AGREEMENT

THIS AGREEMENT, made and entered into this _____day of _____, 202_, by and between the City of Reno and the City of Sparks, hereinafter referred to as the "CLIENT", and Brown and Caldwell, hereinafter referred to as "ENGINEER":

WITNESSETH:

WHEREAS, CLIENT desires to obtain Consulting Services for the TMWRF Dewatering Expansion 2020 Project, hereinafter referred to as "Project";

WHEREAS, public convenience and necessity require the services of a consulting engineer to provide the services required;

WHEREAS, the CLIENT has found ENGINEER qualified and experienced in the performance of said services;

WHEREAS, the CLIENT is desirous of engaging the services of ENGINEER to perform said services; and

NOW, THEREFORE, said CLIENT and said ENGINEER, for the considerations hereinafter set forth, mutually agree as follows:

ARTICLE I - SERVICES

CLIENT agrees to retain and does hereby retain ENGINEER to perform the professional engineering services hereinafter more particularly described, with such services to commence on the date of the execution of this Agreement and to continue until the completion of the work provided for herein.

ENGINEER hereby agrees to perform the professional services as set forth herein and to furnish or procure the use of incidental services, equipment, and facilities necessary for the completion of said engineering services.

ENGINEER has the status of an independent contractor as defined in NRS 333.700 and shall not be entitled to any of the rights, privileges, benefits, and emoluments of either an officer or employee of CLIENT. ENGINEER shall undertake performance of services as independent contractor and shall be wholly responsible for the methods of performance and for their performance.

ENGINEER is subject to NRS 338.010 – 338.090 (prevailing wage) for all covered work.

ARTICLE II - SCOPE OF SERVICES

The Scope of Services is set forth in Exhibit A as attached hereto and incorporated herein by this reference forth tasks.

ARTICLE III - COMPENSATION

Payment for the engineering services hereinabove set forth shall be made by the CLIENT to the ENGINEER and shall be considered as full compensation for all personnel, materials, supplies, and equipment used in carrying out the work.

A. Compensation to the ENGINEER shall be on the basis of time and expense per the fee and rate schedule as set forth in Exhibits A and B.

B. Payments shall be made by the CLIENT based on itemized invoices from the ENGINEER which lists costs and expenses. Such payments shall be for the invoice amount.

C. CLIENT shall pay ENGINEER within 30 days of receipt by CLIENT of ENGINEER's invoice. If CLIENT disputes only portions of an invoice, CLIENT agrees to pay for undisputed items on that invoice within the time provided herein. Payment by CLIENT of invoices or request for payment shall not constitute acceptance by CLIENT of work performed under the Agreement by the ENGINEER.

D. The budget for total charges for services authorized by this Agreement is the not-to-exceed sum of $584,698.00, and shall not be exceeded without authorization of the CLIENT. The City of Reno's share is the sum of $401,278.24 and the City of Sparks' share is the sum of $183,419.76. The budget may be increased by amendment hereto if necessitated by a change in the scope of services which increases the cost of providing the services. ENGINEER is not authorized to provide any additional services beyond the scope of work without having authorized funding pursuant to a written amendment hereto signed by the authorized representative of the governing body.

ARTICLE IV - SCHEDULE OF WORK

ENGINEER will commence the services as described immediately following the Notice to Proceed provided to the ENGINEER by the CLIENT and will proceed with such services in a diligent manner per Exhibit C. ENGINEER will not be responsible for delays caused by factors beyond ENGINEER's control and will not be responsible for delays caused by factors which could not reasonably have been foreseen at the time the Agreement was approved.
Exhibit D is the Preliminary Drawing List.

ARTICLE V - ASSIGNMENT OF AGREEMENT

The ENGINEER SHALL not assign this Contract or any portion of the work without prior written approval of the CLIENT which may be withheld for any reason whatsoever.
ARTICLE VI- OWNER'S RESPONSIBILITY

CLIENT shall provide any information in its possession that is requested by ENGINEER and is necessary to complete the Project. CLIENT shall assist ENGINEER in obtaining access to public and private lands to allow the ENGINEER to perform the work under this Agreement. CLIENT shall examine all studies, reports, sketches, estimates, specifications, drawings, proposals, and other documents presented by the ENGINEER and shall render decisions pertaining thereto within a reasonable time so as not to delay the work of the ENGINEER.

ARTICLE VII - NONDISCLOSURE OF PROPRIETARY INFORMATION

ENGINEER shall consider all information provided by CLIENT to be proprietary unless such information is available from public sources. ENGINEER shall not publish or disclose proprietary information for any purpose other than the performance of the Services without the prior written authorization of CLIENT or in response to legal process or as required by the regulations of public entities.

ARTICLE VIII - NOTICE

Any notice, demand, or request required by or made pursuant to this Agreement shall be deemed properly made if personally delivered in writing or deposited in the United States mail, postage prepaid, to the address specified below:

To ENGINEER:
Roy Johnson, P.E.
Director
Brown and Caldwell
1325 Airmotive Way
Reno, NV 89502

To CLIENT:
John Flansberg, P.E.
Director of Public Works
City of Reno
1 East First Street
Reno, NV 89501
P.O. Box 1900
Reno, NV 89505

John Martini, P.E.
Assistant City Manager
City of Sparks
431 Prater Way
Sparks, NV 89431
PO Box 857
Sparks, NV 89432

Nothing contained in this Article shall be construed to restrict the transmission of routine communications between representatives of ENGINEER and CLIENT.

ARTICLE IX - UNCONTROLLED FORCES

Neither CLIENT nor ENGINEER shall be considered to be in default of this Agreement, if delays in or failure of performance shall be due to uncontrollable forces the effect of which, by the exercise of reasonable diligence, the non-performing party could not avoid and is not reasonably foreseeable at the time of entering into this Agreement. The term "uncontrollable forces" shall mean any event which results in the prevention or delay of performance by a party of it's obligations under this Agreement and which is beyond the control of the non-performing party. It includes, but is not limited to, fire, flood, earthquakes, storms, lightning, epidemic, war, riot, civil disturbance, sabotage, inability to procure permits, licenses, or authorizations from any state, local, or federal agency or personal for any of the supplies, material, accesses, or services required to be provided by either CLIENT or ENGINEER under this Agreement, strikes, work slowdowns or other labor disturbances, and judicial restraint. ENGINEER shall be paid for services performed prior to the delay.

Neither party shall, however, be excused from performance if nonperformance is due to uncontrollable forces, which are removable. The provisions of this Article shall not be interpreted or construed to require ENGINEER or CLIENT to prevent, settle, or otherwise avoid a strike, work slowdown, or other labor action. The non-performing party shall upon being prevented or delayed from performance by an uncontrollable force immediately give written notice to the other party describing the circumstances and uncontrollable forces preventing continued performance of the obligation of this Agreement.

ARTICLE X- GOVERNING LAW

This Agreement shall be governed by and construed pursuant to the laws of the State of Nevada. In the event suit is commenced hereunder and in accordance with the Dispute Resolution Procedures of Article XXIII, the suit shall be brought in the appropriate court in Washoe County, State of Nevada. In the event of an arbitration or mediation pursuant to Article XXII, such arbitration or mediation shall be held in Reno, Nevada.

ARTICLE XI - SUCCESSORS AND ASSIGNS

CLIENT and ENGINEER each binds itself and their successors, and assigns to the other party to this Agreement and to the successors, and assigns of such other party, in respect to all covenants, agreements and obligations or this Agreement.

ARTICLE XII - ASSIGNMENT

Neither CLIENT nor ENGINEER shall assign, sublet, or transfer any rights under interest in (including, but without limitation, monies that may become due or monies that are due) this Agreement without the written consent of the other, except to the extent that the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent

ENGINEER from employing such independent consultants, associates, and subconsultants as she may deem appropriate to assist her in the performance of the Services hereunder.

ARTICLE XIII - INDEMNIFICATION

To the fullest extent permitted by law, ENGINEER shall defend, indemnify and hold harmless CLIENT and its officers, employees and agents (collectively "Indemnitees") from any liabilities, damages, losses, claims, actions or proceedings, including, without limitation, reasonable attorneys' fees, that are caused by the negligence, errors, omissions, recklessness or intentional misconduct of the ENGINEER or employees or agents of the ENGINEER in the performance of this Agreement.

ENGINEER assumes no liability for the negligence or willful misconduct of any indemnitee or other consultants of indemnitee.

ENGINEER'S indemnification obligations for claims involving Professional Liability (claims involving acts, error, or omissions in the rendering of professional services and Economic Loss Only (claims involving economic loss which are not connected with bodily injury or physical damage to property) shall be limited to the proportionate extent of ENGINEER'S negligence or other breach of duty.

If CLIENT's personnel (engineers or other professionals) are involved in defending such legal action, ENGINEER shall also reimburse CLIENT for the time spent by such personnel at the rate charged for such services by private professionals. These provisions shall survive termination of this agreement and shall be binding upon ENGINEER, her legal representatives, heirs, successors and permitted assigns.

If ENGINEER does not so defend the CLIENT and the ENGINEER is adjudicated to be liable, reasonable attorney's fees and costs shall be paid to CLIENT in an amount proportionate to the liability of ENGINEER.

ARTICLE XIV - INTELLECTUAL PROPERTY INDEMNITY

To the fullest extent permitted by law, ENGINEER shall defend, protect, hold harmless, and indemnify CLIENT and the CLIENT'S related Parties from and against any and all liability, loss, claims, demands, suits, costs, fees and expenses (including actual fees and expenses of attorneys, expert witnesses, and other consultants), by whomsoever brought or alleged, for infringement of patent rights, copyrights, or other intellectual property rights, except with respect to designs, processes or products of a particular manufacturer expressly required by CLIENT in writing. If ENGINEER has reason to believe the use of a required design, process or product is an infringement of a patent, ENGINEER shall be responsible for such loss unless such information is promptly given to CLIENT. This Indemnity Covenant shall survive the termination of this Agreement.

ARTICLE XV – PAYMENT OF TAXES

Any and all Federal, State and local taxes, charges, fees, or contributions required by law to be paid with respect to ENGINEER'S performance of this Agreement (including, without limitation, unemployment insurance, social security, and income taxes).

ARTICLE XVI - INSURANCE

GENERAL REQUIREMENTS

The CLIENT requires that ENGINEER purchase Industrial Insurance, General Liability, and ENGINEER's Errors and Omissions Liability Insurance as described below against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the ENGINEER, its agents, representatives, employees or subconsultants. The cost of such insurance shall be borne by ENGINEER unless otherwise agreed.

INDUSTRIAL INSURANCE (WORKERS' COMPENSATION & EMPLOYER'S LIABILITY)

It is understood and agreed that there shall be no Industrial Insurance coverage provided for ENGINEER or any Subconsultant by the CLIENT and in view of NRS 616B.627 and 617.210 requiring that ENGINEER complies with the provisions of Chapters 616A to 616D, inclusive and 617 of NRS, ENGINEER shall, before commencing work under the provision of this Agreement, furnish to the CLIENT a certificate of insurance from the Worker' Compensation Insurer certifying that the ENGINEER and each Subconsultant have compiled with the provisions of the Nevada Industrial Insurance Act, by providing coverage for each and every employee, subconsultants, and independent contractors. Should the ENGINEER be self-insured for Industrial Insurance, the CONSULTANT shall so notify the CLIENT and approve written approval of such self-insurance prior to the signing of a Contract. The CLIENT reserves the right to accept or reject a self-insured CONSULTANT and to approve the amount(s) of any self-insured retentions. The ENGINEER agrees that the CLIENT is entitled to obtain additional documentation, financial or otherwise, for review prior to entering into a Contract with the ENGINEER.

Upon completion of the project, the contractor shall provide the CLIENT with a Final Certificate for itself and each Subconsultant which is prepared by the State of Nevada Industrial Insurance System. If the ENGINEER or Subconsultants are unlicensed and are a sole proprietor, coverage for the sole proprietor must be purchased and evidence of coverage must appear on the Certificate of Insurance and Final Certificate.

It is further understood and agreed by and between the CLIENT and ENGINEER that ENGINEER shall procure, pay for, and maintain the above mentioned industrial insurance coverage at the ENGINEER's sole cost and expense.

MINIMUM SCOPE OF LIABILITY INSURANCE

Coverage shall be at least as broad as: *

Commercial General Liability at least as broad as Insurance Services Office Commercial General Liability Coverage "occurrence" form CG OO O1 04 13 or an equivalent form. The Comprehensive General Liability Coverage shall include, but is not limited to, liability coverage arising from premises, operations, independent contractors, products and completed operations, personal and advertising, injury, blanket contractual liability and broad form property damage.

Automobile Coverage at least as broad as Insurance Services Office Business Auto Coverage form CA OO 01 10 13 or an equivalent form covering Automobile Liability Symbol 1 "Any Auto". In lieu of a separate Business Auto Liability Policy, the City may agree to accept Auto Liability covered in the General Liability Policy, if non owned and hired auto liability are included. The ENGINEER shall maintain limits of no less than $1,000,000 or the amount customarily carried by the contractor, whichever is greater, combined single limit per accident for bodily injury and property damage. No aggregate limit may apply.

The Additional Insured Endorsements for General Liability shall be at least as broad as the unmodified ISO CG 20 10 04 13 and ISO CG 20 37 04 13 endorsements, or equivalent. The certificate shall confirm Excess Liability is following form.

*Coverages may be excluded only with prior approval of the CLIENTS' Risk Managers.

Professional Errors and Omissions Liability applying to all activities performed under this Agreement in a form acceptable to CLIENT. ENGINEER will maintain professional liability insurance during the term of this Agreement and for a period of six (6) years from the date of substantial completion of the project unless waived by the CLIENT. In the event the ENGINEER goes out of business during the term of this Agreement or the six (6) year period described above, ENGINEER shall purchase Extended Reporting coverage for claims arising out of ENGINEER's negligence acts, errors and omissions committed during the term of the Professional Liability Policy.

MINIMUM LIMITS OF INSURANCE

ENGINEER shall maintain limits no less than:

1. General Liability: $2 million minimum combined single limit per occurrence for bodily injury, personal injury and property damage and $4 million annual aggregate.

2. ENGINEER's Errors and Omissions Liability: $2 million per claim and $4 million as an annual aggregate during the term of this Agreement and for six years after the completion of the project, with each subsequent renewal having a retroactive date which predates the date of this Agreement. The ENGINEER may purchase project insurance or obtain a rider on her normal policy in an amount sufficient to bring ENGINEER's coverage up to minimum requirements, said additional coverage to be obtained at no cost to the CLIENT. Should the CLIENTS' Risk Managers require project insurance, project insurance shall be purchased and premium costs

shall be borne by the CLIENT. CLIENT retains option to purchase project insurance through the ENGINEER's insurer or through its own source.

DEDUCTIBLES OR SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions must be declared to and approved by the CLIENT Risk Management Divisions. The CLIENT reserves the right to request additional documentation, financial or otherwise prior to giving its approval of the deductibles or self-insured retention. Any changes to the deductible or self-insured retention made during the term of this Agreement or during the term of any policy, must be approved by the CLIENTS' Risk Managers.

OTHER INSURANCE PROVISIONS

General Liability Coverages

The CLIENT, its officers, officials, employees and volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the ENGINEER including the insured's general supervision of the ENGINEER; products and completed operations of the ENGINEER; or premises owned, occupied or used by the ENGINEER. The coverage shall contain no special limitations on the scope of protection afforded to the CLIENT, its officers, officials, employees or volunteers.

The ENGINEER's insurance coverage shall be primary insurance as respects the CLIENT, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the CLIENT, its officers, officials, employees or volunteers shall be excess of the ENGINEER's insurance and shall not contribute with it in any way.

Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the CLIENT, its officers, officials, employees or volunteers.

The ENGINEER's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

Endorsements for General Liability, Auto, and Excess/Umbrella Liability listing all additional insureds are required. The endorsement for Excess/Umbrella Liability can be accomplished by the ENGINEER'S production of a letter from the insurance company stating that Excess/Umbrella Liability will "follow form."

The ENGINEER'S insurance coverage shall be endorsed to state that coverage shall not be suspended, voided, canceled or non-renewed by either party, reduced in coverage or in limits except after at least thirty (30) days prior written notice for reasons other than non-payment of premium and at least ten (10) days for non-payment of premium mail has been given to the CLIENT.

ACCEPTABILITY OF INSURERS

Insurance is to be placed with an A.M. Best and Company rating level of A - Class VII or better, or otherwise approved by the CLIENT in its sole discretion. CLIENT reserves the right to require that ENGINEER'S insurer be a licensed and admitted insurer in the State of Nevada, or on the Insurance Commissioner's approved but not admitted lists.

VERIFICATION OF COVERAGE

ENGINEER shall furnish the CLIENT with certificates of insurance, including but not limited to the Certificate of Compliance in NRS 616B.627 and with original endorsements affecting coverage required by this article. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf and must be countersigned by a duly appointed and licensed agent in this state. The certificates are to be on forms approved by the CLIENT. All certificate and endorsements are to be received and approved by the CLIENT before work commences. The CLIENT reserves the right to require complete, certified copies of all required insurance policies, at any time. ENGINEER can request that confidential information be redacted.

SUBCONSULTANTS

ENGINEERS shall require all subconsultants to be insured on their own or under its policies and shall furnish separate certificates and endorsement for each subconsultant. Coverages for subconsultants shall be subjected to all of the requirements stated herein.

Miscellaneous Conditions

If the ENGINEER or any Subconsultant fails to maintain any of the insurance coverages required, the CLIENT may terminate this Agreement for cause.

ENGINEER shall be responsible for and remedy all damage or loss to any property, including property of CLIENT, caused in whole or in part by the ENGINEER, any subconsultant, or any employee, directed or supervised by ENGINEER, except damage of loss attributable to faulty drawings or specifications.

Nothing herein contained shall be construed as limiting in any way to the extent to which the ENGINEER may be held responsible for payment for damages to persons or property resulting from her operations or the operations of any subconsultant under her.

If ENGINEER's failure to maintain the required insurance coverage results in a breach of this Agreement, CLIENT may purchase the required coverage, and without further notice to ENGINEER, deduct from sums due to ENGINEER any premium cost advanced by CLIENT for such insurance.

ARTICLE XVII - LITIGATION

This Agreement does not require the ENGINEER to prepare for or appear in litigation on behalf of The CLIENT, or as agent of the CLIENT, other than specified herein, except in consideration of additional reasonable compensation.

ARTICLE XVIII - TERMINATION OF WORK

Either party to this Agreement may terminate the Agreement for cause upon giving the other party thirty (30) days prior written notice. Cause may include, failure to perform through no fault of the party initiating the termination. In addition, CLIENT may terminate the Agreement for any one of the following causes: performance by ENGINEER which CLIENT deems unsatisfactory in CLIENT's sole judgment; and CLIENT's lack of funds to complete the work. Cause for ENGINEER may include, failure of CLIENT to make timely payment to ENGINEER without good cause, following a demand for payment.

In addition, CLIENT may terminate any or all of the work covered by this Agreement by notifying ENGINEER in writing. In the event such termination occurs at the conclusion of services pursuant to an executed task order, then ENGINEER shall be entitled to receive compensation for all work satisfactorily completed and performed through the conclusion of that task order. No other changes or costs incurred for services or materials other than pursuant to an executed task order shall be reimbursed by CLIENT pursuant to this Agreement. In the event such termination occurs during the performance of services pursuant to an authorized task order, then ENGINEER and CLIENT shall need to determine what, if any additional services should be performed by ENGINEER in order to close out the work in progress and provide any such unfinished materials to CLIENT. ENGINEER and CLIENT shall agree upon the additional amount of work to be performed following the termination notice and the amount payable by CLIENT for such work. In the event that the parties cannot otherwise agree on the amount to be paid pursuant to this provision, then the matter may be referred to the Dispute Resolution Procedure in ARTICLE XXIII.

In the event the Agreement is terminated by CLIENT for cause, including performance deemed unsatisfactory by CLIENT, or ENGINEER failure to perform, or other cause created by ENGINEER, CLIENT may withhold and offset against any payments otherwise due and/or seek recovery from ENGINEER for amounts already paid, including without limitation: amounts paid for unsatisfactory work or work not done in accordance with this Agreement; value of CLIENT's time spent in correcting the work or problem; any increase in cost resulting from the problem or work; and any other costs which result from such termination. Subject to the terms herein, ENGINEER will be paid for services performed prior to termination.

ENGINEER expressly agrees that this Agreement shall be terminated immediately if for any reason local, federal and/or State Legislature funding ability to satisfy this Agreement is withdrawn, limited, or impaired.

ARTICLE XIX - PROFESSIONAL SERVICES

ENGINEER shall be responsible for the professional quality and technical accuracy of all services furnished by ENGINEER and their subconsultants under this Agreement. Without limiting the effect of any other provision of this Agreement and in addition to any other provision contained herein, ENGINEER shall, without additional compensation, correct or revise any errors or omissions in their services.

ENGINEER and their subconsultants retained pursuant to this Agreement are considered by CLIENT to be skilled in their profession to a degree necessary to perform the services and duties contained in this Agreement, and CLIENT hereby relies upon those skills and the knowledge of ENGINEER and their subconsultants. ENGINEER and their subconsultants shall perform such professional services and duties as contained in this Agreement in conformance to and consistent with the standards generally recognized as being employed by professionals of their caliber in the State of Nevada. ENGINEER makes no warranty, either expressed or implied, as to their findings, recommendations, specifications or professional advice other than as provided herein.

Neither CLIENTS' review, approval, or acceptance of nor payment for any of the professional services or work required under this Agreement shall be construed to operate as a waiver of any of CLIENTS' rights under of this Agreement. The rights and remedies of CLIENT provided for under this Agreement are in addition to any other rights and remedies provided by law.

Project information including but not limited to reports, written correspondence, and verbal reports will be prepared for the use of the CLIENT. The observations, findings, conclusions and recommendation made represent the opinions of the ENGINEER. Reports, records, and information prepared by others will be used in the preparation of the report. The ENGINEER has relied on the same to be accurate and does not make any assurances, representations, or warranties pertaining to the records or work of others, except for its subconsultants, nor does the ENGINEER make any certifications or assurances except as explicitly provided in writing. No responsibility is assumed by the ENGINEER for use of reports for purposes of facility design by others.

ARTICLE XX – PROPERTY: COPYRIGHTS

The ENGINEER shall furnish to the CLIENT all field notes, reports, data, and electronic or magnetic media, and original tracings of all drawings and plans, maps, photographs, and other materials (including, if requested by the Director, design computations, design sketches and review drawings) prepared pursuant to this Contract (hereinafter collectively referred to as "Documents"). The originals of such Documents shall be and remain the property of the CLIENT.

All of such Documents shall be deemed to be "works made for hire" prepared for the CLIENT. The ownership of all copyrights and all rights embodied in the copyrights in or to such Documents shall rest in the CLIENT when any such is subject to copyright. The ENGINEER

agrees that it, nor any of its employees, shall have any right to copyright any of such Documents. The ENGINEER further agrees that neither it nor any of its employees shall exercise any of the rights embodied in the copyrights in or to such Documents, unless authorized to do so by the Reno City Council. The ENGINEER shall place a conspicuous notation upon each Document which indicates that the copyright thereto is owned by the CLIENT.

Should it be finally determined, by a court or to her tribunal of competent jurisdiction, that any of such Documents is not a "works make for hire," it is agreed that the provisions of this section shall be termed an assignment, sale, and transfer of the copyright in or to such Documents to the CLIENT for the longest term allowed by law. Notwithstanding the foregoing, the ENGINEER may retain copies of such Documents and such copies shall remain the property of the ENGINEER. The ENGINEER shall have the right to use such copies as it may desire, but the ENGINEER may not sell, license, or otherwise market such Documents.

Documents, including drawings and specification prepared by ENGINEER pursuant to this Contract, are not intended or represented to be suitable for reuse by CLIENT or others on extensions of the services provided for the Project or any other project. Any use of completed Documents for other projects and/or any use of uncompleted Documents without specific written authorization from ENGINEER will be at the CLIENT's sole risk without liability or legal exposure to ENGINEER.

ARTICLE XXI - RIGHTS OF ENGINEERS AND EMPLOYEES

No personnel employed by ENGINEER shall acquire any rights or status in the CLIENT services and ENGINEER shall be responsible in full for payment of its employees, including insurance, deductions, and all the like.

ARTICLE XXII - SERVICES BY CLIENT

It is understood and agreed that the CLIENT shall, to the extent reasonable and practicable, assist and cooperate with the ENGINEER in the performance of ENGINEER's services hereunder. Such assistance and cooperation shall include, but not necessarily be limited to, environmental approval, right of access to work sites; providing material available from the CLIENT's files such as maps, As-Built drawings, records, and operation and maintenance information; serving all notices, holding all hearings, and fulfilling legal requirements in connection therewith; and rendering assistance in determining the location of existing facilities and improvements which may be affected by the project.

ARTICLE XXIII - DISPUTE RESOLUTION PROCEDURE

1. If disputes arise under this Agreement, the parties agree to attempt to resolve such disputes through direct negotiations or if such negotiations are not successful, by non-binding mediation conducted in accordance with the rules and procedures to be agreed upon by the parties.

2. The prevailing party in an action to enforce the Agreement shall be entitled to recover its reasonable attorney's fees and costs. It is specifically agreed that a reasonable attorney's fee shall be $125 per hour.

ARTICLE XXIV - NO UNFAIR EMPLOYMENT PRACTICES

1. In connection with the performance of work under this Agreement, Engineer agrees not to discriminate against any employee or applicant for employment because of race, creed, color, religion, national origin, age, sex, sexual orientation, gender identity, gender expression, veteran status, or any other protected class status applicable under federal, state or local law, rule or regulation. Such Agreement shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

2. ENGINEER further agrees to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

3. Any violation of these provisions by ENGINEER shall constitute a material breach of contract.

4. As used in this Article, sexual orientation means having or being perceived as having an orientation for heterosexuality, homosexuality or bi-sexuality.

ARTICLE XXV - AMERICANS WITH DISABILITIES ACT

1. To the extent applicable for the Project, ENGINEER and its subconsultants shall comply with the terms, conditions, and requirements of the Americans with Disabilities Act of 1990 (P.L. 101-136), 42 U.S.C. 12101, as amended, and regulations adopted thereunder contained in 28 C.F.R. 26.101-36.999, inclusive, and any relevant program-specific regulations.

ARTICLE XXVI - GENERAL PROVISIONS

1. Integration. This Agreement, including the Exhibits and the Recitals, all of which are true and correct and are incorporated by reference as a part of this Agreement, constitutes the complete and integrated Agreement between the parties with respect to the matters recited herein, and supersedes any prior or contemporaneous written or oral agreements or understandings with respect thereto.

2. Severability. The legality of any provision or portion of this Agreement shall not affect the validity of the remainder.

3. Amendment. This Agreement shall not be modified, amended, rescinded, canceled, or waived, in whole or in part, except by written amendment signed by duly authorized representatives of the parties.

4. No Third Party Benefit. This Agreement is a contract between CLIENT and ENGINEER and nothing herein is intended to create any third party benefit.

5. Governing Law and Jurisdiction. This Agreement shall be administered and interpreted under the laws of the State of Nevada. Any action at law, suit in equity or judicial proceeding for the enforcement of this Agreement or any provision thereof shall be instituted only in the district courts of the State of Nevada, County of Washoe.

ARTICLE XXVII - DUE AUTHORIZATION

Each party represents that all required authorizations have been obtained to execute this grant and for the compliance with each and every term hereof. Each person signing this Agreement warrants and represents to the other party that he or she has actual authority to execute this Agreement on behalf of the party for whom he or she is signing. A facsimile signature on this Agreement shall be treated for all purposes as an original signature.

Duplicate originals. This Agreement is executed in one duplicate original for each party hereto, and is binding on a party only when all parties have signed and received a duplicate original.

-SIGNATURE PAGE FOLLOWS-

IN WITNESS WHEREOF, CLIENT has caused this Agreement to be executed by the City of Reno and ENGINEER have caused this Agreement to be executed, all as of the day and year first above written.

ENGINEER

By: _____
Roy Johnson, P.E., Director

CITY OF RENO

By: _____
Hillary L. Schieve, Mayor

ATTEST:

By: _____
Ashley D. Turney, Reno
City Clerk

CITY OF SPARKS

By: _____
Ed Lawson, Mayor

ATTEST:

By: _____
Lisa Hunderman, Sparks
City Clerk

APPROVED AS TO FORM:

By: _____
Susan Ball Rothe
Deputy City Attorney

APPROVED S TO FORM:

By: _____
Chet Adams
Sparks City Attorney

Exhibit A
Scope of Work

City of Reno
TMWRF Dewatering Expansion 2020
Truckee Meadows Water Reclamation Facility
November 13, 2020

Project Background

Truckee Meadows Water Reclamation Facility (TMWRF), jointly owned and operated by the Cities of Reno and Sparks, plans to add a third centrifuge, solids cake pump, and additional polymer storage to address capacity issues and increase the reliability of TMWRF's existing sludge dewatering system. Brown and Caldwell (BC) has been working closely with the City of Reno (City) and TMWRF on identifying the needs and approach to best accomplish this task.

Through our recent work with TMWRF, we are aware that TMWRF produces a bio-phosphorus (Bio-P) sludge that is difficult to dewater and that TMWRF's two existing centrifuges do not meet minimum sludge dewatering performance or redundancy requirements. In 2019, BC assisted the City in soliciting centrifuge manufacturers to participate in week long pilot studies to determine the capacity and performance of each manufacturer's recommended centrifuge. BC's report, *"Solids Dewatering Technology Evaluation"* (April 2020) provided recommendations for dewatering technology and concluded that a third centrifuge with a minimum hydraulic capacity of 250 gallons per minute (gpm) would meet TMWRF's performance requirements. Results from the pilot tests showed that all three pre-approved centrifuge manufacturers (Andritz, Flottweg, and GEA Westfalia) piloted at TMWRF were able to meet or exceed the target dewatered cake performance using the manufacturer's provided polymer. Only two manufacturers, Andritz and Flottweg, were able to meet the target dewatered cake performance using TMWRF's existing polymer.

Project Approach

This project will assist TMWRF in the procurement of a new centrifuge, solids cake pump, and address additional polymer storage needs. To accelerate the installation of the equipment and polymer storage, a two-step process is planned. Step 1 is the pre-purchasing of the longest equipment lead items, including the new centrifuge and associated solids cake pump. Step 2 is the detailed design of the project, including a preliminary design report (PDR) to identify polymer storage alternatives, modifications to TMWRF's Sludge Dewatering building, and the design for the construction and installation of the pre-purchased equipment and miscellaneous items. Detailed design will incorporate the specifics of the pre-purchased equipment with the understanding that the winning construction contractor assumes appropriate responsibilities as the equipment purchasing agent, including all invoices by the equipment manufacturer. This will make the construction contractor financially responsible for subsequent submittals, shop tests, shipping, unloading, storage, installation and warranties. BC's scope of work to implement this project is as follows.

Phase 100. Project Management

The objectives of project management are to keep the project on schedule, stay within budget, and to deliver the scope of services necessary for this project. The project management task includes internal project team and client coordination, preparation of a project management plan (PMP), quality control (QC) Plan, fieldwork safety plan (FWSP), monthly preparation of invoices/status reports, overall project tracking, and maintaining a risk register and a decision log. The invoices will include a cover letter that describes work completed, percent of budget expended to date by task, and percent complete by task. BC will conduct a project kickoff meeting

and site visit with the City and TMWRF to review project goals, milestones, and schedule. BC will develop and distribute the kickoff meeting agenda and presentation materials for this meeting.

Meetings:

- Kickoff Meeting and Site Visit (up to 6 BC staff for a duration of 4 hours).
- Monthly one (1) hour telephone meetings between the City and BC project managers.

Deliverables:

- Monthly progress status reports and invoices
- Kickoff Meeting agenda and meeting minutes (1 digital copy in Microsoft Word and .pdf)

Assumptions:

- TMWRF will provide BC with access to at least one (1) staff member for the duration of the Site Visit.
- Invoices will be issued monthly on a time and material basis.
- The project duration is assumed to be 11 months.

Phase 200. Equipment Pre-Purchasing Assistance

BC will prepare technical specifications for the separate pre-purchasing of the long lead time items. These include 1) a new sludge dewatering centrifuge and 2) a new cake pump. Performance requirements based on TMWRF's pilot testing and centrifuge feed characteristics will be included. The technical specifications will account for equipment specific requirements for controls and Human-Machine Interface (HMI).

Preliminary demolition, mechanical, and structural drawings illustrating the Sludge Dewatering Building constraints, limitations, and equipment will be included. Process and instrumentation diagrams (P&IDs) will be provided incorporating the new centrifuge and cake pump in the Sludge Dewatering Building. Due to existing space limitations in the centrifuge room, each manufacturer will be required to provide a detailed step by step plan for lifting the new centrifuge over the existing centrifuges to the final open slot for installation.

An electronic copy of BC's draft technical specifications and drawings will be provided to the City for review. City comments will be incorporated into final pre-purchasing technical specifications and drawings. BC's integrated project delivery team, which has experience with pre-purchasing agreements, will support the City by reviewing the City's pre-purchasing contract language.

BC will provide responses to requests for clarification (RFC) from prospective bidders. For budgeting purposes, it is assumed that up to four (4) formal RFC responses will be provided requiring an average of eight (8) hours to complete, and one (1) addendum will be provided with requiring eight (8) hours to complete. Once bids have been received, BC will conduct a technical review of the bid submittals to ensure compliance with the technical specifications. The City will be responsible for providing the Front End specifications required for pre-purchasing.

Meetings:

- Pre-Purchasing Review Meeting (up to 6 BC staff for a duration of 2 hours, held virtually on MS Teams)

Deliverables:

- Draft technical specifications and preliminary drawing packages for each pre-purchase item (1 digital copy in Microsoft Word and .pdf, drawings in half-size.)
- Responses to draft technical specifications and preliminary drawing review comments (1 digital copy in Microsoft Word or Excel).
- Pre-Purchasing Review Meeting agenda and meeting minutes (1 digital copy in Microsoft Word and .pdf)
- Final technical specifications and preliminary drawings (1 digital copy in Microsoft Word and .pdf, drawings in half-size.)
- Responses to bidders' RFC (1 digital copy in Microsoft Word or Excel format).
- Addenda to technical specifications preliminary drawings (1 digital copy in Microsoft Word or Excel format).

Assumptions:

- Only centrifuge manufacturers who successfully completed pilot testing (Andritz, Flottweg, and Westfalia) will be listed as approved centrifuge manufacturers in the specification.
- The centrifuge will be specified as a packaged system including all supporting equipment such as the in-line polymer mixer and programmable logic controller (PLC).
- The PLC and HMI manufacturer is assumed to be Modicon (Schneider).
- The cake pump specification will be written to match TMWRF's existing cake pumps, including the additional controls and sensors added after the original installation.
- Drawings will be based on existing as-built drawings and will utilize photographs to illustrate limitations on equipment installation.
- Drawings will be completed in AutoCAD 2D and be provided in BC's standard format.
- Technical specifications will be provided as Division 50 in BC's standard format.
- The City will provide TMWRF's standards for electrical, instrumentation, and control within ten (10) days of request.

Phase 300. Polymer Storage Preliminary Design Report

The first floor of the Sludge Dewatering Building is space-constrained and the existing 5,000-gallon polymer storage bulk tank is situated in a location which makes access very difficult. TMWRF has also noted that the existing storage capacity is inadequate for current and future storage requirements, resulting in more frequent polymer chemical deliveries.

BC will screen up to two (2) polymer storage location alternatives and document findings in a Polymer Storage PDR. Location alternatives include the existing concrete pad west of Chemical Building 3 and within the hillside south of Chemical Building 3. Location screening will consider delivery truck route, connections to existing polymer chemical feed piping, ease of operation and maintenance, electrical and structural needs, and construction sequencing. The evaluation will also consider various polymer tank volumes.

Two (2) structural alternatives for a new polymer storage building will also be evaluated, including cast-in-place versus an insulated metal building. Structural services will be provided by BC's subconsultant, BJG Architects and Engineers (BJG). Secondary containment for polymer storage will be evaluated, as well as polymer transfer pumps and tank agitators. Pumps will be included if transfers to the existing day tank are required based on elevations and or locations. A submerged paddle mixer for the polymer tank will be evaluated, considering power demand and overhead clearance. Building HVAC will be included, however, building fire and security systems will not. The selected polymer storage alternative will be incorporated into this project's detailed design phase. BC will identify potential sources of power for the new facilities; it is assumed TMWRF will provide historical power metering data for nearby MCCs or switchgears to be used in load calculations.

A cost estimate for the PDR will be provided for the two polymer storage location alternatives. The cost estimate will be an Opinion of Probable Construction Cost (OPCC) consistent with the Association for the Advancement of Cost Engineering (AACE) guidelines. The PDR OPCC will follow AACE guidelines for a Class 4 estimate (minus 30 percent to plus 50 percent accuracy).

Meetings:

- Draft PDR review meeting (up to 6 BC staff for a duration of 2 hours, held virtually on MS Teams).

Deliverables:

- Draft Polymer Storage PDR (1 digital copy in .pdf).
- Responses to Draft Polymer Storage PDR review comments (1 digital copy in Microsoft Word or Excel).
- Final Polymer Storage PDR (1 digital copy in .pdf).
- AACE Class 4 cost estimate for the preferred two alternatives (1 digital copy in .pdf).

Assumptions:

- A topographic survey and geotechnical investigation and of the project site will be performed to aid the detailed design work, included in Phase 600.

- The design scope is based on the installation of two new 5,000-gallon storage tanks installed in a new building west or south of existing Chemical Building 3. BC will look at other storage volume alternatives.
- TMWRF will provide historical power metering data for nearby MCCs or switchgears to be used in load calculations.

Phase 400. Detailed Design

BC will prepare the detailed drawings and technical specifications required for the installation of the pre-purchased centrifuge and cake pump as well as all other modifications required for a complete construction project. The documents will be suitable for inclusion with the City provided contract documents for competitive bidding of the project. The following design elements will be included:

Cake Room Modifications and Cake Pump Installation: The crowded cake pump room is likely the most challenging aspect of the overall design. Providing a constructible and ultimately maintainable installation for the cake pumps will take some focused early effort. Fortunately, the design of modifications to this room can begin in concurrence with preparation of the pre-purchasing of the cake pump. This scope considers the design challenges described below.

A dewatered cake pump must be installed directly below the centrifuge discharge. While there is minimal flexibility in this requirement, BC will evaluate pump placement that allows for drainage of the area. Placing this pump with the required maintenance clearances requires the existing work platform at the entrance of the Sludge Dewatering Building to be removed. This platform was originally installed to facilitate use of polymer totes. It is now only used for access to the HVAC unit controls and electric panel on the south wall, and most importantly access to the elevated double doors.

BC's scope assumes the double doors will be lowered to ground level and the exterior loading dock would be removed to allow for removal of the platform. The replacement of the double doors with a new rollup door at ground level will be evaluated. Initial structural evaluations indicated that simply shifting the double doors down to the floor level, while maintaining the same width, would not trigger a seismic code upgrade. If the platform is removed, the electrical panels would be lowered or otherwise relocated to a location agreeable with TMWRF. BC will also verify if the HVAC unit will need to be relocated with the removal of the platform.

The design will also address other minor equipment modifications that will be required in the dewatered cake pump room, such as relocation of the existing eye wash and minor piping.

Centrifuge Installation: Determining the optimal location of the new centrifuge will require an in depth structural analysis and potentially structural strengthening of the Sludge Dewatering Building. BC will include structural modifications of the building necessary for centrifuge installation.

Furthermore, it will be challenging to lift the new centrifuge over the existing centrifuges to its planned location using the existing bridge crane. As noted in Phase 200, each potential centrifuge bidder will be required to address this complexity with their equipment supply bid. This scope assumes that a plan will be proposed by the centrifuge supplier that would utilize the existing bridge crane to lift the new centrifuge over the existing centrifuges to its final location without modification to the bridge crane.

Digested Sludge Pumps: No modifications are anticipated to the existing digested sludge pumping system to support the new centrifuge. All new digested sludge piping modifications will be within the Sludge Dewatering Building and will match existing materials.

Additional Modifications: Centrate piping from the new centrifuge to the existing centrate sump will be included; however, modifications to the existing centrate sump and discharge piping are not anticipated or included. Minor modifications of the existing lubrication and drain system may be required and are included in this scope of design.

Polymer Metering System: BC assumes there will be no changes to the polymer metering pumps themselves although the piping between the existing pumps and the new centrifuge will be evaluated to ensure the existing system can support the polymer demand at the new centrifuge. Based on the pilot study, there is an expectation that the new centrifuge will use less polymer and therefore piping modifications will not be required.

Polymer Storage: BC will incorporate the selected polymer storage alternative from the Polymer Storage PDR findings into detailed design. The estimated fee and scope for this task assumed that two (2) new 5,000-gal (net capacity) storage tanks will be included in a new building on the west side of Chemical Building 3. Demolition of the existing 5,000-gal storage tank on first floor of the Sludge Dewatering Building is also included in the design.

Structural Design: Structural tasks and deliverables will be tracked under Phase 500. BC's structural subcontractor, BJG, will complete the following the design tasks:

- Perform analysis of the floor systems at the Sludge Dewatering Building for the new loads from the new centrifuge and the cake pump, and
- Perform an ASCE 41 analysis of the Sludge Dewatering Building for seismic upgrades (no design of upgrades included).
- Provide design services for the installation of the new centrifuge and cake pump in the Sludge Dewatering Building. The design is assumed to include the strengthening of the second floor beams and new openings in the second floor slab, sleeper beam design for the cake pump on the first floor, anchorage of the centrifuge and the cake pump to their respective floors, and the design of up to 10 unique piping/equipment supports.
- Provide architectural and structural drawings and structural calculations for a new Polymer Storage building configuration and layout.

Electrical Design: BC will provide the electrical and instrumentation design for the new polymer storage building and modifications to the existing Sludge Dewatering Building. The design will include equipment layout, conduit routing, conduit and wire schedule on the drawings, power single line diagram for each location, details, lighting and conduit for the new polymer storage building, and control diagrams for new equipment. Control signals from the polymer storage building will be connected to the existing Chemical Building 3 DCS panel, or a new DCS panel will be provided in the new polymer storage building depending on I/O count and system needs.

HVAC Design: BC will provide HVAC design for a system to maintain a temperature between 50°F and 80°F in the new polymer storage building. The City's preference for this design is to provide an HVAC unit with heating coils connected to the existing plant hot water loop. BC will use data provided by TMWRF to evaluate whether the existing hot water system has capacity to serve the new polymer storage building, and will evaluate where connections to the existing hot water loop can be made. BC will provide a control description and simple diagram for integration of the new hot water tap for the polymer storage building into the existing hot water control system (assumed to be Alerton BAS). If connecting to the existing hot water loop is determined not to be feasible or cost effective, BC will make an alternate recommendation for an all-electric packaged HVAC unit.

Planning Shutdowns: BC understands the importance of continued operations while expanding capacity in an operating facility. We will identify and convey the reason, length, and risks associated with all shutdowns, whether driven by piping, power, or other reasons, to the operations staff at each phase of design. Currently, we are assuming shutdowns and limited operations will be required at a minimum to tie in new electrical equipment.

Drawings, Specifications, and Cost Estimate: A preliminary list of drawings for detailed design is included as Exhibit D. Specifications will be included for each project task, including for pre-purchasing, the PDR, and detailed design. BC will provide construction cost estimates with the 60% and 90% design submittals. Similar to the PDR, cost estimates will be provided as an OPCC consistent with AACE guidelines. The 60% cost estimates will be consistent with AACE guidelines for a Class 2 estimate (minus 15 percent to plus 20 percent accuracy). The 90% cost estimate will be consistent with AACE guidelines for a Class 1 estimate (minus 10 percent to plus 15 percent accuracy).

Permitting: Building permits for the new polymer storage building and centrifuge equipment installation are expected with the City of Sparks. BC's structural subconsultant, BJG, will provide architectural and structural drawings and structural calculations suitable for a building permit submittal. Additional permitting scope may be required if significant structural work to install the new centrifuge in the Sludge Dewatering Building is determined during design. In regards to the new centrifuge, an update to TMWRF's NPDES permit update is not

expected, but the design may need to be submitted to the Nevada Department of Environmental Protection (NDEP) for approval. For budgeting purposes, NDEP reports and submissions are not included in BC's scope of work, however, if required, may be performed under the contingency phase of this project.

Meetings

- 60% design deliverable review meeting (up to 6 BC staff for a duration of 2 hours, held at TMWRF)
- 90% design deliverable review meeting (up to 6 BC staff for a duration of 2 hours, held at TMWRF).

Deliverables:

- 60% drawings and specifications (1 digital copy in Microsoft Word and .pdf, digital drawings in half-size).
- AACE Class 2 construction cost estimate at 60% design (1 digital copy in pdf).
- 60% Design Review Meeting agenda and minutes (1 digital copy in Microsoft Word and .pdf).
- Responses to 60% design deliverable comments (1 digital copy in Microsoft Word or Excel).
- 90% drawings and specifications (1 digital copy in Microsoft Word and .pdf, digital drawings in half-size).
- AACE Class 1 construction cost estimate at 90% design (1 digital copy in pdf).
- 90% Design Review meeting agenda and minutes (1 digital copy in Microsoft Word and .pdf).
- Responses to 90% design deliverable comments (1 digital copy in Microsoft Word or Excel).
- 100% drawings and specifications (1 digital copy in Microsoft Word and .pdf, digital drawings in half-size with stamp and signatures, 1-full size drawing hard-copies with wet signatures).

Assumptions:

- Dewatered cake piping will be limited to connection to the flanged location in the cake pump room.
- Upgrades are not required to the existing bridge crane to install a new centrifuge in the Sludge Dewatering Building.
- Submittals for the new centrifuge and cake pump will be provided not less than four (4) weeks before the 90% design is due.
- An existing arc flash study will be provided by TMWRF to the Contractor in electronic format for developing calculations for new equipment.
- The new power supply for the new polymer building will be from an existing 480 V motor control center or switchboard in the nearest process building.
- The new network connection for the new polymer building to the facility's existing monitoring and control system will be from the same building as the power supply and will consist of a single fiber optic or Ethernet connection. No other connections to existing facility control systems will be required.
- Power supply for the new polymer storage building will be routed via a new underground duct bank from existing panel PB-85001 (in Chemical Building 3) or MCC-29 (in Digester Control Building No. 4). The network connection for the new polymer storage building will be routed to the closest communication vault and continue via existing conduit if possible.
- The existing motor control center (MCC) has sufficient capacity for the new equipment loads in the existing Sludge Dewatering building.
- Modifications to the facility's existing monitoring and control system will be provided by TMWRF.
- All work contemplated in this proposal assumes areas are classified under NFPA 820 as non-hazardous.
- Modifications to the existing HVAC unit in the basement of the Dewatering Building assumes relocation of existing HVAC equipment only.
- Photographs may be used to illustrate and define existing conditions and demolition.
- Opinions of probable construction cost, financial analyses, and feasibility projections are subject to many influences including, but not limited to, price of labor and materials, unknown or latent conditions of existing equipment or structures, and time or quality of performance by third parties. Such influences may not be precisely forecasted and are beyond the control of BC; actual costs incurred may vary substantially from the estimates prepared by BC. BC does not warrant or guarantee the accuracy of construction or development cost estimates.

Phase 500. BJG Structural Design Services

BJG will support the design team by providing structural design services through equipment pre-purchasing (Phase 200) and Detailed Design (Phase 300). BJG's task to complete an ASCE 41 review of the Sludge Dewatering Building for seismic upgrades is also included. Structural design deliverables will be submitted as a single package with BC deliverables.

Phase 600. Site Survey and Geotechnical Investigation

To aid in the design of the new polymer storage building, CFA Land Surveyors (CFA) and Black Eagle Consulting, Inc. (Black Eagle) will perform a topographic survey and geotechnical investigation of the project site.

Topographic Survey: CFA will perform a topographic survey to map the planimetric and topographic features encompassing the area near Chemical Building 3. Data collected will enable preparation of a 1-foot contour map at a suitable scale, and existing structures features and surface apparent utilities will be located. Sewer and storm drain manholes and inlets within the project area will be measured for invert elevations. Water and gas valves will be measured for "top of nut" elevations. Manholes immediately outside of the project area will also be included for directional, size, and invert validation. The final deliverable will include planimetric and topographic features with 1-foot contours sufficient for preparation of civil design plans.

Geotechnical Investigation: Black Eagle Consulting will perform a geotechnical investigation with soils laboratory testing in order to develop geotechnical data for the new polymer storage building. Black Eagle's scope of work includes research of past geotechnical reports and information about the project site, field exploration, field and laboratory testing, and preparation of a geotechnical report with recommendations for the construction of the new polymer storage building. Exploration of the project site to host the new building will be performed by advancing a single boring west of Chemical Building 3 to adequately reveal the subsurface soil and groundwater conditions. A second boring is included as an optional task if the City chooses to further explore the hillside location south of Chemical Building 3. Borings will be advanced using hollow-stem auger drilling or solid flight auger techniques, at a target depth of 15 feet below the existing ground surface.

Deliverables:

- Topographic survey map with elevations (1 digital copy in AutoCAD format and .pdf).
- Geotechnical investigation report (1 digital copy in .pdf).

Assumptions:

- The survey will be based on horizontal survey control tied to existing monuments and the City's plant vertical datum bench marks, assumed to be in NAVD88.
- Black Eagle will obtain permits for geotechnical field explorations.

Phase 700. Detailed Design Bid Support

BC will provide bid support services by providing responses to RFC from prospective bidders. For budgeting purposes, it is assumed that up to eight (8) formal RFC responses will be provided with each requiring an average of four (4) hours to complete. BC will also assist the City with preparation of addenda as required. For budgeting purposes, it is assumed that up to two (2) addenda will be provided with each requiring an average of 12 hours to complete. BC will prepare conformed drawing and specifications (assumed 40 hours of effort).

Meetings:

- Pre-Bid Meeting and Site Walk led by City staff (up to 3 BC staff for a duration of 4 hours, to be held at TMWRF). BC's role in the meeting will be to answer questions related to technical requirements of the contract where answers are known and present in the documents.

Deliverables:

- Responses to bidders' RFC (1 digital copy in Microsoft Word or Excel format).
- Addenda to specifications (1 digital copy in Microsoft Word or Excel format).

- Addenda to drawings (1 digital copy in .pdf., drawings in half size.)
- Conformed specifications (2 hard copies, 1 digital copy in Microsoft Word and .pdf).
- Conformed drawings (2 half-size hard copies, 1 digital copy in .pdf, and 1 copy in AutoCAD .dwg)

Assumptions:

- The City will manage the bidding and advertisements.
- The City will distribute bid documents and addenda.

Phase 800. Contingency

A contingency fund of $65,000 (12.5% of the project budget) will be included to cover tasks not included in the scope of work or which deviate from the project's listed assumptions. Approval by City of Reno is needed prior to the release of contingency funds.

Fee Estimate

Work will be performed on a time and expense basis for a not to exceed project budget of **$584,698.**

A supporting rate schedule is included as Exhibit B. A preliminary project schedule and list of drawings used to develop the fee estimate are included as Exhibit C and D, respectively. The table below provides a breakdown of our fee estimate by phase.

TMWRF Dewatering Expansion 2020 Fee Estimate				
Phase	**Phase Description**	**BC Fee**	**Subconsultant Fee**	**Phase Total**
100	Project Management	$28,136	--	$28,136
200	Equipment Procurement Assistance	$56,660	--	$56,660
300	Polymer Storage Preliminary Design Report	$83,000	--	$83,000
400	Detailed Design	$196,686	--	$196,686
500	Structural Design Services (BJG)	--	$117,094	$117,094
600	Site Survey (CFA)	--	$5,948	$5,948
	Geotechnical Investigation (Black Eagle)	--	$13,194	$13,194
700	Bid Support Services	$18,980	--	$18,980
800	Contingency	$65,000	--	$65,000
			Grand Total	**$584,698**

Assumptions:

- Labor Rate is in accordance with attached rate schedule.
- No markups on expenses.
- 5 percent proposed markups on sub-consultant fee.
- Unspent budget on completed tasks can be reallocated.
- Cost is managed at the project level and not phase level.
- Labor rates will not be escalated unless project schedule is extended by at least six (6) months.

Project Schedule

A preliminary project schedule showing the start, end, and duration of each project task is included as Exhibit C. The total project duration through Bid Support Services is assumed to be 12 months.

Assumptions:

- Notice to Proceed (NTP) will be issued by the City on January 25, 2020;
- The City and TMWRF review period is ten (10) working days for all deliverables.

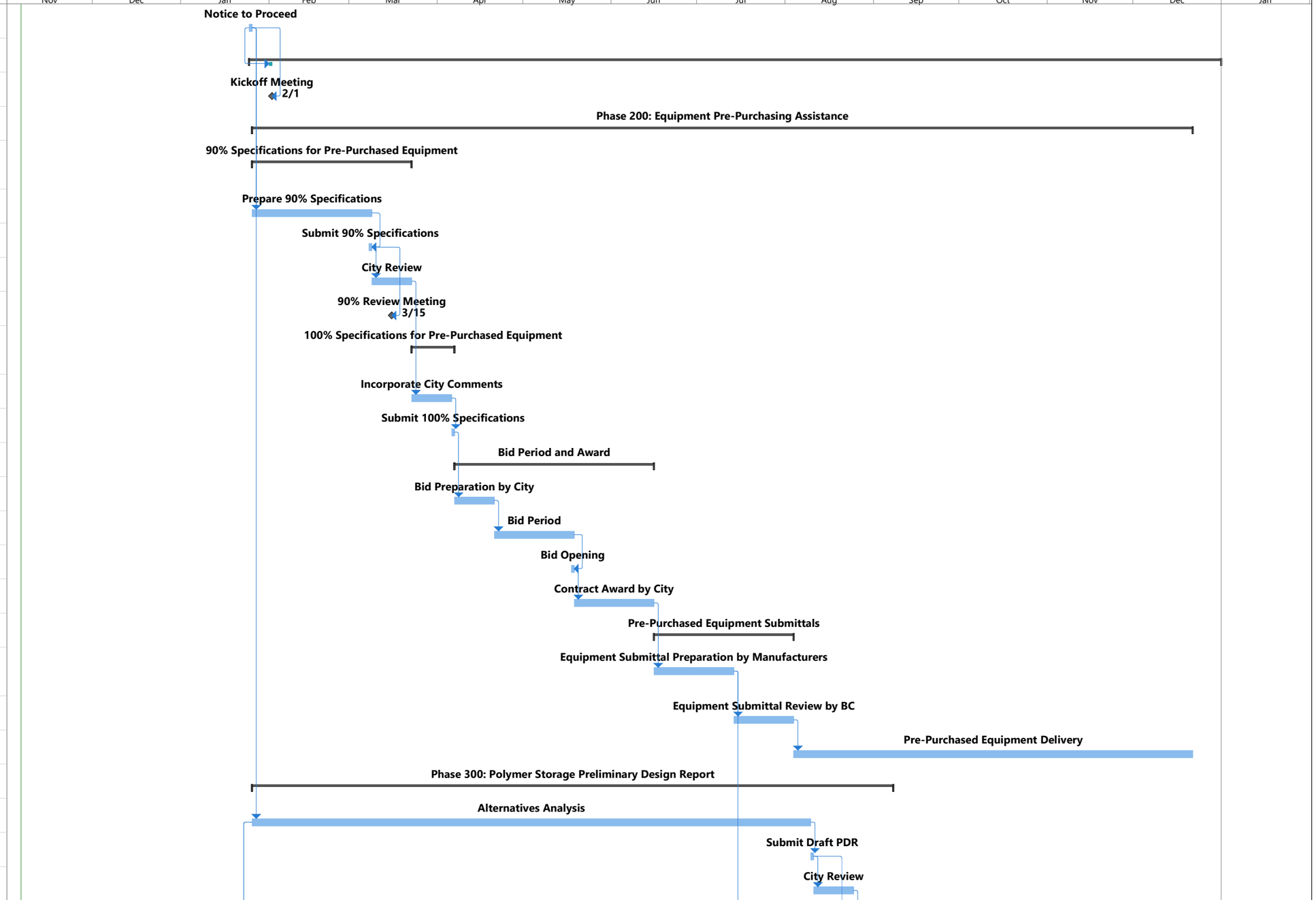
Exhibit B

Brown and Caldwell Schedule of Hourly Billing Rates

Level	Engineering	Technical/Scientific	Administrative	Hourly Rate
A			Office/Support Services I	$54
B	Drafter Trainee	Field Service Technician I	Word Processor I Office/Support Services II	$70
C	Assistant Drafter	Field Service Technician II	Word Processor II Office/Support Services III	$77
D	Drafter Engineering Aide Inspection Aide	Field Service Technician III	Accountant I Word Processor III Office/Support Services IV	$90
E	Engineer I Senior Drafter Senior Illustrator Inspector I	Geologist/Hydrogeologist I Scientist I Senior Field Service Technician	Accountant II Word Processor IV	$110
F	Engineer II Inspector II Lead Drafter Lead Illustrator	Geologist/Hydrogeologist II Scientist II	Accountant III Area Business Operations Mgr Technical Writer Word Processing Supervisor	$130
G	Engineer III Inspector III Senior Designer Supervising Drafter Supervising Illustrator	Geologist/Hydrogeologist III Scientist III	Accountant IV Administrative Manager	$155
H	Senior Engineer Principal Designer Senior Construction Engineer Senior Engineer	Senior Geologist/Hydrogeologist Senior Scientist	Senior Technical Writer	$175
I	Principal Engineer Principal Construction Engineer Supervising Designer	Principal Geologist/Hydrogeologist Principal Scientist	Corp.Contract Administrator	$200
J	Supervising Engineer Supervising Constr. Engineer Supervising Engineer	Supervising Scientist Supervising Geologist/ Hydrogeologist	Assistant Controller	$210
K	Managing Engineer	Managing Geologist/Hydrogeologist Managing Scientist	Area Bus Ops Mgr IV	$230
L	Chief Engineer Executive Engineer	Chief Scientist Chief Geologist/Hydrogeologist	Corp Marketing Comm. Mgr.	$250

Exhibit C (page 1 of 2)

ID	Task Name	Duration	Start
1	Notice to Proceed	1 day	Mon 1/25/21
2	**Phase 100: Project Management**	**245 days**	**Mon 1/25/21**
3	Kickoff Meeting	1 day	Mon 2/1/21
4	**Phase 200: Equipment Pre-Purchasing Assistance**	**236 days**	**Tue 1/26/21**
5	**90% Specifications for Pre-Purchased Equipment**	**40 days**	**Tue 1/26/21**
6	Prepare 90% Specifications	6 wks	Tue 1/26/21
7	Submit 90% Specifications	1 day	Mon 3/8/21
8	City Review	2 wks	Tue 3/9/21
9	90% Review Meeting	1 day	Mon 3/15/21
10	**100% Specifications for Pre-Purchased Equipment**	**11 days**	**Tue 3/23/21**
11	Incorporate City Comments	2 wks	Tue 3/23/21
12	Submit 100% Specifications	1 day	Tue 4/6/21
13	**Bid Period and Award**	**50 days**	**Wed 4/7/21**
14	Bid Preparation by City	2 wks	Wed 4/7/21
15	Bid Period	4 wks	Wed 4/21/21
16	Bid Opening	1 day	Tue 5/18/21
17	Contract Award by City	4 wks	Wed 5/19/21
18	**Pre-Purchased Equipment Submittals**	**35 days**	**Wed 6/16/21**
19	Equipment Submittal Preparation by Manufacturers	4 wks	Wed 6/16/21
20	Equipment Submittal Review by BC	3 wks	Wed 7/14/21
21	Pre-Purchased Equipment Delivery	20 wks	Wed 8/4/21
22	**Phase 300: Polymer Storage Preliminary Design Report**	**161 days**	**Tue 1/26/21**
23	Alternatives Analysis	7 mons	Tue 1/26/21
24	Submit Draft PDR	1 day	Tue 8/10/21
25	City Review	2 wks	Wed 8/11/21

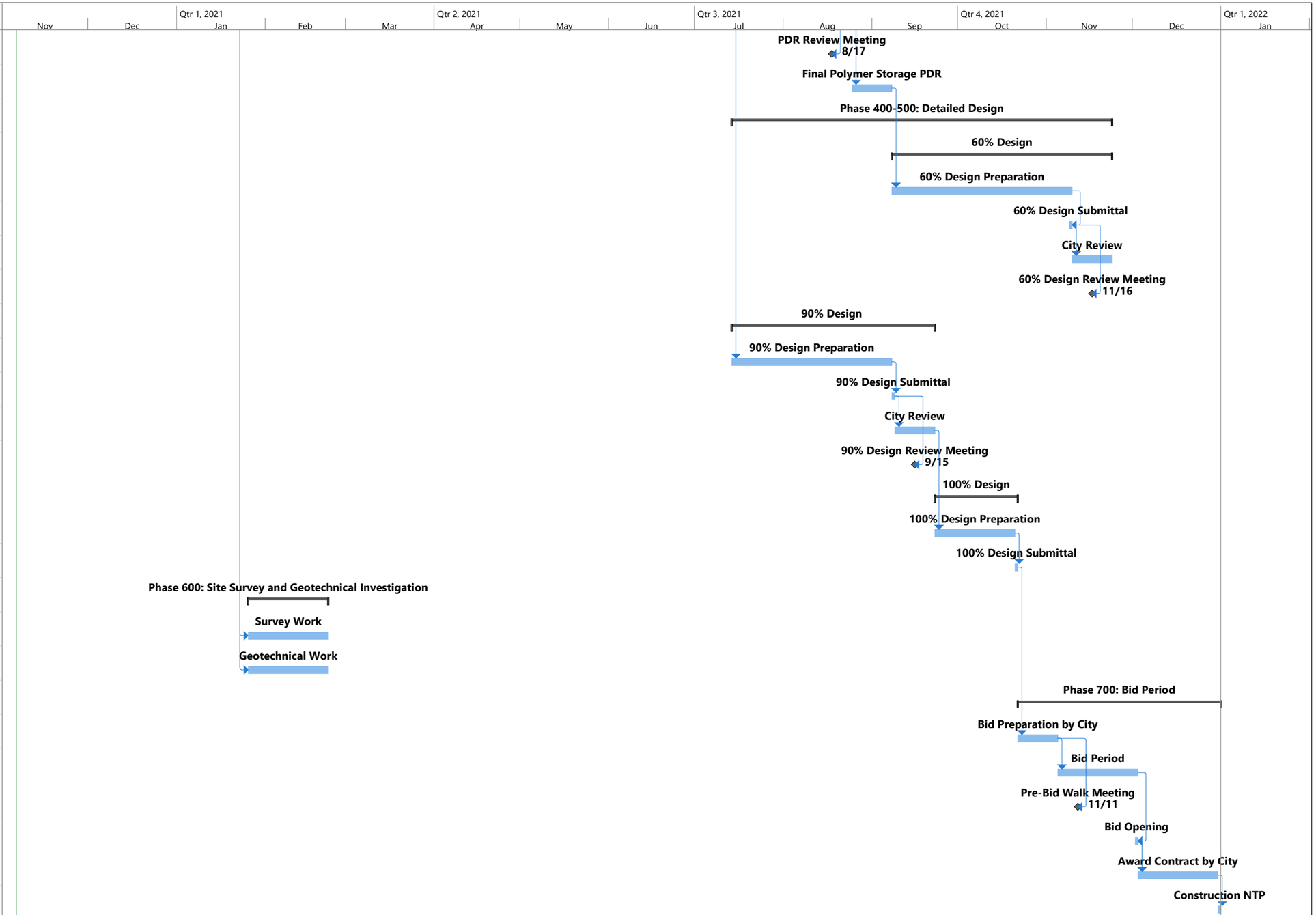


Project: Design Schedule_10-7-
Date: Fri 11/6/20

Task	Summary	Inactive Milestone	Duration-only	Start-only	External Milestone	Manual Progress
Split	Project Summary	Inactive Summary	Manual Summary Rollup	Finish-only	Deadline	
Milestone	Inactive Task	Manual Task	Manual Summary	External Tasks	Progress	

Exhibit C (page 2 of 2)

ID	Task Name	Duration	Start
26	PDR Review Meeting	1 day	Tue 8/17/21
27	Final Polymer Storage PDR	2 wks	Wed 8/25/21
28	**Phase 400-500: Detailed Design**	**95 days**	**Wed 7/14/21**
29	**60% Design**	**55 days**	**Wed 9/8/21**
30	60% Design Preparation	9 wks	Wed 9/8/21
31	60% Design Submittal	1 day	Tue 11/9/21
32	City Review	2 wks	Wed 11/10/21
33	60% Design Review Meeting	1 day	Tue 11/16/21
34	**90% Design**	**51 days**	**Wed 7/14/21**
35	90% Design Preparation	8 wks	Wed 7/14/21
36	90% Design Submittal	1 day	Wed 9/8/21
37	City Review	2 wks	Thu 9/9/21
38	90% Design Review Meeting	1 day	Wed 9/15/21
39	**100% Design**	**21 days**	**Thu 9/23/21**
40	100% Design Preparation	1 mon	Thu 9/23/21
41	100% Design Submittal	1 day	Thu 10/21/21
42	**Phase 600: Site Survey and Geotechnical Investigation**	**20 days**	**Tue 1/26/21**
43	Survey Work	1 mon	Tue 1/26/21
44	Geotechnical Work	1 mon	Tue 1/26/21
45	**Phase 700: Bid Period**	**51 days**	**Fri 10/22/21**
46	Bid Preparation by City	2 wks	Fri 10/22/21
47	Bid Period	4 wks	Fri 11/5/21
48	Pre-Bid Walk Meeting	1 day	Thu 11/11/21
49	Bid Opening	1 day	Thu 12/2/21
50	Award Contract by City	4 wks	Fri 12/3/21
51	Construction NTP	1 day	Fri 12/31/21



Project: Design Schedule_10-7-
Date: Fri 11/6/20

Task	Summary	Inactive Milestone	Duration-only	Start-only	External Milestone	Manual Progress
Split	Project Summary	Inactive Summary	Manual Summary Rollup	Finish-only	Deadline	
Milestone	Inactive Task	Manual Task	Manual Summary	External Tasks	Progress	

Exhibit D

City of Reno - TMWRF Dewatering Expansion 2020

Preliminary Drawing List

11/11/2020

Sheet Number	Drawing Number	Discipline	Sheet Title	Pre-Purchase	30%	60%	90%	100%
1	G1	GENERAL	Cover Sheet, Vicinity, and Location Map			YES	YES	YES
2	G2	GENERAL	Drawing Index and Design Criteria			YES	YES	YES
3	G3	GENERAL	Abbreviations			YES	YES	YES
4	G4	GENERAL	General Legends and Symbols			YES	YES	YES
5	G5	GENERAL	Overall Site Plan			YES	YES	YES
6	G6	GENERAL	Process Flow Diagram			YES	YES	YES
7	T1	TYPICAL DETAILS	Typical Details 1				YES	YES
8	T2	TYPICAL DETAILS	Typical Details 2				YES	YES
9	C1	CIVIL	Polymer Storage Site and Grading Plan		YES	YES	YES	YES
10	C2	CIVIL	Polymer Storage Yard Piping		YES	YES	YES	YES
11	C3	CIVIL	Civil Details				YES	YES
12	D1	DEMOLITION	Sludge Dewatering Building First Floor	YES		YES	YES	YES
13	D2	DEMOLITION	Sludge Dewatering Building Second Floor	YES			YES	YES
14	D3	DEMOLITION	Sludge Dewatering Building Demo Details			YES	YES	YES
15	D4	DEMOLITION	Polymer Storage Demo Plan		YES	YES	YES	YES
16	D5	DEMOLITION	Polymer Storage Demo Details				YES	YES
17	S1	STRUCTURAL	Sludge Dewatering Building First Floor Sections	YES		YES	YES	YES
18	S2	STRUCTURAL	Sludge Dewatering Building Second Floor Sections	YES		YES	YES	YES
19	S3	STRUCTURAL	Sludge Dewatering Building Details				YES	YES
20	S4	STRUCTURAL	Polymer Storage Facility Plan		YES	YES	YES	YES
21	S5	STRUCTURAL	Polymer Storage Facility Sections		YES	YES	YES	YES
22	S6	STRUCTURAL	Polymer Storage Facility Details 1			YES	YES	YES
23	S7	STRUCTURAL	Polymer Storage Facility Details 2				YES	YES
24	M1	MECHANICAL	Sludge Dewatering Building First Floor	YES		YES	YES	YES
25	M2	MECHANICAL	Sludge Dewatering Building Second Floor	YES		YES	YES	YES
26	M3	MECHANICAL	Sludge Dewatering Building Sections				YES	YES
27	M4	MECHANICAL	Sludge Dewatering Building Details				YES	YES
28	M5	MECHANICAL	Polymer Storage Facility Plan		YES	YES	YES	YES
29	M6	MECHANICAL	Polymer Storage Facility Sections		YES	YES	YES	YES
30	M7	MECHANICAL	Polymer Storage Facility Details				YES	YES
31	H1	HVAC	Polymer Storage Facility HVAC Plan/Section			YES	YES	YES
32	H2	HVAC	Polymer Storage Facility HVAC Details			YES	YES	YES
33	H3	HVAC	Hot Water Loop Diagram - Modifications		YES	YES	YES	YES
34	H4	HVAC	Hot Water Piping Partial Site Plan		YES	YES	YES	YES
35	H5	HVAC	Hot Water Loop Connection Plan/Details			YES	YES	YES
36	H6	HVAC	Hot Water Control System Diagram			YES	YES	YES
37	E1	ELECTRICAL	Electrical Legend			YES	YES	YES
38	E2	ELECTRICAL	Electrical Abbreviations			YES	YES	YES
39	E3	ELECTRICAL	Electrical Site Plan	YES		YES	YES	YES
40	E4	ELECTRICAL	Polymer Storage Facility Plan		YES	YES	YES	YES
41	E5	ELECTRICAL	MCC-13 Elevation				YES	YES
42	E6	ELECTRICAL	MCC-13 One Line Diagram			YES	YES	YES
43	E7	ELECTRICAL	MCC-14 Elevation				YES	YES
44	E8	ELECTRICAL	MCC-14 One Line Diagram			YES	YES	YES
45	E9	ELECTRICAL	Polymer Storage Facility Single Line		YES	YES	YES	YES
46	E10	ELECTRICAL	Polymer Stroage Faciltiy Lighting Plan			YES	YES	YES
47	E11	ELECTRICAL	Electrical Details 1				YES	YES
48	E12	ELECTRICAL	Electrical Details 2				YES	YES
49	I1	INSTRUMENTATION	Instrumentation Symbols and Abbreviations 1			YES	YES	YES
50	I2	INSTRUMENTATION	Instrumentation Symbols and Abbreviations 2			YES	YES	YES
51	I3	INSTRUMENTATION	Instrumentation Symbols and Abbreviations 3			YES	YES	YES
52	I4	INSTRUMENTATION	Instrumentation Symbols and Abbreviations 4			YES	YES	YES
53	I5	INSTRUMENTATION	Asset Tag Prefixes Table				YES	YES
54	I6	INSTRUMENTATION	Process Instrumentation and Diagram	YES		YES	YES	YES
55	I7	INSTRUMENTATION	Schematic Symbols			YES	YES	YES
56	I8	INSTRUMENTATION	Sample Loop Drawing				YES	YES
57	I9	INSTRUMENTATION	Communications Block Diagram				YES	YES
58	I10	INSTRUMENTATION	Control Schematic 1				YES	YES
59	I11	INSTRUMENTATION	Control Schematic 2				YES	YES
60	I12	INSTRUMENTATION	New Sludge Dewatering Centrifuge No.1	YES		YES	YES	YES
61	I13	INSTRUMENTATION	Dewatered Sludge Pump No.1 Discharge Pipe			YES	YES	YES
62	I14	INSTRUMENTATION	New Sludge Cake Pump No.1	YES		YES	YES	YES
63	I15	INSTRUMENTATION	Existing Sludge Hoppers No. 1 and No. 2			YES	YES	YES
64	I16	INSTRUMENTATION	New Lube Water Feed Pump No.1			YES	YES	YES
65	I17	INSTRUMENTATION	Polymer Storage Facility No 1		YES	YES	YES	YES
66	I18	INSTRUMENTATION	Polymer Storage Facility No 2		YES	YES	YES	YES