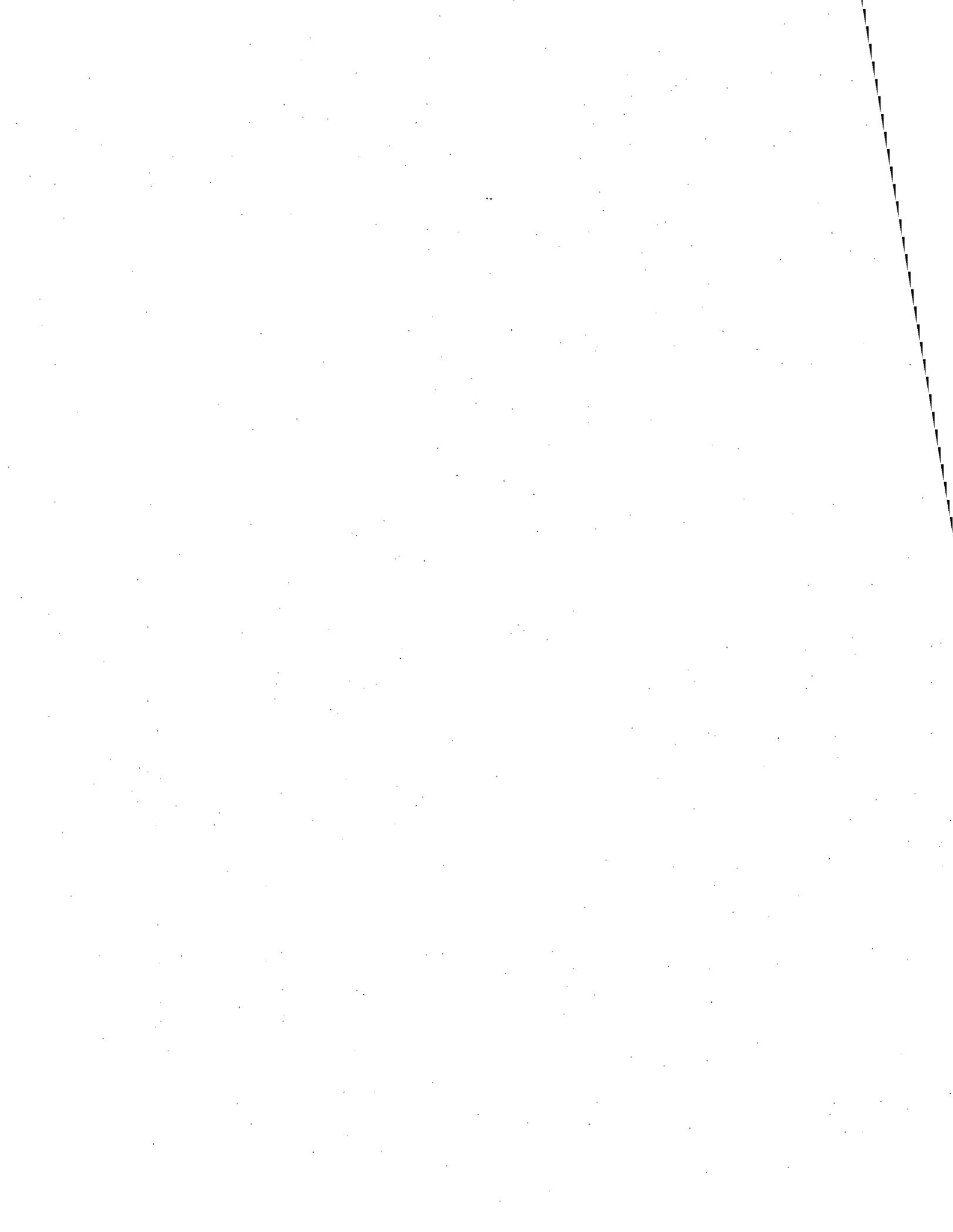


**CORRESPONDENCE**

**FACILITY SERVICES**

**SEWER MAINTENANCE DISTRICT 1**

**WASTEWATER TREATMENT PLANT COMPLIANCE DECISION**





March 8, 2011

Holly Heinzen, Interim County Executive Officer  
Placer County  
175 Fulweiler Ave.  
Auburn, CA 95603

Robert Richardson, City Manager  
City Manager Office at City Hall  
1225 Lincoln Way, Room 9  
Auburn, CA 95603

Subject: Mid-Western Placer Regional Sewer Project  
February 8, 2012 City Council Reaffirmation of the February 8, 2011 Proposal  
with Revised Deal Points in Response to Requests from County and City of  
Auburn Staff

Dear Holly and Robert,

On February 28, 2012 the Lincoln City Council reaffirmed the February 8, 2011 City of Lincoln regional sewer proposal with revised deal points in response to requests from Placer County and City of Auburn staff. The purpose of reaffirming the 2011 proposal and approval of the deal points was to provide assurances that the City of Lincoln remains committed to working with Placer County and the City of Auburn to implement a regional sewer solution that is beneficial to all three agencies.

Attached are the deal point revisions approved by the City of Lincoln Council on February 28, 2012 and the original proposal as transmitted to Placer County and the City of Auburn on February 10, 2011. We are open to consideration of further revisions that Placer County and the City of Auburn may request.

City Hall  
600 Sixth Street  
Lincoln, CA 95648  
(916) 434-2400  
[www.ci.lincoln.ca.us](http://www.ci.lincoln.ca.us)

Administrative Services - City Manager's Office - Development Services  
Fire - Library - Recreation - Police - Public Services



The City is confident in our ability implement the regional project as proposed in the agreement with the deal point revisions and we are prepared to move forward quickly to implement the regional sewer solution.

As you know, staff of our three agencies have now reached agreement on three detailed reports: Preliminary Project Description, Price and Schedule Confirmation and Environmental Constraints. County and Auburn staff have the final versions of these three reports.

If Placer County and the City of Auburn decide to proceed with the regional sewer project based on the City of Lincoln proposal and the deal point revisions, the City of Lincoln is ready to work with Placer County and the City of Auburn to prepare final agreements that would be brought to each agency for approval.

If Placer County and the City of Auburn so desire, the City of Lincoln will continue to work with staff from both the County and Auburn on an interim basis to move the regional sewer project forward. Further environmental review and design work could be continued concurrently with completion of the necessary final agreements. The level of funding needed for this effort per month could vary from \$100,000 to \$600,000. The lower level would keep some critical path items moving forward and the higher level would allow the project to keep on the schedule approved by the Placer Nevada Wastewater Authority Board and Technical Advisory Committee.

We look forward to working further with you and your staff on this important project that will benefit all three agencies for many years.

Sincerely,

Jim Estep  
City Manager

- c: Mark Miller, Public Services Director
- Bruce Burnworth, City Engineer
- Jim Durfee, County Facilities Director, Placer County
- Bernie Schroeder, Public Works Director, City of Auburn
- Orin Bennett, PNWA Executive Director

**Deal Point Revisions Approved by the  
City of Lincoln City Council on February 28, 2012**

The following deal point revisions, clarifications, and changes to the Original Lincoln Offer Agreement (February 2011) were developed during weekly Technical Advisory Committee meetings. These items would be incorporated into revised Environmental Documentation and Design agreements to be executed by the parties. The revised agreements would be subject to final review by the Lincoln City Council, as well as Placer County and the City of Auburn.

The following changes to the Original Agreement have been requested by the City of Auburn, and they are acceptable to County and City of Lincoln staff.

- 1) Schedule update - See Attachment 1 (Project Schedule).
  - a. Commitment to fund Lincoln environmental and design by March 30, 2012.
  - b. Scheduled completion date for environmental review March 2013 with up to six months additional time if needed per the State Revolving Fund commitment to reserve SMD#1 approved principal forgiveness funds.
  - c. Commitment to fund Lincoln construction subject to and upon approval of environmental document in March 2013.
  - d. Completion of SMD#1 conveyance facilities to Lincoln and partial expansion of Lincoln WWTRF to accommodate SMD#1 flow scheduled for March 2014 with up to 12 months additional time if needed to meet Regional Water Quality Control Board Permit requirements for SMD#1.
  - e. Completion of Auburn conveyance facilities and treatment capacity at Lincoln WWTRF scheduled for March 2016.
  - f. First payment for SRF loan would be in 2017 - one year after anticipated completion of construction.
- 2) Cost Update – See Attachment 2 (2012 Revised Exhibits A and C to the Original Agreement).
  - a. Increase all capital and operational costs in the Original Agreement by the amount of inflation over the last year as estimated by Stantec from research with contractors and material suppliers (2.2% overall).
  - b. The firm Capital Cost price assumes 2% inflation from January 2012 to the mid-point of construction. This 2% equals \$1,283,103 and will be considered a contractual allowance for inflation. The amount of inflation to be added to the firm price will be adjusted up or down based on the actual rate of inflation defined by the ENR 20 City Construction Cost Index. The actual inflation rate will be applied to construction phase costs: construction (\$64,155,132) and construction

management (8% of construction cost). Compared to January 2011 there is now a higher level of risk that the level of inflation will significantly increase costs over the next few years.

- c. Capital Costs including Lincoln oversizing (purchase of capacity by SMD#1 and Auburn) are to be paid at the earliest possible date as allowed by the State Revolving Fund (SRF). The earliest possible date is likely to be upon SRF funding of the loan for the regional project and initial reimbursements. The City of Lincoln would hold and not spend these funds until the final payments are made for construction of the regional facilities so that the funds may be used as needed to cover any cost overruns which Lincoln may be obligated to cover.
- 3) Creek water – To the extent required by regulatory agencies, Lincoln will arrange for and pay for the cost of raw water to meet regulatory requirements to make up for the cessation of treated effluent releases into Auburn Ravine (Auburn WWTP) and Coon Creek (SMD#1 WWTP) during the initial five years of operation. Auburn and the County agree to work with Lincoln to encourage PCWA, NID and PG&E to meet endangered fish needs through other means. County agrees to continue its release of NID water into Rock Creek at County cost if required. The NPDES permit for the Auburn WWTP will be maintained by Auburn and the WWTP facilities will be maintained by Lincoln to allow the Auburn WWTP tertiary treatment to be resumed and treated effluent to be released to Auburn Ravine if no other source of water is available to make up for the WWTP effluent water removed and the effluent water is needed to meet regulatory requirements.
- 4) Openness to governance options for pipeline – Lincoln is willing to turn over maintenance, operation and ownership of the regional conveyance system outside the Lincoln sphere of influence to any entity designated by Auburn and the County anytime after completion of construction in return for release from all obligations associated with the facilities and their operation. This would be a future decision by the County and Auburn.
- 5) Start of operations – The five year firm price for operations and maintenance will start when the effluent for each treatment plant site is conveyed to Lincoln (SMD#1 and Auburn firm price commitment periods will not be the same since SMD#1 effluent conveyance to Lincoln would start before Auburn's).
- 6) Increase the initial pumping capacity at the Auburn WWTP from 3.6 million gallons per day to 5.2 million gallons per day with an increase in Capital Cost of \$500,000.

The following changes to the Original Agreement have been requested by the City of Auburn, and they are acceptable to Auburn and City of Lincoln staff.

- 1) Annual Operations Report: Lincoln will prepare for Auburn and County review and comment, at least annually, a regional operations report that will include operational statistics, variations from budgets, major repairs and

improvements, 5-year projections of available treatment capacity, 5-year projections of O&M costs, 5-year projections of major maintenance, 5-year Capital Improvement Program and a 10-year regulatory compliance plan.

- 2) Increase the emergency containment volume from 3 million gallons to 6 million gallons at the SMD#1 WWTP site with an increase in the Capital Cost of \$510,000.
- 3) Reallocate the cost of the Bickford pipeline section with Auburn cost increasing \$500,000 and SMD#1 decreasing \$500,000 with Auburn paid back its share prior to Bickford Ranch use of the sewer line.

The Technical Advisory Committee recommends that the preferred approach to the Regional Sewer Solution is as follows:

- Proceed with the proposed Revised Agreement with the above clarifications and changes (Lincoln to perform environmental review, design, easement acquisition, construction and at least initial operation.)
- Placer County Treasurer to lead obtaining a State Revolving Fund Loan for the Regional Sewer Solution.
- During environmental review, design, construction and initial operation, the Project would proceed under agreements of the parties that include provisions for oversight by Auburn and the County. This would include oversight committees at the technical and elected official level to review and provide input on the project as it proceeds through environmental review, design construction and initial operations phases.
- Implementation and operation of the regional project based on agreements among the parties could continue indefinitely while the participants develop a long term arrangement which could include a joint powers authority or annexation of the conveyance facilities to the South Placer Municipal Utility District.



**Attachment 1**  
**Project Schedule**

Proposed Regional Sewer Project Schedule Range

	2012			2013			2014			2015			2016			2017			2018								
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Approval of Agreements to Implement Regional Project																											
Environmental Review and Design																											
SRF Financing Approval (P.F.A. and F.F.A.)																											
Final PS&E for Pipeline and Pumps																											
Permitting and Right of Way																											
Pipeline & Pump Bidding and Award																											
Pipeline & Pump Construction																											
Partial Start-up of Pipeline & Pumps (Eliminate SMD1 Discharge)																											
Final PS&E for Treatment Plant Expansion																											
Treatment Plant Expansion Bidding and Award																											
Treatment Plant Expansion Construction																											
Milestone for Completion of Oxidation Ditch for SMD1 Flows																											
Start-up of Treatment Plant Expansion & Auburn Flows																											
Treatment Plant Notice of Completion																											
Start Repayment of SRF Loan																											

- Notes
- 1) Darker shading and lighter shading provide a Project Schedule Range.
  - 2) Project Schedule Range includes 6 to 18 months of float between the scheduled elimination of the SMD1 discharge and the required milestone date of September 2015.
  - 3) Darker bars represent the desired outcome due to earlier compliance with Regional Water Quality Control Board discharge requirements for SMD1.

ATTACHMENT 2

Exhibit A (Revised February 2012)

Firm Prices for ~~Construction~~ Capital Cost and Operation of Regional Facilities

	<u>County and Auburn</u>	<u>Stand Alone</u>
<b>Construction-Capital Cost*:</b>		
County:	<del>\$64,500,000</del> \$66,010,000	<del>\$71,700,000</del> \$73,000,000
Auburn:	<del>\$24,500,000**</del> \$28,700,000	<del>\$37,500,000</del> \$39,000,000
 <b>Operation &amp; Maintenance Cost***:</b>		
County:	\$22 per EDU per month****	\$24 per EDU per month
Auburn:	\$21 per EDU per month	\$25 per EDU per month

\*Includes Construction, Design, Environmental Documentation, Construction Management, Design Services During Construction, Inspection, Project Management, Right of Way, Permitting, Inflation, Oversizing Reimbursement and Contingency Payments made by Auburn and County associated with the Environmental and Design Agreement will apply toward this amount. The project scope and various terms and conditions including cost adjustments are generally defined in the Draft Construction/Operation Agreement as described in this agreement. See also Stantec Report: Lincoln Offer Price and Schedule Confirmation. Price assumes 2% inflation from January 2012 to the mid-point of construction. The contractual allowance for inflation will be adjusted to match inflation according to the ENR 20 City Construction Cost Index.

\*\* The amount shown is reduced by \$3M with the provision that Auburn will pay an additional \$3M to Lincoln as Auburn collects development connection charges of an additional \$1,000 per new EDU above and beyond other regional connection charges. Note: Not feasible due to lack of nexus.

\*\*\*In January 2011 dollars. Firm price for first five years of operation. Firm price to be escalated from January 2011 based on electricity and chemical unit cost increases and operator cost increase index based on five area wastewater treatment plants of equivalent size and nature as determined by Lincoln. Includes operation and maintenance of all Regional Facilities, secondary treatment at Auburn Wastewater Treatment Plant, addressing creek water as may be required. Funding for future replacement and repair deferred to after initial five years of operation.

\*\*\*\*During initial operation, before completion of the WWTRF expansion, economies of scale will be reduced and additional work is needed to operate the WWTRF at capacity. An additional \$3 per EDU per month will be added to the amount shown until the initial WWTRF expansion is complete.

**Exhibit C (Revised February 2012)**

**Design and Environmental Review Scope of Work,  
Payment Schedule and Dollar Amounts**

The design and environmental scope of work and not-to-exceed amounts are as follows:

1. Professional Services Agreement Amendment No. 1 to the November 19, 2010 Professional Services Agreement with Stantec Consulting Services, Inc. (Exhibit C-1): \$5,933,000.
2. City of Lincoln Program and Project Management including engineering, planning, environmental review, financial, management and operations staff necessary to complete environmental review and design of the project: \$400,000.
3. Contingency: \$300,000.

~~Payment schedule is as follows:~~ **Estimated monthly amounts:**

	County 72.1%	Auburn 27.9%	
April-12	\$450,000	\$174,000	← Initial Payments
May-12	\$450,000	\$174,000	
June-12	\$450,000	\$174,000	
August-12	\$450,000	\$174,000	
September-12	\$450,000	\$174,000	
October-12	\$450,000	\$174,000	
December-12	\$450,000	\$174,000	
January-13	\$450,000	\$174,000	
February-13	\$285,000	\$108,000	
	\$4,785,000	\$1,848,000	

~~Lincoln will provide invoices in advance of the payment due dates.~~  
Lincoln to invoice for actual expenses.

**Total amounts by Agency:**

County Total:	\$4,785,000
Auburn Total:	<u>\$1,848,000</u>
Total:	\$6,633,000

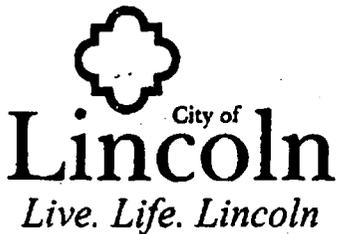
**NOTE: Payments for design, environmental review and permitting are included in and credited toward the Capital Costs identified in Exhibit A.**

**Stand Alone Adjustments:**

If only the County proceeds with the Regional Project, then the total County payments will increase to \$5,580,000.

~~If only Auburn proceeds with the Regional Project, then the total Auburn payments will increase to \$2,810,000.~~

~~Each scheduled payment will be increased in proportion to the total payment increase.~~



February 10, 2011

Tom Miller, County Executive Officer  
Placer County  
175 Fulweiler Ave.  
Auburn, CA 95603

Robert Richardson, City Manager  
City Manager Office at City Hall  
1225 Lincoln Way, Room 9  
Auburn, CA 95603

Subject: Mid-Western Placer Regional Sewer Project Proposal

Dear Tom and Bob,

On February 8, 2011 the Lincoln City Council authorized submittal of the attached draft agreement as a proposal to Placer County and the City of Auburn. The proposal was put in the form of an agreement so that both the County and Auburn would know that the City of Lincoln is committed to this project and the approach.

We understand that the window of opportunity for the County to consider this proposal is short given the County's intent to advertise the SMD#1 upgrade project for bids in May or June 2012. The City is confident in our ability implement the regional project as proposed in the agreement.

We understand that Placer County compliance with Regional Water Quality Control requirements is putting pressure on the County. Lincoln is prepared to focus its efforts on completion of the conveyance facilities associated with SMD#1 in 2013. Conveyance facilities for Auburn would be built concurrently to minimize costs. Completion of expansion of the Lincoln Wastewater Treatment and Reclamation Facility would follow.

The current very competitive bidding environment is likely to fade over time. A five percent increase in bids resulting from a not so competitive bid environment could add over \$4 million to the cost of the project. The City of Lincoln is prepared to move forward quickly with implementation of the regional project.

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Administrative Services - City Manager's Office - Development Services  
Fire - Library - Recreation - Police - Public Services



As you know, staff of our three agencies have been working closely together on this proposal over the last three months. Despite the tight time frames, the staff of our three agencies have made a lot of progress.

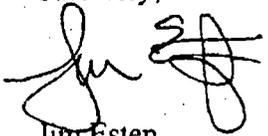
Your agency has at least three options for a response to the attached agreement authorized by the Lincoln City Council: (1) Accept the agreement as submitted, (2) Indicate a desire to pursue the agreement with changes, (3) Reject the proposal.

If the County or Auburn indicate a desire to pursue the agreement with changes, we will work quickly with your staff to consider proposed changes to develop an agreement acceptable to all three agencies.

We respectfully request that the County place this item on the Board of Supervisor's February 22<sup>nd</sup> agenda for consideration. We request that the City of Auburn place the item on the Auburn City Council's February 28<sup>th</sup> agenda for consideration. If these dates are not feasible, please place the item on the earliest possible agenda.

We look forward to working further with you and your staff on this important project that will benefit all three agencies for many years.

Sincerely,



Jim Estep

- c: Mark Miller, Public Services Director
- Bruce Burnworth, City Engineer
- Jim Durfee, County Facilities Director, Placer County
- Bernie Schroeder, Public Works Director, City of Auburn
- Orin Bennett, PNWA Executive Director



**RESOLUTION NO. 2011- 027**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LINCOLN AUTHORIZING THE CITY MANAGER TO EXECUTE (1) AN AGREEMENT WITH THE CITY OF AUBURN AND PLACER COUNTY TO PROVIDE ENVIRONMENTAL DOCUMENTATION AND DESIGN AND A FIRM PRICE FOR CITY OF LINCOLN TO CONSTRUCT AND OPERATE THE MID-WESTERN PLACER REGIONAL SEWER PROJECT, AND (2) AMENDMENT NO. 1 TO THE NOVEMBER 19, 2010 AGREEMENT WITH STANTEC CONSULTING, INC. TO PROVIDE THE ENVIRONMENTAL DOCUMENTATION AND DESIGN SERVICES FOR THE MID-WESTERN PLACER REGIONAL SEWER PROJECT NOT TO EXCEED \$6,233,000 WITH THE COST PAID BY CITY OF AUBURN AND PLACER COUNTY**

**WHEREAS**, the City of Lincoln will benefit from the City firm price to design, build, own and operate the proposed regional sewer facilities; and

**WHEREAS**, the Placer-Nevada Wastewater Authority has unanimously endorsed the Lincoln proposed approach to implementing the regional sewer project; and

**WHEREAS**, Stantec was selected for the necessary design and environmental review work through a competitive selection process; and

**WHEREAS**, the notice to proceed with the Stantec work will not be issued until agreements with Placer County and the City of Auburn are in place to pay for the consultant and City staff work.

**NOW, THEREFORE BE IT RESOLVED**, that the City Council of the City of Lincoln does hereby authorize the City Manager to execute (1) an agreement with the City of Auburn and Placer County to provide environmental documentation and design and a firm price for City of Lincoln to construct and operate the Mid-Western Placer Regional Sewer Project with a provision allowing the City Manager to make nonsubstantial revisions to the agreement following approval of the revisions by the City of Lincoln representative to the Placer Nevada Wastewater Authority, and (2) Amendment No. 1 to the November 19, 2010 agreement with Stantec Consulting, Inc. to provide the Environmental Documentation and Design services for the Mid-Western Placer Regional Sewer Project not to exceed \$6,233,000 with the cost paid by City of Auburn and Placer County .

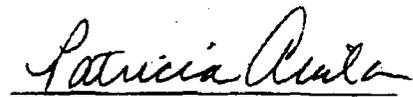


PASSED AND ADOPTED this 8th day of February, 2011, by the following roll call vote.

AYES: COUNCILMEMBERS: Hydrick, Cosgrove, Nader, Joiner  
NOES: COUNCILMEMBERS: None  
ABSENT: COUNCILMEMBERS: Short

  
Paul Joiner, Mayor

ATTEST:

  
Patricia Avila, City Clerk

**Agreement Between City of Lincoln and Placer County and the City of Auburn  
For Environmental Review and Design of  
Mid-Western Placer Regional Sewer Project and for a  
Firm Price for Construction and Operation**

This agreement ("Agreement") made this \_\_\_ day of February, 2011, by and between the City of Lincoln, a municipal corporation, hereinafter referred to as "Lincoln", Placer County hereinafter referred to as "County" and the City of Auburn, a municipal corporation, hereinafter referred to as "Auburn". These three public entities are hereinafter referred to as "Parties".

**RECITALS**

The Parties have been working together to develop a regional solution to wastewater treatment in Mid-Western Placer County for over twelve years.

The Parties currently are and will remain responsible for wastewater collection within their respective jurisdictions.

The Parties desire to work together to convey wastewater collected within Auburn and the County to the City of Lincoln Wastewater Treatment and Reclamation Facility ("WWTRF") for treatment and disposal for the mutual benefit of all Parties. The facilities needed to convey wastewater from County and Auburn to Lincoln and then treat and dispose of the conveyed and treated wastewater are hereinafter referred to as "Regional Facilities" and sometimes referred to as the "Project". Regional Facilities and Project includes expansion of the Lincoln WWTRF required to receive, treat and dispose of the County and Auburn wastewater.

The Parties desire that the disposal of treated effluent produced from County and Auburn wastewater will have an emphasis on beneficial use of the treated effluent on farmland west of Lincoln and that funds from the possible sale of this treated effluent will be used to partially off-set the cost of distributing, regulating and disposal of this treated effluent.

Benefits to the Parties include the following:

- Lincoln receives reimbursement for a portion of its expense to expand parts of the Lincoln WWTRF and the main sewer trunk line across the City of Lincoln for the Project.
- Lincoln shares with Auburn and the County savings from the economies of scale resulting from the combined treatment of wastewater from all three jurisdictions in the Lincoln WWTRF.
- Auburn and the County receive greater certainty regarding the cost of wastewater treatment as regulatory requirements related to wastewater treatment and disposal increase over time.
- Auburn and the County take advantage of the cost savings associated with the current bidding environment by moving the Project forward quickly
- The County is able to more quickly put an end to fines being charged for discharges to creeks that do not meet regulatory standards.

- Auburn and the County receive cost savings and speedy completion associated with having one agency responsible for the design, construction and operation of all regional facilities.
- All Parties, the public and the environment benefit from the removal of treated wastewater from creeks that run through our communities.

The Parties desire to reach agreement and make commitments relative to proceeding with environmental review, permitting and design of a regional solution to wastewater conveyance, treatment and disposal using an expanded Lincoln WWTRF. The Parties also desire to agree now on firm prices for construction and operation of the Regional Facilities based on specific terms and conditions to be further developed during environmental review and design.

**NOW, THEREFORE**, the Parties hereto mutually agree as follows.

**Article 1 Term of Agreement**

This Agreement shall be effective on March 1, 2011 and shall remain in effect through March 30, 2012 (scheduled completion of environmental review and design). Prior to March 30, 2012 the Parties may agree to extend this Agreement.

**Article 2 Firm Price Agreement**

Exhibit "A" sets forth firm prices for construction and operation of the Regional Facilities ("Firm Prices"). Exhibit "B" is a DRAFT Agreement for Construction and Operation of Regional Wastewater Facilities ("DRAFT Construction/Operation Agreement"). The Parties agree that the Firm Prices along with the DRAFT Construction/Operation Agreement will be the basis for an Agreement for Construction and Operation of Regional Wastewater Facilities ("Construction/Operation Agreement") to be considered following completion of environmental review. The Parties agree to diligently and cooperatively to develop a Construction/Operation Agreement as described in this Agreement during environmental review and design.

**Article 3 Obligations of Lincoln**

The design and environmental review work to be completed under this Agreement along with a payment schedule and not-to-exceed dollar amounts for this work are described in Exhibit "C". Following receipt of payments from County and Auburn described in Exhibit C, Lincoln will proceed with environmental review and design for the facilities generally defined in the Construction/Operation Agreement. The initial payments from County and Auburn as set out in Exhibit C must be received by March 30, 2011 with subsequent payments made as set forth in Exhibit C.

Once the required payment is received, Lincoln will proceed expeditiously to complete environmental review of the proposed Regional Facilities. The scheduled completion date for environmental review is March 1, 2012. Completion of environmental review will include sufficient design work to allow for completion of the required environmental review and to be ready for obtaining bids for the work.

Additional dollar amounts beyond those set forth in Exhibit C must be approved by all Parties.

Lincoln will cooperate with the County and Auburn to assist County and Auburn in obtaining reimbursement from the Army Corps of Engineers (ACOE), Environmental Protection Agency (EPA) or other funding agency for environmental review and design payments made to Lincoln pursuant to this Agreement. County and Auburn shall provide the required funds to Lincoln and then County and Auburn shall seek reimbursement from the ACOE, EPA or other funding agency. The Parties agree to work together to minimize any additional costs and delays associated with possible funding sources. If County and Auburn choose to incur additional costs or delay the Project to pursue the use of outside funding sources, Lincoln will not be responsible for such delays or the costs associated with such delays.

Lincoln agrees to complete construction and operate the regional facilities at the firm prices described in Article 2 provided (1) County and Auburn have complied with all the terms of this Agreement, (2) the environmental review has been completed for the Project and (3) the Parties have approved a Construction/Operation Agreement as described in Article 2 on or before March 30, 2012.

### Article 3 Obligations of County/Auburn

County and Auburn shall deposit with Lincoln the funds required for completion of environmental review as described in Exhibit C. These amounts include consultant and City of Lincoln staff time associated with environmental review, project management and design. The initial payments as set out in Exhibit C must be received by Lincoln by March 30, 2011.

County and Auburn shall cooperate with Lincoln in order to timely complete the work as described in Exhibit C.

Auburn and the County agree, if they choose to pursue outside funding, to be responsible for any additional costs and delays associated with the possible additional funding sources as described above in Article 2.

### Article 4 Environmental Review

The Parties agree that Lincoln will be the designated lead agency for purposes of environmental review under the California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA). County and Auburn shall be responsible agencies.

County and Auburn agree as responsible agencies to consider Lincoln's CEQA and NEPA documents following Lincoln's adoption and certification of the Project. County and Auburn agree to subsequently consider the Construction/Operation Agreement and if they decide to approve said agreement, to file their own Notice of Determination pursuant to CEQA.

If County and Auburn decide not to approve and proceed with the proposed Construction/Operation Agreement after Lincoln certification of the appropriate CEQA and NEPA documents, then Lincoln will have no obligation to proceed further with the Regional Facilities project and have no obligation to repay any funds paid by County and Auburn to Lincoln pursuant to this Agreement or any other funds paid for the Project. If

the CEQA and NEPA processes identify significant environmental impacts that are not mitigated by the Project, then the Parties may either choose to adopt overriding considerations or abandon the Project, in which case Lincoln will have no obligation to proceed further with the Project and have no obligation to repay any funds paid by County and Auburn to Lincoln for the project.

#### Article 5 Proposition 218 Hearings

County and Auburn agree to proceed in a timely manner with Proposition 218 hearings for rate increases necessary to accommodate Project costs. Other firm sources of funding may reduce the Project costs to be paid for through user rates

In any Lincoln Proposition 218 hearings Auburn and the County will be wholesale customers and not property owners for purposes of notices and protest counting.

#### Article 6 Other County and Auburn Actions

County and Auburn agree to expeditiously complete any other separate actions necessary for consideration, approval and initiation of the Operation/Maintenance Agreement. These actions include any necessary and related personnel and employee meet and confer contractual matters related to said agreement. The Parties contemplate that these actions will be taken well in advance of completion of environmental review.

#### Article 7 Eminent Domain

If necessary for timely and cost-effective completion of the Regional Facilities, County and Auburn designate Lincoln as the agency having authority for appropriate eminent domain actions within the boundaries of the respective agencies. Such eminent domain action will only be taken after all reasonable efforts have been taken to secure property rights from property owners through negotiation and only when necessary to complete the proposed project in a timely and cost-effective manner. No eminent domain action will be taken prior to completion of environmental review; however, timely completion of the Project may require such eminent domain action to be initiated immediately following completion of environmental review. During the environmental review process Lincoln may work with property owners to secure right of way agreements for the Project that are contingent upon appropriate compliance with CEQA and NEPA. If eminent domain is necessary for the project the costs associated with such eminent domain will be part of the firm project cost. The pipeline is to be located almost entirely within existing roads so the need for eminent domain action is unlikely.

#### Article 8 – Oversight and Cooperation

This Agreement provides that Lincoln will proceed with environmental review and design of the Regional Facilities providing that the County and Auburn fulfill their obligations. County, Auburn and Lincoln will work together at both the technical level through a Mid-Western Placer Regional Sewer Technical Advisory Committee ("TAC") and at an elected official level through a Mid-Western Placer Regional Sewer Oversight Committee ("Oversight Committee"). The TAC will include one technical staff member from each Party. The Oversight Committee will include one elected official appointed by each of the Parties' governing bodies.

The TAC will meet periodically as they agree to review progress and cooperate in completion of the work described in this Agreement. Recommendations from the TAC will be forwarded to the Oversight Committee.

The Oversight Committee will meet periodically as they agree to review progress and cooperate in completion of the work described in this Agreement. Recommendations from the Oversight Committee will be forwarded to the governing bodies of the Parties.

Lincoln will provide information on progress of the work and review analyses and decisions relative to the work with both the TAC and as requested with the Oversight Committee. Lincoln will receive input from both the TAC and Oversight Committee and endeavor to address concerns raised by the TAC and Oversight Committee. Given the responsibility accepted by Lincoln for design, environmental review, construction and operations, Lincoln will be responsible for making decisions regarding design and environmental review.

#### Article 9 – Project Financing

The Parties agree to cooperate in securing financing for the project. If the Parties agree that Lincoln should take the lead in obtaining State Revolving Fund (SRF) loan for the Project, the Parties will enter into a separate agreement to specifically address financing

#### Article 10 - Time and Method of Payments

County and Auburn agree to fund the environmental and design costs described in Exhibit C in advance. The initial payment amounts set forth in Exhibit C will be paid by County and Auburn prior to the dates shown in the payment schedule and no work will be done prior to receipt of payment. The subsequent payments set forth in Exhibit C will be paid per the schedule provided in Exhibit C. Lincoln will provide invoices 30 days prior to the payment dates shown in Exhibit C.

#### Article 11 – Execution by Either County or Auburn

If either the County or Auburn execute this agreement and make the required payments, Lincoln may proceed with the environmental and design work for the party that executed the agreement.

Executed the first date entered above.

Placer County

City of Lincoln  
a municipal corporation

\_\_\_\_\_  
Robert M. Weygandt,  
Chairman, Board of Supervisors

\_\_\_\_\_  
Jim Estep, City Manager

\_\_\_\_\_  
Dated

APPROVED AS TO FORM:

APPROVED AS TO FORM:

\_\_\_\_\_  
County Counsel

\_\_\_\_\_  
Tim Hayes, City Attorney

ATTEST:

\_\_\_\_\_  
Patricia Avila, City Clerk

City of Auburn  
a municipal corporation

\_\_\_\_\_  
Bill Kirby, Mayor

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

Exhibit A

Firm Prices for Construction and Operation of Regional Facilities

	<u>County and Auburn</u>	<u>Stand Alone</u>
<b>Construction Capital Cost**:</b>		
County:	\$64,500,000	\$71,700,000
Auburn	\$24,500,000**	\$37,500,000
<b>Operation &amp; Maintenance Cost***:</b>		
County:	\$22 per EDU per month****	\$24 per EDU per month
Auburn:	\$21 per EDU per month	\$25 per EDU per month

\*Includes Construction, Design, Environmental Documentation, Construction Management, Design Services During Construction, Inspection, Project Management, Right of Way, Permitting, Inflation, Oversizing Reimbursement and Contingency Payments made by Auburn and County associated with the Environmental and Design Agreement will apply toward this amount. The project scope and various terms and conditions including cost adjustments are generally defined in the Draft Construction/Operation Agreement as described in this agreement

\*\* The amount shown is reduced by \$3M with the provision that Auburn will pay an additional \$3M to Lincoln as Auburn collects development connection charges of an additional \$1,000 per new EDU above and beyond other regional connection charges.

\*\*\*In January 2011 dollars Firm price for first five years of operation Firm price to be escalated from January 2011 based on electricity and chemical unit cost increases and operator cost increase index based on five area wastewater treatment plants of equivalent size and nature as determined by Lincoln. Includes operation and maintenance of all Regional Facilities, secondary treatment at Auburn Wastewater Treatment Plant, addressing creek water as may be required. Funding for future replacement and repair deferred to after initial five years of operation.

\*\*\*\*During initial operation, before completion of the WWTRF expansion, economies of scale will be reduced and additional work is needed to operate the WWTRF at capacity An additional \$3 per EDU per month will be added to the amount shown until the initial WWTRF expansion is complete

## Exhibit B

### **DRAFT Agreement Between City of Lincoln and Placer County/City of Auburn For Construction and Operation of Mid-Western Placer Regional Wastewater Facilities**

This contract made this \_\_\_ day of \_\_\_\_\_, 2012, by and between the City of Lincoln, a municipal corporation, hereinafter referred to as "Lincoln", Placer County hereinafter referred to as "County", and the City of Auburn, a municipal corporation, hereinafter referred to as "Auburn." These three public entities are hereinafter referred to as "Parties".

#### **RECITALS**

The Parties have been working together to develop a regional solution to wastewater treatment in Mid-Western Placer County for twelve years.

The Parties currently are and will remain responsible for wastewater collection within their respective jurisdictions.

The Parties desire to work together to convey wastewater collected within Auburn and the County to the City of Lincoln Wastewater Treatment and Reclamation Facility ("WWTRF") for treatment and disposal. The facilities needed to convey wastewater from County and Auburn to Lincoln and then treat and dispose of the conveyed and treated wastewater are hereinafter referred to as "Regional Facilities".

The Parties desire that the disposal of treated effluent produced from County and Auburn wastewater will have an emphasis on beneficial use of the treated effluent on farmland west of Lincoln and that funds from the possible sale of this treated effluent will be used to partially off-set the cost of distributing, regulating and disposal of this treated effluent.

Benefits to the parties include the following:

- Lincoln receives reimbursement for a portion of its expense to expand parts of the Lincoln Wastewater Treatment and Reclamation Facility (WWTRF) and the main sewer trunk line across the City of Lincoln for the regional sewer project
- Lincoln shares with Auburn and the County savings from the economies of scale resulting from the combined treatment of wastewater from all three jurisdictions in the Lincoln WWTRF.
- Auburn and the County receive greater certainty regarding the cost of wastewater treatment as regulatory requirements related to wastewater treatment and disposal increase over time.
- Auburn and the County take advantage of the cost savings associated with the current bidding environment by moving the project forward quickly.
- The County is able to more quickly put an end to fines being charged for discharges to creeks that do not meet regulatory standards.

- Auburn and the County receive cost savings and speedy completion associated with having one agency responsible for the design, construction and operation of all regional facilities.
- All parties, the public and the environment benefit from the removal of treated wastewater from creeks that run through our communities.

The parties entered into an agreement dated \_\_\_\_\_ 2011 to provide for completion of environmental review for the proposed Regional Facilities which contemplated completion and execution of this agreement.

#### Article 1 – Initial Term of Contract

This agreement for construction and operation of regional wastewater facilities shall be effective on April 1, 2012 and shall remain in effect through June 30, 2035.

#### Article 2 – Options for Continued Service

After the expiration of the initial term of this agreement, County and Auburn shall be entitled to renewals of this agreement for successive periods not to exceed twenty years at a time. The terms and conditions of each such renewal shall be agreed upon not later than one year prior to the expiration of the then existing contract and shall provide for wastewater conveyance, treatment and disposal under the same conditions of service as provided for in the then existing contract including time, place, amount and rate of delivery as provided for herein except by mutual agreement.

#### Article 3 - Points of Delivery

All wastewater conveyed, treated and disposed of pursuant to this agreement shall be received from County and Auburn at the existing County and Auburn wastewater treatment plants at the place described and shown on Exhibit A attached hereto and incorporated herein by reference. County and Auburn shall be solely responsible for operating and maintaining all facilities upstream of the point of delivery. The Regional Facilities downstream of the Point of Delivery will be owned, operated and maintained by the City of Lincoln.

#### Article 4 – Inflow and Infiltration

County, Auburn and Lincoln will take steps necessary to reduce inflow and infiltration (I&I) into their collection system. For County and Auburn this effort shall include the expenditure of at least \$500,000 for each agency per year toward the assessment and reduction of I&I in their system and the ability of trunk sewer mains to accommodate and store peak wet weather wastewater flows. This amount shall be adjusted for inflation and continue until the Peak Wet Weather Flow (PWWF) is less than 3.5 times the Average Dry Weather Flow (ADWF). This goal may be modified by the Parties as long as an appropriate mechanism to provide capacity for increased flows from future development is enacted is in place. Each year County, Auburn and Lincoln will provide each other with a multi-year plan for reduction of I&I to meet this goal.

**Article 5 - Delivered Wastewater Characteristics**

County and Auburn and Lincoln to be responsible for meeting all regulatory pre-treatment requirements associated with their respective flows. This includes preparation of pre-treatment plans and implementation of pre-treatment plans. The pre-treatment program is to meet the regulatory requirements associated with a treatment plant with a size of the WWTRF. At a minimum this requires the preparation and implementation of an Industrial Pretreatment Program (IPP). Lincoln will cooperate with County and Auburn in the preparation and implementation of these pre-treatment plans with any associated costs separately paid by the County and Auburn.

County and Auburn and Lincoln will be responsible for any regulated or non-regulated contaminants in their respective flows. Any constituent that results in extra treatment or handling costs above and beyond typical wastewater flow is considered a contaminant. County, Auburn and Lincoln to pay all costs related to conveyance, treatment and disposal of such contaminants to the extent the contaminant was collected in their wastewater system.

To the extent required by regulatory agencies, County, Auburn and Lincoln will monitor flows throughout their respective collection systems to identify and address any flow irregularities or constituent irregularities that are unusual for municipal wastewater flow. At a minimum such monitoring shall meet all applicable regulatory requirements associated with their respective collection system and the WWTRF size and treatment process.

Lincoln will monitor flow at each Point of Delivery and at the WWTRF.

The wastewater constituent characteristics and concentrations that exist in each plant at this time are described in Exhibit B Wastewater Constituents. Significant changes from the current constituent characteristics may result in additional costs which will be paid by the agency that collected the problematic sewage into the sewer system.

Various constituents may be monitored by Lincoln.

Monitoring information collected by Lincoln, County and Auburn will be shared continuously among the agencies to the extent feasible. Such sharing shall be real time through SCADA or other electronic exchange when feasible. If SCADA or electronic exchange is not available then the information will be shared regularly as agreed by the parties. Such exchange of information will include methods of measurement and calibration of measuring devices and instrumentation.

**Article 6 - Maximum Conveyance, Treatment and Disposal Entitlements**

Initial purchase of capacity and operational flows will be based on:

215 gallons per day per EDU (County and Auburn)

340 MG/L Load Rate for County and 320 MG/L BOD Load Rate for Auburn

7,931 EDU (County) and 5,567 EDU (Auburn)

1.7 MGD ADWF (County) and 1.2 MGD ADWF (Auburn)

\_\_\_ MGD PWWF (County) and \_\_\_ MGD PWWF (Auburn)

For reference Lincoln produces 155 gallons per day per EDU, has a BOD load rate of 300 MG/L with 18,175 EDU, 2.8 MGD ADWF and \_\_\_ PWWF.)

Note that the ADWF is the only measure that can be monitored directly by Lincoln. Average Dry Weather Flow will be calculated as a running average over a period of at least 3 years to address changes in flow due to weather and water conservation programs. Lincoln will use the higher of the following two calculations to determine the EDU capacity and connection charges required:

1. EDU as provided initially by the County and Auburn plus the number of EDU connections charges paid to Lincoln by the County and Auburn.
2. EDU as calculated by dividing the ADWF by 215 gallons/day per EDU.

After the initial five years of operations the parties may agree on an adjustment to this method of calculating ADWF and EDUs based on then current flow and BOD rates. The parties may unanimously agree to develop and adopt a common sewer connection charge ordinance.

Lincoln will receive, convey, treat and dispose of wastewater for flows calculated above.

County and Auburn will provide additional payments as necessary to increase the capacity and operational flows calculated as described above.

#### Article 7 – Conveyance, Storage, Plant and Disposal Expansion

Anytime combined average dry weather flows at the WWTRF are projected to exceed capacity within two years, Lincoln will begin design of the next expansion of the WWTRF. Expansion of the WWTRF will be funded by a combination of the following approaches:

- Accumulation of connection charges from Lincoln, Auburn, County
- Advance payments or financing provided by development projects with more than 400 EDUs (see below)
- Financing obtained by Lincoln (Auburn and County to cooperate in any such financing by providing necessary information, meeting required rate covenant requirements and executing required documents as appropriate in a timely manner)

Regional Wastewater Connection charges will include the following components (dollar amounts defined in Article 16):

- Plant expansion (equivalent for all parties based on the cost of expanding the WWTRF and associated treated wastewater disposal facilities)
- Storage at Point of Delivery (Auburn and County only. Separate amount for each based on the cost of providing storage to reduce PWWF to 3.5 times the ADWF)
- Pipeline and WWTRF Oversized Capacity Use (Auburn and County only. Based on the cost of capacity in the Lincoln trunk line, the Lincoln WWTRF oversizing, the Bickford Ranch Pipeline and the Regional Pipeline)

Connection charges will be collected for each building permit that results in an increase in wastewater flow including the addition of any plumbing fixture in any building (i.e., partial EDU).

Connection charges will be collected by the permitting agency and paid quarterly to Lincoln for accumulation and use in paying for expansion of the WWTRF except that the Capacity Use component will be retained by or paid to the agency that provided the capacity being used. This will include connection charges applicable to building permits issued after execution of this agreement.

Any project in the County, Auburn and Lincoln service area that is larger than 400 EDU's, shall be required to pay all connection charges prior to the first sewer service connection or make arrangements with Lincoln to finance their share of next expansion of the WWTRF. Such financing arrangements will be reasonable and address the timing for the next WWTRF expansion

#### Article 8 - Replacement Charges

Replacement costs for treatment plant and conveyance facilities will be as agreed by the Parties. Generally the amount collected for capital replacement will be based on \$4.50 per EDU per month (\$3 for the WWTRF and \$1.50 for conveyance and disposal facilities). These costs will not be added to the operation and maintenance cost during the first five years of operation. The replacement charge will only be added as agreed by the Parties. Adjustments to these amounts will be based on the San Francisco Area Construction Cost Index as published by the Engineering News Record. Adjustments will be as agreed to by the Parties. If replacement charges collected are not sufficient, replacements will need to be funded from O&M with greater fluctuations in annual O&M charges.

#### Article 9 - Operation and Maintenance

Lincoln will operate and maintain the conveyance, treatment and disposal facilities required for the flows described above. Lincoln to hold and maintain all permits.

#### Article 10 - New Regulations Affecting Conveyance, Treatment and Disposal

Due to the uncertainty associated with new regulations, the cost of addressing new regulations affecting conveyance, treatment and disposal of the wastewater flows described above is not included in the charges provided in this agreement. Such new regulations may be established by regulatory agencies at any time, therefore all of the rates established in this agreement are subject to changes required by new regulations.

As new regulations become known, Lincoln will work with the County and Auburn as appropriate to develop an implementation strategy and cost estimates. Following a review of the implementation strategy and cost estimates by the County and Auburn, Lincoln will provide a notice of intent to adjust rates due to new regulations. Since both the nature and timing of the new regulations are unknown, the schedule for implementation of the rates will be included in the implementation plan. County and Auburn will be responsible for the cost of the new regulations on a fair share basis. The definition of a fair share basis will also be included in the implementation plan.

## Article 11 – Lincoln Over Sizing Reimbursement

The following amounts are budgeted for over sizing reimbursement to the City of Lincoln.

WWTRF Component Over Sizing \$ 739 per EDU

Lincoln Sewer Main Over Sizing \$152 per EDU

The capital component of the per EDU charges set forth in Article 16 includes these amounts for oversizing. CURRENTLY THE CAPITAL COST IS PROPOSED AS A SINGLE DOLLAR AMOUNT AND NOT A MONTHLY CHARGE. THIS COULD CHANGE AS THIS AGREEMENT IS DEVELOPED FURTHER.

The calculation of these amounts is shown in Exhibit C Amounts Budgeted for Oversizing Reimbursement to Lincoln.

The connection charges set forth in Article F include the Lincoln Sewer Main Oversizing charges only since the WWTRF oversizing will be used up in the initial expansion.

The following discussion describes how the oversizing reimbursement is used to provide a project contingency that results in the amount of oversizing reimbursement to Lincoln varying with the cost of the project but never resulting in Lincoln paying for the new Regional Facilities and never receiving more than the value of the oversizing. The oversizing reimbursement provides a contingency which allows Lincoln to provide a fixed cost for capital charges associated with the regional facilities. If the capital project costs exceed the amounts estimated by Lincoln for the fixed cost amount, then Lincoln receives fewer dollars of reimbursement for over sizing. If the capital project costs are less than estimated by Lincoln in preparing the fixed cost amount, then Lincoln receives a greater value for its investment in the over sizing.

If the actual capital costs per EDU including engineering, environmental, right of way, construction, construction management, project management and finance but excluding over sizing reimbursement for the conveyance, treatment and disposal facilities exceeds the capital rates set forth in Article 16 of this agreement, then the County and Auburn will each proportionally increase the amount paid for capital per EDU to pay for the costs above these amounts. Note that if the actual costs per EDU exceed the rates set forth in Article 16 then Lincoln would be receiving no reimbursement for the over sizing.

The value of the oversizing performed by Lincoln in the mid 2000s greatly exceeds the cost of the oversizing because the oversizing was performed along with the initial construction of the facilities. The oversizing costs were incurred by Lincoln as developments were constructed. Lincoln paid developers to oversize wastewater facilities. These payments created a negative fund balance of \$9.3 million in the Wastewater PFE Fund. ~~This negative fund balance has impacted other PFE programs such as water and transportation which have been unable to meet their obligations such as water capacity improvements (low pressures exist in the City during peak water use periods due to unconstructed water pipelines, tanks and wells) and transportation (insufficient funds exist to fulfill Lincoln Bypass obligations). In addition to the negative fund balance, Lincoln has an unfunded program to construct approximately \$6 million of gravity sewers and reclaimed water facilities for its new development.~~

If the oversizing capacity in the sewer mains across Lincoln and at the WWTRF were added now, the cost would be in approximately \$50 million. This \$50 million dollar amount is considered the value of the oversizing. If the actual capital costs per EDU including engineering, environmental, right of way, construction, construction

management, project management and finance for the conveyance, treatment and disposal facilities result in a reimbursement to Lincoln exceeding \$2,200 per EDU, then the capital rates set forth in Article 16 of this agreement will be lowered such that the County and Auburn will each share in the savings in effect capping the Lincoln reimbursement at \$2,200 per EDU. Note that this sharing of savings limits the amount Lincoln receives for the over sizing to the estimated value of the oversizing.

The oversizing reimbursement will be recovered by monthly charges with Lincoln financing the oversizing at the same interest rate of 2.7% and same term of 20 years as provided in the SRF loan program. A portion of the oversizing reimbursement will be repaid as part of the connection charges as the capacity in the oversized pipeline is used.

#### Article 12 – Ownership of Facilities

The wastewater conveyance, treatment and disposal facilities downstream of the Point of Delivery will be owned by Lincoln.

The County and Auburn will provide to Lincoln the land at the existing County and Auburn treatment plants needed for regional wastewater facilities for \$1/year. This includes the land initially needed for the facilities and land that may be needed for future expansion of the facilities to accommodate build out of the General Plan. Existing wastewater treatment plant site land will be reserved for future wastewater facilities unless all parties agree that the land is not needed for future wastewater uses.

Any ownership interest the County may have in the Bickford sewer pipeline in SR 193 will be conveyed to Lincoln.

#### Article 13 - Schedule for Construction & Operations

Environmental review and design will be started under the agreement for environmental review and design. The schedule dates and dollar amounts included in this agreement are based on the schedule set forth below.

Given the commitments Lincoln is making to fixed costs in this agreement, the limited construction season window (April/May to October/November), changing construction costs and the fines for non-compliance; if the agreement for environmental review and design is not executed and initial payments made by March 1, 2011 and this agreement for construction and operations is not executed by March 1, 2012, Lincoln cannot hold to its commitment to the schedule, the fixed capital costs, schedule for start of operations and credits for fines. A one to ten month delay in the scheduled agreement execution dates will result in a one year delay in all completion dates (including dates related to responsibility for fines) and a 5% increase in all fixed charges and fees in this agreement.

#### Expected completion dates:

Acceptance of sewage flows from SMMD#1	July 2013
Acceptance of partially treated sewage flows from Auburn	July 2014
Overall completion of construction	August 2015

Latest date for acceptance of sewage from County:

December 31, 2014

If the agreements are executed and payments made as set forth above and, this agreement is not breached by the County and Auburn and, County and Auburn take all reasonable steps to lessen the fines (e.g., operate their sewage existing treatment and disposal facilities to industry standards), then Lincoln will credit discharge permit fines paid by the County and Auburn to County and Auburn as applicable for fines associated with failure to accept sewage flows after the latest date for acceptance of sewage from County: December 31, 2014. The City will use a variety of project management and construction contract management techniques to minimize the associated risk of delay. Lincoln will not be responsible for delays caused by Auburn or County.

#### Article 14 - Limitation on Lincoln Service

The conveyance system will consist of a force main from the County and Auburn Point of Delivery to Sierra College Boulevard which means the pipeline will operate under pressure and no connections to this section of sewer line will be allowed. Lincoln will only convey, treat and dispose of wastewater delivered at the Point of Delivery for County and Auburn except that connections may be made downstream of Sierra College Boulevard as agreed upon by the County and Lincoln. Inside the City of Lincoln, Lincoln may allow connections to the Bickford sewer pipe upon payment of an agreed upon connection charge representing the incremental cost of the pipeline capacity.

#### Article 15 - Measurement

The project will include installation and maintenance of a magnetic flow meter at each Point of Delivery. Lincoln will maintain the existing Magnetic Flow Meter at the WWTRF. These flow meters will be calibrated periodically according to industry standards by an independent third party.

The flow from Lincoln will be calculated by subtracting the flow from the County and Auburn from flow measured at the WWTRF.

These flow measurements will be used to calculate:

- Average Dry Weather Flow (ADWF)
- Average Wet Weather Flow (AWWF)
- Peak Wet Weather Flow (PWWF)
- Average Equivalent Dwelling Unit (EDU) flow rates
- And other flow rates as appropriate

Measurement information from these flow meters will be made available to the County and Auburn.

#### Article 16 - Rates of Payment for Conveyance, Treatment and Disposal

Operations and Maintenance (O&M) fees for the first five years of operation shall be established as set forth in Exhibit D.

The per EDU charge for operations and maintenance will be adjusted annually for increases in the unit cost of electricity and chemicals and operator cost increases from five area wastewater treatment plants.

After five years of operations the following basis will be used to establish the O&M charges including a conveyance component plus a treatment plant component plus a disposal component as follows:

Conveyance component based on reasonable actual costs plus reasonable replacement charges

Treatment plant component based on total treatment costs divided by total Equivalent EDUs treated (Lincoln, County and Auburn equalized based on GPD and BOD per EDU) plus applicable and reasonable capital replacement charges

Disposal component based on total disposal costs minus any related revenues divided by total EDUs treated (Lincoln, County and Auburn) plus applicable reasonable capital replacement charges

The County and Auburn monthly per EDU capital charge will be set for the term of capital financing as set forth in Exhibit E. IF APPLICABLE.

The O&M and capital charge are subject to change as set forth in Article 10 New regulations affecting conveyance, treatment and disposal.

Lincoln will make all commercially reasonable efforts to limit the changes in O&M rates to changes of less than 10% per year.

Connection charges per EDU are estimated as set forth in Exhibit F.

#### **Article 17 - Time and Method of Payments**

**O&M and Capital Charge** – On or before the fifteenth day of each month, Lincoln will send County and Auburn a statement of monthly charges due for the Regional Facilities as set forth in this agreement. The County and Auburn shall pay all statements within twenty (20) days after they are received.

**Connection Charge** – County and Auburn shall remit to Lincoln all Wastewater Connection Charges collected on a quarterly basis, with payments due on March 31, June 30, September 30, and December 31 of each year. Payments will commence with the first quarter ending in which this agreement is executed. Additionally, County and Auburn shall provide Lincoln with documentation specifying the total number of building permits issued by category, the total square footage of permits for non-residential construction and such other information that Lincoln may reasonably require for the purpose of monitoring and accounting for the collection of the fees. The Parties may agree on another schedule for regular remittance of the charges. To the extent that interest accrues on the connection charges while in the possession of the County and Auburn, said interest shall be remitted with payment of the connection charges. The accrued interest shall be calculated on a simple interest basis using the related LAIF rate of interest. Lincoln recognizes that the County and Auburn may implement an administration fee in addition to the connection charge to recover costs of collection and

accounting. The County and Auburn shall be solely responsible for calculating, implementing, collecting and defending any administration fee related to the connection charges.

**Article 18 - Obligations of County and Auburn to Make Payments**

The obligations of the County and Auburn arising out of or pursuant to or incidental to this agreement shall constitute general obligations of the County and Auburn, and each agency shall use all powers and resources available to it under the law to collect the funds necessary for and to pay its respective obligations to Lincoln under this agreement. The County and Auburn as individual agencies are obligated to pay to Lincoln the payments becoming due under this agreement, notwithstanding any individual default by its wastewater users, constituents or others in the payment to each agency for assessments, taxes, user fees, connection fees, or other charges levied by the County and Auburn.

**Article 19 - Interest on Overdue Payments**

Interest shall accrue at the legal rate of interest charged on judgments issued in California courts on any unpaid charges to be paid by the County or Auburn to Lincoln pursuant to this agreement from their due date until paid, and County and Auburn hereby agrees to pay such interest.

**Article 20 - Default**

In the event of any default by the County or Auburn for a period of more than sixty (60) days in the payment of any money required to be paid to Lincoln hereunder, Lincoln in its sole discretion may require immediate acceleration of all oversizing and capital debt payments for the life of the agreement associated with the respective agency when the agency is delinquent in its payments or obligations due to Lincoln under the terms of this agreement. Action taken pursuant to this Article shall not deprive Lincoln of or limit any remedy provided by this contract or by law for the recovery of funds due or which may become due under this agreement. Such default shall also allow Lincoln to put the delinquent agency on notice that it has 36 months to design, build and start operation of an alternative wastewater treatment and disposal system that does not involve Lincoln.

**Article 21 - Financing**

State Revolving Fund Loan. IF APPLICABLE.

Interest at 2.7%

Rate coverage provided by portion of County and Auburn payments made for Lincoln oversizing

Reserve funds equal to one year of SRF payments provided through reimbursement financing of environmental and design costs initially paid by County and Auburn and financed by SRF loan after start of construction

Reserve funds then used to make last year of SRF payments  
Cooperation including information and rate coverage requirements  
Use of Army Corps of Engineers grant funds

#### Article 22 – Oversight and Cooperation

This Agreement provides that Lincoln will proceed with construction and operation of the Regional Facilities providing that the County and Auburn fulfill their obligations. County, Auburn and Lincoln will work together at both the technical level through a Mid-Western Placer Regional Sewer Technical Advisory Committee ("TAC") and at an elected official level through a Mid-Western Placer Regional Sewer Oversight Committee ("Oversight Committee"). The TAC will include one technical staff member from each Party. The Oversight Committee will include one elected official appointed by each of the Parties' governing bodies.

The TAC will meet periodically as they agree to review progress and cooperate in completion of the work described in this Agreement. Recommendations from the TAC will be forwarded to the Oversight Committee.

The Oversight Committee will meet periodically as they agree to review progress and cooperate in completion of the work described in this Agreement. Recommendations from the Oversight Committee will be forwarded to the governing bodies of the Parties.

Lincoln will provide information on progress of the work and review analyses and decisions relative to the work with both the TAC and as requested with the Oversight Committee. Lincoln will receive input from both the TAC and Oversight Committee and endeavor to address concerns raised by the TAC and Oversight Committee. Given the responsibility accepted by Lincoln for design, environmental review, construction and operations, Lincoln will be responsible for making decisions regarding design and environmental review.

Any substantial changes to rates, operations and capital improvements beyond those described in this agreement and the agreement contemplated in Attachment A will be reviewed by the TAC and Oversight Committee.

Notwithstanding anything to the contrary in this agreement, any Party that needs to have the Regional Facilities expanded to meet its needs shall have the right to such an expansion provided that the costs of the expansion are either funded by the Party needing the expansion, through the provisions of existing agreements or through a new agreement approved by the Parties. The Parties agree that they will not attempt to delay or stop such an expansion of the Regional Facilities.

The Lincoln City Council will have responsibility and decision making authority for any decisions not specifically assigned to County and Auburn pursuant to this Agreement.

#### Article 23 – Bickford Ranch

In accordance with Lincoln's MOU with Bickford Ranch, Lincoln will own, operate and maintain the portion of the Bickford pipeline located in SR 193.

Bickford Ranch's obligation to complete the pipeline will remain even if the pipeline is completed by Lincoln for the regional project. Lincoln will separately account for costs associated with completion of the Bickford Ranch pipeline in SR 193. County and Lincoln will use their best efforts to obtain reimbursement for this pipeline completion at the earliest date possible. The cost of completion will be financed as though it is the sole responsibility of the County (no share by Auburn) along with the balance of the Regional Sewer Facilities and any reimbursement obtained will be used to reduce the County's regional sewer charges.

Prior to Bickford Ranch connection to the sewer pipeline in SR 193, County and Lincoln will enter into a sewer service agreement and all other Bickford Ranch sewer obligations associated with the Bickford Ranch development will be met as described in other agreements involving Lincoln and/or the County.

#### Article 24 – Creek Water for Endangered Species

Creek water for endangered species will be addressed by Lincoln in the environmental review document for the Regional Sewer Facilities. The environmental document will provide information on flows from the existing wastewater treatment plants relative to other flows in the creeks. The regional sewer project will assume that current releases other than the treated wastewater will continue to be released into the creeks (e.g., County purchase of NID water). In addition, the regional sewer project will rely on releases of water into creeks by other agencies such as PCWA, NID and PG&E. Lincoln, County and Auburn will make their best efforts to have regulatory and other environmental creek water release requirements met by agencies that routinely divert, store and release water from and into the creeks downstream of each wastewater treatment plant (PCWA, NID and PG&E). To the extent that additional creek water flows are required, Lincoln will make arrangements with the appropriate water purveyor or diverter and provide for said flows as part of the Operations and maintenance charge

#### Article 25 – Responsibility Disposal of Reclaimed Water

The Parties recognize that this Agreement includes the disposal of treated effluent associated with the Regional Facilities with an emphasis on beneficial use of the treated effluent on farmland west of Lincoln. Any funds from the possible sale of the treated effluent produced from wastewater collected in Auburn and the County will be used to partially off-set the cost of distributing, regulating and disposal of this treated effluent. The Regional Facilities do not include facilities for distribution and use of reclaimed water for landscaping and industrial uses within Lincoln. Treated effluent used for Lincoln landscaping and industrial uses will be produced from wastewater collected in Lincoln such that the total treated effluent used for Lincoln landscaping and industrial uses will not exceed the total wastewater produced in Lincoln in an average year.

As set forth in the Operations and Maintenance charges section above, any revenue collected from the sale of reclaimed water will offset the treated wastewater disposal charges (after the first five years of operation).

Lincoln will be responsible for the costs of disposal and collection of any related revenues associated with disposal of treated wastewater

County and Auburn will not be responsible for any cost associated with distribution of reclaimed water in Lincoln for landscape irrigation and industrial uses. Lincoln will pay

for all reclaimed water distribution facilities used for landscape irrigation and industrial uses in Lincoln. Lincoln will use the reclaimed water from the wastewater collected in Lincoln for landscape irrigation and industrial uses in Lincoln. Lincoln will also use existing facilities for the disposal of reclaimed water in Auburn Ravine and current land application acreage for disposal of reclaimed water from the wastewater collected in Lincoln.

Reclaimed water produced from County and Auburn wastewater flows will be disposed of using the most economical and environmentally feasible approach available considering cost of facilities, coordination with property owners, permitting requirements and other factors. This will most likely involve seasonal storage of reclaimed water, agricultural use, land application, and possibly cooling towers to allow increased discharge directly into Auburn Ravine.

County and Auburn may elect to receive up to their share of treated wastewater. Such an election must be made before Lincoln has entered into any long term agreements for disposal of the reclaimed water desired by County and Auburn. If County and Auburn elect to receive some of their share of the reclaimed water, they will need to provide for any necessary conveyance facilities at their sole cost from the end of the WWTRF treatment process (including all applicable environmental review and permitting) and take on the obligation to dispose of the treated wastewater on a permanent basis (unless Lincoln agrees to again accept the reclaimed water for disposal).

**Article 26 – Lead Agency for Environmental Review**

See environmental and design agreement

**Article 27 – Eminent Domain**

See environmental and design agreement

**Standard Clauses**

**Signature lines . . .**

**Exhibit A Points of Delivery**

Drawing of County WWTP showing Point of Delivery at entrance of sewer to the WWTP.

Drawing of Auburn WWTP showing Point of Delivery at entrance of sewer to the WWTP.

**Exhibit B Wastewater Constituents**

Characteristic/Constituent	County	Auburn	Lincoln
PWWF/ADWF	??	??	3.5
BOD . . .			320 mg/l
TDS . . .			
TSS . . .			330 mg/l
Total Nitrogen . . .			60 mg/l
Copper . . .			
Aluminum . . .			
Pesticides . . . .			
Pharmaceuticals . . .			

**Exhibit C Amounts Budgeted for Oversizing Reimbursement to Lincoln**

Two page summary

## Lincoln Sewer Main and Treatment Plant Oversizing

The proposed Mid-Western Placer Regional Sewer Agreement includes reimbursement to the City of Lincoln for oversizing of sewer mains and components of the wastewater treatment plant. This document provides information regarding the oversizing costs incurred by the City of Lincoln.

In December 2000, the City of Lincoln executed a second amendment to the development agreement with Del Webb California Corporation. A major portion of this amendment addressed oversizing of the Wastewater Treatment and Reclamation Facility (WWTRF) including obligations for the City to pay for all oversizing of individual project components. The actual cost of the oversizing was tracked during construction and paid to Del Webb over the course of construction. Total amount paid by Lincoln to Del Webb for WWTRF oversizing was \$9,980,000.

On June 10, 2003, the Lincoln City Council, based on a June 2, 2003 letter from Placer County, agreed to reimburse Del Webb California Corporation for oversizing the main sewer line through Lincoln. Most of this capacity was to be reimbursed by the County as part of the regional sewer project according to the report to Council. Again the actual construction costs were tracked and reimbursed to Del Webb. Total amount paid by Lincoln to Del Webb for sewer main oversizing was \$5,660,000.

Lincoln has shelves full of binders and CDs with cost information associated with improvements built by Del Webb with Lincoln reimbursement for the incremental costs over oversizing.

The costs reimbursed to Del Webb by the City of Lincoln were all incremental costs based on the difference between the cost with and without the oversizing. Bid costs were used to establish incremental cost percentages and then applied to often higher actual construction costs. Incremental costs are much lower than proportional costs. These incremental costs were tracked and used to calculate the oversizing costs to be charged to the Regional Project. The oversizing costs charged to the Regional Project are only for the capacity being used by the Regional Project. For example, the pipeline was sized, built and Lincoln paid for enough capacity to serve additional communities including Newcastle and areas north of SMD#1. Only the capacity needed for the current needs of SMD#1 and Auburn are included in the project budget. Capacity needed for future connections will be included in the connection charges for the new connections.

The value of the oversizing performed by Lincoln in the early and mid 2000s greatly exceeds the cost of the oversizing because the oversizing was performed along with the initial construction of the facilities. For example, going back and adding capacity to a 25 foot deep sewer or WWTRF intake structure would be very expensive.

Reimbursements made by Lincoln to Del Webb associated with the oversized sewer facilities created a negative balance \$9.3 million in the Wastewater Public Facility Element (PFE) fund as of July 1, 2010. This negative fund balance has impacted other PFE programs such as water and transportation which have been unable to meet their obligations such as water capacity improvements (low pressures exist in the City during peak water use periods due to unconstructed water pipelines, tanks and wells) and transportation (insufficient funds exist to fulfill Lincoln Bypass and other improvement obligations). In addition to the negative fund balance, Lincoln has an unfunded obligation to construct approximately \$6 million of gravity sewers and reclaimed water facilities for its new development.

If the oversizing capacity in the sewer mains across Lincoln and at the WWTRF were constructed now, the cost would be over \$50 million. The total actual incremental cost paid by Lincoln was \$5.6 million for the sewer oversizing and \$9.9 million for the WWTRF component oversizing for a total of \$15.5 million. These costs do not include any interest or lost opportunity costs. The portion of this capacity to be used initially in the Regional Sewer project is \$12.1 million. If interest was added to these costs the total would be approximately \$20.8 million. Additional oversizing reimbursement will occur as new developments use the capacity in the pipeline.

The City of Lincoln recognizes that it paid for these oversizing costs based on encouragement from the County and others but with no legally binding agreement for reimbursement. Lincoln is willing to put this oversizing reimbursement at risk by committing to complete the regional sewer project at a firm price using the oversizing reimbursement as a contingency. Cost overruns will reduce the amount of oversizing reimbursement Lincoln receives. In addition, Lincoln is proposing to finance this oversizing at the same rate and terms as the State Revolving Fund loan program (2.7% over 20 years).

**Lincoln Oversizing Reimbursement Calculations**

**Pipe Oversizing**

Includes Original Regional Project Flow and Costs (SMD#1, Auburn, North of SMD#1, Newcastle, etc)

Actual Cost	\$5,660,000	Accumulated oversizing costs for sewer main in the mid 2000's (w/o Bickford pipe)
Flow from TM2	8,000,000	GPD ADWF
\$/GPD	\$0.71	
GPD/EDU	215	
\$/EDU	\$162 <sup>1</sup>	
Auburn Initial	5,567 EDU	
	\$846,810	
SMD#1 Initial	7,931 EDU	
	\$1,206,404	

<sup>1</sup> This fee per EDU would also apply to all future connections since each future connection will use some of the sewer pipe capacity (oversizing)

**WWTRF Oversizing**

Actual Cost	\$9,980,000	Accumulated oversizing costs for components of the WWTRF in early 2000's
Total EDU	13,498	
\$/EDU	\$739 <sup>2</sup>	
Auburn Initial	5,567 EDU	
	\$4,116,066	
SMD#1 Initial	7,931 EDU	
	\$5,863,934	

<sup>2</sup> This fee per EDU would NOT apply to all future connections since the WWTRF oversizing capacity is essentially used up in the initial regional project.

**Total for Oversizing Used Initially (Pipe and WWTRF)**

These amounts essentially create a budget.  
Actual amount varies per agreement.

Auburn Initial	\$4,962,876	\$891 /EDU
SMD#1 Initial	\$7,070,338	\$891 /EDU
Total	\$12,033,215	

Each agency is only paying for oversizing capacity when it is used

**Exhibit D Operations and Maintenance (O&M) fees for the first five years of operation**

See Environmental/Design Agreement

If County and Auburn both participate:

County \$ \_\_\_\_\_ per EDU (\$ \_\_\_\_\_ for conveyance, \$ \_\_\_\_\_ for treatment)

Auburn \$ \_\_\_\_\_ per EDU (\$ \_\_\_\_\_ for conveyance, \$ \_\_\_\_\_ for treatment)

If only County participates:

County \$ \_\_\_\_\_ per EDU (\$ \_\_\_\_\_ for conveyance, \$ \_\_\_\_\_ for treatment)

If only Auburn participates:

Auburn \$ \_\_\_\_\_ per EDU (\$ \_\_\_\_\_ for conveyance, \$ \_\_\_\_\_ for treatment)

These charges include all costs to operate and maintain the conveyance, treatment and disposal services from the Point of Delivery and reasonable Lincoln administrative charges. Replacement charges of \$3 for the WWTRF and \$1.50 for conveyance and disposal facilities are not included at this time.

**Exhibit E County and Auburn monthly per EDU capital charge**

TO BE DETERMINED IF THE PARTIES AGREE THAT LINCOLN WILL TAKE THE LEAD ON SRF FINANCING. Capital charge includes construction, engineering, management, environmental, right of way, Lincoln oversizing (and calculated financing) and financing costs not funded in the environmental review and design agreement.

If County and Auburn both participate:

County \$ \_\_\_\_\_ per EDU

(\$ \_\_\_\_\_ for conveyance, \$ \_\_\_\_\_ for treatment, \$885 for oversizing reimbursement)

Auburn \$ \_\_\_\_\_ per EDU

(\$ \_\_\_\_\_ for conveyance, \$ \_\_\_\_\_ for treatment, \$885 for oversizing reimbursement)

If only County participates:

County \$ \_\_\_\_\_ per EDU

(\$ \_\_\_\_\_ for conveyance, \$ \_\_\_\_\_ for treatment, \$885 for oversizing reimbursement)

If only Auburn participates:

Auburn \$ \_\_\_\_\_ per EDU

(\$ \_\_\_\_\_ for conveyance, \$ \_\_\_\_\_ for treatment, \$885 for oversizing reimbursement)

**Exhibit F Connection charges per EDU**

TO BE DETERMINED.

If County and Auburn both participate:

County \$ \_\_\_\_\_ per EDU total includes:

\$ \_\_\_\_\_ for storage

\$ \_\_\_\_\_ for conveyance

\$ \_\_\_\_\_ for treatment

\$152 for Lincoln pipeline oversizing reimbursement

Auburn \$ \_\_\_\_\_ per EDU total includes:

\$ \_\_\_\_\_ for storage

\$ \_\_\_\_\_ for conveyance

\$ \_\_\_\_\_ for treatment

\$152 for Lincoln pipeline oversizing reimbursement

If only County participates:

County \$ \_\_\_\_\_ per EDU total includes:

\$ \_\_\_\_\_ for storage

\$ \_\_\_\_\_ for conveyance

\$ \_\_\_\_\_ for treatment

\$152 for Lincoln pipeline oversizing reimbursement

If only Auburn participates:

Auburn \$ \_\_\_\_\_ per EDU total includes:

\$ \_\_\_\_\_ for storage

\$ \_\_\_\_\_ for conveyance

\$ \_\_\_\_\_ for treatment

\$152 for Lincoln pipeline oversizing reimbursement

Exhibit C

Design and Environmental Review Scope of Work,  
Payment Schedule and Dollar Amounts

The design and environmental scope of work and not-to-exceed amounts are as follows.

1. Professional Services Agreement Amendment No. 1 to the November 19, 2010 Professional Services Agreement with Stantec Consulting Services, Inc. (Exhibit C-1): \$5,933,000.
2. City of Lincoln Program and Project Management including engineering, planning, environmental review, financial, management and operations staff necessary to complete environmental review and design of the project: \$400,000.
3. Contingency: \$300,000.

Payment schedule is as follows.

	County	Auburn	
March 31, 2011	\$450,000	\$174,000	← Initial Payments
April 30, 2011	\$450,000	\$174,000	
May 31, 2011	\$450,000	\$174,000	
June 30, 2011	\$450,000	\$174,000	
July 31, 2011	\$450,000	\$174,000	
August 31, 2011	\$450,000	\$174,000	
September 30, 2011	\$450,000	\$174,000	
October 31, 2011	\$450,000	\$174,000	
November 30, 2011	\$450,000	\$174,000	
December 31, 2011	\$450,000	\$174,000	
January 31, 2012	\$285,000	\$108,000	

Lincoln will provide invoices in advance of the payment due dates

Total amounts by Agency:

County Total	\$4,785,000
Auburn Total:	<u>\$1,848,000</u>
Total:	\$6,633,000

Stand Alone Adjustments.

If only the County proceeds with the Regional Project, then the total County payments will increase to \$5,580,000

If only Auburn proceeds with the Regional Project, then the total Auburn payments will increase to \$2,810,000.

Each scheduled payment will be increased in proportion to the total payment increase.

**Exhibit C-1**

**Stantec Professional Services Agreement Amendment No. 1  
Design and Environmental Review Scope of Work**



Exhibit A

Amendment No. 1 to November 19, 2010  
Professional Services Agreement with Stantec Consulting Services, Inc.

The agreement between City of Lincoln and Stantec Consulting Services Inc. entered into November 19, 2010 is hereby amended as follows:

- 1) Section 2. Revise the Contract Period to end June 30, 2012.
- 2) Exhibit A: Add the attached Phase 2 Scope of Work – Design, Environmental Documentation, Right-of-Way, Financing, Permitting, and Bid Phase Services
- 3) Exhibit B: Add: "All funding shall be provided by Placer County and the City of Auburn and the not-to exceed amount shall be increased by \$5,933,000 with an additional \$300,000 for extra services approved by the City Manager."
- 4) Exhibit B: Add: "No work will proceed without a Notice to Proceed Issued by the City Manager. Each Notice to Proceed will only cover work for which the City of Lincoln has received advance payment from Placer County and City of Auburn. Each Notice to Proceed will include a specific completion date for the specific work described in the Notice to Proceed. Each Notice to Proceed will include revisions to the Tasks as appropriate to reduce overall project costs and consider construction contract approaches that will reduce overall project costs such as design-build.

Executed this \_\_\_ of \_\_\_\_\_ 2011.

Stantec Consulting Services  
a Delaware Corporation

City of Lincoln  
a municipal corporation

\_\_\_\_\_  
Bob Gomes, President & CEO

\_\_\_\_\_  
Jim Estep, City Manager

\_\_\_\_\_  
Dated

ATTEST:

APPROVED AS TO FORM:

\_\_\_\_\_  
Patricia Avila, City Clerk

\_\_\_\_\_  
Tim Hayes, City Attorney

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## EXHIBIT C-1

### Mid-Western Placer Regional Sewer Detailed Scope of Work and Project Objectives

## **Phase 2 – Design, Environmental Documentation, Right-of-Way, Financing, Permitting, and Bid Period Services**

*(Scope Based on Phase 1, Scenario 4 Project by Stantec)*

The following sections define the detailed scope of work for Phase 2. It is based on the Phase 1, Scenario 4 project description.

### **TASK 1: PROJECT COORDINATION AND MANAGEMENT**

Stantec will provide routine supervision and coordination with our staff, and sub-consultants, and overall coordination of the multiple project components.

#### **TASK 1.1 - PROJECT ADMINISTRATION AND COORDINATION**

This project provides for overall project administration and coordination. A Project Management Plan will also be developed under this task.

#### **TASK 1.2 - MONTHLY REPORTS/PROGRESS BILLING**

Stantec will prepare a monthly status report to accompany the invoice for the previous month's work. The status report will review major work activities, budget and schedule by tasks.

### **TASK 2: CEQA AND ENVIRONMENTAL COMPLIANCE**

Stantec's environmental staff has gained a thorough understanding of the project through discussions and site visits related to previous planning efforts over the years and most recently while assisting our engineers with the preliminary scoping for this project. In addition, ICF- Jones & Stokes, a firm that was originally contracted by the County to conduct this environmental compliance for a potential regional project also has extensive familiarity with the project and will assist with the environmental compliance. It is our understanding that the project includes four specific components: a) Pump Station and Storage Improvements b) Pipeline Improvements, c) City of Lincoln Wastewater Treatment and Reclamation Facility (WWTRF) Improvements, and d) effluent disposal pipeline and facilities.

California Environmental Quality Act (CEQA) compliance is necessary for the whole and complete regional project (components a through d, above). As such the project-level Environmental Impact Report (EIR) will address the potential impacts of each project component in a single document. For the purpose of scoping and as directed by the City, we have assumed that replacement flows will be negotiated and available for Rock/Coon Creek and Auburn Ravine and therefore there will be no impact to fisheries. However, we have included an optional task to assess fisheries impacts, should replacement water not equal current discharge rates in these streams.

Stantec's environmental team has extensive experience with environmental resources and constraints analyses within the proposed project areas. Our environmental specialists have walked and driven the proposed pipeline routes (Options 1 of previous planning documents) and visited the wastewater treatment plant locations. Stantec's environmental team will leverage this project-specific experience and our efficient and strong working ties with our engineering team to conduct the tasks outlined below.

This proposal is for Stantec to prepare the draft and final CEQA documents for the City of Lincoln. However, we have also scoped additional tasks to support the City of Lincoln, Placer County and the City of Auburn with permits such as the Petition to Change Discharge, that will be required if these agencies were to cease discharging to Rock/Coon Creek and Auburn Ravine. Stantec's environmental staff will coordinate and interface with the City Engineer (or the designated City representing department, typically the Planning Department) and with the Stantec engineering staff throughout the CEQA process.

Specifically, Stantec's environmental staff will:

- Provide environmental planning assistance and conduct an environmental constraints analysis to include the entire project, project alternatives, and current information in order to assist the engineers with ways to avoid and minimize costly environmental impacts
- Develop a CEQA Project Description
- Develop a Notice of Preparation (NOP) prior to development of a CEQA compliant Environmental Impact Report (EIR) document
- Conduct Biological and Cultural Resource Reconnaissance-level Field Surveys
- Draft and Finalize the required CEQA chapters for a project specific Environmental Impact Report
- Draft and submit permit applications, and conduct agency follow-up to obtain environmental permits (CWA Section 404, CWA Section 401, SHPA Section 106, CDFG Streambed Alteration Agreement Notification, Placer County Tree Permit, and USFWS and NMFS Section 7 (informal consultation support), for each permit that is triggered (IBD in Phase 1 and early Phase 2)
- Each of these tasks, the task assumptions, and deliverables are discussed in further detail below.

## **TASK 2.1 - ENVIRONMENTAL CONSTRAINTS ANALYSES AND PLANNING ASSISTANCE**

### **Task 2.1.1 - Pre-field Research and Environmental Constraints Analysis**

As part of the pre-field survey research and the environmental constraints analysis, Stantec's environmental staff will develop a preliminary desktop GIS-based analysis of selected resources along two possible pipeline alignments, the wastewater treatment plant improvement sites, and reclamation areas (effluent disposal improvements) to define the potential environmental constraints and possible permit streamlining solutions for the proposed project. This analysis will also form the basis for the required CEQA EIR alternatives analysis.

Stantec will conduct background research prior to the development of a project description and other environmental documentation for the project. The background research will include, but will not be limited to, the following:

- Review previous CEQA documents related to the proposed project facilities, including the City of Lincoln Wastewater Treatment and Reclamation Facility (WWTRF) Environmental Impact Report (Draft, Final, Addendum), Bickford Ranch EIR, Auburn Wastewater Treatment Plant Upgrade IS/MND (ECO:LOGIC, 2007) and other local documents.
- Conduct updated review of environmental databases for special-status plant and animal species, including, but not limited to, the CDFG California Natural Diversity Data Base (CNDDDB), USFWS and NMFS lists of threatened and endangered species, and the California Native Plant Society (CNPS) list of sensitive plants.
- Review engineering and environmental related documentation for the proposed project.

Under this task Stantec's environmental team will update the GIS data to include current published County and State data. We will utilize the following data to complete the pre-field environmental constraints/streamlining desktop analysis for the entire project and project alternatives:

- Placer County General Plan land use designations (Placer County)
- Public lands (National Forest Service, California Park Service, Placer County, 2007)
- Soil types (NRCS, 2007)
- Geologic faults (Placer County, 2007)
- Important farmland designations (NRCS, 2007)
- Habitat maps (Placer County and CDF, 2007)
- Known potential wetlands/waters of the US (NWI, 2007)
- Registered rare and endangered species locations (CNDDDB, 2010)
- Previously recorded cultural resources (NCIC, 2007)
- Potential historic features (historic maps)
- A subjective cultural resources sensitivity layer based on slope, distance from water, land forms, and environmental associations

This information will be provided for use during the project planning and pre-design phase to 1) facilitate avoidance, to the extent practicable, of fatal-flaw issues; to 2) minimize environmental impacts; and to 3) assist the engineering team in evaluating the risks and schedule impacts from proposed project alternatives.

**Deliverables:**

- Internal and Administrative Draft Environmental Constraints Technical Memorandum
- Final Technical Memorandum

**Task 2.1.2 - Environmental Planning Assistance**

Stantec's environmental team will provide support and work closely with Stantec and City engineers to convey environmental constraints and potential permit streamlining alternatives. This task will enable efficient coordination to determine final proposed alignment/project sites and ultimately refine the alignment such that it avoids, to the extent feasible, environmental constraints. Under this task Stantec's environmental staff will coordinate with the project engineers and participate in two site visits.

**Deliverables:**

- None – Site visits and meetings with project engineers

**TASK 2.2 - CEQA COMPLIANCE (EIR)**

The City of Lincoln (City) proposes to serve as the lead entity for CEQA compliance for the project. Therefore, the City will be the Lead Agency and will be required to fulfill the requirements of CEQA for the proposed project. It is our experience that substantial time and resources are usually invested by environmental firms to convert engineering plans or pre-design reports into a CEQA project description. Stantec's environmental/permitting staff, accustomed to working with our engineering staff on a routine basis, is already well versed in "engineer-speak" and will work efficiently with our engineering team and the City to prepare the CEQA Project Description, conduct public scoping meetings (scope includes the development and participation in two public scoping meetings) for the EIR process, prepare a Notice of Preparation (NOP) for the EIR, and submit the NOP to the CA State Clearinghouse and public for 30-day review.

**Task 2.2.1 - Public Outreach and Meetings**

Stantec will assist the City with the CEQA required public meetings to 1) scope the project, 2) receive comments on the Draft EIR and 3) adopt the CEQA document and MMRP. Under this task we will meet internally three times with the project proponents (agencies) to prepare for the two public meetings. We will also prepare and conduct the CEQA presentations at each internal team meeting as the CEQA processes moves forward, and three public meetings. Our public relations specialist (See Public Outreach Program) will assist Stantec and the City in preparation for public meetings. The public relations specialist will produce outreach materials, coordinate meeting locations and meeting setups, and outline public feedback for the City and the Stantec engineering and environmental teams.

**Deliverables:**

- Materials developed during the public outreach process
- Three (3) public scoping meeting presentations
- Meeting Minutes and Documentation of Public Comments

**Task 2.2.2 - Prepare Project Description and Notice of Preparation (NOP)**

The project description will have all required elements, including introduction and background, project planning process, project phasing, construction process, and staging areas. We will also assist in defining potential alternatives that will be evaluated in the EIR that reasonably meet the project's goals and objectives. Alternatives could be pipeline alignments, wastewater treatment plant upgrade locations, or a combination thereof. Alternatives may also be framed around avoidance of a specific impact associated with the recommended project. Our environmental and permitting staff will have in-depth familiarity with the project components and phasing, and will be working closely with our engineers. Their experience and knowledge will greatly streamline the early phases of the EIR process.

This task includes the incorporation of project team comments on an internal version of the project description and the development of a final project description that will form the basis for the CEQA document and the basis for the development of a Notice of Preparation (NOP) for public review. Stantec will assist the City with NOP public notifications for the 30-day public scoping and review period. As part of the NOP development, we assume that one public scoping meeting will be

sufficient to get the input of local agencies and communities into the final project description. This public scoping meeting was in Task 2.2.1 above.

**Deliverables:**

- Draft CEQA Project Description, including a description of project alternatives for project team Review
- One (1) Project Description review meeting
- Draft and Final Notice of Preparation (NOP)

**Task 2.2.3 - Reconnaissance-level Field Surveys**

Under this task Stantec's environmental staff will conduct reconnaissance-level field surveys to ground-truth and augment GIS and background data, define resource specific baseline information, and refine the proposed alternative infrastructure locations to minimize environmental impacts/constraints (Figure 2-2).

Once the environmental constraints analysis and maps are finalized (Task 1.1 above) and a specific project location is defined, Stantec's environmental team of biologists (botanist, wildlife/aquatic biologist, and arborist), archeologists, and land use planners will conduct a reconnaissance-level survey/habitat assessment of the proposed project as identified in the Draft CEQA project description, including the project alternatives to be carried forward into the CEQA process. Greater focus will be given to the proposed project elements than will be given to project alternatives.

The proposed reconnaissance-field surveys will include biological and cultural resource evaluations as well as verifying current land uses within the proposed project areas. It is anticipated that the proposed project will entail removal of net water flow from both Rock/Coon Creek and Auburn Ravine. As directed by the City, we assume that replacement water will be available and therefore there will not be a significant adverse impact to the protected fisheries and habitats in these streams. However, if negotiated replacement water is not feasible we have included an optional task and field studies (below) to complete the CEQA and permitting assessments of potential impacts to these creeks and their associated protected species. Therefore, for the sake of this base scope, Stantec assumes that the amount of water being returned to Rock/Coon Creek and Auburn Ravine will be sufficient and timely in order to maintain no impact on federally listed steelhead and salmon and their habitat.

The Stantec field survey corridor will encompass a 50-foot buffer on either side of the pipeline alignments and alternatives. In areas where significant environmental constraints (such as potential California red-legged frog habitat or large wetlands) are encountered, Stantec's survey team will extend the survey buffer by 100 feet to look for alternative routes that avoid sensitive and/or costly crossings of such habitats.

Resources to be mapped within the proposed project and project alternative footprints and buffer include:

- Special-status species observances and potential habitats that could trigger consultations with the California Department of Fish and Game (CDFG), US Fish and Wildlife Service (USFWS), and/or the National Marine Fisheries Service (NMFS). Specifically, habitat along the route that could support valley elderberry longhorn beetle (VELB), California red-legged frog (CRLF), and California black rail will be mapped.

- Raptor and migratory bird nests and nesting areas that are protected under the Migratory Bird Treaty Act and CDFG Code.
- Areas that could contain sensitive plants. If the surveys are conducted during non-blooming season, species will be identified to the genus level where possible and flagged (GPS) as areas that should be target-surveyed during spring.
- Potential jurisdictional wetlands and waters of the US, the crossings of which would trigger Clean Water Act Section 404 permitting under the US Army Corps of Engineers (Corps)
- Oak "hot spots" where dense oak woodlands would trigger extensive oak tree mitigation and/or fees under the Placer County Tree Ordinance. Every effort will be made to minimize impacts to trees and woodlands protected under the ordinance.
- Archeological finds and historic structures that would be protected under Section 106 of the State Historic Preservation Act.

This task does not include California black rail audio surveys. This CDFG Fully Protected Species is known to inhabit leaky canal wetlands, canal areas, and riparian wetlands.

Given CDFG and public requests for black rail bird species survey data on recent linear projects in Placer County, it is possible that black rail audio surveys could be required. However, since the project will likely remain in roadways, Stantec has not incorporated audio surveys to demonstrate the absence (or presence) of this species in the construction corridor. If it is determined by the regulatory agencies that black rail presence/absence surveys should be conducted, an additional scope of work will be developed for those protocol-level species specific surveys. In addition, this scope does not include protocol-level California red-legged frog surveys (or any protocol level surveys for protected species). Due to the project's timeline, if habitat for these species cannot be avoided, it is recommended the City assume presence and implement simple avoidance/minimization measures to facilitate a "not likely to adversely affect" determination by the regulatory agencies. This strategy has worked effectively in the foothills and adjacent areas

The data generated during field surveys will be mapped using a Trimble Geo XH GPS with sub-meter accuracy. The data collected during these surveys will augment our preliminary permit streamlining/constraints maps to facilitate refining the proposed project location/alignment and form a basis for the CEQA sections and permit applications.

**Deliverables:**

- Specific environmental resources GIS map of the proposed project and project alternatives described above. This map will depict data collected during the pedestrian field surveys
- This task also includes a stand-alone Cultural Resources Survey Report that will form the basis of the CEQA Cultural Resources Section and NHPA Section 106 permitting (as necessary). A stand-alone Biological Resources Evaluation Report will be developed and form the basis for the Biological Resources section of the EIR permit applications to regulatory agencies protecting these resources (excluding fisheries – see optional task below).

**Task 2.2.4 - Development of Internal and Administrative Draft Environmental Impact Report CEQA Document**

Capitalizing on the data collected and generated during the desktop and field studies portions of the constraints analysis and baseline study (Tasks 1.1 and 2.3), Stantec will draft the required CEQA chapters for the development of a project specific Environmental Impact Report (EIR) CEQA document. This information will be consistent with preliminary project data and ready to insert into

the Public Draft CEQA document. Using our detailed field data, Stantec will complete an Internal and Administrative Draft Environmental Impact Report (EIR), including the development of the following CEQA Chapters (setting, baseline and impact analyses):

**Complete CEQA Chapters**

- Aesthetics, Agricultural Resources, Air Quality & Green House Gases
- Biological Resources (including botany, wildlife, fisheries, and wetland/waters of the US resources);
- Cultural Resources;
- Geology and Soils, Hazards & Hazardous Materials, Hydrology and Water Quality
- Land Use and Planning, Mineral Resources, Noise, Population and housing,
- Public Services, Recreation, Transportation and Traffic, Utilities and Service Systems,
- Cumulative Impacts, Alternatives Analysis, and Mandatory Findings of Significance.

Stantec will address the key sections as listed below:

**Biological Resources.** The consultant team of wildlife biologists, botanists, fisheries biologists, and wetland ecologists will use their resource knowledge developed through recent experience on the Nevada Irrigation District Regional Water Treatment Plant project and other mid-western Placer County studies to assess the construction-related and operational impacts of the proposed project on biological resources. We will capitalize on and utilize existing information developed through the Placer County Natural Resources Report Phase I HCP/NCCP planning area (Jones & Stokes 2004), Placer County Fish Assessment Report (Jones & Stokes, 2005), and NID, Placer County, and PCWA environmental documents.

Federal and state-listed species that could be affected by the project include: California red-legged frog, giant garter snake, valley elderberry long horn beetle, vernal pool fairy and tadpole shrimp, black rail, bald eagle, and Swainson's hawk. Special-status plants and non-listed special-status species such as western pond turtle and foothill yellow legged frog also could be affected. Construction could also have a short term impact on riparian communities and oak trees. These and other special-status species known to occur in the project area are depicted in Figure 2-3. It contains the updated California Natural Diversity Database (CNDDDB) Salmon and Steelhead area also known to occur in Coon Creek and Auburn Ravine and both streams have designated Critical Habitat. For the sake of this base estimate and as directed by the City, we assume that the project will not impact wetlands, streams, or Central Valley Steelhead or Central Valley Chinook salmon. We assume this because replacement water will be negotiated to equally compensate for the current SMD-1 and Auburn discharges to Rock/Coon Creek and Auburn Ravine, respectively. In addition, the stream crossings will be installed such that they avoid impacts to aquatic resources. However, if this is not the case we have included an optional task below for defining water requirements and assessing potential fisheries impacts

Our biological resources assessment will be based on the proposed, less costly non-protocol levels surveys described in task 2.3 above. Under this task we will define the potential impacts and develop appropriate mitigation measures for avoiding or minimizing impacts to biological resources. If significant adverse impacts are identified, Stantec will work with the project proponents/Lead Agency to define appropriate mitigation measures.

the Final EIR (FEIR), Mitigation Monitoring and Reporting Program (MMRP), and City Resolution for City Council project approval and adoption of the Draft and FEIR. Stantec will file a Notice of Determination (NOD) with CA State Clearinghouse, which gives the public an additional 30 days to file a formal lawsuit against the document and project. After the 30-day NOD period is completed, and if no formal lawsuit(s) are filed against the City, then the project will be in compliance with CEQA.

**Deliverables:**

- Final EIR (FEIR), MMRP, and the NOD

**Task 2.3 - Develop Permit Applications and Conduct Agency Follow-up to Secure Environmental Permits**

Stantec's environmental team will serve as the lead permit consultant and will be responsible for securing all necessary permits for this project. We will prepare all applications and coordinate with regulatory agencies on behalf of the City for the proposed project.

Depending on the ultimate alignments and project proposal (and funding sources), the following permits and approvals may be required.

- Clean Water Act (CWA) Section 404 Nationwide 12 and 33 Permit
- CDFG Streambed Alteration Agreement
- Clean Water Act (CWA) Section 401 Water Quality Certification
- National Historic Preservation Act Section 106 compliance
- Federal/State Endangered Species Act compliance
- Placer County Tree Permit
- Petition to Change Discharge (optional task below for City of Auburn and County)

Some of the permits can take up to a year to obtain and identifying the permits early in the process is an important step to ascertaining critical path items for project scheduling. Under this task Stantec will coordinate with agencies and conduct pre-permitting meetings with the agencies to define the project-specific permitting requirements and timelines as narrowly as possible. Stantec will draft permit applications and consultation letters where necessary for the project.

**Task 2.3.1 - Clean Water Act Section 404 Nationwide 12/33 Permit**

This task covers the Wetland Delineation and authorization under a NWP 12 and NWP 33

**Wetland Delineation**

A Stantec aquatic biologist and botanist will conduct a wetland delineation along the proposed alignment, at the two proposed pump station sites, the Lincoln WWTRF plant site, and the reclamation site. Stantec will produce a preliminary wetland delineation report (including GIS maps). Our wetland ecologist/permitting specialist will also conduct agency follow-up and one site visit with the agency, as required, to secure a final wetland verification.

**Nationwide (NWP) 12 and 33 Permit Pre-Construction Notification (i.e. the permit application).**

The NWP 12 and 33 will require the submittal of a PCN to the Corps, and proof of compliance with CWA Section 401, Federal ESA, and SHPA Section 106 (these items are described separately below). Under this task Stantec will draft the PCN for the NWP 12 and 33.

The following assumptions have been made relative to these permits.

- Assumes stacked NW 12 (utilities) and 33 (access roads) possible (i.e. threshold 1/2 acre of impacts not exceeded and avoidance ensured during constraints process)
- Assumes that through good planning and avoidance the USFWS will determine that the proposed project is "not likely to adversely affect" T&E species

**Deliverables:**

- Preliminary Wetland Delineation Report and GIS Map
- Draft Pre-construction Notification (i.e., Nationwide Permit Application) for project team review
- Final Pre-construction Notification for submittal to the Corps

**Task 2.3.2 - Federal Endangered Species Act Compliance (Biological Resource Evaluation)**

Stantec will provide support for the Corps Endangered Species Act (ESA) Section 7 informal consultations as part of the CWA Section 404 permitting requirements. Stantec proposes to adjust the Biological Resources Evaluation Report (to be developed as a part of the CEQA process) to focus on the potential of the project to impact federally listed species, specifically candidate, threatened, and endangered species. The adjusted Biological Resources Evaluation Report will be included with a letter requesting informal consultations. Given the project area contains habitat for the California red-legged frog, the valley elderberry longhorn beetle (VELB), and listed steelhead and salmon, both the USFWS and NMFS will most likely be included in the Section 7 informal consultation process.

We assume that through avoidance and good planning no protocol level surveys will be required and the Corps/USFWS/NMFS will determine the project is "unlikely to adversely affect" any threatened and endangered listed species and therefore informal consultations under Section 7 of the Federal ESA will be sufficient. We therefore assume that a formal BA and Formal Section 7 consultations will not be necessary. We have; however, included a budgetary place holder (optional task) for an In-stream Flow Study to assess and minimize fisheries impacts, should replacement or "make-up" water be unavailable or of lesser volume than the current discharges to Rock/Coon Creek and Auburn Ravine (see optional tasks below). The optional stream study task below includes a fisheries BA, should it be required.

**Deliverables:**

- Letters requesting USFWS and NMFS Informal ESA Section 7 Consultations
- Federal Species adapted Biological Resource Evaluation (adapted from the CEQA sections described above).

**Task 2.3.3 - Clean Water Act Section 401 Water Quality Certification**

This water quality certification application will be drafted by Stantec's water quality specialist, as a part of the Clean Water Act Section 404 permitting process. Stantec will draft a Section 401 certification application and conduct follow-up with the Regional Board. This CWA Section 401 certification must be secured before the project can be authorized under Section 404 of the CWA and is also necessary if federal funding is to be applied to the project.

**Deliverable:**

- CWA Section 401 – Water Quality Certification Application

**Task 2.3.4 - National Historic Preservation Act Section 106 Compliance**

This NHPA Section 106 authorization must be secured if the project is federally funded and/or before the project can be authorized under Section 404 of the CWA. Stantec archeologists will provide assistance/support with the NHPA Section 106 consultations between the Corps and the State Historic Preservation Office (SHPO). Stantec will also draft letters requesting a records search from the North Central Information Center at Sacramento State University and input from Native Americans through the consultations with the Native American Heritage Commission. We will submit the project-specific Section 106 compliant cultural resources report, participate in conference calls, respond to comments and prepare draft consultation letters as directed by the Corps, and conduct agency follow-up.

Note: Much of the field surveys and reporting costs of developing the stand-alone cultural report was included in Task 2 above.

**Deliverables:**

- Draft SHPO Consultation Letter
- Draft Native American Heritage Commission Letter
- Records Search with North Central Information Center

**Task 2.3.5 - CDFG Streambed Alteration Agreement (SAA) Notification**

CDFG has regulatory jurisdiction over streams and lakes with a defined bed and bank, their associated riparian habitat and floodplain (including the hyporheic flow under the streambed). During the environmental constraints and permit streamline phase, our environmental staff will work closely with the project engineers to facilitate design options that avoid triggering this permit. However, if a CDFG permit is triggered for the project by pipeline crossings of streams or drainages protected by CDFG or encroaching on riparian habitat and floodplain areas protected by CDFG, we will facilitate the SAA permit process.

Under this task Stantec will use the biological and water resources information compiled for the CEQA process to complete a Streambed Alteration Agreement Notification and conduct agency follow-up. We will work closely with Bob Hosea and Gary Hobgood at CDFG to ensure the project application is complete upon submittal and to facilitate the overall permit process. Stantec will incorporate the Biological Resources Evaluation developed during the CEQA baseline studies. Stantec assumes the City or the local water purveyors will provide the required hydrology data for the streams crossed by the proposed project.

**Deliverable:**

- Streambed Alteration Agreement Notification.

**Task 2.3.6 - Placer County Tree Ordinance Compliance**

It is the goal of the Placer County Tree Ordinance to minimize impacts to oak woodlands and riparian trees. In some cases, public utilities can negotiate exemptions from the Placer Tree Ordinance. Under this task Stantec will submit the Environmental Questionnaire to the Placer County Planning Department; conduct one pre-application meeting with the County, and if required,

conduct field studies necessary to develop the Tree permit application. If the permit is required, the County considers tree impacts removal of trees AND impacts to the root structure (i.e. within the dripline of the tree). This would include trees along the edges of roadways that may have their roots severed as a result of the pipeline installation. Our first order of business under this task would be to negotiate the project specific permit requirements under the Placer County Tree Ordinance.

If a permit is required, Stantec will GPS map, tag, collect diameter breast height (dbh) data, and assess the health of all the oak trees within the proposed project foot print. Stantec will develop a MS Excel database to tally the tree impacts. This database will form a basis for mitigation calculations. Stantec will draft a Tree permit application for project team review, incorporate comments and prepare a final application for submittal to the County. The fieldwork will be conducted by one Stantec biologist and a Stantec ISA Certified Arborist. A Stantec permit compliance specialist will conduct follow-up to address comments and secure the permit from the County. Stantec assumes the survey footprint for temporary and permanent impacts to protected trees encompasses the proposed project and project alternatives as discussed above. We assume the time necessary to complete this survey is 15 days.

**Placer Tree Ordinance Compliance Deliverable:**

- Tree Permit Application, including an arborist report and oak tree database.

**Task 2.3.7 - Agency Coordination & Permit Expediting Services**

Stantec's biologists, archeologists, arborists, and environmental compliance specialists have worked extensively with the regulatory agency technical staff and upper management on over 30 projects in the foothills in just the past five years. We recently secured permits for in-stream pipeline work (including federal clearances) in less than two weeks. For a project this size we anticipate a certain amount of coordination with various agencies in the planning process to obtain information on regulatory issues and concerns. In addition, once the permits are submitted, our staff will maintain close communication with agency personnel to ensure they have what is needed to issue permits. We take an extremely proactive approach to permitting so that we can provide the needed support for under-staffed agencies such as CDFG and the USFWS. We have budgeted time to conduct coordination with the US Army Corps of Engineers, the US Fish and Wildlife Service, the California Department of Fish and Game, the Regional Water Quality Control Board, State Historic Preservation Office, the Placer County Planning Department, and the City of Lincoln. We have allocated a time for specific environmental compliance specialists with excellent agency relationships because this task is vital to secure an expedited issuance of environmental permits.

Coordination with NMFS is included under a separate optional task required if exact replacement or "make-up" water is unavailable at the two current effluent discharge points.

**TASK 2.4 - DEVELOP STATE BOARD DIVISION OF FINANCIAL ASSISTANCE SRF ERU ENVIRONMENTAL COMPLIANCE SUPPORT SERVICES**

The following tasks must be completed as part of SRF Environmental Review Unit (ERU) Environmental Compliance if SRF funding will be sought for this project. The following required SRF documentation will be completed through the federal permitting process (Task 3).

**Section 106 Compliance Documentation** – An updated records search will be conducted with search results to be included on a map detailing all known sites within the project footprint. Native American consultations/correspondence will be completed to meet Section 106 compliance. The results of the updated records search and responses to Native American correspondence will be

forwarded to the State Board Division of Financial Assistance SRF ERU for Section 106 compliance with the National Historic Preservation Act.

**Section 7 Compliance Documentation** – An up to date California Natural Diversity Data Base (CNDDDB) species list and map will be developed detailing all known special-status species within 5 miles of the project area. A current U.S. Fish and Wildlife Service (USFWS) list of endangered, threatened and candidate species with potential to occur in the project area will be downloaded from the USFWS website. A species table, including potential for special-status species to occur in the project area, will be developed and forwarded to the State Board Division of Financial Assistance SRF ERU for Section 7 compliance with the Endangered Species Act.

**Clean Air Act** – Project-specific air emissions data will be developed to fill in the Evaluation Checklist Section 3 Table and verify the de minimus finding. The results of the air emissions data related to these projects will be forwarded to the State Board Division of Financial Assistance SRF ERU for compliance with the Clean Air Act.

SRF ERU Environmental Compliance Support Services will therefore include finalizing the required SRF-specific environmental checklist (“federal cross-cutting forms”) that must be included along with the documentation listed above. Under this task we have allotted additional time for and expediting the review process because the permitting and federal compliance portion of securing funds could be a key scheduling constraint.

**Deliverable:**

- Draft and Final SRF Compliance Environmental Support and Checklist

**TASK 2.5 - ENVIRONMENTAL PROJECT MANAGEMENT AND QUALITY CONTROL**

Stantec’s environmental Team Leader will serve as the point of contact with the Project Manager and the City for the environmental compliance tasks for this project and will be responsible for providing quality control for all documents submitted to the City and regulatory agencies.

**Task 2.5.1 - Environmental Administration and Management**

As part of this task, Stantec will be available for periodic conference calls with the Project Manager and the City and attend project meetings. In addition, Stantec will provide bi-monthly updates on the project status.

- Stantec will proactively manage its team, review work progress, schedule work assignments, and maintain budget through the duration of the project. This task includes:
- Defining project scope and budget
- Maintaining open communications with the City
- Coordinating and directing subconsultant(s)
- Obtaining prior City approval for any changes in scope.

**Deliverable:**

None

### Task 2.5.2 - Quality Control

As part of this task, the Stantec environmental Team Leader will be responsible for ensuring that all documentation for this project meets the highest standards of quality control for all documentation being submitted to the City and on behalf of the City. Our approach to this task is proactive to yield the best overall CEQA document for the public disclosure process. To maximize QA/QC, we are teamed with IFC Jones & Stokes for objective peer review.

ICF will provide overall peer review and QA/QC services for environmental documentation during the internal draft and administrative draft of the environmental documentation. Their senior staff will provide review to ensure documents meet the content and process requirements of the California Environmental Quality Act (CEQA). Focus of this review will be on adequacy of the project description and alternatives, significance thresholds and level-of-detail and accuracy of impact analyses. We will also assess the adequacy and feasibility of recommended mitigation measures proposed to reduce significant impacts. ICF will also provide management oversight of ICF sections and attend up to 4 meetings for project start-up and internal and administrative draft documents.

This will include the following:

Implementation of quality control procedures throughout the duration of the project

Monitoring and controlling the progress of the work to assure compliance with schedule and budget

**Deliverable:**

- QA/QC will be conducted on deliverables accounted for in all of the previous task documents.

### TASK 2.6 - STREAM-RELATED ENVIRONMENTAL COMPLIANCE SUPPORT (IN-STREAM FLOW STUDY, STREAM-RELATED CEQA AQUATIC RESOURCES SECTIONS, AND NMFS SECTION 7 CONSULTATIONS)

The base environmental scope for CEQA and permitting includes the assumption that make-up water would be negotiated to replace the current WWTP discharges of 1.3 MGD to Auburn Ravine and the 1.7 MGD from SMD-1 to Rock Creek/Coon Creek. Under this assumption there would be no negative flow related impacts on listed anadromous fisheries (Chinook salmon and steelhead) and no impacts to designated Critical Habitat. In addition, the water quality in these two aquatic systems (Auburn Ravine and Coon Creek) would actually be improved by the removal of effluent and its replacement with raw water. However, if sufficient make-up water is infeasible, necessary fish-related stream studies will be required to support the following project documents:

- CEQA public disclosure document
- Federal financing applications
- Federal ESA Section 7 permitting with the National Marine Fisheries Service
- Petition to Change Discharge with the State Board Division of Water Rights

Stantec is proposing to conduct the necessary fish-related in-stream studies for the City of Lincoln as part of the Regional Project.

Regionalizing wastewater treatment and disposal at the City of Lincoln without providing exact make-up waters means that Auburn's effluent discharge to the headwaters of Auburn Ravine would stop and flows would cease or be reduced. The SMD-1 effluent discharge to Rock Creek/Coon

Creek would also stop and flows would cease or be reduced. Altering the flows to these surface waters will require the following to be addressed:

- Will other water be discharged to replace some to all of the removed effluent? If so, how much will be required to maintain aquatic life?
- If there is no replacement water, will the stream functionally dry up as a result of the water loss, and how will the ecology (aquatic, riparian, and dependent terrestrial) change?
- Are endangered species involved in this change of ecology?
- Do downstream parties make beneficial use of the effluent discharged?

With Auburn Ravine, the base flow of upper reaches of the stream in autumn when PG&E's Wise Powerhouse (WPH) shuts down for maintenance is Auburn's effluent discharge. Even with the effluent discharge, the stream flow is so low that fish become stranded and imperiled to where downstream parties have called Auburn, to ask if more effluent can be released to the stream to help the fish. The fish in the lower and middle reaches of Auburn Ravine include endangered species. As such, for Auburn to stop its effluent discharge to Auburn Ravine, it may be necessary to buy raw water from PG&E or PCWA to release to Auburn Ravine when WPH is offline. That may become a necessary mitigation to the regionalization project.

With Coon Creek, endangered species and designated Critical Habitat issues are both involved. Make-up water will be necessary to ensure the project will not have an adverse affect or ("modify or destroy") the designated Critical Habitat or result in the "take" ("harm, harassment, or death") of a listed- species.

If complete make-up water is infeasible, it will be necessary to provide adequate detail regarding regionalization impacts on Auburn Ravine and Coon Creek. This is necessary to comply with CEQA/NEPA and to satisfy the requirements for the Petition to Change Discharge with the State Water Resource Control Board's Division of Water Rights.

#### **Task 2.6.1 - Negotiation Support with Water Purveyors**

This is a necessary step prior to any field studies to verify that delivery of exact makeup water is feasible, and negotiate maintenance outages (i.e. PG&E) to avoid impacts to anadromous fisheries, or pursue procurement of replacement water from PCWA or NID. If exact make-up water is infeasible, then additional negotiations will be necessary once the minimal flow requirements are defined to maintain the anadromous fisheries (Task 4.2 below). Stantec has not allocated any time to this task because we assume Lincoln, Auburn, and Placer County will manage these negotiations. Stantec does have water delivery specialists that have worked extensively with the key water purveyors in the area. If requested we can provide a scope to support water purveyor negotiations for make-up water in Auburn Ravine and Rock Creek/Coon creek.

#### **Task 2.6.2 - Technical Stream Study: In-stream Flow Requirement Study**

The objective of this study is to provide the County, the City of Auburn, and NMFS with basic technical information necessary to adjust flows in Auburn Ravine and Rock Creek/Coon Creek to maintain fisheries resources. In addition, the results will form the basis for aquatic resources impact evaluation of the CEQA public disclosure document and the Biological Assessment for the NMFS Section 7 consultation process. This will be accomplished through the development of physical habitat simulation models (PHABSIM) that:

- Describe the quantity and quality of habitat available for the target species

- Describe how habitat availability changes with flow
- Assist in determination of appropriate minimum instream flows for the study reach

#### **Data Review and Workplan Development**

Stantec will review relevant data provided by the City, County, NMFS, and other organizations working in these watersheds (i.e., SARSAS, City of Lincoln, NID, PCWA, PG&E). Under this task our fisheries biologists will work with IFC's fish biologist to develop a site-specific work plan with the goal of meeting the County, City of Auburn, City of Lincoln CEQA Lead and Responsible Agencies, and the National Marine Fisheries objectives. We will work closely with Brian Hansen at NMFS to seek approval of the proposed study parameters.

#### **Field Study**

The field studies will consist of two components 1) habitat mapping of a representative reaches of Auburn Ravine and Coon/Rock Creeks and 2) physical measurements necessary to build and calibrate physical habitat simulation models. Habitat mapping is necessary to gain an understanding of the proportionality of important macro-habitat types for use in the habitat models. This information will be used to "weight" transects in the useable area calculations. Habitat mapping also serves an important function in that it will provide project personnel with an overview of the study site conditions and will assist in identifying suitable locations for the PHABSIM transects.

PHABSIM transects will be established for representative macrohabitat types and will be clustered together where possible. Clustering transects can facilitate identification of potential calibration errors in the subsequent hydraulic models and makes collection of field measurements more convenient. Basic input data for the PHABSIM hydraulic and habitat models will be collected using the procedures and data reduction techniques described by the USGS Instream Flow Group.

Discharge and water surface elevation will be measured on at least two occasions at every site with the intention of collecting three stage-discharge pairs. Field efforts will be designed to capture a sufficient range of discharges to enable the models to reliably simulate conditions ranging from the current flow regime up to the unimpaired winter low flows. No more than five transects will be studied per stream. It is also assumed that releases will be provided such that field measurements can be collected with only three mobilizations and that measurements will occur on consecutive days. The project team proposes to collect velocity data at the middle calibration flow for all sites in order to maximize the reliability of velocity simulations over the range of flows modeled. We assume that field personnel will be able to safely and reliably wade during desired flow events and that precautionary safety measures such as cabling will be unnecessary. In addition to stage, discharge, and velocity measurements, field personnel will visually characterize substrate and cover for each station on the study transects.

#### **Data Reduction and Modeling**

Hydraulic and habitat modeling will be accomplished using the Riverine Habitat Simulation Software (HABSIM). Relationships between stream stage (the elevation of the water surface) and discharge will be determined by one of three methods 1) IFG4-a, 2) ManSQ, or 3) Step Backwater. The IFG4-a is the preferred model for use in this study, because the empirically derived relationship generally works well within a reasonable range of extrapolation for most habitat types and it is relatively easy to calibrate. We assume that NMFS will provide regionally relevant Habitat Suitability Curves (HSCs) for use in habitat modeling. HSC's are used to represent the preferences and behavior of the target species in the PHABSIM model. HSC's are a means of representing the value of the simulated physical conditions for the target species. The range of physical conditions encountered in the

stream is given a suitability value between zero and one with a value of one being the most suitable. The parameters assigned suitabilities in this study are velocity, depth, cover type, and percent spawnable gravel. This approach and cost estimate does not include time-series or habitat duration modeling. Stantec personnel will present the methods and results in a brief technical memo and will provide limited discussion on interpretation of the results.

Because the project would result in the removal of effluent from the two creek systems and therefore the water quality will be intrinsically linked to flow and not new effluent discharges, we assume the instream flow study will be a sufficient proxy for assessing impacts to fisheries. If a temperature or other water quality study is required by the agencies, we will provide an additional task description and scope. This scope would utilize the 5 years of temperature data we have collected for the City of Lincoln in Auburn Ravine, water quality data from the Lincoln Supplemental Environmental Program and any County data for Coon Creek to complete the assessment.

#### **Task 2.6.3 - CEQA Aquatic Resources Section**

Under this task we will draft an expanded aquatic resources section to address potential impacts to fisheries and aquatic resources in Rock and Coon Creek and Auburn Ravine. This section will include information from the above mentioned assessment of potential impacts to salmon and steelhead and their associated designated Critical Habitat in Coon Creek and Auburn Ravine. We assume that all the data necessary to support the CEQA assessment will be collected during the above mentioned in-stream flow study and no additional field work will be necessary.

#### **Task 2.6.4 - NMFS Biological Assessment and Consultations**

If exact replacement water is not feasible in Coon Creek and Auburn Ravine, under this task Stantec's aquatic biologist will draft the Biological Assessment for salmon and steelhead and their associated designated Critical Habitat in Coon Creek and Auburn Ravine. We have allotted time for support of formal consultations and the issuance of a NMFS Biological Opinion. This process could take a year or more; therefore, we recommend that the issue of replacement water be defined immediately upon initiating the project planning phase (See Optional Task 6.1).

#### **Deliverables:**

- ISFS Technical Memorandum
- Letters requesting NMFS Formal ESA Section 7 Consultation for Salmon and Steelhead
- CEQA Aquatic Resources Section
- Fisheries Biological Assessment (BA)

#### **TASK 2.7 - CA STATE WATER RESOURCES CONTROL BOARD DIVISION OF WATER RIGHTS PETITION TO CHANGE DISCHARGE (OPTIONAL TASK TO SUPPORT AUBURN AND PLACER COUNTY)**

Though the Regional Water Board's Basin Plan holds that direct discharge of wastes to sloughs and streams with intermittent flow or limited dilution capacity (such as Rock Creek and Auburn Ravine) is inappropriate as a permanent disposal method, other regulations come into play when a discharger such as the City of Auburn (Auburn) or the County at SMD-1 attempts to stop discharging effluent to a surface water, e.g., Auburn Ravine and Rock Creek/Coon Creek. Under most interpretations of the law, including case law (e.g., State Board vs. El Dorado Irrigation District), removing an effluent discharge from a surface water requires:

1. A CEQA document disclosing the impacts of removing the water aspect of effluent from the surface water (or possibly replacing the removed "effluent water" with other water, i.e., a "water swap"), and
2. The approval of the State Water Resources Control Board, Division of Water Rights, via the Petition to Change Discharge process.

#### **Task 2.7.1 - Petition to Change Discharge**

Under this task Stantec and Best, Best, and Krieger (BBK), local water rights attorneys with extensive Petition to Change Discharge experience with foothill clients, will support Placer County and the City of Auburn with the required State Board Petition to Change Discharge permitting. This will be required for any reduction in discharges to Auburn Ravine and Rock Creek/Coon Creek created by the consolidation to a regional plant. The State Board has a Change Petition form which will be required to begin the process. The form requires a quantification of the reductions in discharges created by the proposed action(s). The form should also attach documents analyzing the environmental effects of the reductions in wastewater discharges. In this case, we will need to file two related change petitions, one for the Placer County plant and one for the City of Auburn plant.

Once the completed Change Petitions are submitted to the State Board, the State Board staff will review the applications to ensure that they are complete. If the applications are not complete the applicants will be notified within 30 days. Upon completion of the applications, the State Board will issue the required public notice. The public notice will set a time limit for protests to be filed. Applications before the State Board are subject to protest by any party. Generally speaking, an application that is not protested results in the State Board issuing a permit without a hearing.

#### **Task 2.7.2 - Response to Protests and Legal Support During Hearings**

If there is a protest filed, the State Board will notice a hearing and each side will present evidence. If no protest is filed, it is likely that it will take a minimum of one year to complete the application process. If a protest is filed the process can take several years and will be more expensive. The increased costs are attributable to preparation of written testimony, retention of expert witnesses and preparation for the hearing.

The costs for these tasks are estimates and will depend on the extent of the protest.

### **TASK 3: PLANNING AND PREDESIGN**

A number of tasks will provide information/data necessary for the subsequent detailed predesign of the various facilities. The timing and staging of the planning phase tasks will impact the order of work for the predesign phase and may also occur concurrently with the predesign and design efforts. Planning phase tasks include commencing the public outreach, financing, and the development of overall project design criteria and preliminary engineering studies.

Preliminary studies planned to be completed prior to the predesign of the project include pre-field environmental constraints analyses and planning assistance, overall system hydraulics analysis, right of way evaluations, influent characterization, facility site evaluations, aerial and topographic surveys, and geotechnical evaluations. These sub-tasks include preliminary work and data collection necessary for development of the project design criteria that will be used to complete the predesign and design portions of the project. The timing of some of these sub-tasks may vary as some may be needed prior to starting some of the predesign tasks and others can occur concurrently with the

predesign and design. As a result, these planning tasks are included within the scopes of services descriptions of the other larger project tasks.

**Deliverables:**

- One internal draft document for the various design criteria and predesign memos (technical memoranda [TM])
- One administrative draft for the various TMs, circulated.
- Present administrative drafts to TAC
- Final project team review
- One final document for the various TMs

Figure 2-4 is an approximate illustration of the overall project and its primary components and relative locations.

**TASK 3.1 - PUMP STATION AT AUBURN WWTP**

The following is a detailed description of the proposed preliminary design scope of services for the Phase 2 - City of Auburn WWTP Pump Station project.

**Task 3.1.1 - Management and Administration**

Stantec will provide management and administrative services including the monitoring and control of the work and expenses during the preliminary design phase of the project.

**Task 3.1.2 - Technical Memorandum No. 1 - Design Flows and Loads**

Stantec will review the existing WWTP flow and loading data and prepare an analysis of these flows and loads for conveyance to the City of Lincoln WWTRF. Based on this analysis, Stantec will prepare two drafts and a final technical memorandum to establish the design flows and loads.

**Task 3.1.3 - Technical Memorandum No. 2 - Sewer Conveyance Pump Station**

Stantec will evaluate the pumping requirements and facilities for the new pump station. Stantec will prepare two drafts and final technical memorandum describing the recommendations for the new Pump Station.

**Task 3.1.4 - Technical Memorandum No. 3 - Electrical and Instrumentation**

Stantec will evaluate the electrical and instrumentation requirements for the new pump station, grit removal and odor control facilities. Stantec will prepare two drafts and a final technical memorandum describing the recommendations for electrical and instrumentation.

**Task 3.1.5 - Draft and Final Preliminary Design Report**

Stantec will compile the technical memorandums and appendices into a three ring binder with divider tabs. Stantec will prepare ten (10) copies of the draft and final report for the City.

**Task 3.1.6 - Peer Review (QA/QC)**

Work under this task will involve an independent peer review by qualified personnel not associated with the development of the Predesign TM. Their comments will be incorporated in the final draft of the TM.

### **TASK 3.2 - PUMP STATION AT SMD-1 WWTP**

The following is a detailed description of the proposed preliminary design scope of services for the Phase 2 – Placer County Sewer Maintenance District No. 1 Pump Station (SMD-1) project.

#### **Task 3.2.1 - Management and Administration**

Stantec will provide management and administrative services including the monitoring and control of the work and expenses during the preliminary design phase of the project.

#### **Task 3.2.2 - Technical Memorandum No. 1 - Design Flows and Loads**

Stantec will review the existing WWTP flow and loading data and prepare an analysis of these flows and loads for conveyance to the City of Lincoln WWTRF. Based on this analysis, Stantec will prepare two drafts and a final technical memorandum to establish the design flows and loads.

#### **Task 3.2.4 - Technical Memorandum No. 2 - Sewer Conveyance Pump Station**

Stantec will evaluate the pumping requirements and facilities for the new pump station. Stantec will prepare two drafts and final technical memorandum describing the recommendations for the new Pump Station.

#### **Task 3.2.5 - Technical Memorandum No. 3 - Sewer Screening Facilities**

Stantec will evaluate the requirements for new sewer screening facilities prior to pumping wastewater. Stantec will prepare two drafts and a final technical memorandum describing the recommendations for the new screening facilities.

#### **Task 3.2.6 - Technical Memorandum No. 4 - Odor Control Facilities**

Stantec will evaluate the requirements for odor control for the new pump station and screening facilities. Stantec will prepare two drafts and a final technical memorandum describing the recommendations for the screening facilities.

#### **Task 3.2.7 - Technical Memorandum No. 5 - Electrical and Instrumentation**

Stantec will evaluate the electrical and instrumentation requirements for the new pump station, screening and odor control facilities. Stantec will prepare two drafts and a final technical memorandum describing the recommendations for electrical and instrumentation.

#### **Task 3.2.8 - Draft and Final Preliminary Design Report**

Stantec will compile the technical memorandums and appendices into a three ring binder with divider tabs. Stantec will prepare ten (10) copies of the draft and final report for the City.

#### **Task 3.2.9 - Peer Review (QA/QC)**

Work under this task will involve an independent peer review by qualified personnel not associated with the development of the Predesign TM. Their comments will be incorporated in the final draft of the TM.

### **TASK 3.3 - REGIONAL SEWER PIPELINE IMPROVEMENTS**

The purpose of the predesign is to identify and quantify all of the pertinent project variables to the extent possible such that the most efficient design can be developed and executed with buy-in from all parties to the regional Agreement. The predesign of the pipeline improvements will be dependent

upon results of the various preliminary engineering reports completed in the planning phase. Therefore, this task will commence with the initiation of services in the areas of aerial and topographic survey, environmental and geotechnical investigations, right-of-way evaluations, and a project team field walk with the environmental team. These services are identified separately in this scope of services, but this task will coordinate those efforts with respect to the pipeline planning and preliminary design work.

Stantec pipeline and environmental teams have a proven history of a 'can-do' approach to a design/construction project. Working closely together, the teams take a holistic approach to the project goals and objectives, and evaluates the various alignment alternatives to minimize environmental impacts which affect overall schedule and costs. Key team members from the environmental and design teams will perform field exploration of the proposed alignment and City recommended alternative alignments and develop criteria to establish the most environmentally desirable alignments. Additionally, the stream crossings will be evaluated in much the same manner with consideration given to potential permitting requirements, schedule, constructability and costs.

Additional information gathered will allow us to verify or refine the results of the previous studies and reports. It can then be determined whether or not the previously recommended alignments (Option 1 of the previous planning documents) for the sewer force main from SMD-1 WWTP and the Auburn WWTP do in fact offer the best overall value and constructability by combining the best combination of the following:

- Least private land encumbrances
- Least environmental impacts
- Best accessibility
- Least overall construction costs

Surveying and subsurface exploration by our geotechnical sub consultant will commence immediately upon receipt of the notice to proceed. The specifics of their scopes are included in separate sections of the scope of services. It is intended that the survey will include the alignments identified in the Brown and Caldwell report identified as Alignment Option 1. In addition, the survey will include the following:

- Areas identified by the City in the RFP as being potential alternative alignments
- Up to 6,000 feet along SR 193 west of Sierra College Blvd along the Bickford Alignment. (This section of sewer was already surveyed and designed, but that was more than five years ago and a new survey may be warranted. With aerial survey of the adjacent corridors already underway, inclusion of this area will not incur significant costs.)
- Up to 10,000 feet along East Catlett Road along the proposed reclaimed waterline alignment
- Due to the potential of having prescriptive easements along some of the roadways in which the proposed alignment lies, it is essential to start, the right of way investigations immediately upon receipt of the Phase 2 notice to precede. A detailed scope of the proposed right of way investigations are included in a separate section of this scope of services.

As stated previously, the subsurface exploration subtask will also commence at this time by our geotechnical sub consultant, Blackburn Consulting. The subsurface exploration scope contained in this proposal is very comprehensive. It is our experience that the more comprehensive the subsurface exploration is, the more refined the design can be. Additional geotechnical information allows the contractors' bids to be more refined, as contingencies in their bids for unknown subsurface conditions can be significantly reduced, providing the owner with a much more

competitive bid and a reduced risk of contract change orders associated with 'unforeseen conditions'. This is particularly important in the Sierra Foothills where geological conditions are highly variable. This particular project crosses three different geological formations, making this effort extremely important from both the design and construction perspective. The benefit of this comprehensive evaluation is overall design refinement and the potential for significant cost savings to the owner.

The Stantec pipeline design team is very familiar with area construction conditions and pipe availability in the region, along with area contractor qualifications. The team will evaluate the many variables associated with pipeline design and construction and will present the City with recommendations for the best combinations of pipeline and backfill materials. We will provide recommendations related to the following:

- Pipeline alignment corridor for the CEQA process
- Right of way procurement
- Hydraulic conditions
- Trenching conditions
- Suitable backfill materials, cost, and availability
- External loading conditions
- Minimization fittings and appurtenances
- Operations and maintenance issues
- Constructability issues
- Traffic control requirements
- Pipeline material and equipment staging
- Multiple headings
- Soil corrosivity
- Creek crossing alternatives
- Tunneling requirements
- Soil conditions relative to rock and groundwater
- Roadway repair/replacement requirements
- Air relief, vacuum relief and odor control

The pipeline design team's objective is to provide the City with the most efficient design relative to both capital costs and operation and maintenance costs

#### **Task 3.3.1 - Management and Administration**

Under this sub-task, the pipeline design team leader will be responsible for completing all work under this task. The team leader will be responsible for adherence to the project schedule and budget. The team leader will manage all of the sub-consultants and interface with the other team leaders, Project Manager and the City. The objective of this sub-task is to create a single point of responsibility for all work completed under the pipeline improvements task.

#### **Task 3.3.2 - Alignment Alternatives**

Under this sub-task, the pipeline design team will perform all work associated with developing, evaluating, and providing recommendations on the various pipeline alignment alternatives. Currently, the pipeline alignment is defined as the alignment identified in the Brown and Caldwell Technical Memorandum 1 and 3, Option 1. Three alignment alternatives have been presented by the City for further evaluation. This sub-task involves working closely with the environmental team and the ROW consultant to determine the most efficient alignment routes.

### **Task 3.3.3 - Survey**

This sub-task is for work associated with coordinating with Andregg-Geomatics to perform field and aerial surveys identified in other sections of this proposal. As identified, the survey will include the alignment associated with Option 1 of the Brown and Caldwell memos 1 and 3, the three alternative identified by the City, the reclamation pipeline, 6,000 feet of the Bickford alignment and areas of each treatment plant where improvement are being performed.

### **Task 3.3.4 - Rights-of-Way and Easements**

This sub-task involves the identification of the necessary easements along the proposed and alternative alignments. Work under this task is for coordinating with BRI and establishing the necessary easements associated with the pipeline elements of this project as identified in other sections of this proposal.

### **Task 3.3.5 - Geotechnical Report**

This sub-task involves coordinating with the project geotechnical sub-consultant, Blackburn Consulting, for performing the subsurface exploration work identified in other areas of this proposal. It is anticipated that a significant amount of interaction and coordination will be necessary to define the most efficient manner in which to obtain as much information as possible, as quickly as possible to enable detailed design to commence in a timely manner.

### **Task 3.3.6 - Construction Techniques**

Work under this sub-task is to evaluate all of the design parameters identified under this task and develop the most efficient construction techniques that will be applicable to this project. Once defined, the design will reflect this information in the alignment and details.

### **Task 3.3.7 - Alternative Materials**

This sub-task is for the evaluation of the various pipe types and materials, along with the bedding and backfill types, as defined in this task. The intent is to provide the City with the most appropriate and cost effective combinations of pipe and backfill materials in every reach of the alignment.

### **Task 3.3.8 - Pipe Size and Configuration**

Work performed under this sub-task involves the verification of flows and velocities established by Brown and Caldwell in order to confirm the recommended pipe sizes. Additionally, the configuration of the pipelines relative to junction structure, energy dissipation structure and tie-in locations will also be confirmed under this sub-task.

### **Task 3.3.9 - Road Repair and Traffic**

This sub-task involves working with the County and the geotechnical consultant to evaluate existing roadway structural sections, current R-values, future traffic indices, and County standards to establish roadway repair methodologies on each reach of the project. Additionally, the design team will coordinate with county transportation staff and the team's traffic consultant to develop a traffic control strategy that maximizes construction efficiencies while minimizing impacts to local traffic.

### **Task 3.3.10 - Air Venting and Odor Control**

Work under this task includes evaluating and implementing a suitable odor control scheme at each of the venting locations as well as at the energy dissipation and junction structures.

Work includes the development of a sewer ventilation sulfide model, an evaluation of capital and life cycle costs of potential solutions, and an alternatives analysis.

#### **Task 3.3.11 - Environmental and Permitting Evaluation**

As stated earlier, work performed under this task involves the coordination with environmental team members to create a project which minimizes to the extent possible the potential for environmental issues

#### **Task 3.3.12 - Updated Cost Evaluation**

Upon the completion of the preliminary design phase, the pipeline design team will re-evaluate and update the engineer's estimate of probable construction costs.

#### **Task 3.3.13 - Pipeline Improvements Predesign TM and Plans**

The work under this sub-task combines all of the work performed in accordance with this section, culminating in the development of a draft Pipeline Improvements Predesign Technical Memorandum, which will include plans developed to an approximate 30 percent completion level. The defined number of copies will be transmitted to the City for comment and discussion, whereby a final draft of the TM will be finalized and utilized as a basis for final design.

#### **Task 3.3.14 - Peer Review (QA/QC)**

Work under this task will involve an independent peer review by qualified personnel not associated with the development of the Predesign TM. Their comments will be incorporated in the final draft of the TM.

#### **Deliverables:**

- Provide Pipeline Improvements Criteria Technical Memoranda
- Provide 30 percent preliminary plan and profile drawings, details, and opinion of probable construction costs
- Participate in review meetings

### **TASK 3.4 - LINCOLN WWTRF EXPANSION**

The following is a detailed description of the proposed scope of services for the Phase 2 - City of Lincoln Wastewater Treatment and Reclamation Facility (WWTRF) Expansion project.

#### **Task 3.4.1 - Management and Administration**

Stantec will provide management and administrative services including the monitoring and control of the work and expenses during the preliminary design phase of the project.

#### **Task 3.4.2 - WWTRF Design Criteria Memorandum**

Stantec will work closely with the City to establish fundamental design criteria for the Lincoln WWTRF, including base design flows and management of peak flows from SMD-1 and the City of Auburn. Preferred effluent management methods (storage, land disposal, discharge, cooling, etc) will also be established. Detailed flows and load analyses for process design will be developed in a subsequent task.

**Task 3.4.3 - Technical Memorandum No. 1 - Design Flows and Loads**

Stantec will review the existing WWTRF flow and loading data and prepare an analysis of these flows and loads combined with the design flows and loadings from the SMD-1 and Auburn WWTPs. Based on this analysis, Stantec will prepare two drafts and a final technical memorandum to confirm the combined design flows and loads required for the Mid-Western Placer Regional Sewer project.

**Task 3.4.4 - Technical Memorandum No. 2 - Headworks and Influent Pump Station**

Stantec will evaluate the influent pumping and screening requirements for expansion. Based on which scenario is selected from the Phase 1 project, Stantec will prepare two drafts and final technical memorandum describing the recommended improvements for the Headworks and Influent Pump Station.

**Task 3.4.5 - Technical Memorandum No. 3 - Secondary Treatment**

Additional secondary treatment facilities including new oxidation ditch, secondary clarifier, scum and RAS pumping, and WAS metering station will be required for each expansion scenario. Based on which scenario is selected from the Phase 1 project, Stantec will prepare two drafts and a final technical memorandum describing the recommended improvements for the secondary treatment facilities.

**Task 3.4.6 - Technical Memorandum No. 4 - Maturation Pond / Filter Pump Station**

Proposed modifications to the SCADA programming will eliminate the need for new Maturation Pond pumps, however, new filter feed pumps will be required for each expansion scenario. Based on which scenario is selected from the Phase 1 project, Stantec will prepare two drafts and a final technical memorandum describing the recommended improvements to the Maturation Pond/ Filter Pump Station.

**Task 3.4.7 - Technical Memorandum No. 5 - Maturation Ponds**

Stantec will evaluate the performance of the Maturation Ponds to confirm that the detention time can be reduced, thus eliminating the need for new Maturation Ponds. Stantec will prepare two drafts and a final technical memorandum to address the performance of the Maturation Ponds and the recommended improvements including modifications to the outlet gate controls and new flow measurement using level sensors.

**Task 3.4.8 - Technical Memorandum No. 6 - Dissolved Air Flotation System**

Stantec will evaluate the Dissolved Air Flotation System including splitter box, clarifiers, pump station and recirculation pump station. Based on which scenario is selected from the Phase 1 project, Stantec will prepare two drafts and a final technical memorandum describing the recommended improvements to the Dissolved Air Flotation System.

**Task 3.4.9 - Technical Memorandum No. 7 - Tertiary Filters**

Stantec will evaluate the Tertiary Filters including the rapid mix basin, flocculation basins, sand filters, filter mud well, and filter clear well. Based on which scenario selected from the Phase 1 project, Stantec will prepare two drafts and a final technical memorandum describing the recommended improvements to the Tertiary Filters.

**Task 3.4.10 - Technical Memorandum No. 8 – Effluent Storage and Disposal Facilities**

Stantec will evaluate the capacity requirements for on-site effluent storage and the options for off-site land disposal. In addition, Stantec will evaluate Cooling Towers for year round discharge to Auburn Ravine if off-site land disposal is not a viable option. Based on which scenario is selected from the Phase 1 project, Stantec will prepare two drafts and a final technical memorandum describing the recommended improvements for Effluent Storage and Disposal.

**Task 3.4.11 - Technical Memorandum No. 9 – Solids Treatment and Handling**

Stantec will evaluate the Solids Treatment and Handling facility requirements including the solids holding tank, sludge feed pumps, centrifuges, polymer feed system, and active solar dryers. Stantec will prepare two drafts and a final technical memorandum describing the recommended improvements for the Solids Treatment and Handling facilities.

**Task 3.4.12 - Technical Memorandum No. 10 – Electrical and Instrumentation**

Stantec will evaluate the electrical and instrumentation requirements. Because the main service and switchgear are oversized to accommodate future expansion of the WWTRF this effort will focus on the improvements required for area motor control centers (MCCs) and on SCADA programming to improve energy efficiency and load shedding to reduce peak demand use charges. Based on which scenario is selected from the Phase 1 project, Stantec will prepare two drafts and a final technical memorandum describing the recommended improvements for electrical and instrumentation.

**Task 3.4.11 - Draft and Final Preliminary Design Report**

Stantec will compile the technical memorandums and appendices into a three ring binder with divider tabs. Stantec will prepare ten (10) copies of the draft and final report for the City.

**Task 3.4.12 - Peer Review (QA/QC)**

Work under this task will involve an independent peer review by qualified personnel not associated with the development of the Predesign TM. Their comments will be incorporated in the final draft of the TM.

**TASK 3.5 - EFFLUENT DISPOSAL/RECLAMATION PREDESIGN/PERMITTING**

The assimilative capacity of Auburn Ravine Creek is limited by the temperature constraints defined in the WWTRF effluent discharge permit (NPDES permit). In order to allow expansion of the WWTRF either effluent cooling facilities have to be constructed or land discharge opportunities have to be identified and developed. If, after the Phase 1 Value Engineering evaluation the land disposal option is deemed viable Stantec will follow up that evaluation by formalizing the pre-design, including permitting and environmental considerations, of the value engineered land disposal project elements. This scope and associated costs are based on the "baseline" project as described in the Phase 1 Value Engineering section.

**Task 3.5.1 - Management and Administration**

Stantec will provide management and administrative services including the monitoring and control of the work and expenses during the preliminary design phase of the project.

**Task 3.5.2 - Update Prior Reclamation Studies**

Stantec will develop and provide a brief amendment for the 2003 City of Lincoln - Facilities Plan and Water Recycling Study, and the 2004 City of Lincoln - Master Reclamation Plan. This work will

refine water demands and the resultant land disposal requirements and includes the following elements:

- Effluent Reclamation Site Identification, limited primarily to the Muchado agricultural practice identified in the Phase 1 work.
- Update inventory of existing landowners, crops, and irrigation practices
- Water Reclamation Issues Discussion
- Update water rights issues
- Identify issues relevant to the Master Reclamation Permit renewal which is currently extended pending Regional Board staff evaluation of the renewal application.
- Estimate Reclamation Demand Potential for the preferred land disposal site (Muchado property).
- Identify Environmental constraints relevant to identified sites/users.

#### **Task 3.5.3 - Pipeline Alignment and Easement Coordination**

Stantec will evaluate the 10,000 LF Catlett Road pipeline alignment in regards to easement and existing utility coordination as well as Placer County construction constraints.

#### **Task 3.5.4 - Land Owner/ Farmer Agreements**

Stantec will meet with up to 3 landowners to determine project improvement requirements and whether certain improvements can be completed by the owner/farmer. Stantec will also work with the City attorney to draft agreements with the owner/farmers that meet the project and regulatory requirements. We have an allowance of \$30,000 of Stantec staff resources to be applied towards this task.

#### **Task 3.5.5 - Reclamation Project Identification TM**

Stantec will produce a technical memorandum that summarizes the results of Tasks 1-4 above and produces design specifications for the required distribution pipeline(s), turnout facilities, and site improvements for each parcel. SCADA and electrical power requirements for each parcel's facilities will also be identified in this memorandum. Ten copies of the DRAFT TM will be provided.

#### **Task 3.5.6 - Peer Review QA/QC.**

Stantec will have experienced senior staff review the Task 5 DRAFT TM and address City review comments to produce the FINAL Reclamation Project Identification TM. Ten copies of the FINAL TM will be provided.

### **TASK 4: DETAILED DESIGN**

#### **TASK 4.1 - PUMP STATION AT AUBURN WWTP**

##### **Task 4.1.1 - Management and Administration**

Stantec will provide management and administrative services, including the monitoring and control of the work and expenses during the final design phase of the project.

**Task 4.1.2 - General Drawings**

Stantec will prepare a title sheet, index of drawings, general site plans, standard notes, design criteria, process flow diagram, hydraulic profile, and flow schematic drawings using AutoCAD. A total of 10 general drawings are anticipated for this project.

**Task 4.1.3 - Typical Drawings**

Stantec will prepare stamped civil, structural and mechanical typical drawings in AutoCAD. A total of 26 typical drawings (not including electrical and instrumentation) are anticipated for this project.

**Task 4.1.4 - Civil Drawings and Specifications**

Stantec will prepare stamped paving and grading and yard piping drawings in AutoCAD. Stantec will prepare civil technical specifications in CSI format using Microsoft Word. A total of 8 civil drawings are anticipated for this project.

**Task 4.1.5 - Structural Drawings and Specifications**

Stantec will prepare stamped structural drawings in AutoCAD and stamped structural calculations for each of the project structures. Stantec will prepare structural technical specifications in CSI format using Microsoft Word. A total of 7 structural drawings are anticipated for this project.

**Task 4.1.6 - Mechanical Drawings and Specifications**

Stantec will prepare stamped mechanical drawings for each of the project elements. Stantec will prepare mechanical technical specifications in CSI format using Microsoft Word. A total of 7 mechanical drawings are anticipated for this project.

**Task 4.1.7 - Electrical and Instrumentation Drawings and Specifications**

Stantec will prepare stamped electrical and instrumentation drawings for each of the project elements. Stantec will prepare electrical and instrumentation technical specifications in CSI format using Microsoft Word. A total of 26 electrical and instrumentation drawings are anticipated for this project.

**Task 4.1.8 - Front-End Specifications**

Stantec will prepare EJCDC front-end specifications for the bid documents using Microsoft Word. These documents will be reviewed by the City Attorney.

**Task 4.1.9 - Progress Submittals**

Progress submittals will be delivered at approximate 30 percent and 90 percent completion points. The 30 percent submittal will include the drawings in progress at that time as well as draft specifications for key equipment items. The 90 percent submittal will include a set of all drawings, specifications, and other documents to be included in the project bid package. Ten (10) copies of each submittal will be provided to the City.

**Task 4.1.10 - Peer Review (QA/QC and Constructability)**

Stantec shall complete a final quality control review and constructability review of all drawings, specifications, and other bidding documents between the 90 percent and final submittals. Documents shall be reviewed for correctness, completeness, and coordination with other documents and between disciplines.

**Task 4.1.11 - Final Submittal**

After receiving final comments from the City and completion of the final QA/QC in-house review, Stantec will prepare final bidding documents for reproduction and distribution. Ten (10) copies of the final bidding documents will be provided to the City.

**TASK 4.2 - PUMP STATION AT SMD-1 WWTP****Task 4.2.1 - Management and Administration**

Stantec will provide management and administrative services, including the monitoring and control of the work and expenses during the final design phase of the project.

**Task 4.2.2 - General Drawings**

Stantec will prepare a title sheet, index of drawings, general site plans, standard notes, design criteria, process flow diagram, hydraulic profile, and flow schematic drawings using AutoCAD. A total of 10 general drawings are anticipated for this project.

**Task 4.2.3 - Typical Drawings**

Stantec will prepare stamped civil, structural and mechanical typical drawings in AutoCAD. A total of 26 typical drawings (not including electrical and instrumentation) are anticipated for this project.

**Task 4.2.4 - Civil Drawings and Specifications**

Stantec will prepare stamped paving and grading and yard piping drawings in AutoCAD. Stantec will prepare civil technical specifications in CSI format using Microsoft Word. A total of 8 civil drawings are anticipated for this project.

**Task 4.2.5 - Structural Drawings and Specifications**

Stantec will prepare stamped structural drawings in AutoCAD and stamped structural calculations for each of the project structures. Stantec will prepare structural technical specifications in CSI format using Microsoft Word. A total of 7 structural drawings are anticipated for this project.

**Task 4.2.6 - Mechanical Drawings and Specifications**

Stantec will prepare stamped mechanical drawings for each of the project elements. Stantec will prepare mechanical technical specifications in CSI format using Microsoft Word. A total of 8 mechanical drawings are anticipated for this project.

**Task 4.2.7 - Electrical and Instrumentation Drawings and Specifications**

Stantec will prepare stamped electrical and instrumentation drawings for each of the project elements. Stantec will prepare electrical and instrumentation technical specifications in CSI format using Microsoft Word. A total of 26 electrical and instrumentation drawings are anticipated for this project.

**Task 4.2.8 - Front-End Specifications**

Stantec will prepare EJCDC front-end specifications for the bid documents using Microsoft Word. These documents will be reviewed by the City Attorney.

**Task 4.2.9 - Progress Submittals**

Progress submittals will be delivered at approximate 30 percent and 90 percent completion points. The 30 percent submittal will include the drawings in progress at that time as well as draft specifications for key equipment items. The 90 percent submittal will include a set of all drawings, specifications, and other documents to be included in the project bid package. Ten (10) copies of each submittal will be provided to the City.

**Task 4.2.10 - Peer Review (QA/QC and Constructability)**

Stantec shall complete a final quality control review and constructability review of all drawings, specifications, and other bidding documents between the 90 percent and final submittals. Documents shall be reviewed for correctness, completeness, and coordination with other documents and between disciplines.

**Task 4.2.11 - Final Submittal**

After receiving final comments from the City and completion of the final QA/QC in-house review, Stantec will prepare final bidding documents for reproduction and distribution. Ten (10) copies of the final bidding documents will be provided to the City.

**TASK 4.3 - REGIONAL PIPELINE IMPROVEMENTS**

Detailed design will commence once the Pipeline Improvements Criteria TM and 30 percent preliminary plan and profile drawings, details, and opinion of probable construction costs have been reviewed and accepted by the City. The detailed design effort will build upon the analysis and recommendations developed in the planning and preliminary design phase.

In the detailed design phase, the project team will refine the parameters previously identified and work diligently to develop detailed construction documents.

During this phase, land acquisition and easement requirements will be more clearly understood. As a result, the most appropriate alignments, within the corridors identified in predesign, will be determined. Additionally, major environmental obstacles will have been identified, and avoided if possible

The project design team will be working closely with County staff on issues related to the following:

- alignment within the roadways
- roadway repair/replacement
- staging areas
- traffic control
- hours of operation
- temporary paving and plating

Operational characteristics will also be vetted out and designed in detail. An efficient design not only involves the development of a layout which maximizes construction efficiencies, but also minimizes the need for appurtenances like air and vacuum relief valves that create a nuisance to affected landowners and require regular maintenance. The design team will carefully scrutinize the horizontal and vertical layout to minimize high and low points and areas where the accumulation of air or grit would create operational issues.

The proposed energy dissipation structure will be a significant design element. This structure must not only dissipate the energy of the SMD-1 and Auburn sewer force mains, but also maintain back pressure on the force mains such that vacuum conditions do not develop during pump shutoff. The details of this structure and its control system will necessitate input from operations staff and SCADA engineers to develop an efficient, reliable, and low maintenance facility under all operating conditions.

Another key element of the pipeline system is the junction structure, which ties the new sewer transmission system with the existing gravity system. Careful consideration will be given to siting the structure, operational characteristics, and odor control.

URS will work as a sub-consultant with the pipeline design team to understand the placement of pipe in each roadway and the crossing of each intersection along Alignment Option One. The roads and corresponding intersections include the following:

- Joeger Road
- Baxter Grade Road
- Wise Road
- Gold Hill Road
- Chin Hill Road
- Virginia Town Road
- Fowler Road
- Highway 193 (State Route)

Individual traffic control plans will be prepared by URS for each roadway and corresponding intersection identified above.

The URS team has worked extensively with Caltrans on projects for that agency. They have also worked with Caltrans in conjunction with Bender-Rosenthal, Inc. (BRI) on other large infrastructure projects. BRI are providing right-of-way services for the regional project as described in a separate section of this scope of services.

#### **Task 4.3.1 - Management and Administration**

Under this sub-task, the pipeline design team leader will be responsible for completing all work under this task. The team leader will be responsible for adherence to the project schedule and budget. The team leader will manage all of the sub-consultants and interface with the other team leaders. The objective of this sub-task is to create a single point of responsibility for all work completed under the pipeline improvements task.

#### **Task 4.3.2 - Design Submittals (plans and specifications)**

Work under this sub-task involves the development and submittal of draft and final construction plans and specifications for City review, discussion and bidding.

**Task 4.3.2a - 90 Percent Submittal.** The design team will submit a 90 percent design package of plans, specifications and cost estimate for the City's review, comment, and discussion.

**Task 4.3.2b - Peer Review (QA/QC and Constructability).** Work under this task will involve an independent peer review by qualified personnel not associated with the development of the design documents. Their comments will be incorporated in the final plans and specifications.

**Task 4.3.2c - Final Submittal.** The design team will submit a final package of construction contract plans, specifications and cost estimate for the City's review, comment, and discussion

**Deliverables:**

- Provide 90 percent plan and profile drawings, details, and opinion of probable construction costs
- Final plan and profile drawings, details, and opinion of probable construction costs

**TASK 4.4 - LINCOLN WWTRF EXPANSION**

**Task 4.4.1 - Management and Administration**

Stantec will provide management and administrative services, including the monitoring and control of the work and expenses during the final design phase of the project.

**Task 4.4.2 - General Drawings**

Stantec will prepare a title sheet, index of drawings, general site plans, standard notes, design criteria, process flow diagram, hydraulic profile, and flow schematic drawings using AutoCAD. A total of 16 general drawings are anticipated for this project.

**Task 4.4.3 - Typical Drawings**

Stantec will prepare stamped civil, structural and mechanical typical drawings in AutoCAD. A total of 37 typical drawings (not including electrical and instrumentation) are anticipated for this project.

**Task 4.4.4 - Civil Drawings and Specifications**

Stantec will prepare stamped paving and grading, coordinate tables, yard piping, piping profiles and effluent storage basins plan, sections and detail drawings in AutoCAD. Stantec will prepare civil technical specifications in CSI format using Microsoft Word. A total of 41 civil drawings are anticipated for this project.

**Task 4.4.5 - Structural Drawings and Specifications**

Stantec will prepare stamped structural drawings in AutoCAD and stamped structural calculations for each of the project structures. Stantec will prepare structural technical specifications in CSI format using Microsoft Word. A total of 35 structural drawings are anticipated for this project.

**Task 4.4.6 - Mechanical Drawings and Specifications**

Stantec will prepare stamped mechanical drawings for each of the project elements. Stantec will prepare mechanical technical specifications in CSI format using Microsoft Word. A total of 39 mechanical drawings are anticipated for this project.

**Task 4.4.7 - Electrical and Instrumentation Drawings and Specifications**

Stantec will prepare stamped electrical and instrumentation drawings for each of the project elements. Stantec will prepare electrical and instrumentation technical specifications in CSI format using Microsoft Word. A total of 121 electrical and instrumentation drawings are anticipated for this project.

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**Task 4.4.8 - Front-End Specifications**

Stantec will prepare EJCDC front-end specifications for the bid documents using Microsoft Word. These documents will be reviewed by the City Attorney.

**Task 4.4.9 - Progress Submittals**

Progress submittals will be delivered at approximate 30 percent and 90 percent completion points. The 30 percent submittal will include the drawings in progress at that time as well as draft specifications for key equipment items. The 90 percent submittal will include a set of all drawings, specifications, and other documents to be included in the project bid package. Ten (10) copies of each submittal will be provided to the City.

**Task 4.4.10 - Engineer's Cost Estimate**

Stantec will prepare and submit to the City within two weeks after submission of the 30 percent and 90 percent progress submittals, the Engineer's opinion of probable construction costs. This shall include quantity takeoffs, unit costs, and extended costs for all significant items of construction, with appropriate subtotals for major project components and overall total.

**Task 4.4.11 - Peer Review (QA/QC and Constructability)**

Stantec shall complete a final quality control review and constructability review of all drawings, specifications, and other bidding documents between the 90 percent and final submittals. Documents shall be reviewed for correctness, completeness, and coordination with other documents and between disciplines.

**Task 4.4.12 - Final Submittal**

After receiving final comments from the City and completion of the final QA/QC in-house review, Stantec will prepare final bidding documents for reproduction and distribution. Ten (10) copies of the final bidding documents will be provided to the City.

**TASK 4.5 - EFFLUENT DISPOSAL/RECLAMATION IMPROVEMENTS****Task 4.5.1 - Management and Administration**

Stantec will provide management and administrative services, including the monitoring and control of the work and expenses during the final design phase of the project.

**Task 4.5.2 - Pipeline Drawings and Specifications**

Stantec will prepare stamped plan and profile, sections and detail drawings in AutoCAD. Stantec will prepare technical specifications in CSI format using Microsoft Word. A total of 20 drawings are anticipated for this project.

**Task 4.5.3 - Irrigation Site Improvements Drawings and Specifications**

Stantec will prepare stamped site plan, piping, and grading drawings in AutoCAD for each of the project reclamation sites. Detailed plans for two sites are anticipated. The level of detail on the site drawing shall be sufficient for typical farming site improvements and will assume all soils will be retained on each site (in accordance with typical agricultural site work). One overall site plan for each parcel with typical details and sections as needed are anticipated. Electrical and instrumentation drawings will be provided for each site. Stantec will prepare technical specifications in CSI format

using Microsoft Word. A total of 24 site improvement drawings (12 for each site) are anticipated for this project.

#### **Task 4.5.4 - Progress Submittals**

Progress submittals will be delivered at approximate 30 percent and 90 percent completion points. The 30 percent submittal will include the drawings in progress at that time as well as draft specifications for key equipment items. The 90 percent submittal will include a set of all drawings, specifications, and other documents to be included in the project bid package. Ten (10) copies of each submittal will be provided to the City.

#### **Task 4.5.5 - Peer Review (QA/QC and Constructability)**

Stantec shall complete a final quality control review and constructability review of all drawings, specifications, and other bidding documents between the 90 percent and final submittals. Documents shall be reviewed for correctness, completeness, and coordination with other documents and between disciplines. Site improvement drawings and equipment specifications will be reviewed with the local reclamation farmer and affected property owners for constructability and operational review.

#### **Task 4.5.6 - Final Submittal**

After receiving final comments from the City and completion of the final QA/QC in-house review, Stantec will prepare final bidding documents for reproduction and distribution. Ten (10) copies of the final bidding documents will be provided to the City.

### **TASK 5: RIGHT-OF-WAY EVALUATION**

As a prelude to this section, it should be noted that while right of way and easement identification and procurement assistance is included in this scope, the cost to actually buy the easements from private property holders is not included. An allowance for right of way purchase should be included in the final offer to Placer County SMD-1 and the City of Auburn, along with an allowance for legal participation in the process.

Stantec will coordinate with District staff and Bender Rosenthal (BRI) to refine issues facing the ROW easement acquisitions prior to completing predesign. ROW Planning activities include a field review of the project and developing a preliminary ROW capital cost estimate based on the predesign. This task will include developing a ROW scoping report that provides a detailed analysis of the project right of way needs. BRI's scope is as follows

It is assumed that the majority of the pipelines will be placed within existing roadways. Many of the older roads within the City of Lincoln and in the unincorporated areas of Placer County have been established by a prescriptive use, or are considered a prescriptive road easement. If the road was not acquired by another instrument (dedication, road easement, or in fee), it is likely that a sewer easement will be required within the roadway. While the monetary cost to acquire a sewer easement under an existing road may be small, the cost to develop plats and legal descriptions, appraise, acquire, close escrow and offer the property owner up to \$5,000 to secure their own appraisal should be budgeted.

Other items to consider in the right of way estimate will be temporary construction easements as well as staging areas. Specific to the "County Shortcut" exhibits in the RFP, up to 30 parcels are affected and five parcels are affected for the Fowler Alternative. With regards to the 10,000 foot

stretch of potential off-site disposal piping on the East Catlett Road element, up to 8 parcels are affected based preliminary analysis. BRI tasks will include:

Two site visits, including an inspection of proposed right of way for opportunities to avoid sensitive sites, critical constraints, and environmental problems:

- Attending up to eight (8) meetings with the project team
- Reviewing current and projected land use patterns from a right-of-way cost perspective for the proposed pipeline route
- Providing a comparable analysis of each property along the proposed pipeline, including potentially affected property improvements (up to 4 property types)
- Providing relocation cost estimate per Federal / State relocation standards, should it become apparent that at least one relocation will be required
- Providing right-of-way estimates, by parcel
- Providing an analysis of potentially affected parcels, including identifying right-of-way solutions to environmental problems where appropriate

BRI deliverables will be provided through Stantec to the project team and include, estimated ROW costs for the proposed alignment section and a project ROW scoping report. BRI will also provide full acquisition services for the utility easements required within existing roadway prescriptive easements.

Per the assumptions in this base project, that the pipeline will be located in existing roadways, no appraisals for off-road, private easements are included in the scope. These can easily be added if the preferred alignment incorporates an alignment other than the currently propose Option 1 alignment. Off-road alignment studies will be considered in Phase 1 and easement cost estimating is scoped there, but if additional study work is completed in Phase 2, appraisal estimates (not actual appraisals) will be provided to support the study process and conclusions.

If final appraisals are warranted, a separate scope will be required that works with easement boundaries, as defined by the engineering team and with easement legal descriptions prepared by the surveyor. Acquisition Services, including coordinating with private property owners, City and legal counsel can also be provided.

## **TASK 6: PROJECT FINANCING**

The Regional Sewer project, as outlined in this scope of work, will be under an aggressive timeline. Key to the success of meeting this project timeline will be to target and secure funding as quickly and efficiently as is possible.

The lowest cost of financing is likely through the State Water Resources Control Board Clean Water State Revolving Fund (SRF) program. Stantec has a very successful track record in securing funding through this program for our clients. We understand the program requirements and elements necessary to complete a successful application. Initial discussions with SRF program staff indicate that the program does have the ability to fund the Regional Sewer project within the desired timeframe set for the project.

The SRF program currently offers debt financing at interest rates that are one-half of the State's most recent General Obligation (GO) Bond rate (current SRF rate at approximately 1.7 percent) and

a financing term of 20 years. The application process can be lengthy, typically 6 to 12 months or longer. In addition, the regional nature of this project and the multiple sources of revenue from the participating agencies, results in a more complicated financing arrangement than is typically undertaken by the SRF program.

Therefore, it may be in the City's interest to also evaluate interim financing (bridge loan until SRF funding comes into place) as well as other financing alternatives such as traditional revenue bonds or a private placement. However this scope of work does not include assistance with evaluating alternative financing.

Stantec has assembled a finance team of seasoned professionals that have a solid track record in obtaining project financing for their clients. The finance team includes professionals from Stantec, G Aronow Consulting, and Northcross Hill & Ach, Inc.

The following sections outline the tasks necessary to secure the City funding for the Regional Sewer project.

### **TASK 6.1 - MANAGEMENT AND ADMINISTRATION**

Stantec will provide management and administrative services including the monitoring and control of the work and expenses during the preliminary design phase of the project.

### **TASK 6.2 - SRF FINANCING**

Under this task Stantec and its project team will work with the City to prepare, submit, and facilitate the SRF application for the Regional Sewer project.

#### **Task 6.2.1 - Preliminary Application**

Working with the City of Lincoln, the project team will coordinate with SRF staff and prepare a preliminary application to be submitted to the SRF program. Once submitted, Stantec will request a meeting with the SRF staff assigned to the project and the City to ensure that the project gets on track to get the necessary approvals from state (and federal agencies, if required). A key issue in this early meeting with the SRF staff will be to assess their willingness and ability to allow the City of Lincoln to borrow money that will be in large part secured or repaid with revenues generated by the City of Auburn and Placer County. Preliminary discussions with SRF staff have indicated that this is a viable option, but not "typical". It will be important to address this loan security issue early on so that it can be resolved in parallel with the rest of the application process and not result in delay.

#### **Task 6.2.2 - Coordination with CEQA**

CEQA is a critical component of the SRF application process. The CEQA document must be reviewed by several state agencies and their comments must be addressed in a Final EIR for the proposed project. Once the EIR is approved and adopted by the City Council and a Notice of Determination (NOD) is filed, the applicant must show that the project is in compliance with federal regulations as part of the process carried out by the SRF Environmental Review Unit (ERU). The applicant must show compliance with the following regulations: Section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act, and the Clean Air Act. The applicant must also fill out an SRF specific environmental checklist. As part of complying with SRF ERU environmental requirements, the CEQA team project manager will coordinate with SRF staff to complete the appropriate documentation in order to expedite the environmental approval for SRF funding requirements.

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(The CEQA-funding interdependence is one item that is critical to the project schedule and will require careful monitoring as the project unfolds.)

#### **Task 6.2.3 - Coordinate the SRF Credit Review Component**

Another critical component essential to SRF approving the loan is the Credit Review. The Credit Review is performed by an outside contractor for SRF, Cal Muni. The Credit Review looks at the financial health of the Sewer Enterprise Fund and determines the borrowing capacity of the City. Therefore, ensuring a favorable determination with the Credit Review is imperative to the overall success of the financing and SRF application process.

For this project, the Sewer Enterprise Fund will be bolstered with Agreements from Placer County SMD-1 and the City of Auburn, promising payment for sewer service. These Agreements will undergo review and scrutiny during the Credit Review process and by extension the SRF program will want to look at the financial health and ability to repay by Placer County SMD-1 and the City of Auburn.

There will be substantial information that will need to be provided to SRF from each agency in order for the SRF to perform the Credit Review. The finance team will assemble and provide the information in a cohesive format that will demonstrate the City's ability to borrow and repay the loan. It is assumed that the City will participate, with cooperation from Placer County and the City of Auburn, and provide the underlying or supporting documentation needed for the Credit Review, including the funding Agreements with Placer County and the City of Auburn. This task may also rely on information gathered and determined under Task 6.3, Regional Sewer Rate and Fee Analysis, described below.

#### **Task 6.2.4 - Application Facilitation and Completion**

Stantec will facilitate the application process for the City and help see the application through the various SRF project approvals. This includes checking in with SRF staff via phone and email on a weekly or bi-weekly basis. It will never be permissible for SRF to waiting for something from the City and not have the project team know about it and working on delivering it; hence the frequent check-ins. It also includes 2 to 3 meetings with the City and SRF staff at their office and generally ensuring that SRF staff have what they need to continue processing the loan application.

### **TASK 6.3 - REGIONAL SEWER RATE AND FEE ANALYSIS**

The City will need to be able to demonstrate that it has the ability to repay the loans. In addition, demonstrating that the sewer enterprise fund is in sound financial health will help secure a favorable credit review determination under the SRF financing option and can help secure a lower cost of financing under the revenue bond option.

The primary source of funding, however, is not to be the City of Lincoln rate payers but Placer County and the City of Auburn. The City will need to enter into binding agreements with these two agencies, where they promise to pay the City of Lincoln for their fair share of costs, prior to any financing being secured.

Under this task Stantec will provide a regional cost analysis that will calculate the rates and or fees that Placer County and the City of Auburn will need to pay, based on aggregate equivalent dwelling units for each agency and with cost data provided by and/or approved by Lincoln. These costs would include both capital financing costs and operation and maintenance costs.

This analysis will be done in a two step process. The first step will be to determine the preliminary cost share and estimated rate and fee impact based on current estimates of project costs. This early analysis can be used to begin the process with SRF and the regional agencies to move forward with adopting Memorandum's of Understanding (MOUs) for financing of the project. The values that go into this step could be the results from Phase 1 that the City uses in its proposal to Placer County SMD-1 and the City of Auburn. As a formal commitment will result from the City's proposal, these costs could also represent the final costs.

Identifying the potential rate impact from the Regional Project at an early stage could also help Placer County and the City of Auburn move forward with their rate adjustment and Proposition 218 processes. The sooner the two agencies implement rates to support the Regional Project, the greater potential success with the SRF program. In addition, it may allow the agencies to phase in their rate increases over a two to three year period, assuming that the first SRF loan payment is due one year following the end of construction of the project (typical). It should be noted that this scope does not include providing direct assistance to Placer County or the City of Auburn for their rate adjustment processes.

Once Stantec has finished the design of the project and has determined the Engineer's probable cost, the regional cost analysis will be updated. Again, this is an option, but per the City's proposal concept, the original costs may be final for purposes of determining the fees for SMD-1 and Auburn. Variations in the City's proposal costs and the final Engineer's estimate or even bid costs, could simply result in variations in the amount that is reimbursed to the City for oversizing.

Specifically, this analysis will look at the following:

- Projected Operating Costs of the Lincoln WWTP through 2019, incorporating any economies of scale as a result of the Regional Project. This date is set coincident with the City's proposed fixed costs commitment for operation of the pipeline, with start-up in 2014 and fixed for five years. This concept is based on the fact that over this time period additional users could come on line and contribute payments, but a conservative approach would be to assume that the initial rate payers are the only rate payers and any new connections, anticipated to be relatively few, would simply add to the reserve fund.
- Timing of capital improvement project costs. By design, these will be completed by the end of 2013, absent any delays.
- Share of capital improvement costs to regional agencies. Theoretically, this cost element will be fixed with the acceptance of the City's offer after completion of Phase 1.
- Financing costs related to the regional project (may involve looking at more than one option, i.e., SRF, private placement, and revenue bonds)
- The findings of the analysis, including rate and fee recommendations, will be summarized in a technical memorandum with supporting tables.

## **TASK 7: CONDUCT AERIAL AND DESIGN LEVEL TOPOGRAPHIC SURVEYS**

Surveying will commence immediately upon receipt of the notice to proceed. Andregg Geomatics shall perform field and office work to provide the following services.

### **TASK 7.1 - DESIGN LEVEL TOPOGRAPHIC MAPPING**

Andregg Geomatics shall complete aerial mapping, including setting and surveying semi permanent photogrammetric aerial targets suitable for future construction and boundary surveys. Obtain stereo aerial photography of the proposed route and prepare topographic base mapping of the route at a scale of 1" = 40 ft with 1-foot contours. The mapping limits as delineated as "Alignment Option 1" on Figure 3 of the "Placer Nevada Wastewater Authority Regional Pipeline Project" by Brown and Caldwell and dated February 26, 2008. One pipeline route starts at SMD-1 Wastewater Treatment Plant on Joeger Road in North Auburn, following Joeger Road westerly to Mt Vernon Road, then along Mt Vernon to Baxter Grade Road, along Baxter Grade Road to Wise Road, Wise Road to Gold Hill Road and Gold Hill Road to the Junction Structure at Gold Hill Road and Chili Hill Road. The second pipeline route starts at Auburn Waste Water Treatment Plant in the Ophir, then following Wise Road westerly to Bald Hill Road, then along Bald Hill Road to Chili Hill Road and Chili Hill Road to the Junction Structure. From the Junction Structure the pipeline follows Gold Hill Road to Virgintown Road, then along Virgintown Road to Fowler Road, Fowler Road to State Highway 193, State Highway 193 to the Transition Structure and Connection Point at Sierra College Blvd. Corridor mapping coverage shall be 300' wide and centered on the proposed pipeline route. Deliverables shall be an AutoCAD drawing in both digital and hardcopy format with the DTM in AutoCAD XML format. The horizontal datum shall be NAD83, California State Plane Zone 2 in US Survey feet and vertical datum shall be NAVD88 and based on nearest found NGS monuments. Included in this proposal is digital color ortho-rectified imagery of the mapping corridor 500 feet wide and centered on the proposed pipeline route. Also included in this proposal is surveying for the location of conflicting visible utilities, culverts, storm drain and sewer manholes inverts, gas lines and overhead and underground electrical, telephone, fiber optics and/or cable lines.

This task also includes all of the three (3) alternative routes identified by the City in the RFP. After Phase 1, it may be known if these survey efforts are required or not. These survey tasks will not be implemented without City approval.

Survey's will also be provided for the SMD-1 treatment plant site, the City of Auburn wastewater treatment plant site and the Lincoln WWTRF site.

Note: This Task does not include potholing or pothole surveys, USA notification, or accessing dangerous or unsafe manholes or vaults.

### **TASK 7.2 - APPROXIMATE RIGHT-OF-WAY AND LAND NET**

Andregg Geomatics shall determine and locate the approximate record right of way along the proposed route(s). It is assumed that the proposed pipeline design shall primarily be contained within existing road rights of way, therefore, right of way and parcel boundary lines shall be loosely depicted onto the topographic mapping for information purposes and shall be compiled solely from readily available record maps and documents (i.e. Placer County Assessor's Office and Recorder's Office). The Land Net thus developed shall include Assessor's Parcel Numbers and owner's names of record at the time and shall be compiled as an AutoCAD drawing suitable as a standalone drawing or as overlay onto the mapping in Task 1 above.

### **TASK 7.3 - LIMITED ACCURATE RIGHT-OF-WAY AND LAND NET**

For limited areas and parcels, Andregg Geomatics shall accurately determine and locate record right of way along the proposed route(s). This effort shall be to determine and locate rights of way and parcel boundaries accurate to the scale of the mapping in Task 1 above and shall be utilized in areas where the engineering design includes improvements near to encroaching on existing rights of way

and properties. For purposes of this proposal it is estimated that 15 Assessor's Parcels shall be affected in this manner and will need more accurate right of way and parcel lines depicted in the mapping.

Note: No boundary surveys, boundary dispute resolution, boundary monumentation or surveys requiring a Record of Survey is included in this proposal.

#### **TASK 7.4 - MISCELLANEOUS DESIGN AND AUGMENTATION SURVEYS**

Provide specific design surveys as directed by Engineer which may include pothole surveys, boring, tree or site surveys, and overlay onto mapping in Task 1 above. For purposes of this proposal five days of field work and associated office work are estimated.

#### **TASK 7.5 - LEGAL DESCRIPTION DOCUMENT PACKAGES**

Prepare legal description document packages consisting of a legal description and exhibit plat of the acquisition parcel for permanent or temporary easements. The deliverable for the document package set is one legal description and accompanying exhibit plat suitable for recording in Placer County, prepared to PNWA specifications, signed and sealed by a licensed professional land surveyor. The level of effort for this task is for one set of the draft document package submitted for review and redlines and one final signed and sealed document package for recording. For purposes of this proposal 15 legal description document packages are estimated. It is assumed that Preliminary Title Reports will be provided (by Client or Owner) for each parcel impacted by acquisition for either permanent or temporary easements.

#### **TASK 7.6 - EAST CATLETT ROAD DESIGN LEVEL TOPOGRAPHIC MAPPING**

Andregg Geomatics shall complete aerial mapping, including setting and surveying semi permanent photogrammetric aerial targets suitable for future construction and boundary surveys. Obtain stereo aerial photography of the proposed route and prepare topographic base mapping of the route at a scale of 1" = 40 ft with 1-foot contours. The mapping limits shall be a 150 ft wide corridor along East Catlett Road from Fiddymont Road East 10,000 feet. Deliverables shall be an AutoCAD drawing in both digital and hardcopy format with the DTM in AutoCAD XML format. The horizontal datum shall be NAD83, California State Plane Zone 2 in US Survey feet and vertical datum shall be NAVD88 and based on nearest found NGS monuments. Included in this proposal is digital color ortho-rectified imagery of the mapping corridor 300 feet wide and centered on the proposed pipeline route. Also included in this proposal is surveying for the location of conflicting visible utilities, culverts, storm drain and sewer manholes inverts, gas lines and overhead and underground electrical, telephone, fiber optics and/or cable lines.

Note: This Task does not include potholing or pothole surveys, USA notification, or accessing dangerous or unsafe manholes or vaults.

#### **TASK 7.7 - EAST CATLETT ROAD RIGHT OF WAY AND LAND NET**

Along the East Catlett Road mapping corridor above, Andregg Geomatics shall accurately determine and locate record right of way along the proposed route(s). This effort shall be to determine and locate rights of way and parcel boundaries accurate to the scale of the mapping in Task 6a above and shall be utilized in areas where the engineering design includes improvements near to encroaching on existing rights of way and properties.

Note: This scope does not include obtaining Preliminary Title Reports, boundary surveys, boundary monumentation, boundary conflict resolution, or Record of Survey, right of way or easement acquisition, appraisals or staking.

- Specifically included in this proposal are the following work elements;
- Project Coordination and Management
- Project Survey Control
- Aerial Survey and Mapping
- Visible Utility Mapping
- Design Support Ground Surveys
- Traffic Control for Survey
- Encroachment and Other Permitting for Survey
- Preliminary Title Report Document Review

### **TASK 7.8 - EXISTING TREATMENT PLANTS AS-BUILT TOPOGRAPHICAL SURVEY AND MAPPING**

This task includes performance of field and associated office work to provide specific site as-built design level topographical surveys at each of the three wastewater treatment facilities, and overlay the topographic survey information onto mapping generated in the base site survey.

### **TASK 8: GEOTECHNICAL SERVICES**

Geotechnical investigations of the various sites and pipeline alignments will be necessary and will commence immediately upon receipt of the Phase 2 notice to proceed. We are proposing that Blackburn Consultants Inc (BCI) provide geotechnical investigations of the wastewater treatment sites and the proposed sewer and reclamation pipeline alignment, with up to three alternative alignments. The geotechnical investigation results will be used during the selection of the final proposed pipeline alignments and WWTRF site layout. Information provided for the treatment plant site will be used in the determination of the site layout and configuration.

The City may provide personnel to accompany BCI, drillers, etc in the field. No work will be performed without the City's prior knowledge and authorization. Digital photos will be taken at the sites to document conditions before and after the work. Where appropriate digital video will also be taken.

The following services will provide predesign and design level geotechnical input for the project, directed toward confirming site feasibility, identifying geologic limitations, and establishing key geotechnical elements for the project. Draft and finalized technical reports will be submitted.

### **PROJECT PREPARATION, TEAM MEETINGS, DOCUMENT REVIEW, AND MANAGEMENT**

BCI will review the pipeline alignment and discuss the project with the design team. BCI will review documents assumable made available by the City of Lincoln and the design team, including mapping, previous investigation work, and preliminary pipeline and structure location plans. BCI assumes they will attending up to three kick-off/project review meetings and attend one site walk meeting with the project designers.

### **SITE REVIEW, PERMITTING, AND UNDERGROUND SERVICE ALERT**

Following preliminary alignment modifications, BCI will review the proposed pipeline alignment and structure locations for adequate equipment access. BCI will then mark boring locations in the field, notify Underground Service Alert (USA), and obtain necessary County encroachment and drilling

permits. BCI assumes that Stantec and the City of Lincoln will obtain and provide all rights-of-entry to private property as necessary for exploration purposes. BCI plans to provide the design team with a preliminary exploration map for reference in the right-of-entry process.

### **GEOLOGIC MAPPING**

Following review and compilation of existing data, BCI will complete geologic mapping along the regional pipeline alignment, in order to verify published geologic mapping, existing data from other work, and support the interpretation of subsurface conditions. Through geologic mapping the following will be identified:

- Distribution of major rock types and exposures
- Mines or mining activity
- Areas of slope instability
- Likely areas with shallow groundwater
- General location of significant fills and hard rock outcrops

Findings will be discussed with the project team to aid in preliminary facility layout and determine areas of significant impact/interest. Final boring and trench locations will be identified following completion of geologic mapping and any alignment modifications.

### **SUBSURFACE EXPLORATION**

BCI's professional geologist or engineer will log the borings and obtain bulk and relatively undisturbed (driven) samples of representative subsurface materials. Borings will be backfilled with native materials at completion or as required by encroachment/drilling permits. BCI assumes four mobilizations will be required to complete the subsurface exploration. Details of the proposed borings are as follows:

### **REGIONAL SEWER PIPELINE**

BCI proposes to drill and sample borings at intervals of approximately 2,000 feet along the pipeline alignment with two borings located at each of the stream crossing locations. Based on maximum trench depths indicated by Stantec it is assumed there will be 48 borings will extend to depths of 12 feet and 5 borings will extend to depths of 20 feet. BCI anticipates coring approximately 20 percent of borings.

Approximately seventy percent of the borings will be located along the pipeline alignment within the roadway traveled lane so that the existing pavement structural sections can be identified for more refined pavement replacement information. BCI will provide traffic control for borings within or adjacent to the roadway.

### **EFFLUENT DISPOSAL PIPELINE**

BCI proposes to drill and sample borings at intervals of approximately 1,000 feet along the pipeline alignment. We assume 10 borings will extend to depths of 12 feet for the pipeline and 3 borings will extend to depths of 20 feet for structures.

Approximately fifty percent of the borings along the pipeline alignment within the roadway traveled lane so that we can identify the existing pavement structural sections for replacement information. We will provide traffic control for borings within or adjacent to the roadway

## WASTEWATER TREATMENT IMPROVEMENTS

BCI assumes there will be an additional 10 to 16 borings for improvements at the Lincoln WWTRF to depths of 10 to 40 feet. Improvements include 5 to six structures and levee design for wastewater storage ponds. Two borings will be drilled to depths of 30 feet for pump stations at both SMD-1 and the Auburn WWTP.

Supplemental Field Testing-Seismic Refraction Survey: To supplement existing data and excavability estimates, BCI will conduct seismic velocity profiling at about 20 locations along the pipeline alignment to supplement boring data. Seismic velocity profiling will be concentrated in areas where we expect shallow, hard rock to occur.

## LABORATORY TESTING

Laboratory testing will depend on the soil and rock conditions encountered and will likely include the following:

- Moisture content and dry density (for soil classification, comparison, and earth pressure estimates)
- Unconfined compressive or direct shear strength
- Soil corrosivity (pH, resistivity, sulfate and chloride content)
- Sieve analysis (for soil classification and comparison)
- Atterberg Limits (for soil classification and comparison)
- R-value (for pavement design)
- Modified Proctor (for remolding parameters and unit weights)

## Analysis

We will analyze the field and lab data to obtain the following data for design:

- Corrosivity potential
  - Earth pressures
  - Bearing capacity
  - Lateral Capacity
  - Seismic Factors affecting the Alignment
  - Analysis of Seismic Refraction Lines \*
  - Analysis of lab data and boring logs
  - Excavability\*
  - Pavement Section Design
  - Backfill requirements and suitability of native materials
- \* Will not be included in the Reclamation Pipeline analysis.

## Deliverables:

Prepare a geotechnical design report (one draft and final) for the Regional Sewer Pipeline and WWTP's as defined in the attached detailed scope.

Prepare a geotechnical design report (one draft and final) for the Reclamation Pipeline as defined in the attached detailed scope.

## **TASK 9: SMD-1 AND CITY OF AUBURN EFFLUENT EVALUATION AND WWTRF REGIONAL COMPLIANCE ASSESSMENT**

The City of Auburn's CTR (and related) effluent data will be analyzed to confirm that bringing Auburn wastewater to Lincoln will not result in non-compliance with Lincoln's current Order and the anticipated renewed Order. Because Auburn has a wastewater treatment process very similar to Lincoln's, this analysis is expected to be very simple, and brief. That expectation is reflected in the effort estimated in the fee for this task.

SMD-1's CTR (and related) effluent data (and possibly influent data) will be analyzed to assure that bringing SMD-1 wastewater to Lincoln will not result in non-compliance with Lincoln's current Order and the anticipated renewed Order. This may require more effort because SMD-1's treatment process is dissimilar to Lincoln's, and reportedly has more compliance problems. If the analysis suggests that SMD-1 wastewater will be problematic, then the problems will be addressed by the Pretreatment Program rather than additional treatment at the Lincoln WWTRF.

This task assumes that all necessary CTR and effluent data will be provided by the City of Auburn and Placer County SMD 1 to Stantec. Deliverables will include a technical memorandum summarizing the results of the data analysis and subsequent WWTRF compliance assessment.

Based on these analyses and analysis of the City's own effluent quality issues and industrial dischargers, the City can complete the Pretreatment Program (identified in Phase 3) at any time up to when the engineering report (identified in Phase 3) certifies that capacity physically exists at the WWTRF for regionalization to occur. Thus, permitting cost items 1 and 2 need to be completed as part of baseline planning for the regional WWTRF. This task will be undertaken very early on in the preliminary design phase (Phase 2).

## **TASK 10: BID PERIOD SERVICES**

Engineering services will be provided by Stantec during the bid period. The basic elements of these services will generally be the same for each portion of the project being constructed. The individual tasks in this scope describe the assumptions made relative to level of effort, quantity of documents produced, number of meetings, etc. The associated effort, based on task-specific assumptions described in this scope of work, are listed in the detailed fee estimate for Phase 3 services attached to this proposal. The services to be provided for each of the project components include:

### ***Management and Administration***

Stantec will provide management and administrative services, including the monitoring and control of the work and expenses during the bid period services phase of the project.

### ***Bid Advertisement***

Stantec will reproduce and issue construction bid documents to the building exchanges and assist the City with advertising the project in the local news paper in conformance with California construction laws.

### ***Pre-Bid Meeting***

Stantec will conduct a pre-bid meeting with the contractors and vendors to explain the requirements of the project and to answer questions about the project.

**Requests for Information**

Stantec will receive and respond to questions during the bid period. A log of the questions and responses will be kept and distributed weekly to the general contractors during the bid period

**Prepare Addendums**

Stantec will prepare and distribute addenda in response to all questions from the contractors and vendors that require clarifications or changes to the bid documents.

**Bid Opening and Evaluation**

Stantec will attend the bid opening and assist the City in reviewing the bids. Stantec will make a recommendation to the City regarding award of the construction contract.

Budgets for bid period services are attached to this proposal in accordance with the above listed bidding services and are included for each of the following project components by task numbers:

**TASK 10.1 - PUMP STATION IMPROVEMENTS AT AUBURN AND SMD-1 WWTPs**

**TASK 10.2 - REGIONAL PIPELINE IMPROVEMENTS**

**TASK 10.3 - WWTRF EXPANSION**

**TASK 10.4 - EFFLUENT DISPOSAL/RECLAMATION IMPROVEMENTS**

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**Fee Estimate for the  
Mid-Western Placer Regional Sewer Project**

**Phase 2 - Design, Environmental documentation, Right of Way,  
Financing, Permitting & Bid Period Services**

**Based on Phase 1, Scenario 4 Project (a)**

**Stantec Consulting Services**

Scope item	Cost
TASK 1 - PROJECT COORDINATION AND MANAGEMENT	\$84,000
TASK 2 - CEQA AND ENVIRONMENTAL COMPLIANCE	\$1,012,000
TASK 3 - PLANNING AND PREDESIGN	\$830,000
TASK 4 - DETAILED DESIGN	\$2,911,000
TASK 5 - RIGHT OF WAY EVALUATION	\$205,000
TASK 6 - FINANCING	\$44,000
TASK 7 - SURVEY AND MAPPING	\$353,000
TASK 8 - GEOTECHNICAL SERVICES	\$221,000
TASK 9 - NPDES PERMITTING	\$48,000
TASK 10 - BID PERIOD SERVICES	\$225,000
Total	\$5,933,000

**Notes**

- a) The Scenario 4 project includes both SMD1 and the City of Auburn with Auburn providing pre-treatment at its existing WWTP
- b) Scope costs include zero contingency

**Placer-Nevada  
Wastewater Authority**

Bill Kirby, Chair  
~City of Auburn~  
Orin Bennett, Executive Director

Victor Markey  
S.P.M.U.D.

Ed Sander  
Newcastle Sanitary District

Spencer Short  
City of Lincoln

Robert Weygandt  
Placer County

March 5, 2012

Placer County  
Board of Supervisors  
Kirk Uhler  
Jack Duran  
Jennifer Montgomery  
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City of Lincoln  
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Spencer Short  
Tom Cosgrove  
Gabriel Hydrick  
Paul Joiner  
Stan Nader  
600 Sixth Street  
Lincoln, CA 95648

Subject: Regional Sewer Project Technical Information

Honorable Supervisors and Council Members,

The Placer Nevada Wastewater Authority (PNWA) Technical Advisory Committee (TAC) has been meeting weekly since December 2011. The purpose of the meetings was to develop a project description, project estimate of cost, a project schedule, and a set of environmental constraints that all TAC members could agree upon. If agreement could not be reached, the intention was to bring the area of disagreement to the elected officials for consideration.

The TAC developed a regional sewer project upon which all TAC members agreed. On February 22, 2012 the TAC presented to the PNWA a project description, cost estimate, and schedule to be considered. The PNWA Board unanimously approved the following motion; **Approve the project description, project schedule, and project estimate of cost as presented and to recommend the Placer County Board of Supervisors, the Auburn City Council, and the Lincoln City Council approve the Regional Project.**

The TAC includes technical representatives from each agency and consulting team members, each with detailed knowledge of the Regional Sewer Project and each with specific technical skills in various project areas including, engineering design and construction, environmental evaluation, finance and governance.

PLACER-NEVADA WASTEWATER AUTHORITY  
TECHNICAL ADVISORY COMMITTEE (TAC)



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