- A. Call To Order Joint Workshop With Tourism Promotion Advisory Committee
- B. Roll Call
- C. Topics
 - a. Discussion Regarding The Tourism Promotion Advisory Committee.

Documents: TPAC CWR.PDF

- D. Adjournment
- E. Call To Order City Council Workshop
- F. Roll Call
- G. Topics
 - a. Intergovernmental Agreement With Brookings Harbor Port District For Police Services.

Documents: PORT POLICE CWR.PDF, PORT POLICE.ATT.A.COST ANALYSIS.PDF, PORT

POLICE.ATT.B.DRAFT IGA.PDF

b. Streaming Live Video Of City Council And Planning Commission Meetings.

Documents: VIDEO STREAMING CWR.PDF

c. Proposed Revision To The Wastewater System Development Charge.

Documents: SDC REVISION CWR.PDF

d. Treatment Plant Energy Conservation Update.

Documents: WWTP ENERGY CWR.PDF, WWTP ENERGY.ATT.A.LETTER.PDF, WWTP ENERGY.ATT.B.AUDIT.PDF, WWTP ENERGY.ATT.C.TRANING.PDF

- H. Council Member Request For Workshop Items
- I. Adjournment

All public meetings are held in accessible locations. Auxiliary aids will be provided upon request with 10 days advance notification. Please contact 469-1102 if you have any questions regarding this notice.

CITY OF BROOKINGS

COUNCIL WORKSHOP REPORT

Meeting Date: August 5, 2013

Originating Dept: City Manager

City Manager Approval

hature (submitted by

Subject: Tourism Promotion Advisory Committee Joint Workshop

Financial Impact: See below.

Background/Discussion:

This matter was discussed at the July workshop and was continued to the August workshop to provide an opportunity for a joint workshop meeting with the members of the Tourism Promotion Advisory Committee.

The City Council appointed a Tourism Promotion Advisory Committee (TPAC) in October, 2012. Since that time, the Committee has held 10 meetings. Regular attendance of members has declined from eight to six, with Brent Siebold having resigned upon his retirement from State Parks and member Jeremy Small not having attended in some months.

To date, TPAC has:

- 1. Made recommendations to the City Council on categories for which the City's 2012-13 tourism promotion Transient Occupancy Tax allocation should be spent. These recommendations were approved by the City Council and are as follows:
 - \$17,500 for a television advertising campaign.
 - \$10,000 to provide incentives for new off-season events.
 - \$10,500 for an Internet advertising campaign.
- 2. Interviewed and made a split recommendation on the selection of a television advertising campaign provider.
- 3. Provided advice/direction to the television advertising campaign contractor concerning program content.
- 4. Reviewed three proposals for grant funding under the off-season event program, recommending one for approval.
- 5. Received, but tabled, consideration of three proposals for Internet advertising.
- 6. Participated in the Rural Tourism Studio Project.

The 2012-13 fiscal year has now come to a close, and a new allocation of funding is budgeted for 2013-14. Staff is seeking direction as to whether TPAC should be requested to provide recommendations for funding allocations for fiscal 2013-14.

There was some discussion at the time of TPAC's formation as to whether the Committee would be made permanent and, if so, the number of members/terms/etc. TPAC discussed this matter at length at their meeting of July 30, 2013. While no vote was taken, it appeared that the general consensus of the Committee was to:

- 1. Retain the Committee in its current form for an additional year while the City works toward one of the following longer term approaches:
 - a. Preferred Alternative: A joint agreement with the Port District and the Chamber of Commerce whereby all three entities pool their financial resources and jointly conduct a tourism promotion program.
 - b. If unable to achieve above goal: Appoint a 5-7 member Committee with members appointed from designated stakeholder groups, such as motel operators, the Port, other businesses, with a basic requirement that the appointee's experience has some nexus with the tourism industry.

TPAC has also discussed its operating structure and has appointed liaisons to work with City staff and contractors. For example, the Committee has appointed Peter Spratt as the City liaison with the television advertising contractor, Candice Michel as the liaison with the internet advertising contractor, and Tim Patterson as the liaison to conduct preliminary review of grant applications.

CITY OF BROOKINGS

COUNCIL WORKSHOP REPORT

Meeting Date: August 5, 2013

Originating Dept: City Manager

City Manager Approval

nature (submitted by)

Subject: Police Services Intergovernmental Agreement with Brookings Harbor Port District

Financial Impact:

See below.

Background/Discussion:

At its meeting of June 24, the City Council authorized staff to undertake a study of the feasibility of providing police services to the property owned by the Brookings Harbor Port District lying outside the City's boundaries. This action was taken in response to a request from the Port that the City consider providing such service on a contract basis.

Subsequent to that meeting, and following a meeting of the Port District Commission, the District amended its request to include developing a plan for providing police services to all lands within the District's geographic boundaries (a large area; maps will be provided at the workshop).

At a follow-up meeting between District and City staff, and District Commissioner Relaford, on July 31, the following approach was discussed:

- 1. Finalize the attached contract for police services to become effective September 1, 2013.
- 2. Develop a plan of service and budget for providing police services to the larger District by October 1, 2013. This plan and budget may be used to form the basis for a May, 2014, ballot measure to enact a property tax levy within the District to fund police services.
- 3. If the tax measure is approved by the voters in May, 2014, the District would contract with the City to provide police services. The District representatives indicated they would prefer a term of five years; City representatives indicated that the City Council had previously stated a preference for a term of three years for the County tax levy.

City staff raised the issue of annexation of property within the Urban Growth Area. Staff is concerned about any arrangement whereby the City would be providing its highest value and highest cost service to non-residents for an extended period, and missing the added tax value of development on lands that enjoy police services.

The City Manager conferred with the Director of Public Safety and the Director of Finance/Human Resources concerning the initial proposal to provide police services to Port property. Current levels of staffing were reviewed, as well as the Sheriff's Department call data for the Port property. The Port property was added to the regular patrol schedule to gather data

on the number of patrol hours that would be provided as a part of the Police Department's routine patrol schedule. Three basic areas of service and cost were explored.

PATROL: The two-week patrol study found that officers would spend approximately 27 hours per week providing routine patrol of the Port as a part of their regular shift. These hours would be distributed over the seven-day-per-week, 24-hour-per-day, 365-day-per-year schedule under which the Police Department now operates. Staff analyzed the cost of providing patrol services using two methods: as a percentage of the budget and as an actual cost of fielding a mid-level police officer exclusive of administrative overhead and equipment costs.

CALLS: Police management reviewed a two-year history of call data for the Port property, both from the City's 9-1-1 records and from data provided by the Sheriff's Department. Police management assigned a time value to each classification of call. The cost of this service was also analyzed using the two methods discussed above. It is anticipated that there may be more reports/calls for service taken by the Brookings Police Department than has been experienced by the Sheriff's Department, as the Brookings Police Department would be providing 24/7 coverage, which the Sheriff's Department does not. Also, the Brookings Police Department employs a proactive approach to law enforcement, meaning police officers make contact with the public and explore suspicious activities in an effort to deal with situations/conditions before a crime is attempted.

SPECIAL EVENTS: There are several special events that generate more than 1,000 participants during the course of the year on Port property. The Police Department will facilitate appropriate event security and provide a law enforcement presence at these events at a level that is determined by the Public Safety Director and Port management. The Port will pay the City the actual cost of providing this service.

Not included in the cost proposal incorporated into the draft Intergovernmental Agreement is administrative overhead and dispatching costs. This contract arrangement will be a learning experience for both City management and Port management, and a more detailed analysis of actual costs will be developed during this initial year of implementation.

Staff believes that adding the Port property to the responsibilities of the Brookings Police Department would not require an increase in staffing. The Council may recall that the City added a police officer approximately two years ago to assure that there would be at least two police officers on duty at all times. Due to turnover, retirements and training periods, this higher level of service has only recently been implemented. In some cases, there are now two officers and a sergeant on a shift, and more officers during periods of shift overlap. The addition of one police officer enabled the City not only to provide 24/7 two-officer coverage, but has increased the Department's capability to handle additional workload.

Another benefit to City residents of contracting this service to the Port District is the general law enforcement approach that intensifying law enforcement activity in a given area pushes the criminal element to areas where the level of law enforcement presence is less. Thus, by adding the Port property to the general patrol pattern, the City would be further buffered from criminal activity.

Policy Considerations

Staff recommends that the City Council discuss the following policy issues:

- 1. Initial contracting for police services to the Port District as proposed in the Draft Intergovernmental Agreement.
- 2. Should the City consider providing police services to the larger Port District area without annexation of at least those properties located within the Urban Growth Area?

Attachment(s):

- a. Police Service to Port Cost Analysis
- b. Draft Intergovernmental Agreement

POLICE SERVICE TO PORT COST ANALYSIS

Cost of one mid-level patrol officer, not including equipment and overhead, is approximately \$90,138. Use \$100,000. Actual weighted hourly rates are \$43.17 regular and \$60.58 OT. "Typical" police officer handles just over 1,000 police calls/year. 200 calls equals 20 per cent of police officer; \$20,000.

CALLS

Sheriff and BPD 9-1-1 data shows 343 police calls 06/25/11-06/25/13, excluding 9-1-1 incomplete/misuse calls, which do not typically result in an office response. This would be 171 calls per year. BPD has reviewed calls and estimates it would take 125 hours to handle. This does not include cost of dispatcher and supervision.

125 hours X \$43.17: \$5,396. Use \$5,400.

There would probably be more calls than experienced now as there will be higher level of coverage. This method only captures direct cost, no overhead.

Alternate Call Method based upon Budget

Total BPD police service calls 06/25/12-05/25/13 was 11,990 excluding ambulance and fire standby calls (2,566).

200 calls is approximately 1.68 per cent of total calls. 1.68% of \$2,130,305 = \$35,335.

40 per cent of officer time is spent on calls. 40 % X \$35,534 = \$14,136. Use \$14,000.

PATROL

Experimental patrol period estimates 27 hours/wk, 1,404 hours/yr for regular patrol at same level as provided in City. Use hourly rate of \$43.17.

1,404 hours/year patrol X \$43.17 = \$60,610.68. Use \$60,600.

This method only captures direct cost, no overhead.

Alternative Patrol Method based upon Budget

Estimated total annual patrol hours: 24,960 patrol/sergeant/detective hours.

\$2,130,305 budget divided by 24,960 = \$85.35 per patrol hour.

1,404 = 5.6 per cent of total patrol hours.

5.6% of budget = \$119,297. Use \$119,300

60 per cent of officer time is spent on patrol. 60 per cent of \$119,300 = \$71,580. Use \$71,600.

SPECIAL EVENTS

Estimated 76 hours per event, overtime + paid reserves; 20 hrs/OT + 54 hrs/regular. No overhead applied.

Cost per event $(\$60.58 \times 20 \#1,211.60\# + \$15.00 \times 54 \#\$810\#) = \$2,010.60$.

Assume following events would require same level of staffing with Port providing additional security:

- 1. Kite Festival
- 2. Pirate Festival
- 3. Fourth of July
- 4. Party at the Port
- 5. Slam'n Salmon

Cost per event \$2,010.60 X 5 events = \$17,713.90; use \$10,053. Use \$10,000.

Note: Does not include cost of handling incidents that may occur at events or overhead.

BASIC CONTRACT COST A (CALLS + PATROL hourly rate): \$66,000

BASIC CONTRACT COST B (CALLS + PATROL % budget): \$85,600

EVENTS COSTS: \$10,000

TOTAL CONTRACT COST A: \$76,000 +12.0% overhead: \$85,120

TOTAL CONTRACT COST B: \$95,600

INTERGOVERNMENTAL AGREEMENT

THIS INTERGOVERNMENTAL AGREEMENT ("Agreement") is entered into by and between the City of Brookings, an Oregon municipal corporation, ("City") and the Brookings Harbor Port District ("Port"), for the provision of Police Services at the Port of Brookings Harbor.

RECITALS

WHEREAS, City currently operates the Brookings Police Department providing 24 hour/365 day police services within the City limits; and

WHEREAS, Port has established a Police Department with the authority to exercise police powers in accordance with the provisions and limitation of federal and state laws; and

WHEREAS, City and Port have determined that it would be most efficient for Port to obtain police services from City; and

WHEREAS, ORS 190.010 authorizes City and Port to enter into an intergovernmental agreement;

NOW THEREFORE, City and Port enter into this Agreement.

AGREEMENT

SECTION 1 – SCOPE OF SERVICES

City agrees to provide Port the following police services, pursuant to this Agreement. Police services provided under this Agreement shall be in accordance with policies, procedures and protocols established by and at the discretion of City, in consultation with Port, as needed.

- 1. Police services to be provided shall include, but not be limited to, enforcement of state statutes, investigation of criminal offenses, and other duties as assigned by City's Police Chief or the Police Chief's designee ("Chief").
- 2. Service shall be provided in the same manner as police services are provided in City.
- 3. The area identified in Exhibit "A", hereto made part of this Agreement by attachment, denotes the geographical area of responsibility encompassed by this Agreement.
- 4. Chief will meet with Port management at least once each quarter to report on services provided under this Agreement and discuss public safety concerns with the Port Commission.
- 5. Port acknowledges that City police resources may be insufficient to provide adequate security during special events conducted at the Port. Security planning for special events shall be a joint responsibility of City and Port and all event security plans shall be jointly approved. Port agrees to provide at its sole expense additional security personnel to assist City police in providing adequate security personnel to assist City police in providing adequate public safety on Port property during such events, not later than November of the preceding year. Port management will provide an annual schedule of events to Chief to enable Chief to evaluate staffing and other needs.

SECTION 2 – HOURS OF SERVICE

Officers shall provide routine patrol services for the Port on a random schedule 24 hours per day and provide complaint call coverage 24 hours per day, 365 days per year.

SECTION 3 - EMPLOYEES

- 1. Assignment of Employees. All City police employees assigned to perform duties under this Agreement shall be at the sole determination and discretion of City and Chief.
- 2. Status of Employees. All City police employees assigned to provide police services for Port shall remain City police employees and shall not have any right, status or benefit of Port employment.
- 3. Performance of Employees. City shall maintain standards of employee performance and discipline used in the delivery of police services to Port, including training and professional standards of conduct as set forth by DPSST and Brookings Police Department policy.
- 4. Payment of Employees. Port shall not be liable for direct payment of salaries, wages, or other employee compensation to City police employees.
- 5. Accountability of Employees. All City police employees, regardless of patrol areas served under this Agreement, shall at all times be under the direction and control of Chief.

SECTION 4 - SUPPORT SERVICES

- 1. Administrative services provided by City shall include required records functions, required monthly/annual Oregon Uniform Crime Reporting documentation of incident activity, patrol and emergency response time and field unit status using records management programs and procedures in place or proposed by Brookings Police Department.
- 2. City will maintain evidence collected by City police officers during this contract in conformance with commonly accepted evidence standards as defined in Section 3.4.
- 3. Police reports generated as a result of Port complaint calls will be completed using City forms.
- 4. Port agrees to make office space available within Port District office for use by police employees as needed in support of special events, preparing reports and conducting interviews and the general conduct of police business relating to providing services hereunder.
- 5. Port agrees to provide, at its sole expense, the use of watercraft as needed for the conduct of police services herein provided.

SECTION 5 - AUTHORIZATION

Port hereby authorizes City to enforce all ORS criminal statutes and agrees to a time-limited grant of jurisdiction to enforce vehicle and traffic statutes during the period of this Agreement – regardless of whether such statutes are considered regulatory or criminal – on and within Port properties, streets and facilities as defined in Exhibit A.

SECTION 6 – COMPENSATION

1. Port shall pay a quarterly fee of \$16,500 to City basic policing services provided under this Agreement, which includes all costs (personnel, benefits, equipment and predictable overtime). Payments shall be made on or before the 15th of each month for which payment is due. All funds

- received must be earmarked for law enforcement services. Any reduction in funding must be proportionate with other City-wide funding reductions.
- 2. The quarterly fee listed above shall be adjusted annually based upon the CPI-U West Size class B/C index and upon a review of the first nine-month history of actual patrol time and calls for service directly attributable to Port-owned property.
- 3. In addition to basic policing services, Port shall pay to City the actual cost of providing police services in support of special events based upon actual weighted hourly rates (salary + benefits) for assigned police personnel. Said payment shall be made within 30 days of the date of the City invoice prepared for the provision of said services.
- 4. It is agreed and understood that City owns and shall continue to own all right, title and interest in all City patrol vehicles and other City owned equipment utilized in performing police services herein, and nothing herein, nor any of the payments to be made by Port is intended to, or shall be construed to vest Port with any ownership rights, thereto, with any and all such ownership rights remaining with City.

SECTION 7 – EFFECTIVE DATE, REVIEW AND TERMINATION

- 2. This Agreement may be terminated by either party with 60 days written notice. In the event of termination Port must pay in full any and all fees and expenses incurred in accordance with this Agreement through the date of termination. Such fees and expenses are due and payable within 15 days of termination.
- 3. In the event of termination, City shall continue to provide services necessary to complete any case(s) that has been charged but has not yet been completed prior to said termination, such as appearing at court hearings, and Port shall pay a reasonable hourly rate, as determined by City and Port pursuant to Section 7.4, below, until such case(s) has been completed.
- 4. Any change in the scope or character of services requested may require a fee review by both parties at least 30 days before implementation of any such change. An increased or decreased fee schedule may be established based upon any requested change in the area, scope, or character of the services provided by City. City and Port shall review the performance, scope, and character of work, compensation and other conditions as needed, but not less than on a quarterly basis.

SECTION 8 – HOLD HARMLESS

- 1. City agrees to indemnify, defend, and hold Port, its officers, agents and employees, harmless from any and all claims, actions, liability or costs, including attorney fees and other costs of defense, arising out of , or in any way related to, this Agreement, and arising out of the actions or conduct of City or any of its officers, agents or employees.
- 2. Port agrees to indemnify, defend and hold City, its officers, agents or employees, harmless from and all claims, actions, liability or costs, including attorney fees and other costs of defense, arising out of, or in any way related to, this Agreement, and arising out of actions or conduct of Port or any of its officers, agents or employees.

3. City agrees to include Port, its officers, agents and employees, as additional named insured on liability and vehicle insurance programs to provide coverage against any and all claims occurring as a result of the existence of this Agreement or services performed pursuant to this Agreement.

SECTION 9 – CHOICE OF FORUM

Subject matter and personal jurisdiction over each and every dispute, claim, action, liability, cost, and attorney fee which is in any way related to any right, duty, or contribution or indemnification claim which is any way related to, or connected to, this, regardless of whether such dispute, claim, action, liability, cost, and attorney fee is based upon tort, statute, or contract, shall lie in the Circuit Court of the State of Oregon for the County of Curry.

SECTION 10 - SEVERABILITY

The determination that any provision of this Agreement is in conflict with any federal, state, local constitution, charter, law, ordinance, regulation or order, shall not nullify any other provision of this Agreement. The conflicting provision shall continue in effect to the extent that it remains valid. All remaining sections and conditions of this Agreement shall remain in effect until terminated pursuant to Agreement.

SECTION 11 – DESIGNATED REPRESENTATIVES

Until further written	notice from	Port or City,	any notice	under this Ag	reement shall	be sent to:

For City: City Manager, 898 Elk Drive, Brookings, OR 97415 For Port: Executive Director, P.O. Box 846, Brookings, OR 97415

IT IS SO AGREED.			
Dated this day of	, 2013	3	
City of Brookings		Brookings Harbor Port District	
City Managan Carry Milliman	Data	Evenutive Dimenton Ted Eitzeneld	Doto
City Manager Gary Milliman	Date	Executive Director Ted Fitzgerald	Date

CITY OF BROOKINGS

COUNCIL WORKSHOP REPORT

Meeting Date: August 5, 2013

Originating Dept: City Manager

Signature (submitted by)

City Manager Approval

Subject: Streaming live video of City Council and Planning Commission meetings.

Recommended Action:

Direct staff on how they wish to proceed with regards to streaming live video using the City's website.

Financial Impact:

Unknown at this time.

Background/Discussion:

Prompted by a request from Mayor Hedenskog back in May, staff asked CivicPlus, the City's website provider, if we have the capability to stream live video of City Council and Planning Commission meetings via the website. CivicPlus responded that we can use the website's video center to accomplish this task, provided that we have a "broadcasting computer" set-up and in place to provide the feed.

CivicPlus has provided the necessary technical information to begin streaming live video, upon purchase of a computer with the capability to handle the feed.

Staff is looking for direction from Council on how they wish to proceed in this matter.

CITY OF BROOKINGS

Council WORKSHOP Report

Workshop Date: August 5, 2013

Originating Dept: PW/DS

Public Works/Development Services Director

City Manager Approval

Subject: Proposed Revision to the Wastewater System Development Charge (SDC)

<u>Recommendation</u>: To proceed with a City Council motion to reduce Brookings' current wastewater SDC from \$9,381 to \$6,624 per equivalent dwelling unit (EDU).

<u>Financial Impact</u>: The proposed 29% reduction in the wastewater SDC will make the City more competitive in attracting new development. All other provisions of the City's wastewater SDC and current water, streets and parks SDCs would remain the same until the related master plan updates are complete.

Background/Discussion: City Council has expressed ongoing concerns over the amount of Brookings' wastewater SDC and its impact on promoting new development and businesses. SDCs are a one time fee applied to new development or a change of use of an existing property which increases that property's demand on the wastewater system. Wastewater SDCs are applied within the City as well as the Harbor Sanitation District service area. The February 11, 2013 council meeting authorized staff to conduct a preliminary wastewater SDC assessment. The assessment's goals include: 1) evaluate whether there are immediate ways to reduce the wastewater SDC; 2) identify options for calculating future wastewater SDCs as the City moves ahead with its master plan updates.

Staff hired Shaun Pigott Associates, a municipal finance consulting firm with 23 years of SDC experience, which provided staff with new perspectives regarding wastewater SDCs. This assessment is timely because the loans and the related debt service used to fund wastewater facilities have changed which affects the SDC. Also, at the time of the 2009 SDC Study, the calculations included a provision for <u>future</u> principal and interest expense (debt service) that significantly increased the SDC amount. It has also been determined that the 2009 Study included costs that are now being paid via the City's 2003 General Obligation Bond (assessed through property taxes) which would not be SDC eligible. Mr. Pigott demonstrates in the following table that these two provisions will reduce the current wastewater debt service SDC rate;

Elements of Current SDC (based on 2009 SDC Study)	Current Wastewater SDC per EDU (based on 2009 SDC Study but inflated to show current values)	Revised Wastewater SDC per EDU (based on current loan conditions and historical investment in facilities)
Reimbursement		

Fee		
Debt Service	\$2,946	\$ 189
Sewers	\$2,246	\$2,246
Wastewater Plant	\$1,105	\$1,105
Pump Stations	\$ 31	\$ 31
Improvement Fee		
New Facilities	\$3,053	\$3,053
TOTAL	\$9,381	\$6,624

Staff recommends that the wastewater SDC be reduced to \$6,624/EDU for new connections to the City's wastewater system. The Harbor Sanitation District's SDC would also be reduced but their SDC amount is calculated based on only those capital costs related to their proportionate share of wastewater treatment and collector main expense.

Based on Shaun Pigott Associate's review of the current wastewater SDC methodology, Brookings should also consider the following policy options during next year's comprehensive SDC update:

- 1) The current methodology constructed an EDU multiplier table based on numerous factors which is used to apply the SDC to 62 specific development types. An option used by most cities in Oregon is application of the SDC based on demand as represented by meter size and capacity established through the American Water Works Association (AAWA). The water meter size is directly related to the potential demand that wastewater connection places on the sewer system. The 62 development types would be replaced by meter size and flow factor equivalence. Using this approach, a restaurant with a 1-inch meter would pay a similar wastewater SDC rate as a single family residence with a 1-inch meter.
- 2) The current SDC study applies all capital expenses over a 10 year growth planning period. In most cities, SDCs and capital planning are done over a 20 year capital/capacity period. This policy redirection would also tend to reduce the City's SDC.
- 3) The Harbor Sanitation District's demand on the City's wastewater treatment system may not have been included in the current SDC calculation which would also reduce the SDC.
- 4) The 2009 SDC study uses replacement cost less depreciation as the basis for establishing a total asset value of \$28,528,262. The City could elect to use the original cost of these same assets at \$20,585,173 also resulting in a reduction of the SDC.
- 5) The 2009 Study appears to include the costs related to "replacing existing obsolete or worn out system components" in the SDC calculation. Replacement costs can only be included in the SDC when those replacements increase the capacity of the wastewater system. Only that increased capacity expense may be included in the SDC calculation.
- 6) Growth projections are critical to the SDC calculation and should be consistent with either City comprehensive planning or population forecasts centers such as Portland State University. The comprehensive update to the City's SDCs should revisit the growth projections contained in the current SDC methodology.

<u>Policy Considerations</u>: The proposed motion would only affect the calculation of the SDC in relation to its treatment of existing wastewater debt. All other elements of the current methodology would remain in place pending the comprehensive SDC update planned for the next budget year.

Attachment(s): None

CITY OF BROOKINGS

Council WORKSHOP Report

Workshop Date: August 5, 2013

Originating Dept: PW/DS

Public Works/Development Services Director

City Manager Approval

Subject: Treatment Plant Energy Conservation Update

<u>Recommendation</u>: This item is an update only and opportunity for City Council feedback on staff's approach to energy conservation at the treatment plants.

Financial Impact: Not at this time.

<u>Background/Discussion</u>: City Council's Strategic Goal 1.3 "Conduct conservation improvements at the water and wastewater treatment plant," is a general goal in which staff has been evaluating options for a recommended approach. The following report is an update on measures staff has taken to evaluate conservation at the treatment plants.

In 2012, staff received a free energy audit from Energy Smart Industrial which is a program funded by Bonneville Power Administration (BPA) who provides power to Coos Curry Electric Company (CCEC). There are currently financial incentives from CCEC via BPA to conserve power as an offset to new demand. The free audit was limited to typical recommendations, namely the aeration blower. The aeration blower consumes roughly 16% of the overall plant's electrical use, and the report recommended the installation of variable frequency drives (VFD) on the blower to reduce energy demand with a price tag of \$30,800 - \$34,848 with a potential rebate of \$21,560 - \$24,394 (70%). The project was approved by City Council just before the major storm event in November 2012 which in turn resulted in these funds being reassigned to storm damage relief. The aeration blower VFD project was put on hold. It was later discovered that the best application for a VFD in this capacity will be in conjunction with installation of new blowers.

In 2013, the City Manager authorized the Public Works Director to hire the engineering services of Kennedy/Jenks Consultants (K/J) to conduct a comprehensive energy study at the wastewater treatment plant. K/J is one of the top consulting firms in the US implementing energy recovery and conservation projects. K/J sent key staff in wastewater treatment processes and energy recovery to Brookings WWTP. Attachment (b) is a summary of K/J's recommendations. The report recommended improvements to the snail removal system which is an approved CIP project this fiscal year. The report offered "just do it" operational adjustments. One such suggestion involved reducing the temperature of the anaerobic digester a few degrees would save energy with no capital investment. When adjusting operations, Operators must comply with all regulatory discharge requirements. Altering a process must be closely monitored as well as measurable in obtaining the desired result. Staffing has been challenged with the retirement of a seasoned operator and recent medical leave of another operator thus conservation efforts may or may not be coordinated during summer low flows.

The K/J report confirmed the City's WWTP is a potential candidate for a FOG (fat's oils and grease) anaerobic digester injection and gas storage project. The existing anaerobic digestion process produces methane gas which in turn is used to heat the anaerobic digester. The digester is oversized for the current application and the excess storage could be used for increased methane production via introducing FOG. FOG is usually a nuisance in a collection system but is an asset for energy production when injected into an anaerobic digester. Under the right conditions FOG injection collected from commercial grease traps will increase methane production by up to 30%. CIP budget to conduct a FOG feasibility study is in place for this year.

The Treatment Supervisor and Public Works Director are actively participating in a collaborative interagency sustainability workshop meeting regularly for the next several months. The goal is to reduce energy consumption by at least 10 percent by the end of the class, and develop an energy management plan to pursue future sustainable projects and long term energy reductions. This group includes other agencies with similar sized wastewater treatment plants including Florence, Shady Cove, North Bend, Coos Bay, and Ashland. This sustainability group also includes funding agencies for energy recovery projects. By being a member, the City of Brookings will have better opportunities for grants and rebates. Membership also requires active participation and attachment (a) is a commitment letter from City of Brookings Management.

The sustainability group has requested us to meet with Coos Curry Electric for a clear understanding of our bills. Staff is tracking baseline energy use so any current or future conservation measures can be compared to past use. Staff will continue to implement B&C and Sustainability group recommendations and will provide City Council updates bi-annually or as requested.

Policy Considerations: Informational update only

Attachment(s): a) Commitment Letter to ACWA Sustainable Energy Management

Training Program

b) Kennedy/Jenks Energy Scoping Audit

c) Sustainable Energy Management Training Schedule

Janet Gillaspie

Executive Director

Oregon Association of Clean Water Agencies

107 SE Washington, Suite 242

Portland, OR 97214

e-mail at gillaspie@oracwa.org

Letter Commitment – ACWA Sustainable Energy Management Training Program-Round III

Dear Janet:

The City of Brookings is pleased to be participating in the ACWA Sustainable Energy Management Training Program, organized by ACWA, and financially supported by the Energy Trust of Oregon and Bonneville Power Administration.

We understand that as project participants our staff will be attending five (5) day-long workshops at locations in Southern Oregon. Our utility will be working internally between these training sessions to develop a systematic approach to managing energy at our treatment plant, and working to evaluate appropriate energy conservation and renewable energy power opportunities at our treatment plant.

At the end of the project, we will prepare a simple final report using a master reporting template to summarize our utilities energy metrics and actions including:

- o Baseline energy consumption and project conclusion energy consumption
- o Inventory of efficiency projects completed or underway
- o Renewable power opportunities identified, scheduled, or implemented
- o Two year energy plan outline
- o Key lessons learned
- o Opportunity register
- o Communications program highlights, and
- o Brief summary of how your utility will maintain your energy program over time

We commit to completing our final report and submitting it to ACWA by April 30, 2014 - approximately one month after the conclusion of the project.

1 | Page

We understand there is a \$2,000 fee for joining the project.

Very truly yours,

Loree Pryce, PE

Public Works/Development Services Director

Kennedy/Jenks Consultants

Engineers & Scientists

240 Country Club Road, Suite A Eugene, Oregon 97401 541-338-8135 FAX: 541-338-8180

28 June 2013

Ms. Loree Pryce Director of Public Works and Development Services City of Brookings 898 Elk Drive Brookings, Oregon 97415

Subject: Wastewater Engineering Services

FOG Waste-to-Energy Feasibility Study

K/J Proposal No. P13047

Dear Ms. Pryce:

We are pleased to submit this proposal for providing professional services for evaluating the feasibility of a fats, oils and grease (FOG) receiving program for the City of Brookings (City).

Background

Kennedy/Jenks Consultants (Kennedy/Jenks) recently completed an energy audit of the Brookings Wastewater Treatment Plant (WWTP) that recommended a feasibility study to investigate the details and quantify the estimated cost and potential cost savings to determine if waste-to-energy is cost effective for the City. FOG is an environmentally problematic waste stream that can be difficult to control. Like Brookings, most communities require that FOG be separated from the normal wastewater stream using grease traps and that the grease traps be pumped out periodically by grease haulers. However, few communities have provided a satisfactory disposal solution for the grease waste. FOG waste is undesirable in landfills, cannot be land applied, and is problematic when mixed in with the liquid process in wastewater treatment plants.

This Feasibility Study will examine the potential for utilizing FOG within the City's biosolids treatment system. Doing so may have four potential benefits for the City:

- Creating an alternate source of energy
- Reducing the amount of biosolids generated, thereby potentially reducing the cost of biosolids disposal
- Reducing the amount of FOG accumulating within the City's collection system
- Reducing the environmental impacts associated with hauling grease long distances for disposal.

Page 2

FOG can be an important alternate energy source when collected and added to a well heated and mixed anaerobic digester. It results in increased digester gas production that can be utilized in a cogeneration system to generate electricity and heat. The electricity that is generated can help offset utility costs at the WWTP.

The amount of biosolids produced by the City's WWTP has a direct impact on the cost of disposing of the dewatered material. Developing a FOG receiving program may help the City in reducing the amount of biosolids produced. Experience at other wastewater treatment facilities that, like Brookings, utilize anaerobic digestion suggests that adding FOG directly to the digestion process improves treatment efficiency and may result in an overall decrease in biosolids production.

This Feasibility Study will consider the sources and quantities of FOG, how it could be received at the City's wastewater treatment plant, grease digestion capabilities at the plant, and the potential for additional digester gas generation and utilization. The study will address program economics, taking into consideration the capital and O&M cost of new and rehabilitated facilities, as well as the potential for revenue generation from tipping fees and additional digester gas production.

Scope of Work

Kennedy/Jenks' approach to this project will be based on our successful experience developing similar FOG programs for 20 years. We recommend the following approach to the major tasks.

Task 1 - Quantify the Volume of Potential FOG

Our experience indicates that the projection of FOG quantities in any given area can be estimated by comparing the results of three different approaches; (1) the potential for FOG generation primarily from identified food preparation facilities, (2) the potential for FOG generation based on demographics and per-capita average FOG generation potential, and (3) the actual records for grease haulers in the area. The comparison of the results of these three approaches leads to an estimate that is reasonable and defendable. This task will include a phone survey of grease haulers and a look at area industries that may have a significant FOG component in their waste stream.

Task 2 - Evaluate the Existing WWTP and Facility Needs for Digesting FOG

FOG would be introduced directly to the anaerobic digester after basic screening. Our experience indicates that digesters that accept FOG should have the following features:

- Energetic and thorough mixing
- Hydraulic shearing with high velocity at the mixing nozzles
- Hydraulic disturbance of the liquid surface in the digester
- Hydraulic draw-off for the mixing pumps at the liquid surface

Page 3

With well-designed and mixed digesters, substantial FOG can be readily digested without any need for additional detention time. The City's current digester mixing system and heating system will be evaluated to determine their adequacy for incorporating grease waste.

Task 3 - Evaluate Gas Utilization Options

Kennedy/Jenks will estimate the quantity of digester gas expected based on FOG quantities and growth projections in Task 1. Options for utilizing the digester gas through cogeneration will be discussed, with a focus on microturbines and other engines applicable to smaller WWTPs. Fuel cells and internal combustion engines are also commonly used for generating electricity from digester gas; however, they are typically suited for larger WWTP's with average flows greater than 10 MGD, so they will be omitted from this evaluation. The simple payback period of each gas utilization alternative will be developed. If the quantity of digester gas available is less than what is required to operate a cogeneration system, estimates will be provided of the additional amount of municipal solids and FOG needed. This information could then be used by the City to evaluate the feasibility of developing a regional FOG receiving program that would accept FOG from areas outside the City.

Task 4 - Prepare Program Financials

Kennedy/Jenks will prepare a life-cycle cost model that will be used to evaluate the program based on the cogeneration technology with the shortest relative payback period. We have recent experience with the construction costs for receiving stations, digester rehabilitation, gas scrubbing, and cogeneration facilities.

Task 5 - Prepare Draft Feasibility Report

Kennedy/Jenks will prepare a Draft Feasibility Report on the findings of Tasks 1 through 4. Included in this report will be a general process schematic of a FOG receiving station.

Deliverable

Draft Feasibility Report (1 electronic copy in PDF format and 2 hardcopies)

Task 6 - Review Meeting and Final Feasibility Report

Kennedy/Jenks will meet with the City to present our findings and discuss the Draft Feasibility Report. The report will be revised as needed to address City comments and concerns.

Deliverables

Final Feasibility Report (1 electronic copy in PDF format and 2 hardcopies)

Page 4

Task 7 - Project Management and QA/QC

Overall project management functions include communication with City staff, internal team coordination, preparation of monthly invoices, preparing meeting agendas and notes, monitoring scope, schedule and budget and completing quality assurance/quality control (QA/QC) functions on deliverables.

Budget

We propose to complete the consulting services described herein on a lump sum basis. We estimate a total budget of \$25,000 to complete Tasks 1 through 7, as shown in the following table. The actual task-by-task cost may vary, but the overall Not-to-Exceed Budget will not be exceeded without mutual written agreement.

Task	Budget
Task 1 - FOG Potential	\$1,400
Task 2 - Existing Facility Needs for Digesting FOG	\$4,300
Task 3 - Gas Utilization Options	\$5,100
Task 4 - Program Financials	\$3,700
Task 5 - Draft Feasibility Report	\$5,100
Task 6 - Final Feasibility Report	\$2,000
Task 7 - Project Management and QA/QC	\$3,400
Total	\$25,000

Schedule

Kennedy/Jenks is prepared to initiate the FOG Feasibility Study immediately upon receipt of authorization to proceed from the City. It is anticipated that this project will be completed over a period of 120 days.

Project Team

For this study Kennedy/Jenks proposes to use staff that are familiar with your facility and have specific experience developing successful FOG programs at wastewater treatment facilities. Kennedy/Jenks proposes to use Ron Walz as the Project Manager and Luke Werner as the Project Engineer. Both Ron and Luke worked together on the recent Brookings Energy Scoping Audit of the Brookings WWTP. Ron will be responsible for day-to-day activities and will be the primary project contact with the City. Luke will provide project engineering support based on his experience with anaerobic digestion and waste-to-energy projects. Other personnel will be involved in the project as appropriate to complete the scope of services.

Page 5

Terms and Conditions

The terms and conditions shall be provided by the City of Brookings.

Authorization

If this proposal is acceptable to you, please sign where noted below and return one copy to serve as our authorization to proceed.

If you have any questions regarding this proposal, please call me at (541) 844-7808. We look forward to working with you on this project.

very truly yours,	AUTHORIZAT	ION:	
KENNEDY JENKS CONSULTANTS, INC.	THE CITY OF	BROOKINGS	
Rop Wałz Office Manager	Ву:	(Signature)	
		(Print Name)	
	Title:		
	Date:		

Sustainable Energy Management Training

ACWA/Energy Trust of Oregon/BPA Energy Smart Industrial

Round III

Date	Type of Session	Location
6/24/13	All Day Training Session	Ashland
	9 am – 4 pm	
7/22/13	Phone check in	Call 1 641 715 3625 ; passcode 193064#
	8:30 – 9:30 am	
8/26/13	All Day Training Session	Rogue Valley Sanitary Service
		Central Point
9/23/13	Phone check in	Call 1 641 715 3625 ; passcode 193064#
	8:30 – 9:30 am	
10/28/13	All Day Training Session	Florence
11/25/13	Phone check in	Call 1 641 715 3625 ; passcode
	8:30 – 9:30 am	193064#
12/16/13	Phone check in	Call 1 641 715 3625 ; passcode 193064#
	8:30 – 9:30 am	193004#
1/27/13	All Day Training Session	Brookings
2/24/14	Phone check in	Call 1 641 715 3625 ; passcode
	8:30 – 9:30 am	193064#
3/17/14	All Day Training Session	Coos Bay/North Bend