase 1 pump station upgrades included in the City's adopted Wastewater System Facilities Plan. Prepare a Pump Station Upgrades Scope and Phasing Technical Memorandum (TM-2) considering options to phase, delay or modify pump station upgrades. The Draft TM-2 will be submitted to Oregon DEQ for review and comment prior to finalizing.

Task 2 Deliverables

1. One electronic (PDF) copy of project funding technical support information.
2. One electronic (PDF) copy of technical packages associated with project funding support services, such as re-submittal of the City's WIFIA funding application.
3. One electronic (PDF) copy of the Draft Existing WWTP Immediate Needs Preliminary Design Report for City and DEQ review.
4. Five hard copies and one electronic (PDF) copy of the Final Existing WWTP Immediate Needs Upgrades Preliminary Design Report incorporating City and DEQ comments.
5. One electronic (PDF) copy of the Draft Sandy WSFP Collection System Modeling Refinement TM-1 for City and DEQ review.
6. Five hard copies and one electronic (PDF) copy of the Final Sandy WSFP Collection System Modeling Refinement TM-1.
7. One electronic (PDF) copy of the Draft Sandy WSFP Pump Station Scope and Phasing TM-2 for City and DEQ review.
8. Five hard copies and one electronic (PDF) copy of the Final Sandy WSFP Pump Station Scope and Phasing TM-2.

Task 2 Assumptions

- A. Task 2 funding technical support services requirements are currently undetermined, so the budget for these services has been established based on the support services requested in the

previous Continuing Services contract. A budget augmentation may be required if services beyond the budget are requested by the City.

- B. No Environmental Impact Statement (EIS) will be required as part of the environmental review and cross cutters process.
- C. Final Design of Existing WWTP Immediate Needs Upgrades will be scoped separately.
- D. Collection system hydraulic model updates will utilize the collection system model previously developed by Murraysmith and incorporate additional flow monitoring data, smoke-testing findings, and updated CCTV results to be provided by the City. City staff will lead the collection of additional flow monitoring data, including hourly rain data during the monitoring period. Recalibration of the model will be done using the three largest wet-weather events from the monitoring period. No recalibration of dry-weather baseline flows will be conducted.
- E. QC of flow monitoring installations will be conducted by one Murraysmith staff member with field assistance by City staff, including City-assisted confined space entry. Flow data quality control will be conducted on a bi-monthly basis.
- F. The focus of the pump station scope and phasing evaluation will be on pump station upgrades recommended to be implemented as part of the Phase 1 upgrades in the adopted WSFP Recommended Plan.

EXHIBIT B
SANDY WASTEWATER SYSTEM MASTER PLAN CONTINUING SUPPORT SERVICES
PROPOSED FEE ESTIMATE
CITY OF SANDY, OREGON

	LABOR CLASSIFICATION (HOURS)										Estimated Fees								
	PIC Principal Engineer V	PM Principal Engineer V	PE Professional Engineer IV	QA/QC Principal Engineer III	Staff Professional Engineer VII	Professional Engineer V	Staff Professional Engineer III	CAD Technician IV	Admin. III	Hours	Labor	Subconsultants		Subconsultant Multiplier	Subconsultant Total with Markup	Expenses	CADD Units \$18/hr	GIS Units \$10/hr	Total
	\$248 Hickey	\$248 Van Meter	\$153 Moman	\$228	\$182 Flowers	\$163 Murphy	\$149 Cawley	\$148 Estep	\$105	PHS		ISI							
Task 1 - Project Management																			
Task 1.1 - Team Management and Coordination	8	16							8	32	\$ 6,792			1.1	\$ -	\$ 50	\$ -	\$ -	\$ 6,842
Task 1.2 - Monthly Project Status Reports and Invoices (8 invoices)	8	8	16						16	48	\$ 8,096			1.1	\$ -	\$ 75	\$ -	\$ -	\$ 8,171
Task 1 Subtotal	16	24	16	0	0	0	0	0	24	80	\$ 14,888	\$ -	\$ -		\$ -	\$ 125	\$ -	\$ -	\$ 15,013
Task 2 - WSFP Continuing Support Services																			
Task 2.1 - Continuing DEQ MAO Renegotiation Support Services	2	16	24						4	62	\$ 10,940			1.1	\$ -	\$ 100	\$ -	\$ -	\$ 11,040
Task 2.2 - Project Funding Technical Support Services	2	12	24						8	106	\$ 16,924			1.1	\$ -	\$ 25	\$ -	\$ -	\$ 16,949
Task 2.3 - Environmental Review and Cross-Cutters for CWSRF Funding	2	12	16						6	60	\$ 10,126	\$ 26,125		1.1	\$ 28,738	\$ 500	\$ -	\$ -	\$ 39,364
Task 2.4 - Existing WWTP Immediate Needs Upgrades PreDesign Report	4	12	28	4	28				8	328	\$ 49,148		\$ 16,000	1.1	\$ 17,600	\$ 50	\$ 1,152	\$ -	\$ 67,950
Task 2.5 - Collection System Hydraulic Model Update TM-1	2	8	4	4	2	120			4	176	\$ 29,108			1.1	\$ -	\$ 65	\$ -	\$ -	\$ 29,173
Task 2.6 - Flow Data Collection Assistance	2	4	16						4	46	\$ 7,512			1.1	\$ -	\$ 165	\$ -	\$ -	\$ 7,677
Task 2.7 - Pump Station Upgrades Recommendations Review TM-2	2	8	16	4	2	8			4	64	\$ 10,900			1.1	\$ -	\$ 200	\$ -	\$ -	\$ 11,100
Task 2 Subtotal	16	72	128	12	32	128	272	84	34	842	\$ 134,658	\$ 26,125	\$ 16,000		\$ 46,338	\$ 1,105	\$ 1,152	\$ -	\$ 183,253
TOTAL - ALL TASKS	32	96	144	12	32	128	272	84	58	922	\$ 149,546	\$ 26,125	\$ 16,000		\$ 46,338	\$ 1,230	\$ 1,152	\$ -	\$ 198,266