### **ORDINANCE NO. 1440**

## AN ORDINANCE AUTHORIZING THE MAYOR AND CITY ADMINISTRATOR TO EXECUTE A CONTRACT WITH CURRAN-MCLEOD, INC. CONSULTING ENGINEERS FOR ENGINEERING SERVICES TO COMPLETE IMPROVEMENTS TO THE WASTEWATER TREATMENT FACILITY FOR SLUDGE STORAGE AND CONDITIONING, TRANSFERRING BUDGET APPROPRIATIONS; AND DECLARING AN EMERGENCY.

WHEREAS, the CITY OF CANBY has heretofore advertised and received proposals for Municipal Engineering Services, completed oral interviews and selected CURRAN-McLEOD, INC. for the City's Engineer of Record; and

WHEREAS, CURRAN-McLEOD, INC. has provided the Master Planning, preliminary engineering and cost estimates for engineering and construction of the Sludge Storage and Conditioning Improvements to the Wastewater Treatment Facilities; and

WHEREAS, the CITY OF CANBY anticipates the need to complete construction of the Sludge Storage and Conditioning Project within the 2016-17 Fiscal Year; and

WHEREAS, the City would like to start the engineering on the planned 2016-2017 Sludge Storage and Conditioning Project now with an estimate of \$80,000 to be realized prior to June 30<sup>th</sup>; and

WHEREAS, due to timing variances between budget and actual \$62,015 of expenses from the 2014-2015 wastewater treatment plant improvements were realized in fiscal year 2015-2016 instead of fiscal year 2014-2015; and

WHEREAS, the 2015-2016 Wastewater Treatment Facility Biosolids Loadout Building Improvements bids exceeded our budget estimates by approximately \$150,000 as noted in Ordinance 1431 approved by council; and

WHEREAS, to maintain compliance with local budget law the City would like to transfer \$292,015 of appropriations from existing appropriations in the Sewer Combined Fund unallocated capital outlay category to the wastewater treatment plant capital outlay category in order to have sufficient budget authority to meet the requirements of the timing and amount variances between budget and actual of improvements noted herein; Now therefore,

### THE CITY OF CANBY ORDAINS AS FOLLOWS:

<u>Section 1.</u> The Mayor and City Administrator are hereby authorized and directed to make, execute, and declare in the name of the CITY OF CANBY and on its behalf, an appropriate contract with CURRAN-MCLEOD, INC for engineering services in an amount not to exceed \$245,000; and the City Administrator shall transfer or cause to be

transferred \$292,015 of appropriations from existing appropriations in the Sewer Combined Fund unallocated capital outlay category to the wastewater treatment department capital outlay category.

<u>Section 2.</u> Inasmuch as it is in the best interest of the citizens of Canby, Oregon, to complete this project as soon as possible, an emergency is hereby declared to exist and this ordinance shall therefore take effect immediately upon its enactment after final reading.

**SUBMITTED** to the Canby City Council and read the first time at a regular meeting therefore on Wednesday, April 20, 2016, and ordered posted in three (3) public and conspicuous places in the City of Canby as specified in the Canby City Charter and scheduled for second reading before the City Council for final reading and action at a regular meeting thereof on Wednesday, May 4, 2016, commencing at the hour of 7:30 PM at the Council Meeting Chambers located at 155 NW 2<sup>nd</sup> Avenue, Canby, Oregon.

Kimberly Scheafer, MMC City Recorder

**PASSED** on second and final reading by the Canby City Council at a regular meeting thereof on the 4<sup>nd</sup> day of May, 2016, by the following vote:

YEAS 😡

NAYS 🔿

Brian Hodson, Mayor

ATTEST:

Kimberly Scheafer, MMC

Kimberly Scheafer, MMC City Recorder

## CITY OF CANBY FY16-17 WASTEWATER TREATMENT FACILITY IMPROVEMENTS SLUDGE STORAGE & CONDITIONING AGREEMENT FOR ENGINEERING SERVICES

This Agreement is made this <u>19</u><sup>th</sup> day of <u>May</u>, 2016, by and between the **CITY OF CANBY**, Oregon, hereafter referred to as the OWNER, and **CURRAN-McLEOD**, **INC. Consulting Engineers**, Portland, Oregon, hereafter referred to as the ENGINEER.

The OWNER intends to construct Sludge Storage and Conditioning Improvements to the Canby Wastewater Treatment Facility, for which the ENGINEER agrees to perform the various professional engineering services for the design and construction of said improvements.

#### WITNESSETH

That for and in consideration of the mutual covenants and promises between the parties hereto, it is hereby agreed:

## SECTION A - ENGINEERING SERVICES

The ENGINEER shall furnish engineering services to accomplish the work identified above and as more specifically identified in the correspondence dated April 6, 2016, attached as Exhibit A:

- 1. The ENGINEER will attend conferences with the OWNER, representatives of the State, or other interested parties as may be required for completion of the work previously described.
- 2. After the OWNER directs the ENGINEER to proceed, the ENGINEER will perform the necessary alignment determination, accomplish the detailed design of the projects, prepare construction Drawings, Specifications and Contract Documents, and prepare a final cost estimate based on the final design. It is also understood that if additional subsurface explorations (such as borings, soil tests, rock soundings and the like) are required, the ENGINEER will furnish coordination of said explorations without additional charge, but the costs incident to such explorations shall be paid for by the OWNER as set out in Section D hereof.

Statements of probable construction costs and detailed cost estimates prepared by the ENGINEER represent his best judgment as a design professional familiar with the Construction Industry. It is recognized, however, that neither the ENGINEER nor the OWNER has any control over the cost of labor, materials or equipment, over the Contractor's method of determining bid prices, or over competitive bidding or market conditions. Accordingly the ENGINEER cannot and does not guarantee that bids will not vary from any statement of probable construction cost or other cost estimate prepared by the ENGINEER.

- 3. The Contract Documents furnished by the ENGINEER under Section A-2 shall include the State of Oregon Prevailing Wage Rates or the Federal Davis Bacon Prevailing Wage Rates as applicable, and OWNER, funding agency, and state requirements as appropriate.
- 4. Prior to the advertisement for bids, the ENGINEER will provide for each Construction Contract, not to exceed 10 copies of detailed Drawings, Specifications, and Contract Documents for use by the OWNER, and for appropriate Federal, State, and local agencies from whom approval of the project must be obtained. The cost of such drawings, Specifications, and Contract Documents shall be included in the basic compensation paid to the ENGINEER. The OWNER pays the cost of permits and review fees as provided in Section F-2 of this Agreement.
- 5. The drawings prepared by the ENGINEER under the provisions of Section A-2 above shall be in sufficient detail to permit the actual location of the proposed improvements on the ground. The ENGINEER shall prepare and furnish to the OWNER without any additional compensation, three copies of a map(s) showing the general location of needed construction easements and permanent easements and the land to be acquired. Property surveys, property plats, property descriptions, abstracting and negotiations for land rights shall be provided by the OWNER, unless the OWNER requests, and the ENGINEER agrees to provide those services. In the event the ENGINEER is requested to provide such services, the ENGINEER shall be additionally compensated as set out in Section D hereof, unless this task is identified and included in the proposed scope of work herein.
- 6. The ENGINEER will furnish additional copies of the Drawings, Specifications and Contract Documents as required by prospective bidders, materials suppliers, and other interested parties, but may charge them for the reasonable cost of such copies. Upon award of each contract, the ENGINEER will furnish to the OWNER three sets of the Drawings, Specifications and Contract Documents for execution. The cost of these sets shall be included in the basic compensation paid to the ENGINEER. Drawings and Specifications as instruments of service are and shall remain the property of the ENGINEER whether the project for which they are made is executed or not. They are not to be used by the OWNER on other projects or extensions to this project except by agreement in writing and with appropriate compensation to the ENGINEER.
- 7. The ENGINEER will require prospective contractors to file an approved Pre-qualification Form with the Oregon Department of Transportation and will require a Bid Bond not to exceed 10% in the Bidding Documents to secure the Bid.
- 8. The ENGINEER will attend the bid opening and tabulate the bid proposals, make an analysis of the bids, make recommendations for awarding contracts for construction.
- 9. The ENGINEER will assist in the Preconstruction Conference, and will review and approve, for conformance with the design concept, any necessary shop and working drawings furnished by Contractors.

- 10. The ENGINEER will interpret the drawings and specifications to protect the OWNER against defects and deficiencies in construction on the part of the Contractor. The ENGINEER will not, however, guarantee the performance of any Contractor. Planning and design of the project and construction engineering services shall be accomplished with due diligence and in conformance with accepted industry standards of the practice of professional engineering.
- 11. The ENGINEER will provide general engineering review of the work of the contractors as construction progresses to assure conformance with the design concept.
- 12. The ENGINEER will establish baselines and grades for locating the work together with a suitable number of bench marks adjacent to the work as shown in the Contract Documents.
- 13. The ENGINEER, as representative of the OWNER during the construction phase, shall advise and consult with the OWNER and all of the OWNER'S instructions to the Contractor shall be issued through the ENGINEER. The ENGINEER shall have the authority to act on behalf of the OWNER to the extent provided in this Agreement.
- 14. Unless otherwise requested by the OWNER in writing, the ENGINEER will not provide Resident Construction Inspection. The ENGINEER'S undertaking construction inspection hereunder shall not relieve the Contractor of Contractor's obligation to perform the work in conformity with the Drawings and Specifications and in a workmanlike manner; shall not make the ENGINEER an insurer of the Contractor's performance; and shall not impose upon the ENGINEER any obligation to see that the work is performed in a safe manner.
- 15. The ENGINEER will review the Contractor's applications for progress and final payment and, when approved, submit same to the OWNER for payment.
- 16. The ENGINEER will prepare and review necessary contract Change Orders on a timely basis for consideration of approval by the OWNER.
- 17. The ENGINEER and a representative of the OWNER will make an inspection of the project or project element to determine the status of completion. The ENGINEER may issue a Certificate of Substantial Completion consistent with the General Conditions of the Construction Contract Documents.
- 18. The ENGINEER will provide the OWNER with one set of record drawings on electronic media and three sets of prints at no additional cost to the OWNER. Such drawings will be based upon construction records provided by the Contractor during construction, as specifically required in the Construction Contract, and reviewed by the ENGINEER, and from the ENGINEER'S construction data.
- 19. If State statutes require notices and advertisements of final payment, the ENGINEER shall assist in their preparation.

20. The ENGINEER will be available for site visits to furnish engineering services and consultations necessary to correct unforeseen project operation difficulties for a period of one year after the date of the Certificate of Substantial Completion of the facility. The ENGINEER will assist the OWNER in performing a review of the project during the 11th month after the date of initiation of the 12 month warranty period.

## SECTION B - COMPENSATION FOR ENGINEERING SERVICES

1. The OWNER shall compensate the ENGINEER for services in accordance with the following schedule:

# **Preliminary Engineering:**

- Forty Five Thousand and No/100 Dollars (\$45,000)

# **Design Phase Engineering:**

- One Hundred and Twenty Thousand and No/100 Dollars (\$120,000)

# **Construction Phase Engineering:**

- Eighty Thousand and No/100 Dollars (\$80,000)

- 2. The compensation for the above Engineering Services shall be as follows:
  - a. Preliminary and Design Phase Services shall include items A-1 through A-5.
  - b. Billings shall be submitted monthly by the ENGINEER for Preliminary and Design Phase Services during the previous month. Payments shall be made for these billings within 30 days. Billings shall be based on percent of completion for Preliminary and Design Phase Services. The ENGINEER will provide a status report with the billing as requested.
  - c. Construction Engineering Services and Construction Inspection shall include items A-6 through A-20 and shall be billed by the ENGINEER on an hourly basis. The total shall not exceed the budget figures under Article B.1 above without the express written authorization of the OWNER.
  - d. Where hourly rates are used, they shall be in accordance with the Standard Hourly Rate Schedule, attached herewith and referenced Exhibit B.
  - e. In the event of multiple construction contracts, the ENGINEER may negotiate revised figures under Article B.1.

- 3. The budget figures shown above shall not be exceeded except by express written authorization of the OWNER.
- 4. Billings for Engineering Services shall be submitted in a format consistent with the payment provisions and format of the Agreement.

## SECTION C - RESIDENT CONSTRUCTION INSPECTION

If the OWNER requests the ENGINEER to provide Resident Construction Inspection, the ENGINEER will, prior to the Preconstruction Conference, submit a resume of the Resident Inspector's qualifications, anticipated duties and responsibilities for approval by the OWNER. The OWNER agrees to pay the ENGINEER for such services in accordance with the "Inspector" rate schedule set out in Exhibit B. The ENGINEER will render to OWNER for such services performed hereunder during such period, the same to be due and payable by the OWNER to the ENGINEER on or before the 10th day of the following period. A separate agreement shall be negotiated for Resident Construction Inspections Services setting out estimated hours required and maximum estimated fees and charges.

## SECTION D - ADDITIONAL ENGINEERING SERVICES

In addition to the foregoing being performed, the following services may be provided UPON WRITTEN AUTHORIZATION OF THE OWNER.

- 1. Financial feasibility or other special studies.
- 2. Record boundary surveys or other similar surveys, excepting surveys required to locate the construction project, or as identified in the scope of work.
- 3. Laboratory tests, borings, specialized geological, soil, hydraulic, or other studies recommended by the ENGINEER.
- 4. Record property surveys, detailed descriptions of sites, maps, drawings, or estimates related thereto; assistance in negotiating for land and easement rights.
- 5. Necessary data and filing maps for storm water discharge permits, water rights, adjudication, and litigation.
- 6. Redesigns not initiated by the ENGINEER after final Plans and Specifications have been approved by the OWNER, except redesigns to reduce the project cost to within the funds available.
- 7. Appearances before courts or boards on matters of litigation or hearings related to the project and providing services as an expert witness in connection with any public hearing, arbitration proceeding, or the proceedings of a court of record.

- 8. Preparation of Environmental Assessments or Environmental Impact Statement (E.I.S.).
- 9. Performance of detailed staking necessary for construction of the project in excess of the control staking set forth in Section A-12.
- 10. Preparing documents for alternate bids requested by the OWNER.
- 11. Providing consultation concerning replacement of any work damaged by fire or other cause during construction, and furnishing professional services of the type set forth as previously mentioned in this Agreement as may be required in connection with the replacement of such work.
- 12. Providing professional services made necessary by the default of the Contractor in the Construction Contract.
- 13. Providing construction engineering and inspection services after the construction contract time has been exceeded.

Unless identified as included in the proposed scope of work herein, payment for the services specified in this Section D shall be as agreed in writing prior to commencement of the work. The ENGINEER will render to OWNER for such services an itemized bill, once each month, for compensation for services performed hereunder during such period, the same to be due and payable by OWNER to the ENGINEER within 30 days.

# SECTION E - OWNER'S RESPONSIBILITIES

- 1. The OWNER shall provide full information regarding his requirements for the project.
- 2. The OWNER shall designate, when necessary, a representative authorized to act in his behalf with respect to the project. The OWNER or his representative shall examine documents submitted by the ENGINEER and shall render decisions pertaining thereto promptly, to avoid unreasonable delay in the progress of the ENGINEER'S work.
- 3. The OWNER shall furnish all pertinent existing mechanical, chemical or other laboratory tests, inspections and reports as required by law or the Contract Documents, and which may impact the design.
- 4. The OWNER shall furnish such legal, accounting and insurance counseling services as may be necessary for the project, and such auditing services as he may require to ascertain how or for what purposes the CONTRACTOR has used the moneys paid to him under the Construction Contract.
- 5. If the OWNER observes or otherwise becomes aware of any fault or defect in the project or non-conformance with the Contract Documents, he shall give prompt oral notice with written confirmation thereof to the ENGINEER.

6. The OWNER shall furnish information required of him as expeditiously as necessary for the orderly progress of the work.

## **SECTION F - SPECIAL PROVISIONS**

The following is agreed to by both parties:

- 1. That the OWNER reserves the right to request replacement of any Resident Inspector(s) furnished by the ENGINEER or to furnish the Resident Inspector(s) from the OWNER'S own forces, subject to the approval of the ENGINEER regarding the qualifications of the Resident Inspector(s). If the OWNER furnishes the Resident Inspector(s), the OWNER agrees that the Resident Inspector(s) will be under the direction and supervision of the ENGINEER.
- 2. That the OWNER shall pay for advertisement for bids, building or other permits, licenses, technical review fees, public works BOLI fee, etc., as may be required by local, State or Federal authorities, and shall secure the necessary land easements and rights-of-way.
- 3. The ENGINEER will endeavor to assure compliance of his work with applicable State and Federal requirements.
- 4. That insofar as the work under this Agreement may require, the OWNER shall furnish the ENGINEER all existing maps, field survey data, grades and lines of streets, pavements, and boundaries, rights-of-way, and other surveys presently available, which will be returned upon project completion. ENGINEER will provide the OWNER a copy of survey notes establishing bench marks and location of improvements.
- 5. That if the engineering work covered in this Agreement has not been completed on or after the expiration of an <u>Eighteen (18)</u> month period from the date of execution of this Agreement, the OWNER or ENGINEER may, at the option of either, on written notice, request a renegotiation of Sections B, C, and D (providing for the compensation to be paid the ENGINEER for services rendered) to allow for changes in the cost of services. Such new schedule of compensation is to apply only to work performed by the ENGINEER after delivery date of such written notice.
- 6. That this Agreement is to be binding on the heirs, successors and assigns of the parties hereto and is not to be assigned by either party without first obtaining the written consent of the other. At least fifteen (15) days shall be allowed for such consent.
- 7. Attorney's fees: In the event a suit, arbitration or other legal action is required by either the OWNER or the ENGINEER to enforce any provision of this Agreement, the prevailing parties shall be entitled to all reasonable costs and reasonable attorney's fees upon litigation or upon appeal.

## 8. Termination

- a. This Agreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this Agreement through no fault of the terminating party, provided that no termination may be effected unless the other party is given (1) not less than ten (10) calendar days' written notice (delivered by certified mail, return receipt requested) of intent to terminate, and (2) an opportunity for consultation with the terminating party prior to termination.
- b. The Agreement may be terminated in whole or in part in writing by the OWNER for its convenience, provided that the ENGINEER is given (1) not less than ten (10) calendar days' written notice, (delivered by certified mail, return receipt requested) of intent to terminate, and (2) opportunity for consultation with the terminating party prior to termination.
- c. If termination for default is effected by the OWNER an equitable adjustment in the price provided for in the Agreement shall be made, but (1) no amount shall be allowed for anticipated profit on unperformed services or other work, and (2) any payment due to the ENGINEER at the time of termination may be adjusted to cover any additional costs to the OWNER because of the ENGINEER'S default. If termination for default is effected by the ENGINEER, or if termination for convenience is effected by the OWNER, the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for any termination shall provide for payment to the termination, in addition to termination settlement costs reasonably incurred by the ENGINEER relating to commitments which had become firm prior to the termination.
- d. Upon receipt of a termination action under paragraphs a. or b. above, the ENGINEER shall (1) promptly discontinue all affected work (unless the notice directs otherwise), and (2) deliver or otherwise make available to the OWNER reproducible data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by the ENGINEER in performing this Agreement whether completed or in process.
- e. Upon termination under paragraphs a. or b. above, the OWNER may take over the work and may award another party a contract to complete the work under this Agreement.
- f. If, after termination for failure of the ENGINEER to fulfill contractual obligations, it is determined that the ENGINEER had not failed to fulfill contractual obligations, the termination shall be deemed to have been for the convenience of the OWNER. In such event, adjustment of the Agreement price shall be made as provided in paragraph c. of this clause.

- 9. The ENGINEER agrees to hold harmless and indemnify the OWNER against all claims, damages, losses and costs, including costs of defense, arising out of the negligent performances of engineering services under this Agreement. OWNER may make claim under applicable law against ENGINEER or ENGINEER'S insurance carriers for any loss, damage or cost arising out of ENGINEER'S negligent performance of services under this Agreement.
- 10. The ENGINEER agrees to acquire and maintain for the duration of this Agreement, Professional Liability Insurance in the nominal amount of \$1,000,000 per occurrence and \$2,000,000 aggregate.
- 11. The ENGINEER further agrees to obtain and maintain, at the ENGINEER'S expense, such insurance as will protect the ENGINEER from claims under the Worker's Compensation Act and such comprehensive general liability insurance as will protect the OWNER and the ENGINEER from all claims for bodily injury, death, or property damage which may arise from the performance by the ENGINEER or by the ENGINEER'S employees or agents.
- 12. The ENGINEER will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The ENGINEER will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin, such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; lay off or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
- 13. ENGINEER covenants that he presently has no interest and shall not acquire interest, direct or indirect, which would conflict in any manner or degree with the performance of his services under this Agreement. Any interest on the part of the ENGINEER or his employees must be disclosed to the OWNER.
- 14. INDEPENDENT CONTRACTOR. It is agreed that ENGINEER is providing the services hereunder as an independent contractor and not as an employee of OWNER.

OWNER shall have no right to control the manner of the performance of the services, but may place restrictions on ENGINEER relating to use of OWNERS premises. As an independent contractor, ENGINEER shall not be eligible to receive benefits otherwise provided to employees of the OWNER.

15. The records and documents with respect to all matters covered by the Agreement shall be subject at all times to inspection, review or audit by the OWNER, County, Federal or State officials so authorized by law during the performance of this contract. Required records shall be retained for a period of three (3) years after termination of this Agreement

- 16. No member or delegate to the Congress of the United States and no Resident Commissioner or City Official shall be admitted to any share or part of this Agreement or to any benefit that may arise hereunder.
- 17. This CONTRACT shall be construed according to the laws of the State of Oregon. Any litigation between the OWNER and the ENGINEER or out of work performed under this CONTRACT shall occur, if in the state courts, in the Clackamas County Court having jurisdiction thereof, and if in the federal courts, in the United States District Court for the District of Oregon.
- 18. This Agreement, including Exhibits A and B, represents the entire integrated agreement between the OWNER and the ENGINEER and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both the OWNER and ENGINEER.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in duplicate on the respective dates indicated below.

OWNER: CITY OF CANBY	ENGINEER: CURRAN-McLEOD, INC.
SIGNATURE: SJOLOG	SIGNATURE: CUEWSC
NAME: BICK RODINGON	NAME: CURT MCLEOD
TITLE: City Administrator	TITLE: PRIPCIPAL
DATE: May 19,2016	DATE: <u>4-7-16</u>

April 6, 2016

CURRAN-MCLEOD, INC. CONSULTING ENGINEERS .6655 S.W. HAMPTON STREET, SUITE 210 PORTLAND, OREGON 97223

Mr. Dave Conner City of Canby 182 North Holly Street Canby, OR 97013

## RE: CITY OF CANBY FY16-17 WASTEWATER TREATMENT FACILITY IMPROVEMENTS SLUDGE STORAGE AND CONDITIONING PROJECT

Dear Dave:

As you are well aware, we are approaching the last of the major capital improvements required for the Canby Wastewater Treatment Facility. The task scheduled for FY 2016-17 is the construction of sludge storage and conditioning improvements to provide needed capacity in the operation of the sludge treatment process. This project was estimated at \$2,200,000 and will be partially included in a supplemental budget this year with the remainder in FY 2017.

The Capital Improvement Plan implemented in 2013 included upgrading the headworks and main pumping station, which was budgeted over two years in FY14-15, expanding the biosolids loadout building, which is currently under construction and will be complete in FY16, and construction of an aerated sludge storage tank scheduled for completion in FY17.

The CIP also contains two additional tasks for the following two years which are less critical to the operation of the plant, but will be important to address at some point. These include odor control improvements and general site restoration.

Depending upon the success of the current ventilation and exhaust systems, the FY18 Odor Control Improvements, estimated at \$1,335,000, may not be necessary. The current approach is to collect all off gasses, dilute them and exhaust through a plume that diffuses the odors well above the ground surface. This approach has been in-place for a year at the headworks and belt press facilities and is working well in most situations. This same approach is included in the current biosolids loadout building and will be included with the proposed storage tank improvements.

The FY19 site restoration efforts, which were estimated at \$400,000, primarily include repair of all damaged travel surfaces and rehabilitation of the existing lime silos. One of the lime storage silos is planned to be relocated adjacent to the primary headworks and used for pH adjustment of the primary effluent as needed. Due to postponing the second sludge conditioning tank and associated cost savings in this upcoming year, we recommend this silo relocation be included in the upcoming sludge storage project. The second existing silo will remain in place and be rehabilitated in the future for continued use for sludge processing if needed to meet the Class B requirements.

Upon completion of these remaining capital improvements, the plant facility will be in a good position to accommodate many years of growth. Currently the plant loading is less than 50% of the 2.8 MGD hydraulic capacity and approximately 60% of the 4,900 pound per day organic loading capability. This facility has capacity for substantial industrial and residential growth within the City.

#### FY 2016-17 SLUDGE STORAGE IMPROVEMENTS:

The work proposed for FY 2016-17 was the subject of the 2015 Wastewater Treatment Facility Sludge & Biosolids Handling study. The scope of the improvements identified in the report included installation of two 300,000 gallon aerated tanks to store and condition waste sludge. Storage is a necessity for the logistics of plant operations. Conditioning was originally required as a pre-treatment for a sludge drying process to reduce the fats, oils and grease component. This conditioning benefit is provided by any storage facility, and no special construction or equipment is required. Although not important now, conditioning of sludge may be important in the future if the City pursues any further biosolids drying process.

The 2015 Sludge & Biosolids Handling Study recommended that the second storage tank be delayed until plant loadings increase, but was projected to be required within the 20-year planning window. The cost estimate prepared in 2015 for all work totaled \$2,200,000.

In discussing the work scope with you, we conclude that only one of the two storage tanks is essential to included in this project at this time. Additionally, instead of demolition of the existing Waste Activated Sludge Holding (WASH) and the Stabilized Sludge Storage (SSST) tanks to accommodate the new storage tanks, we will locate the new storage facility in the open area north of the GBT building. We will also repurpose the two existing sludge structures for pressate storage and backup sludge storage. The proposed scope of FY 2016-17 work, with the cost reduction from postponing the second tank, will be substantially less than the original \$2,200,000 budget.

Based on the preliminary reports and discussions with the operating staff, the tasks included in the FY17 Sludge Storage Improvements include:

1. Completion of a pre-design report identifying the project scope in more detail and to secure DEQ approval. This work will also include a detailed evaluation of the power distribution system, plant electrical loads and backup power system capacities;

- 2. Design and construction of a 300,000 gallon concrete sludge storage tank with flat aluminum cover, diffused aeration and submersible mixer(s), overflow to the headworks, decant facilities if desired, and an external sludge transfer pumping station. The design will include provisions for addition of the second tank when needed;
- 3. Modifications to the existing WASH Tank include removal of the existing pier and bridge structure, installation of steeper sloped floors with an epoxy coating system draining to a new submersible transfer pump sump with reuse of the existing pump, if adequate, and new diffused aeration system. The existing off-gas collection ducting will be retained. Piping modifications will include sludge transfer piping and belt press pressate piping to permit this tank to receive sludge or the filtrate from the belt press;
- 4. Modifications to the existing SSST include piping to permit the structure to store sludge or pressate, and a new aeration system will be added. The existing off-gas collection system will be retained;
- 5. Odor Control Improvements will include installing a new exhaust fan and discharge stack at the new sludge storage tank, with provisions to incorporate the second tank in the future, and a new blower and discharge stack at the existing chemical scrubber equipment pad. The existing chemical scrubber equipment will be removed;
- 6. GBT Building Improvements will include isolating the west half of the building by enclosing the open wall sections if new blowers are required, pouring a new floor to eliminate the existing containment sumps, and installing two PD blowers as needed. There is a good potential to utilize available blower capacity from the existing blower building, which would be much more cost effective if feasible. The east half of the building will have the GBT sump filled and potentially the pipe chase backfilled, to create a flat floor for future storage space. Last, a wet closet and bathroom facilities will be added to this building;
- 7. PH Adjustment facilities will include relocating and refurbishing the original lime silo and pumping equipment from the GBT building to be adjacent to the primary headworks. Additionally, the second silo located adjacent to the Solids Processing Building will be refurbished and repainted as needed.
- 8. Electrical design efforts will include consolidation of all site power distribution diagrams from the past five plant upgrades, followed by design of the needed improvements. This contract will inventory all plant loads and create a single diagram identifying all power routing and capacities. Unused motor controls and controls for abandoned equipment will be identified for removal to recover capacity;

- 9. Instrumentation and SCADA improvements will include providing narrative and directives for the City's integrator to remove unused and abandoned PLC and SCADA programming throughout the plant, and to integrate the new equipment and processes into the system. Unused input and output wiring in the GBT Building SP2 will be removed and repurposed as feasible. SP4 will also be modified to integrate the new processes, including installation of a second rack for additional input and output cards. Existing outdated PLC controls will be identified;
- 10. Miscellaneous plant improvements will include a review and, if required, replacement of existing transfer pumps required to pump to the new storage facility from the primary sludge pump and secondary clarifier scum pump; review and potential replacement of electrical components on existing equipment impacted by the process revisions; and general site restoration efforts.
- 11. Record drawings will be completed for the improvements, and the operation and maintenance manuals will be updated.

#### **ENGINEERING SERVICES:**

CURRAN-McLEOD, INC was originally retained by the City of Canby through a competitive process to provide engineering services for the wastewater collection and treatment systems. Our firm has served the City since 1985 and has an extensive history with all aspects of the public infrastructure. We have completed the planning, design and construction engineering of each upgrade to the Canby Wastewater Treatment Facility since 1992.

As a result of our history with the City of Canby, experience and familiarity with the plant and treatment process and our current Engineer of Record agreement, the City is permitted to directly appoint this engineering contract in accordance with ORS 279C.115(2) and OAR 137-048-0200 for projects with fees less than \$250,000. We are confident our efforts are both cost effective and provide a solid design basis for the plant facilities.

The engineering tasks required for the FY17 Sludge Storage and Conditioning Tank will include the following:

**Preliminary Engineering:** 

Coordination and Preliminary Research	\$ 4,000	
Design Surveys	4,000	
Geotechnical Review	10,000	
DEQ Pre-Design Report Summary	12,000	
Plant Electrical Evaluation & Load Summary	15,000	
Subtotal	\$ 45,000	
Design Phase Engineering:	÷ ÷ .	
Site Civil and Piping Design	\$ 16,000	
Storage Tank Structural, Permit Calculation	22,000	
Mechanical Design, Aeration, Mixing	12,000	
WASH & SSST Rehabilitation, Repurposing	12,000	
Electrical & Instrumentation Design	18,000	
CAD Graphics and Publication	22,000	
Contract Documents & Specifications	8,000	
Printing and Miscellaneous Expenses	4,000	
Review Meeting, Permits and Approvals	6,000	
Subtotal	\$120,000	
<b>Construction Phase Engineering:</b>		
Bid Solicitation & Award	\$ 5,000	
Field Layout Survey	5,000	
Field Inspection (20 weeks @ 12 hrs/wk)	28,000	
Contract Administration (32 weeks @ 8 hrs/wk)	32,000	
Special Inspection - Carlson Testing	5,000	
Project Closeout, Record Drawings	5,000	
Subtotal	\$ 80,000	

Total Estimated Engineering Costs <u>\$245,000</u>

We are proposing to utilize four sub-consultants to complete this work, including a geotechnical engineer for the foundation evaluation, a structural engineer for reinforcement design and building permit calculations, a consultant for design surveys and construction layout, and last, a testing lab to complete required special inspections during construction.

Construction is estimated to take 240 days, and if the design is initiated soon, the construction can be scheduled to begin by late fall of 2016 for completion by June 30, 2017. Construction Phase Engineering costs were estimated based on 20 weeks of active field work and 32 weeks of contract administration.

#### **PROJECT FINANCES:**

The total construction cost is preliminarily estimated at \$1,600,000. The total engineering costs are estimated at approximately \$245,000 for a total of approximately 15.3% of the estimated construction cost. With a budget of \$2,200,000 this leaves a project contingency of \$350,000. All of this project cost is eligible for SDC funding with either the Improvement Fee or Reimbursement Fee resources.

#### **PROJECT SUMMARY:**

This project is feasible and within the financial resources of the City to complete in the next fiscal year. With this letter we request the City's approval to proceed with the pre-design and design engineering efforts for the 2017 sludge storage improvement project. \$80,000 dollars is anticipated to be included in the 2015-16 supplemental budget for this effort, with all remaining expenses to be budgeted for FY 2016-17.

An engineering contract is included for the City's review and approval. We are available at your convenience to review this proposal in more detail and answer any questions you may have, or provide more detail on the scope of work. We will be coordinating with you at each step to assure we include all work tasks that are important to your operations.

If you have concerns or comments about any portion of the project, please let me know.

Very truly yours,

CURRAN-McLEOD, INC.

Curt J. McLeod, P.E.

Enclosure: Canby WWTP 2017 Sludge Storage Engineering Contract

Cc: Mr. Rick Robinson, City of Canby Mr. Mark Gunter, City of Canby

# **STANDARD HOURLY RATES**

Effective February 1, 2016

Senior Principal Engineer	\$ 135.00
Principal Engineer	125.00
Project Engineer/Manager	115.00
Design Engineer/Manager	115.00
Design Technician	75.00
Graphics Technician	65.00
Word Processing	60.00

# **REIMBURSABLE EXPENSES**

Reproduction expenses are at cost.

Auto expenses reimbursed at 54¢ per mile.

Meals and Lodging at cost.