Tab 3

Metropolitan Water District of Salt Lake & Sandy
Board Meeting Information
Last Update: June 4, 2024

Agenda Item: Consider cooperation agreement - Allmark and Johnson

Objective: Receive approval for the Allmark and Johnson agreements.

Background:

Briant Johnson and Amelia Allmark (collectively Johnson in this document)
Location: 3298 Antler Way, Cottonwood Heights
Stations: SLAR 125+50, SLA 1873+75
Corridor: Easement

The Johnson property is encumbered by the SLA and will be encumbered by the SLAR. The SLAR easement acquisition team has been working with Mr. Johnson for more than nine months to acquire the SLAR easement. These efforts culminated in a mediation with the Utah Property Rights Ombudsman on April 22, 2024.

Mediation resulted in two actions to bring to the board. The first are modifications to the Easement Agreement, which dictates the terms of the new SLAR easement. These modifications are shown on the attached redline and include an expanded definition of shrub (see 2a), clarification on when the District has the right to remove uses within the SLAR easement (see 3), and additional direction on how the District seeks reimbursement (see 5).

The Easement Agreement permits uses not described in the Easement Agreement with the District's written consent. Mr. Johnson currently maintains two moveable carports within the SLA easement and to-be-acquired SLAR easement. The attached Cooperation Agreement documents the terms under which those carports may exist within the SLAR easement.

The property is shown on Exhibit A of the attached Easement Agreement.

Committee Activity: The Engineering Committee discussed this item on June 4, 2024. The committee recommends to approve the modified Easement Agreement and Cooperation Agreement, with non-substantive changes as determined appropriate by the General Manager and legal counsel.

Suggested Motion: I move to (approve / table, with direction for staff / deny) the modified Easement Agreement and Cooperation Agreement, with non-substantive changes as determined appropriate by the General Manager and legal counsel.

Attachments:

- Easement Agreement (redline)
- Cooperation Agreement

When Recorded Return to:
Metropolitan Water District of Salt Lake & Sandy
Attn: General Manager
3430 East Danish Road
Cottonwood Heights, Utah 84093-2139

Salt Lake County Parcel No. 22-26-281-001-0000

EASEMENT AGREEMENT

This Easement Agreement (Agreement) is entered into by the METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY, a Utah metropolitan water district (the District) and AMELIA ANNE ALLMARK and BRIANT JOHNSON (Landowners).

AGREEMENT PURPOSES

Landowners hold fee title to the following tract of land in Cottonwood Heights City, Salt Lake County, Utah:

> Lot 37 of the Reindeer Hills #2 Subdivision according to the official plat thereof recorded with the Salt Lake County Recorder's office.

(the Parcel). The Parcel has a street address of 3298 E Antler Way, Cottonwood Heights City, Utah, and has been assigned by Salt Lake County the parcel number of 22-26-281-001-0000.

The District is constructing the Cottonwoods Connection project (the Project), which includes large water pipelines (with associated improvements) that will reach from a point near the mouth of Big Cottonwood Canyon to the District's Little Cottonwood Water Treatment Plant located near Little Cottonwood Creek. The Project includes an aqueduct being referred to as the Salt Lake Aqueduct Replacement (SLAR) that will mostly be constructed parallel to and relatively near the existing Salt Lake Aqueduct (SLA). The SLAR will eventually function in conjunction with the existing SLA; it will not actually completely replace the SLA. For the most part, the SLAR will be constructed in existing easements that allow the District to construct, own, operate, repair and replace the SLA.

A portion of the SLAR will be constructed across the Parcel. The District has requested a permanent easement for the SLAR across a portion of the Parcel from Landowners.

For good and valuable consideration, the sufficiency and receipt of which is acknowledged by Landowners, Landowners have agreed to convey to the District a permanent easement across a portion of the Parcel for the SLAR, all as more particularly described below.

AGREEMENT TERMS

1. Conveyance of Permanent SLAR Easement. Landowners hereby convey and warrant only against all who claim by or through Landowners, to the District a perpetual easement for the survey, planning, layout, construction, use, operation, inspection, maintenance,

repair, replacement, and improvement of the SLAR, or its replacement or replacements, and related improvements on, over, under, and through the following described land located in Cottonwood Heights City, Salt Lake County, State of Utah (the Easement):

A FIFTY FOOT WIDE PERPETUAL EASEMENT FOR A WATERLINE LYING WITHIN THE EXISTING METROPOLITAN WATER DISTRICT OF SALT LAKE AND SANDY AQUEDUCT EASEMENT AND BEING A PORTION OF THE BRIANT JOHNSON, AN UNMARRIED MAN AND AMELIA ANNE ALLMARK, AN UNMARRIED WOMAN, AS JOINT TENANTS (GRANTORS) PROPERTY, APN 22-26-281-001, BEING A PORTION OF LOT 37, REINDEER HILLS NO. 2 SUBDIVISION, RECORDED MARCH 9, 1973, FILE NO. NN-40, SALT LAKE COUNTY RECORDS, AND LOCATED IN THE NORTHEAST QUARTER OF SECTION 26, TOWNSHIP 2 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTHERLY LINE OF THE GRANTORS' PROPERTY, WHICH POINT LIES SOUTH 89°12'34" WEST ALONG THE QUARTER SECTION LINE 1277.84 FEET AND NORTH 00°47'26" WEST 804.80 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION 26; AND RUNNING THENCE ALONG SAID SOUTHERLY LINE NORTH 68°45'13" WEST 50.16 FEET; THENCE NORTH 16°39'00" EAST 91.15 FEET TO A POINT ON THE NORTHERLY LINE OF THE GRANTORS' PROPERTY AND POINT ON A 75.00 FOOT RADIUS CURVE TO THE LEFT; THENCE ALONG SAID NORTHERLY LINE THE FOLLOWING THREE (3) COURSES: 1) NORTHEASTERLY 9.29 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 07°05'42" (CHORD BEARS NORTH 67°25'05" EAST 9.28 FEET) TO A POINT OF REVERSE CURVATURE OF A 15.00 FOOT RADIUS CURVE TO THE RIGHT; THENCE 2) EASTERLY 15.02 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 57°21'50" (CHORD BEARS SOUTH 87°26'08" EAST 14.40 FEET); THENCE 3) SOUTH 58°45'13" EAST 29.81 FEET; THENCE SOUTH 16°39'00" WEST 97.03 FEET TO THE POINT OF BEGINNING.

CONTAINS 4,965 SQUARE FEET (0.114 ACRE), MORE OR LESS.

The approximate location of the Easement is shown in Exhibit A, attached.

2. Landowners' Use of Land Subject to the Easement. Landowners may utilize the land that is subject to the Easement for the following:

(a) landscaping, including edging, gardening, planter boxes, free-sitting pavers, organic or gravel mulch, shrubs (defined as a several-stemmed woody plant and which does not include trees) which must be kept at a height and size so as not to impede the District's ability to reasonably visually inspect the SLAR from outside the easement, ~~less than four feet tall when mature~~, landscape rock no greater than 36 inches in any direction, irrigation systems with a quickly accessible shutoff valve outside the Easement, and turf;

(b) above-ground trampolines, swing sets, and similar play sets, and picnic chairs and tables that can be quickly removed without excavation and without mechanized equipment;

(c) non-masonry fencing, so long as the fencing provides reasonable and efficient access to the Easement, including gates to allow access to any portion of the Easement that is not otherwise accessible. If the gate is to be locked, it shall have the ability to install a District lock for District access;

(d) unreinforced concrete, asphalt or other unreinforced paving or flatwork;

(e) unreinforced curbing, gutters;

(f) road base or gravel driveways or walkways;

(g) one single-pole mailbox if on frontage of property;

(h) not more than one shed for gardening, storage, or small animal husbandry. The shed shall be no larger than 120 square feet in footprint, constructed on skids, without attachment to the ground or utilities, and capable of being dragged off the Easement with not more than a small mini excavator; and

(i) buried utilities, so long as any new crossing of the Easement is perpendicular to the SLAR at 90 degrees whenever practicable and not less than 60 degrees, maintains at least 18 inches of clearance from the SLAR, and has a metallic location strip. Any metal pipe or high voltage power lines in close proximity to the SLAR must have appropriate corrosion protection measures that provide protection of the SLAR.

Landowners shall not place any other structures or improvements of any nature within the Easement or make any material changes to the ground elevation within the Easement without the prior written consent of the District, which consent shall not be withheld unless, in the District's good faith judgment, the proposed structure, improvement ground elevation change may present risk to the SLAR, or may make the District's enjoyment of the Easement more expensive or more time consuming. Overhangs, footings, and foundations are prohibited.

Upon notice from the District that is reasonable under the circumstances, Landowners shall remove any above-ground trampolines, swing sets, similar play sets; picnic chairs and tables; and shed from the Easement. Landowners shall be responsible for storing such improvements outside of the Easement during the District's work within the Easement. In the event Landowners do not remove such improvements within the time identified by the District, the District or its contractors may do so. The District or its contractors shall have no obligation to maintain or store the improvements or restore them on the Parcel following the work, and shall not be liable for any damages associated with the removal of such improvements.

All uses of the land subject to the Easement shall be consistent with all applicable federal, state, and local statutes, regulations, ordinances, common law, and restrictive covenants, recorded declarations, and homeowner association rules.

No hazardous substances or substances of concern as defined by any applicable federal, state, or local statute, rule, or ordinance shall be stored on the land subject to the Easement. The use of such substances on or in close proximity to the land subject to the Easement shall be consistent with the manufacturer's instructions.

Landowners shall act reasonably to prevent the violation of these requirements by guests, family members, tenants, lessees, agents, employees, contractors, and others allowed to use the Parcel.

3. The District's Right to Correct. The District shall have the right to remove, haul off, and discard or destroy any use, structure, or improvement not expressly allowed under the terms of this Agreement if Landowners fail to do so after notice of non-conformity for a period of ~~time that is reasonable under the circumstances (not to exceed 30 days)~~thirty days unless a shorter period is required because the non-conforming use, structure, or improvement threatens immediate harm to the District's infrastructure or because of an immediate need to access the SLAR to make an emergency repair to the SLAR. Landowners shall reimburse the District for all reasonable costs of any such removal, hauling off, and disposition as provided in Paragraph 5.

4. The District's Restoration Obligations. In the event use of the Easement by the District or its employees or contractors causes material damage to the land subject to the Easement, the District shall, at its sole expense:

(a) refill and reshape and compact as reasonable all excavations;

(b) remove excess materials; sort, grade, and replace topsoil; and

(c) restore any landscaping (except that plants, including shrubs, may be immature and a similar, not necessarily the same, genus and species), irrigation systems, flatwork, fencing, curb, gutter, walkways, driveways, mailbox, and utilities in the affected area that are consistent with this Agreement to a reasonably similar pre-work condition at District's sole expense.

The District shall restore any other structures or improvements that were previously approved in writing by the District, consistent with the terms of the written approvals for the same.

Such restoration by the District shall be performed reasonably promptly as weather allows such work to be accomplished efficiently.

5. Reimbursement of the District. In the event that Landowners are required to reimburse the District for costs pursuant to this Agreement, Landowners shall reimburse the

District for all costs reasonably incurred by the District within 90 days of mailing of an itemized invoice from the District for such costs. After 90 days following mailing of an invoice, all amounts due to the District will accrue interest at a rate of 10% annually, compounded annually. If any amounts remain payable to the District after 120 days following mailing of an invoice, Landowners agree to have entered against them personally a Confession of Judgment for the full amount owing plus interest in the Third Judicial District Court, Salt Lake County, State of Utah. ~~If any amounts remain payable to the District after 120 days following mailing of an invoice, the District may perfect a lien on the Parcel for the amounts owed the District, together with interest and costs of foreclosure, by making a reasonable attempt to contact Landowners to discuss the matter, followed by recording a Notice of Lien referencing this paragraph and the amount of the lien. The District will mail a copy of the recorded Notice of Lien to Landowners. Such a lien may be foreclosed in the same manner as a mortgage.~~

6. Notice. Any notice required by this Agreement will be deemed given when mailed or delivered to:

To the District:	To Landowners:
Metropolitan Water District of Salt Lake & Sandy ATTN: General Manager 3430 East Danish Road Cottonwood Heights, UT 84093	Amelia Anne Allmark and Briant Johnson, or current resident 3298 E Antler Way Cottonwood Heights, UT 84121

7. General.

(a) Specific Performance. The parties are entitled to the remedies of specific performance and/or injunctive relief for any breach of this Agreement that is not cured after notice of breach that is reasonable under the circumstances.

(b) Changes in Writing. This Agreement and any of its terms may only be modified, waived, or terminated by a written instrument properly executed by both parties.

(c) Authority. Persons signing this Agreement on behalf of any entity represent and warrant that they have full authority to enter into this Agreement for and on behalf of the entity for which they are signing. Landowners represent and warrant that [they are the only owners of the Parcel, that no other person or entity claims any ownership interest in or to the Parcel, that they are duly authorized and empowered to sign this Agreement as it impacts the Parcel, and that no signature of any other person or entity is necessary to make this Agreement fully effective.

(d) Agreement binding on successors and assigns. The rights and obligations of this Agreement shall run to the benefit of, and be binding upon, the successors and assigns of the parties. In particular, all rights and obligations of Landowners under this Agreement shall run with the Parcel and any portion thereof.

(e) Delay in Asserting Rights Will Not Constitute a Waiver. No delay of either party in asserting rights under this Agreement will constitute a waiver in whole or in part.

(f) No Impact to the Rights of Thirds Parties, if Any. Nothing in this Agreement is intended to, or should be interpreted to, affect the existing rights of third parties, if any, relating to the Parcel.

(g) No Intended Third Party Beneficiaries. Nothing in this Agreement is intended to benefit third parties or give them any interests, rights, claims, or causes of action.

(h) Entire Agreement. This Agreement contains the entire agreement of the parties regarding the Easement as it may impact the Parcel, and this Agreement supersedes all prior agreements, negotiations, and understandings between the parties regarding that topic.

(i) Existing SLA Easement. Any existing SLA easement that may impact the Parcel is not intended to be modified in any respect.

(j) Counterparts. This Agreement may be executed in counterparts.

DISTRICT:

DATED this ___ day of _____, 2024.

METROPOLITAN WATER DISTRICT
OF SALT LAKE & SANDY

By: _____
Annalee Munsey
General Manager

STATE OF UTAH)
: ss.
COUNTY OF SALT LAKE)

On the ___ day of _____, 2024, Annalee Munsey personally appeared before me, and having been first duly sworn by me acknowledged that she is the General Manager of the Metropolitan Water District of Salt Lake & Sandy, that she is duly authorized to sign the foregoing Easement Agreement on behalf of the Metropolitan Water District of Salt Lake & Sandy and that she signed the same on behalf of the Metropolitan Water District of Salt Lake & Sandy.

_____
NOTARY PUBLIC

LANDOWNERS:

DATED this ___ day of _____, 2024.

By: _____
Amelia Anne Allmark

DATED this ___ day of _____, 2024.

By: _____
Briant Johnson

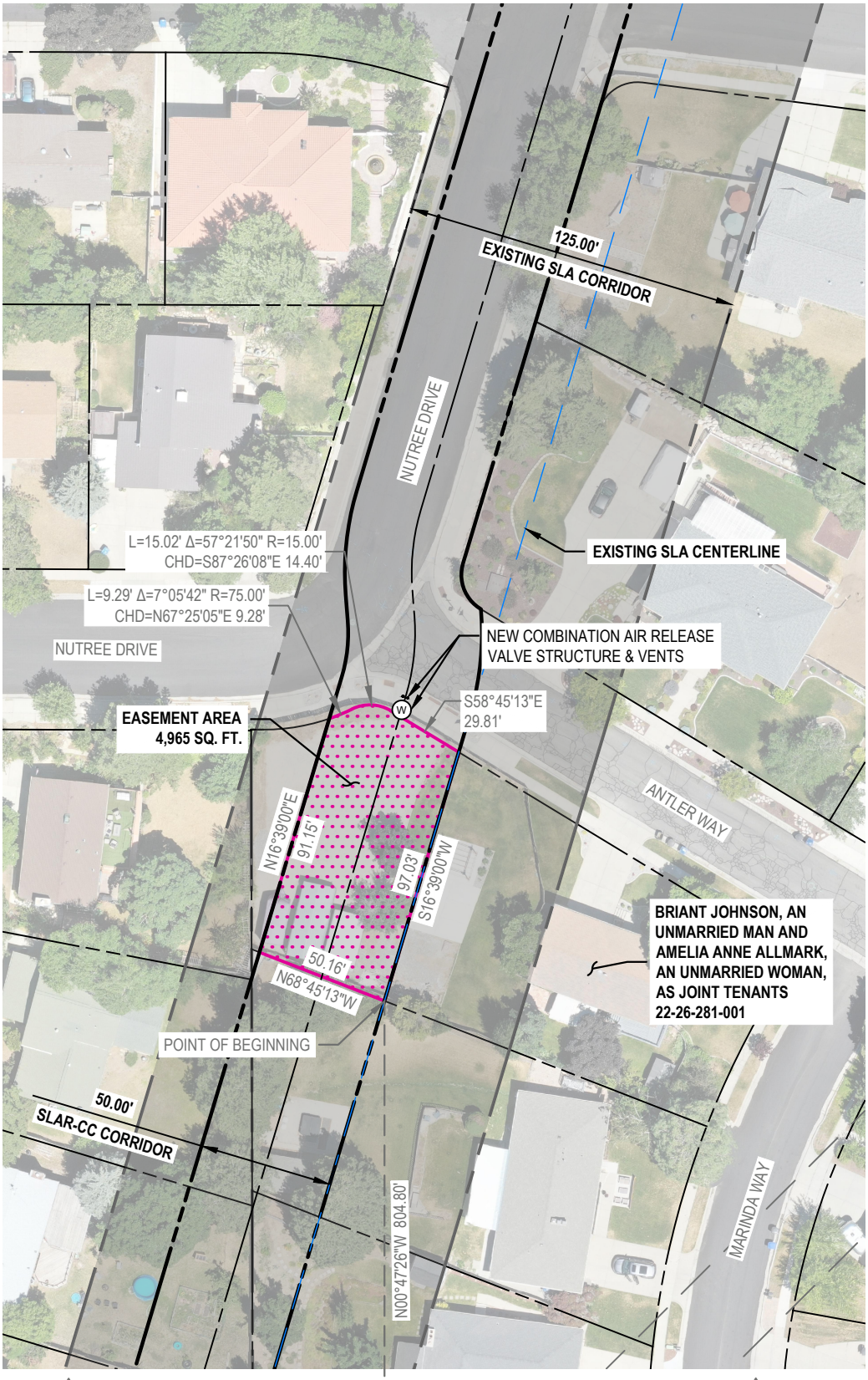
STATE OF UTAH)
: ss.
COUNTY OF SALT LAKE)

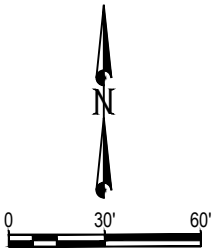
On the ____day of _____, 2024, Amelia Anne Allmark and Briant Johnson, the Landowners in the foregoing Easement Agreement, personally appeared before me, and having been duly sworn, acknowledged that they executed the same.

_____
NOTARY PUBLIC

<u>ЕХНІВІТ A</u>

(Easement)





PERPETUAL EASEMENT DESCRIPTION

A FIFTY FOOT WIDE PERPETUAL EASEMENT FOR A WATERLINE LYING WITHIN THE EXISTING METROPOLITAN WATER DISTRICT OF SALT LAKE AND SANDY AQUEDUCT EASEMENT AND BEING A PORTION OF THE BRIANT JOHNSON, AN UNMARRIED MAN AND AMELIA ANNE ALLMARK, AN UNMARRIED WOMAN, AS JOINT TENANTS (GRANTORS) PROPERTY, APN 22-26-281-001, BEING A PORTION OF LOT 37, REINDEER HILLS NO. 2 SUBDIVISION, RECORDED MARCH 9, 1973, FILE NO. NN-40, SALT LAKE COUNTY RECORDS, AND LOCATED IN THE NORTHEAST QUARTER OF SECTION 26, TOWNSHIP 2 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTHERLY LINE OF THE GRANTORS' PROPERTY, WHICH POINT LIES SOUTH 89°12'34" WEST ALONG THE QUARTER SECTION LINE 1277.84 FEET AND NORTH 00°47'26" WEST 804.80 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION 26; AND RUNNING THENCE ALONG SAID SOUTHERLY LINE NORTH 68°45'13" WEST 50.16 FEET; THENCE NORTH 16°39'00" EAST 91.15 FEET TO A POINT ON THE NORTHERLY LINE OF THE GRANTORS' PROPERTY AND POINT ON A 75.00 FOOT RADIUS CURVE TO THE LEFT; THENCE ALONG SAID NORTHERLY LINE THE FOLLOWING THREE (3) COURSES: 1) NORTHEASTERLY 9.29 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 07°05'42" (CHORD BEARS NORTH 67°25'05" EAST 9.28 FEET) TO A POINT OF REVERSE CURVATURE OF A 15.00 FOOT RADIUS CURVE TO THE RIGHT; THENCE 2) EASTERLY 15.02 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 57°21'50" (CHORD BEARS SOUTH 87°26'08" EAST 14.40 FEET); THENCE 3) SOUTH 58°45'13" EAST 29.81 FEET; THENCE SOUTH 16°39'00" WEST 97.03 FEET TO THE POINT OF BEGINNING.

CONTAINS 4,965 SQUARE FEET (0.114 ACRE), MORE OR LESS.

LEGEND	
SLA	EXISTING SALT LAKE AQUEDUCT
SLAR-CC	NEW SALT LAKE AQUEDUCT REPLACEMENT - COTTONWOODS CONNECTION PIPELINE
	PROPERTY BOUNDARY
	SLA CORRIDOR
	SLA APPROXIMATE CENTERLINE
	SLAR-CC CORRIDOR
	SLAR-CC APPROXIMATE CENTERLINE
	REQUIRED PERMANENT EASEMENT

CRS ENGINEERS
Answers to Infrastructure®
4246 S Riverboat Rd, Ste 200 | Salt Lake City, UT 84123 | P: 801.359.5565 | www.crsengineers.com

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY
SLAR-CC EASEMENT
APN 22-26-281-001
BRIANT JOHNSON AND AMELIA ANNE ALLMARK, JOINT TENANTS
3298 ANTLER WAY
COTTONWOOD HEIGHTS, UTAH

PROJECT NUMBER 2022-0037
SHEET 1 OF 1
SHEET NUMBER EXHIBIT A

BP069

When Recorded Return to:
Metropolitan Water District of Salt Lake & Sandy
Attn: General Manager
3430 East Danish Road
Cottonwood Heights, Utah 84093-2139

Application No.: _____
Version: 08-29-22

PARCEL NO.: 22-26-281-001-0000

COOPERATION AGREEMENT FOR NON-DISTRICT USE OF DISTRICT LANDS AND INTEREST IN LANDS

(SLAR)

THIS COOPERATION AGREEMENT ("Agreement") is entered into effective this _____ day of _____, 20___, between Metropolitan Water District of Salt Lake & Sandy ("District") and AMELIA ANNE ALLMARK and BRIANT JOHNSON, 3298 E Antler Way, Cottonwood Heights City, Utah (collectively "Applicant"). AMELIA ANNE ALLMARK and BRIANT JOHNSON shall be jointly and severally responsible to the District under this Agreement.

AGREEMENT PURPOSES

District is constructing the Cottonwoods Connection project ("Project"), which includes large water pipelines (with associated improvements, including all manner of works, equipment, facilities and infrastructure) that will reach from a point near the mouth of Big Cottonwood Canyon to the District's Little Cottonwood Water Treatment Plant located near Little Cottonwood Creek. The Project includes an aqueduct being referred to as the Salt Lake Aqueduct Replacement ("SLAR") that will mostly be constructed parallel to and relatively near the existing Salt Lake Aqueduct ("SLA"). District is a political subdivision of the State of Utah responsible for transporting and treating public water, and as such District is engaged in protecting the SLA, SLAR, SLA and SLAR Corridors, District improvements and operations, and District water.

Applicant has entered an Easement Agreement granting District an Easement for the SLAR Corridor. Under that Easement Agreement, the placement of any structures or improvements not provided for under the Easement Agreement requires the prior written consent of the District, which consent shall not be withheld unless, in the District's good faith judgment, the proposed structure, improvement, or ground elevation change may present risk to the SLAR, or may make the District's enjoyment of the Easement more expensive or more time consuming. The Easement Agreement prohibits overhangs, footings, and foundations.

Applicant has requested permission for the non-exclusive use described below of that portion of the SLAR Corridor also described below, which overlaps the SLA Corridor. Although the use described below is not authorized by the Easement Agreement and generally would not be

approved for the SLAR, District is willing to permit the described use of the described portion of the SLAR Corridor, given that use predated acquisition of the Easement. It does so without representation or warranty whatsoever. Without intending to limit the scope of the immediately preceding disclaimer of **all** warranties, District specifically disclaims any representation or warranty of title, and any representation or warranty regarding the condition or fitness of the SLAR Corridor for the intended use by Applicant.

This Agreement is intended to document the fact that Applicant's described use of the described portion of the SLAR Corridor is acceptable to District and consistent with District policies. Applicable District policies are available to Applicant for review.

This Agreement grants a non-exclusive right to Applicant for only those uses of the SLAR Corridor described herein. District has no authority to grant Applicant any right of use that is valid as against others who have title interests in the SLAR Corridor lands in question, and this Agreement does not purport to do so. Nor does this Agreement purport to satisfy any legal requirement other than District policies. Applicant is solely responsible to obtain and maintain all other required agreements, permits, licenses, etc., including any necessary planning or zoning approvals. District has not agreed to provide any assistance to Applicant in understanding or meeting these other requirements.

AGREEMENT TERMS AND CONDITIONS

The parties agree as follows:

I. APPLICANT'S USE OF SLAR CORRIDOR.

Notwithstanding anything written in this Agreement, no permission is intended to be given to: 1) adversely impact in any respect District improvements; or 2) introduce any substance into District improvements or water; or 3) adversely impact in any respect District's operations.

(A) Description of Applicant's Use of SLAR Corridor:

Applicant may utilize the SLAR Corridor for no more than two carports on wheels or skids, as shown in Exhibit A. Upon notice from the District that is reasonable under the circumstances, Applicant shall remove the carports from the SLAR Corridor. Applicant shall be responsible for storing such improvements outside of the SLAR Corridor during the District's work within the SLAR Corridor. In the event Applicant does not remove the carport(s) and the contents of the carport(s) within the time identified by the District, the District or its contractors may do so. The District or its contractors shall have no obligation to maintain or store the carports or restore them following the work, and shall not be liable for any damages associated with the removal of the carports.

(B) Term:

This Agreement shall remain in effect so long as one or both Amelia Anne Allmark and Briant Johnson, individually or as trustees of a trust in which one or both is a beneficiary, owns

the property described in Article I, Section (E). This Agreement shall terminate upon transfer of the property described in Article I, Section (E) to a third-party.

(C) Location by Stationing:

Approximate SLAR Station 125+50 to 126+50.

(D) Legal Description of SLAR Corridor Lands Applicant Will Be Using:

BEGINNING AT A POINT ON THE SOUTHERLY LINE OF LOT 37, REINDEER HILLS #2 SUBDIVISION, WHICH POINT LIES SOUTH 89°12'34" WEST ALONG THE QUARTER SECTION LINE 1277.84 FEET AND NORTH 00°47'26" WEST 804.80 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION 26; AND RUNNING THENCE ALONG SAID SOUTHERLY LINE NORTH 68°45'13" WEST 50.16 FEET; THENCE NORTH 16°39'00" EAST 91.15 FEET TO A POINT ON THE NORTHERLY LINE OF SAID LOT 37 AND POINT ON A 75.00 FOOT RADIUS CURVE TO THE LEFT; THENCE ALONG SAID NORTHERLY LINE THE FOLLOWING THREE (3) COURSES: 1) NORTHEASTERLY 9.29 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 07°05'42" (CHORD BEARS NORTH 67°25'05" EAST 9.28 FEET) TO A POINT OF REVERSE CURVATURE OF A 15.00 FOOT RADIUS CURVE TO THE RIGHT; THENCE 2) EASTERLY 15.02 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 57°21'50" (CHORD BEARS SOUTH 87°26'08" EAST 14.40 FEET); THENCE 3) SOUTH 58°45'13" EAST 29.81 FEET; THENCE SOUTH 16°39'00" WEST 97.03 FEET TO THE POINT OF BEGINNING.

CONTAINS 4,965 SQUARE FEET (0.114 ACRE), MORE OR LESS.

(E) Legal Description of Applicant's Property Benefited by this Agreement to Which the Rights and Responsibilities of Applicant Shall Run:

Lot 37 of the Reindeer Hills #2 Subdivision according to the official plat thereof recorded with the Salt Lake County Recorder's office, which has a street address of 3298 E Antler Way, Cottonwood Heights City, Utah, and has been assigned by Salt Lake County the parcel number of 22-26-281-001-0000.

(F) Plans, Drawings, Maps, Plats, etc. Attached and Incorporated Into This Agreement:

Exhibit A

II. REIMBURSEMENT OF COSTS.

In the event that Applicant is required to reimburse District for costs pursuant to this Agreement, Applicant shall reimburse District for all costs reasonably incurred by District within 90 days of mailing of an itemized invoice from District for such costs. After 90 days following

mailing of an invoice, all amounts due to District will accrue interest at a rate of 10% annually, compounded annually. If any amounts remain payable to the District after 120 days following mailing of an invoice, Applicant agrees to have entered against them personally a Confession of Judgment for the full amount owing plus interest in the Third Judicial District Court, Salt Lake County, State of Utah.

III. WORK.

(A) Applicant warrants and agrees that no earthwork, construction work or other work performed by or for Applicant on the SLAR Corridor will take place except as expressly described in plans and specifications approved in writing by District. Any modifications to such plans and specifications must be approved in writing by District.

(B) Applicant warrants that all earthwork, construction work and other work will:

(i) strictly comply with plans and specifications approved in writing by District;

(ii) meet or exceed all applicable codes, ordinances, other legal requirements, and all applicable generally recognized written trade and industry standards and recommendations;

(iii) be performed by skilled, experienced, competent and properly licensed contractors and workers;

(iv) be conducted in a timely, careful, safe, workmanlike and professional manner;

(v) be conducted so as not to damage District improvements;

(vi) be consistent with *District Standard Specifications*, as they may from time to time change. *District Standard Specifications* are available to Applicant for review, and are incorporated herein by reference.

(C) District shall have the right, but no obligation, to inspect the progress of the work or to inspect materials at all times. District may also reasonably require inspection or testing by others of any work or materials. District shall have the right to stop work and require correction of any work, or replacement of any materials, which does not comply with any term or condition of this Agreement. If, after notice from District which is reasonable under the circumstances, Applicant fails to remove or correct unacceptable work or materials, correction or removal of unacceptable work or materials may be accomplished by District, or its contractor, and Applicant shall reimburse District as described in Article II. District shall have no obligation whatsoever to review or supervise the method or manner in which the work is accomplished. District shall have no obligation whatsoever for the safety of workers or others on or adjacent to the job site. No approval, observation, inspection or review undertaken by District is intended to be for the benefit

of Applicant, its contractors, suppliers, subcontractors, or their respective employees. Unless expressly stated in writing, any approval, observation, inspection or review by District shall not constitute an acceptance of work or materials that do not comply with the approved plans or specifications or this Agreement.

IV. MAINTENANCE OF APPLICANT'S IMPROVEMENTS.

(A) Applicant's improvements on the SLAR Corridor under this Agreement, or close enough to the SLAR Corridor to present risk to District improvements or operations, shall be maintained in a condition which:

(i) does not interfere with the ability of District to use, operate, repair, reconstruct, maintain, improve or modify the SLAR, SLAR Corridor or any District improvements for District's purposes, as those purposes may from time to time change;

(ii) is reasonably safe and attractive;

(iii) complies with all applicable codes, ordinances, other legal requirements, as well as generally recognized written trade and industry standards and recommendations; and

(iv) complies with all applicable written policies of District including, but not limited to, *District Policies and Procedures* and *District Standard Specifications* as those policies and specifications may change from time to time.

(B) District may from time to time and as is reasonable have any or all of Applicant's improvements which are on the SLAR Corridor inspected by qualified professionals.

(C) If after notice from District that is reasonable under the circumstances, Applicant fails to correct any unacceptable condition of any of Applicant's improvements on the SLAR Corridor, or close enough to the SLAR Corridor to present risk to District improvements or operations, correction may be accomplished by District, and Applicant shall reimburse District as described in Article II above.

V. RIGHTS RESERVED.

(A) Any and all rights of Applicant under the terms of this Agreement shall be limited by, subject to, and subordinate to, any and all rights of District and District Trustees, employees, agents, and permittees to enjoy, manage, supervise, use, operate, occupy, enter, exit, inspect, repair, maintain, replace, improve or modify the SLAR Corridor and any District improvements or operations. To the extent Applicant's use of the SLAR Corridor increases the cost of District's exercise of its rights, Applicant may be required to reimburse the District as described in Article II above.

(B) District will make reasonable efforts to provide reasonable advance notice to Applicant of any work District reasonably recognizes as materially adverse to Applicant's

authorized use of the SLAR Corridor. District may implement electronic notice procedures. Applicant will be responsible to timely provide District with current contact information. Applicant accepts all risks that any or all of Applicant's improvements installed on the SLAR Corridor may be modified, destroyed or reconstructed at Applicant's sole cost and expense to accommodate District's exercise of District rights to use the SLAR Corridor. This provision is not intended to provide District with new or additional property rights to use the SLAR Corridor.

(C) District reserves the right to issue additional licenses or permits for uses of the SLAR Corridor. District will not provide a conflicting license without a finding that doing so is necessary for public purpose after reasonable efforts to notify the Applicant. District will make reasonable efforts to provide advance notice that is reasonable under the circumstances to Applicant of additional licenses that District reasonably recognizes may be temporarily or permanently disruptive to Applicant's authorized use of the SLAR Corridor. District may implement electronic notice procedures. It is acknowledged that District claims no right to grant permission for uses of the SLAR Corridor except as to District's interests in the SLAR Corridor. For example, where District holds only an easement for the SLAR, District could not grant permission for uses by others that would be effective as to the fee title holder. This provision is not intended to provide District with new or additional property rights for licensing third party uses of the SLAR Corridor.

(D) District and its officers, Trustees, employees and contractors shall have no liability for any damage to, or interference with Applicant's works or improvements as a result of the exercise by District of any of its rights.

(E) All reservations of rights by District under this Agreement are in addition to any and all other rights which District may have by operation of law or otherwise.

VII. CONTRACTORS, INSURANCE, BONDS. Applicant shall be jointly and severally liable for any act, fault, error, omission or non-compliance with this Agreement by Applicant or any of Applicant's contractors, employees or subcontractors. Applicant warrants that all persons or entities performing earthwork or construction work on the SLA Corridor on behalf of Applicant will provide insurance and bonds in strict compliance with Exhibit B attached hereto and incorporated herein.

VIII. DEFENSE, INDEMNITY.

Applicant shall defend, indemnify and hold District and its officers, trustees and employees harmless, including costs and attorneys' fees, from any claim, demand, action or cause of action: (i) alleging that District was at fault in allowing Applicant's use of the SLAR Corridor under this Agreement; or (ii) alleging that District was at fault in failing to supervise, inspect, direct, instruct, warn or otherwise manage or control Applicant's use of the SLAR Corridor under this Agreement, or (iii) alleging that District knew of, should have known of, or had constructive knowledge of a dangerous condition created by Applicant or any employee, agent or contractor of Applicant; or (iv) alleging District is vicariously liable for acts or omissions of Applicant or any employee, agent or contractor of Applicant (under the Peculiar Risk Doctrine or otherwise), or (v) challenging in any manner Applicant's use of the SLAR Corridor under this Agreement. This defense and

indemnity obligation is not intended to hold District or its officers, trustees, or employees harmless from any claim that is not derivative of Applicant's use of the SLAR Corridor. In no event shall any fault of Applicant or Applicant's employees or contractors be reapportioned to District, its officers, trustees or employees. Applicant shall indemnify and hold District and its officers, trustees and employees harmless from any such reapportionment of fault. The described duty to defend and indemnify is not intended to run to the benefit of any District liability insurer to the extent such insurer would be responsible for defense costs or indemnity beyond District's deductible or self-insured retention.

IX. TERMINATION.

(A) Applicant's right to use the SLAR Corridor under this Agreement shall expire completely as described in Article I above, absent a new agreement or written extension signed by both parties.

(B) Should District reasonably determine Applicant is in breach of any of the terms and conditions of this Agreement, and if Applicant has not made diligent progress toward correcting that breach within a time set by District and reasonable under the circumstances, after Applicant receives written notice describing the breach and time for correction, then this Agreement may be terminated by District.

(C) The following, as described in this Agreement, shall survive any termination of this Agreement:

(i) All of Applicant's obligations to reimburse any costs incurred by the District;

(ii) All of Applicant's obligations to remove Applicant's improvements and make restoration;

(iii) All of Applicant's obligations to defend and indemnify District and its officer, trustees and employees, as described in this Agreement; and

(iv) All provisions regarding remedies, and limitations of warranties or representations.

(D) Notwithstanding termination, Applicant's use of the SLAR Corridor following termination shall not be considered adverse and shall not cause any adverse possessory right or prescriptive right of Applicant to begin to accrue.

X. REMOVAL OF FACILITIES.

District will reasonably determine what portion of Applicant's improvements, if any, on the SLAR Corridor under this Agreement will be removed upon termination of this Agreement and set a deadline and specifications for removal and restoration. Such removal and restoration will be at the sole expense of the Applicant.

XI. REMEDIES.

(A) Applicant will first submit any claim or dispute to the authorized District representative. If the matter is not resolved satisfactorily, Applicant may submit the dispute or claim in concise written form with any supporting documentation to District's Board of Trustees, or committee assigned by the Board to hear the matter. If the matter is not resolved satisfactorily the dispute or claim will be submitted to non-binding mediation, with a qualified mediator selected by the parties, with each party sharing the cost of that non-binding mediation. After and only if these processes are first followed and Applicant's dispute or claim remains unresolved, an action may be brought in the Third Judicial District Court of the State of Utah In and For Salt Lake County. Under no circumstances shall District or its officers, trustees or employees be liable for any consequential damages resulting from interruption of Applicant's use of the SLAR Corridor.

(B) If improvements are to be removed from the SLAR Corridor by Applicant and are not removed timely as described in this Agreement, or items are prohibited under the terms of this Agreement or District policies, District may, , remove and dispose of such items from the SLAR Corridor, or hire a contractor to do the same, and send Applicant an invoice for the reasonable out of pocket costs of such removal and disposal, to be paid as described in Article II of this Agreement, after giving Applicant sixty (60) days written notice or shorter notice if the improvements threaten immediate harm to the District's infrastructure or because of an immediate need to access the SLAR to make an emergency repair to the SLAR.

XII. PRESUMPTION.

As against the Applicant, any calculation, determination or interpretation made by District in good faith with respect to this Agreement shall be *prima facia* correct, subject to rebuttal by a preponderance of the evidence.

XII. SUCCESSORS, ASSIGNS.

Applicant's rights and obligation may not be assigned or transferred without the prior written consent of District, which District is under no obligation to give. Any bankruptcy filing by Applicant, other purported assignment by operation of law, or appointment of a receiver, shall be grounds for immediate termination of this Agreement. Any attempt to assign without the prior written consent of District shall be considered null and void and shall be grounds for immediate termination of this Agreement.

XIV. AUTHORITY.

The person(s) signing this instrument represents and warrants that they have been duly authorized to execute this Agreement on behalf of the Applicant. Those signing as or on behalf of the Applicant represent and warrant that they are duly authorized to sign on behalf of all those persons claiming an interest in the property described in Article I, Section (E) above.

XV. NO WARRANTY.

(A) District makes no warranty or representation, either express or implied, as to the extent or validity of any grant or license contained in this Agreement.

(B) District makes no warranty or representation as to the condition of the SLAR Corridor or any District improvements, or the fitness or compatibility of any of the same for use as described by Applicant.

XVI. COMPLIANCE WITH APPLICABLE LAWS.

Applicant shall strictly comply with all applicable Federal, State, and local statutes, rules, regulations, codes, ordinances and other laws.

XVII. NOTICES.

Any notice required by this Agreement shall be deemed given when mailed or delivered to:

Metropolitan Water District of Salt Lake & Sandy
Attn: General Manager
3430 East Danish Road
Cottonwood Heights, Utah 84093
Phone: (801) 942-1391
Email: rightsofway@mwdsls.org

Amelia Anne Allmark and Briant Johnson, or current resident
3298 E Antler Way
Cottonwood Heights, Utah 84121
Phone:
Email:

Each party may change the designation of the addressee or the address for that party to receive notice by sending written notice of the change.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first above written.

DISTRICT:

METROPOLITAN WATER DISTRICT
OF SALT LAKE & SANDY

_____
Annalee Munsey, General Manager

STATE OF UTAH)
: ss.
COUNTY OF SALT LAKE)

On the ___ day of _____, 2024, personally appeared before me Annalee Munsey, and having been first duly sworn by me acknowledged that she is the General Manager of the Metropolitan Water District of Salt Lake & Sandy, that she was duly authorized by the Board of Trustees of the Metropolitan Water District of Salt Lake & Sandy to execute the above Cooperation Agreement for and on behalf of the Metropolitan Water District of Salt Lake & Sandy, and that she executed the above Cooperation Agreement on behalf of the Metropolitan Water District of Salt Lake & Sandy.

_____
NOTARY PUBLIC

APPLICANTS:

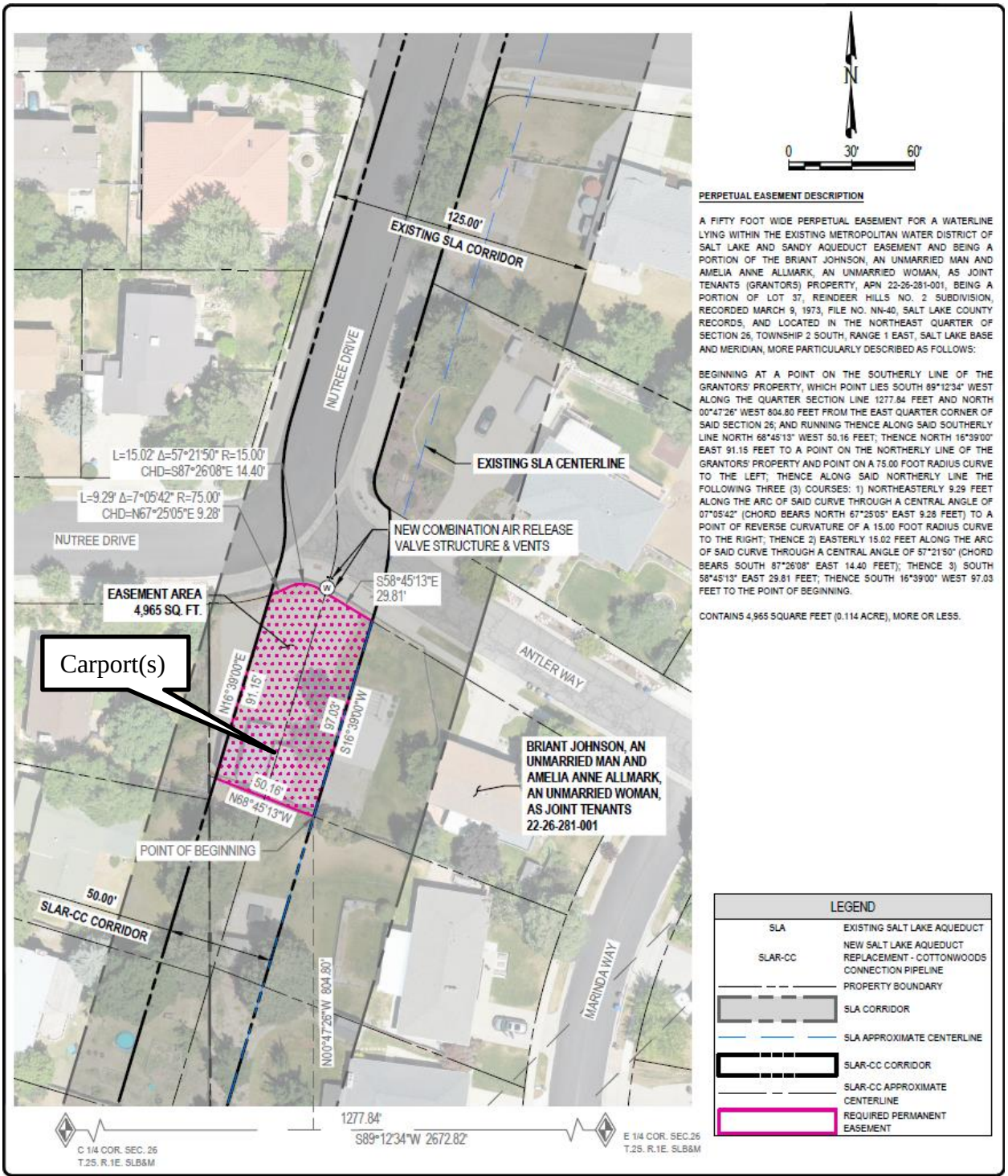
_____
Amelia Anne Allmark

_____
Briant Johnson

STATE OF UTAH)
: ss.
COUNTY OF SALT LAKE CITY)

On the ___ day of _____, 2024, personally appeared before me Amelia Anne Allmark and Briant Johnson, the Applicants in the foregoing Cooperation Agreement, and having been duly sworn, acknowledge that they executed the same.

_____
NOTARY PUBLIC



PERPETUAL EASEMENT DESCRIPTION

A FIFTY FOOT WIDE PERPETUAL EASEMENT FOR A WATERLINE LYING WITHIN THE EXISTING METROPOLITAN WATER DISTRICT OF SALT LAKE AND SANDY AQUEDUCT EASEMENT AND BEING A PORTION OF THE BRIANT JOHNSON, AN UNMARRIED MAN AND AMELIA ANNE ALLMARK, AN UNMARRIED WOMAN, AS JOINT TENANTS (GRANTORS) PROPERTY, APN 22-26-281-001, BEING A PORTION OF LOT 37, REINDEER HILLS NO. 2 SUBDIVISION, RECORDED MARCH 9, 1973, FILE NO. NN-40, SALT LAKE COUNTY RECORDS, AND LOCATED IN THE NORTHEAST QUARTER OF SECTION 26, TOWNSHIP 2 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTHERLY LINE OF THE GRANTORS' PROPERTY, WHICH POINT LIES SOUTH 89°12'34" WEST ALONG THE QUARTER SECTION LINE 1277.84 FEET AND NORTH 00°47'26" WEST 804.80 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION 26; AND RUNNING THENCE ALONG SAID SOUTHERLY LINE NORTH 68°45'13" WEST 50.16 FEET; THENCE NORTH 16°39'00" EAST 91.15 FEET TO A POINT ON THE NORTHERLY LINE OF THE GRANTORS' PROPERTY AND POINT ON A 75.00 FOOT RADIUS CURVE TO THE LEFT; THENCE ALONG SAID NORTHERLY LINE THE FOLLOWING THREE (3) COURSES: 1) NORTHEASTERLY 9.29 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 07°05'42" (CHORD BEARS NORTH 67°25'05" EAST 9.28 FEET) TO A POINT OF REVERSE CURVATURE OF A 15.00 FOOT RADIUS CURVE TO THE RIGHT; THENCE 2) EASTERLY 15.02 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 57°21'50" (CHORD BEARS SOUTH 87°26'08" EAST 14.40 FEET); THENCE 3) SOUTH 58°45'13" EAST 29.81 FEET; THENCE SOUTH 16°39'00" WEST 97.03 FEET TO THE POINT OF BEGINNING.

CONTAINS 4,965 SQUARE FEET (0.114 ACRE), MORE OR LESS.

LEGEND	
SLA	EXISTING SALT LAKE AQUEDUCT
SLAR-CC	NEW SALT LAKE AQUEDUCT REPLACEMENT - COTTONWOODS CONNECTION PIPELINE
	PROPERTY BOUNDARY
	SLA CORRIDOR
	SLA APPROXIMATE CENTERLINE
	SLAR-CC CORRIDOR
	SLAR-CC APPROXIMATE CENTERLINE
	REQUIRED PERMANENT EASEMENT

CRS ENGINEERS
Answers to Infrastructure®
4246 S Riverboat Rd, Ste 200 | Salt Lake City, UT 84123 | P: 801.359.5565 | www.crsengineers.com

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY
SLAR-CC EASEMENT
APN 22-26-281-001
BRIANT JOHNSON AND AMELIA ANNE ALLMARK, JOINT TENANTS
3298 ANTLER WAY
COTTONWOOD HEIGHTS, UTAH

PROJECT NUMBER: 2022-0037
SHEET 1 OF 1
SHEET NAME: EXHIBIT A

EXHIBIT B

INSURANCE AND BOND REQUIREMENTS FOR PARTIES ENTERING INTO AGREEMENTS WITH METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY

Last Update: August 8, 2023

Applicant's contractors and subcontractors shall maintain, at no cost to the District, the following insurance, and provide evidence of compliance satisfactory to District.

A. MINIMUM LIMITS OF INSURANCE

Except as approved in writing by District in advance, Contractor and all of Contractor's subcontractors shall maintain limits no less than:

1. **GENERAL LIABILITY (including claims arising from: premises-operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract.):**
    i. Combined Single Limit (Bodily Injury and Property Damage):
        1. $2,000,000 Per Occurrence
    ii. Personal Injury (including completed operations and products liability):
        1. $2,000,000 Each Occurrence
    iii. General Aggregate:
        1. $3,000,000
    iv. Products - Comp/OP Aggregate:
        1. $3,000,000
    v. Limits to apply to this project individually.

2. **AUTOMOBILE LIABILITY**:
    i. $2,000,000 Per Occurrence
    ii. "Any Auto" coverage required.

3. **WORKERS' COMPENSATION and EMPLOYERS LIABILITY:**
    i. Workers' compensation statutory limits.
    ii. Employers Liability statutory limits.

4. **CONTRACTORS POLLUTION LIABILITY:**
    i. $1,000,000 Per Claim
    ii. $1,000,000 Aggregate
    iii. Coverage applies to this project individually.

B. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions (SIRs) must be declared to and approved by the District in writing. At the option of the District, either; the insurer may be required to reduce or eliminate such deductibles or SIRs as respects the District, its trustees, officers, and employees as additional insureds; or the Contractor may be required to procure a bond or other instrument guaranteeing payment of losses and related

investigations, claim distribution, and defense expenses of the District, its trustees, officers, and employees as additional insureds.

The District does not ordinarily approve deductibles in an amount exceeding 2.5% of the required minimum limits described above or $50,000, whichever is less. The District does not ordinarily approve SIRs in an amount exceeding 1.0% of the required minimum limits described above or $20,000, whichever is less. With respect to any deductible or SIR, the Contractor shall pay for costs related to losses, investigations, claim distribution, and defense expenses of the District, its trustees, officers, and employees as additional insureds that would otherwise be covered by an insurer under the coverages described in these insurance requirements if no deductible or SIR existed.

C. OTHER INSURANCE PROVISIONS

The General Liability, Automobile Liability, and Pollution Liability Coverages are to contain, or be endorsed to contain, the following provisions:

1. District, its trustees, officers, and employees are to be covered as additional insureds as respects: claims arising out of any activities conducted on District lands or interests in lands including products completed. The coverage shall contain no special limitations on the scope of protection afforded to District, its trustees, officers, and employees.

2. Additional insured coverage shall be on a primary basis for ongoing and completed work.

A waiver with respect to the District, its trustees, officers, and employees of Worker's Compensation subrogation shall be provided.

D. ACCEPTABILITY OF INSURERS

Insurance and bonds are to be placed with insurers admitted in the State of Utah with a Bests' rating of no less than A-, IX, and in the limits as listed in this document, unless approved in writing by the District.

E. APPLICANT STRICTLY LIABLE FOR COMPLIANCE OF CONTRACTORS

Applicant shall see that each of Applicant's contractors, and each of their subcontractors, complies with these insurance requirements, and Applicant shall be strictly liable for any failure of such contractors and subcontractors to meet these requirements.

F. PERFORMANCE AND PAYMENT BONDS

All persons and entities performing any work on District lands or District's interest in lands will provide performance and payment bonds for the full sum of their contracts, naming the District as co-obligee.

Metropolitan Water District of Salt Lake & Sandy
Board Meeting Information
Last Update: June 4, 2024

Agenda Item: Consider MAR SIBs and Site Infrastructure Change Order No. 2

Objective: Approve a change order for construction related to the Aquifer Storage and Recovery Pilot Testing and Phase 1 – SIBs and Infrastructure project.

Background: On June 12, 2023 the Board approved a contract for $5,550,687 to COP Construction to construct the surface infiltration basins and site infrastructure portion of the Aquifer Storage and Recovery Pilot Testing and Phase 1 project.

Well development finalized in February 2024 and led to the redesign of the electrical and piping systems at the well house. Cost and schedule changes resulting from the redesign are included with Change Order No. 2 in the amount of $62,913.99 and a contract completion date of July 25, 2025. In summary, the changes include

- Remobilization and redesign meetings,
- Concrete labor and material increases,
- Additional well house piping,
- Reduction in well pump size and VFD from 300HP to 60HP, and
- Reduction in the transformer from 500kV to 125kV.

The revised drawings, specifications, and an itemized cost breakdown is included in the attached change order. Note Change Order No. 1 was previously approved by the General Manager and represented a deduct of $11,727.75 from the project. If approved, this change order will represent a 0.92% cumulative change order increase to the project.

Committee Activity: The Engineering Committee discussed this item on June 4, 2024. The committee recommends to approve Change Order No. 2 as described.

Suggested Motion: I move to (approve / table, with direction for staff / deny) Change Order No. 2 for the Aquifer Storage and Recovery Pilot Testing and Phase 1 – SIBs and Infrastructure project in the amount of $62,913.99.

Attachment:
- Change Order No. 2

CHANGE ORDER

Order No. 02

Date: 05/22/2024

Name of Project: Aquifer Storage and Recovery Pilot Testing Phase 1 SIB and Infrastructure

District Project Number: LC063

CONTRACTOR: COP Construction LLC

Contract Date: June 15, 2023

The following changes are hereby made to the CONTRACT DOCUMENTS:

1. This change order captures changes to design of the ASR well pump, motor, and associated well house piping and electrical resulting from findings during well development. See attached for revised drawings, specifications, and an itemized cost breakdown. ($62,913.99)
   a. Remobilization and redesign meetings.
   b. Concrete labor and material increase.
   c. The well house piping is reduced from 10” diameter to 4” diameter piping. The manufactured 10” special pieces cannot be returned for credit. Valves are similarly impacted. This change order assumes the butterfly valves cannot be returned.
   d. The 300HP ASR Well pump shall be replaced with a 60HP submersible pump.
   e. Reduce the 500kV electrical transformer to a 125kV electrical transformer. Reduce the VFD from 300HP to 60HP. Reduce gear sizing. Perform associated modifications to electrical conduits and instrumentation.

2. Contract Time Extension/SIB and ASR Milestones:
   a. Change Order No. 1 identified the need to revise the substantial and final project completion dates following redesign of the ASR pump, motor, and associated well house piping.
   b. The selected 125kV electrical transformer has a lead time of 42 weeks, plus 3 weeks for design and submittals.
   c. Owner is willing to extend the contract time insomuch as the Work progresses more or less as outlined in the attached schedule, with the well house and site electrical complete by December 31, 2024 and the transformer arriving in April 2025. Provided the transformer arrives as advertised, the project shall be substantially complete by May 22, 2025, and finally complete by July 25, 2025.

Total Change to CONTRACT PRICE: Increase (Decrease)	$	$62,913.99
Original CONTRACT PRICE:	$	$5,550,687.00
Current CONTRACT PRICE adjusted by previous CHANGE ORDER(S):	$	$5,538,959.25

The new CONTRACT PRICE including this

CHANGE ORDER is $ $5,601,873.24

The CONTRACT TIME is increased (decreased) by 356 calendar days.

The date for substantial completion of the WORK is May 22, 2025.

The CONTRACTOR agrees to furnish all labor and materials and perform all work as necessary to complete the change order items for the price named herein, which includes all supervision and miscellaneous costs. This change order constitutes full and mutual accord and satisfaction for all time and all costs related to this change. By acceptance of this change order the CONTRACTOR agrees that the change order represents an equitable adjustment to the Contract, and further agrees to waive all right to file a claim arising out of or as a result of this change. This document becomes part of the Contract Documents, and all provisions will apply hereto, upon approval by the OWNER.

Recommended: _____ 5/22/2024

ENGINEER Date

Recommended: _____

Metropolitan Water District of Salt Lake & Sandy Date
Project Manager

Recommended: _____

Metropolitan Water District of Salt Lake & Sandy Date
Assistant General Manager / Chief Administrative Officer

By signing below, the District's general manager certifies that the expenditure of this change order amount is properly authorized by the District's board of trustees consistent with the District's budget and financial management policies and the instructions of the board of trustees.

Final Approval:

Approved: _____ 05/23/2024

COP Construction LLC Date

Approved: _____

Metropolitan Water District of Salt Lake & Sandy Date
General Manager

May 15, 2024

Greg S. Thomas, P.E.
Hansen, Allen & Luce Engineering Inc.
859 West South Jordan Pkwy Ste. 200
South Jordan, UT 84095

Re: LC063 Aquifer Storage and Recovery Pilot Testing Phase 1

Subject: ASR Well House Electrical (125KVA) and Mechanical Change Order Request

Dear Mr. Thomas,

Per contract specification 00700: Article 10, 11, and 12, COP Construction is formally requesting a contract change order for the ASR Well House Electrical and Mechanical scope of work.

COP Construction is requesting an adjustment of $62,913.99, as detailed in the attached itemized breakdown of costs for the adjusted work. These adjustments are based on the Revised Electrical Drawings (Not for Construction) provided on 2/2/24 and ASR Well Revisions (Not for Construction) on 4/11/24.

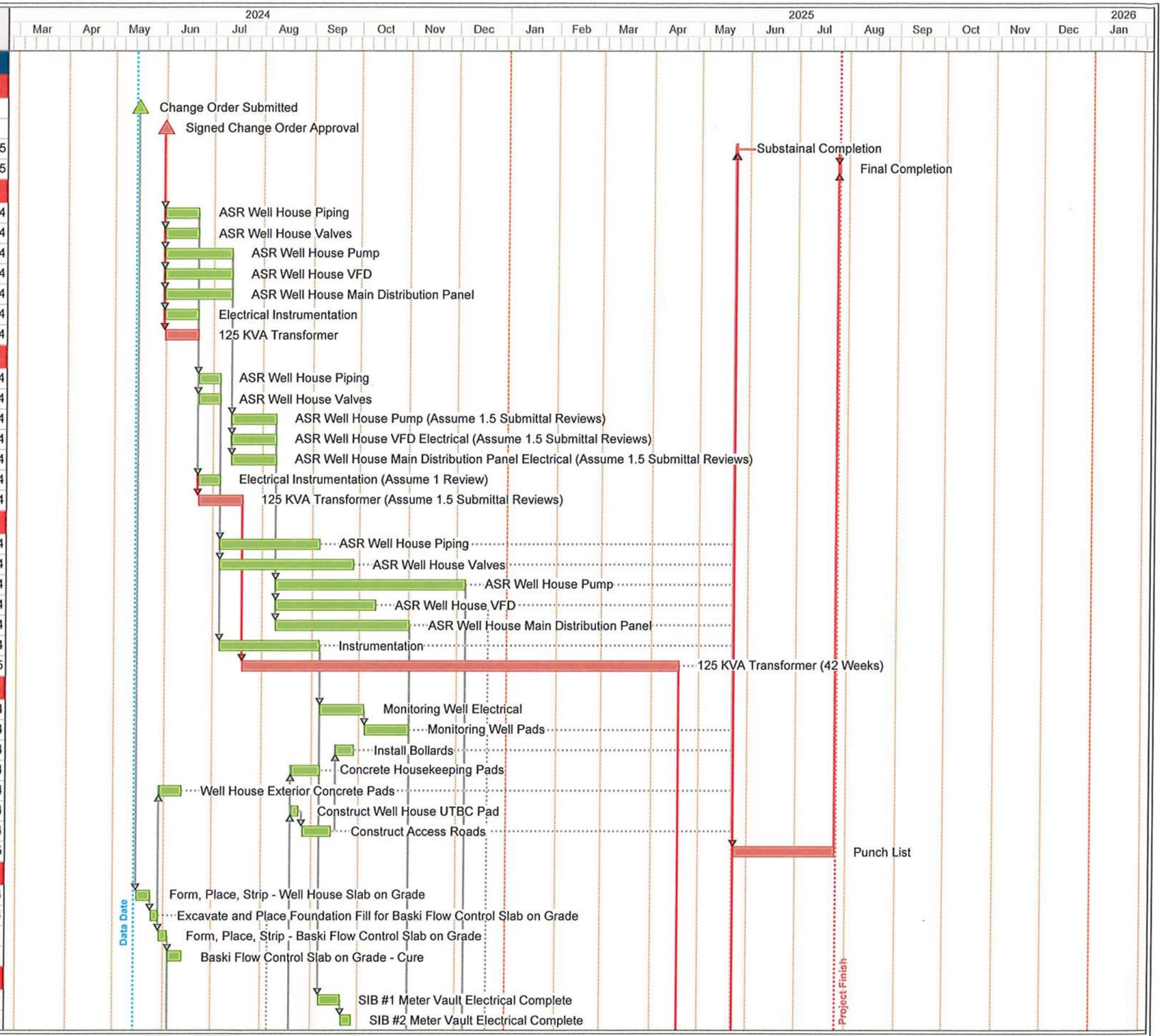
Furthermore, due to the revisions in both electrical and well pump specifications, we are also seeking an extension of 356 working days to the contract timeline. Our proposed substantial completion date is May 22, 2025, with a final completion date of July 25, 2025. Attached, you will find a schedule outlining the necessary working days required for material procurement and the sequencing of work to ensure the successful completion of this project.

Thank you for your attention to this matter. Should you have any questions or require further clarification regarding this correspondence, please do not hesitate to contact me directly.

Sincerely,

Bill Crowley
Construction Manager
COP Construction, LLC.

ID	Description	Original Duration	Start	Finish
LC063 Aquifer Storage and Recovery Pilot Testing - Phase 1				
Contract Time				
10	Change Order Submitted	0	05/15/24	
20	Signed Change Order Approval	0	05/31/24	
30	Substainal Completion	1	05/22/25	05/22/25
40	Final Completion	1	07/25/25	07/25/25
Submittal Development				
50	ASR Well House Piping	15	05/31/24	06/20/24
60	ASR Well House Valves	15	05/31/24	06/20/24
70	ASR Well House Pump	30	05/31/24	07/11/24
80	ASR Well House VFD	30	05/31/24	07/11/24
85	ASR Well House Main Distribution Panel	30	05/31/24	07/11/24
87	Electrical Instrumentation	15	05/31/24	06/20/24
90	125 KVA Transformer	15	05/31/24	06/20/24
Submittal Review				
110	ASR Well House Piping	10	06/21/24	07/04/24
120	ASR Well House Valves	10	06/21/24	07/04/24
130	ASR Well House Pump (Assume 1.5 Submittal Reviews)	20	07/12/24	08/08/24
140	ASR Well House VFD Electrical (Assume 1.5 Submittal Reviews	20	07/12/24	08/08/24
150	ASR Well House Main Distribution Panel Electrical (Assume 1.5	20	07/12/24	08/08/24
160	Electrical Instrumentation (Assume 1 Review)	10	06/21/24	07/04/24
165	125 KVA Transformer (Assume 1.5 Submittal Reviews)	20	06/21/24	07/18/24
Material Procurement				
170	ASR Well House Piping	45	07/05/24	09/05/24
180	ASR Well House Valves	60	07/05/24	09/26/24
190	ASR Well House Pump	85	08/09/24	12/05/24
200	ASR Well House VFD	45	08/09/24	10/10/24
210	ASR Well House Main Distribution Panel	60	08/09/24	10/31/24
220	Instrumentation	45	07/05/24	09/05/24
230	125 KVA Transformer (42 Weeks)	195	07/19/24	04/17/25
General & Misc. Activities				
269	Monitoring Well Electrical	20	09/06/24	10/03/24
270	Monitoring Well Pads	20	10/04/24	10/31/24
280	Install Bollards	10	09/16/24	09/27/24
300	Concrete Housekeeping Pads	15	08/19/24	09/06/24
440	Well House Exterior Concrete Pads	10	05/29/24	06/11/24
441	Construct Well House UTBC Pad	5	08/19/24	08/23/24
441.5	Construct Access Roads	15	08/26/24	09/13/24
442	Punch List	45	05/23/25	07/24/25
Strucutal Concrete				
580	Form, Place, Strip - Well House Slab on Grade	7	05/15/24	05/23/24
590	Excavate and Place Foundation Fill for Baski Flow Control Slab (	3	05/24/24	05/28/24
600	Form, Place, Strip - Baski Flow Control Slab on Grade	4	05/29/24	06/03/24
610	Baski Flow Control Slab on Grade - Cure	7	06/04/24	06/12/24
Mechanical Piping				
670	SIB #1 Meter Vault Electrical Complete	10	09/06/24	09/19/24
700	SIB #2 Meter Vault Electrical Complete	5	09/20/24	09/26/24



Start Date: 05/25/23
Finish Date: 07/25/25
Data Date: 05/14/24
Run Date: 05/15/24

phoenix PROJECT MANAGER

ID	Description	Original Duration	Start	Finish
Civil Activites				
917	ASR Waste Line Catch Basin and Piping	3	06/04/24	06/06/24
918	ASR Waste Line RIP RAP Placement	1	06/07/24	06/07/24
ASR Well House				
970	Installation of Prefabricated Well House	10	08/05/24	08/16/24
980	Installation of Well House Door/Window/Skylight	5	08/19/24	08/23/24
985	ASR Well House Mechanical Piping and Valves	10	12/06/24	12/19/24
990	Installtion of Electrical	25	11/01/24	12/05/24
1000	Installtion of HVAC	5	11/01/24	11/07/24
1010	Installtion of BASKI FCV Equipment and Electrical	15	12/06/24	12/26/24
1030	Installation Well House Pump	3	12/20/24	12/24/24
1035	Painting & Coating Complete	5	12/25/24	12/31/24
1037	Installation of 125 KVA Transformer	20	04/18/25	05/15/25
1040	Start-up ASR Well House	5	05/16/25	05/22/25

Start Date: 05/25/23
Finish Date: 07/25/25
Data Date: 05/14/24
Run Date: 05/15/24

phoenix PROJECT MANAGER

Project Name: MWDSLS Aquifer Phase 1
COP Project Number: 23302
Proposal Number: 1
Date: 5/14/2024
Proposal Description: ASR Well House Electrical 125KVA and Mechaincal Adjustment

Description	Quantity	Units	Labor Hours	Labor Rate W/Burden	Labor Cost	Material Cost	Equipment Hours	Equipment Rate	Equipment Cost	Subcontractor Cost
Re-Mobilzation / Redesign Meetings	1	LSM	85	$ 211.26	$ 17,957.10	$ 650.00				
Axiom Concrete	1	LSM								$ 5,451.42
ASR Well House Pipe Material	1	LSM				$ 111,054.00				
ASR Well House Pipe Material (Credit)	-1	LSM				$ (9,300.92)				
Nickerson Pump (Credit)	-1	LSM								$ (248,357.00)
Nickerson 60HP Pump	1	LSM								$ 173,355.00
Electrical (125KVA Adjustments)	1	LSM								$ 2,170.60
Subtotal					$ 17,957.10	$ 102,403.08			$ -	$ (67,379.98)
Subtotal										$ 52,980.20
P & P Bond (1.25%)										$662.25
Liability Insurance (.75%)										$3,973.52
OH&P (10%)										$5,298.02
Total Proposal Amount										$ 62,913.99

Nickerson Company, Inc.
2301 West Indiana Ave.
Salt Lake City, UT 84104
801-973-8888

Credit Invoice

QUOTATION

May 10, 2023

To: Bidding Contractors.
Project Name: Little Cottonwood Water Treatment Plant Aquifer Storage and Recovery Pilot Testing
Bid Date: May 10, 2023

We are pleased to quote the following for Section 33 12 30 Deep Well Pump and Pump Motor.

Qty (1) National M14MC-5 Stage Vertical Turbine Pump, Oil Lubricated
-Rated for 1500 gpm at 490 ft. TDH
-Cast Iron/Bronze Construction, Epoxy Coating
-416SS Bowl Shaft
-Marine Bowl and Suction Bearings
-Stainless Steel Cone Strainer
-Fabricated Steel Discharge Head with 10", 150 lb. Discharge Flange, Epoxy Lined and Coated
-Oil Tank with Solenoid Valve and Manual Bypass Valve
-10" Column w/ 1-15/16" Shafting, 3" Oil Tube
-300HP, 1800 RPM, 3/60/460V, VHS, WPI, Premium Efficient Inverter Duty Motor
  -Insulated Bearings with Shaft Grounding Ring
  -100 Ohm Platinum RTD's, Bearing and Winding
  - Vibration Switch
-Sole Plate
-BASKI Flow Control Valve
  -Two (2) SS Control Lines
  -Control Panel
  -One (1) Nitrogen Gas Regulator
-Check Valve on intake of pump
-Qty (2) PVC Flush Thread Sounder Tube, 1-1/4" Diameter
-Installation at job site, including well head work
-Startup, including support by BASKI for installation and startup of the Flow Control Valve system

Optional Adder
Chrome journals on bowl shaft. If chrome journals are included per the spec, the pump will not meet compliance with NSF61 requirements.

Section 33 11 33 Pump and Pump Motor Addendum 2
Para 2.1 – Pump bowl shaft being offered in 416SS without chrome journals in order to comply with NSF61 requirements. If chrome journals are desired, an optional adder is included, but the pump will not be in compliance with NSF61.
Para 2.2.G – BASKI Flow Control Valve system – BASKI is taking exception to the following specification requirements:

1. Nitrogen tanks will **not** be provided.
2. Only one (1) Nitrogen regulator will be provided instead of two. According to BASKI, only one regulator is required.
3. The control panel will be provided by BASKI but they will **not** provide an enclosure for the control panel and/or the nitrogen tanks.
4. The concrete pad will **not** be provided by BASKI and will be the responsibility of others.

5. BASKI is **not** providing any PLC Controllers, SCADA system, hardware, software, and testing.
6. BASKI is **not** providing any conduits or other protective enclosure for the control lines from the well head to the control panel.

Para 3.3 – Nickerson Company will disinfect the well during pump installation. Contractor to be responsible for bacteriological testing.

PRICING

Section 33 12 30 Deep Well Pump and Pump Motor	$248,357.00
Optional Adder (Chrome Journals on Pump Bowl Shaft)	$2,387.00

Price **does not** include any applicable taxes which may apply and would be added to the order. Price **does** include shipping and startup costs.

PRICING DOES NOT INCLUDE CONTROLS, WIRE, ELECTRICAL HOOK - UP, VALVES, AUXILIARY PIPING, FITTINGS, SPECIAL COATINGS, ETC. **OTHER THAN MENTIONED ABOVE.**

STATE AND LOCAL TAXES ARE NOT INCLUDED.

MANUFACTERS STANDARD WARRANTY TO APPLY.

NICKERSON COMPANYS TERMS AND CONDITIONS TO APPLY.

PRICING IS FIRM THROUGH DELIVERY SUBJECT TO ACCEPTANCE WITHIN 30 DAYS.

WE DO NOT ACCEPT LIQUIDATED DAMAGES AS OUR SUPPLIERS DO NOT ACCEPT LIQUIDATED DAMAGES.

PAYMENT TERMS: 95% NET 30, 5% RETAINAGE PAYABLE IN 60 DAYS FROM DATE OF INSTALLATION OF PUMP AND EQUIPMENT OR 30 DAYS FROM DATE OF START UP WHATEVER COMES FIRST.
CREDIT CARD PURCHASES: A 3% CARD PROCESSING GEE WILL BE ASSESSED TO ALL CREDIT CARD PURCHASES GREATER THAN $2000.00.
START UP MUST BE SCHEDULED AT LEAST 2 WEEKS IN ADVANCE
FOB: FACTORY – FREIGHT ALLOWED
ESTIMATED LEAD TIME IS APPROXIMATELY 16-18 WEEKS AFTER SUBMITTAL APPROVAL.
SUBMITTAL LEAD TIME IS APPROXIMATELY 8 WEEKS.

Dean Larson
Nickerson Company, Inc.
801-973-8888

NICKERSON COMPANY, INC. WARRANTY, TERMS AND CONDITIONS OF SALE.

PURCHASER:_____P.O.#_____

DESCRIPTION_____

All orders shall be made out to Nickerson Company, Inc. at P.O. Box 25425, Salt Lake City, Utah 84125 and shall be subject to acceptance by Nickerson Company, Inc.

1. CONSTRUCTION AND LEGAL EFFECT. Our sale to you will be solely upon the terms and conditions set forth herein. They supersede and reject any conflicting terms and conditions of yours, any statement in yours to the contrary notwithstanding. Exceptions to any of our terms and conditions must be contained in a written or typed (not printed) statement received from you; we shall not be deemed to have waived any of our terms and conditions or to have assented to any modification or alteration of such terms and conditions unless such waiver or assent is in writing and signed by an authorized officer. No representation of any kind has been made by us except as set forth herein; this agreement conclusively supersedes all prior writings and negotiations with respect thereto and we will furnish only the quantities and items specifically listed on the face hereof; we assume no responsibility for furnishing other equipment or material shown in any plans and/or specification for a project to which the goods ordered herein pertain. Any action for breach of contract must be commenced within one year after the cause of action has accrued Our quoted prices, discounts, terms and conditions are subject to change without notice.

2. PRICES. Unless otherwise noted on the face hereof, prices are net F.O.B. Point of Origin. Service time of a factory-trained service man is not included and may be charged extra. The amount of any applicable present or future tax or other government charge upon the production, sale, shipment or use of goods ordered or sold will be added to billing unless you provide us with an appropriate exemption certificate.

3. DEFECTIVE EQUIPMENT AND LIMITATION OF WARRANTIES. Providing purchaser notifies us promptly, if within one year from date of shipment equipment sold by Nickerson Company, Inc. fails to function properly under normal, proper and rated use and service because of defects in material or workmanship demonstrated to our satisfaction to have existed at the time of delivery, the company reserving the right to either inspect them in your hands or request their return to us will at our option repair or replace at our expense F.O.B. our Salt Lake City plant, or give you proper credit for such equipment or parts determined by us to be defective, if returned transportation prepaid by purchaser. The foregoing shall not apply to equipment that shall have been altered or repaired after shipment to you by anyone except our authorized employees, and the company will not be liable in any event for alterations or repairs except those made with its written consent. Purchaser shall be solely responsible for determining suitability for use and the company shall in no event be liable in this respect. The equipment or parts manufactured by others but furnished by us will be repaired or replaced only to the extent of the original manufacturer's guarantee. Our obligations and liabilities hereunder shall not be enforceable until such equipment has been fully paid for. Purchaser agrees that if the products sold hereunder are resold by purchaser, he will include in the contract for resale, provisions which limit recoveries against us in accordance with this section. In case of our failure to fulfill any performance representation, it is agreed that we may at our option remove and reclaim the equipment covered by this agreement at our own expense and discharge all liability by repayment to the purchaser of all sums received on account of the purchase price. (The foregoing obligations are in lieu of all other obligations and liabilities including negligence and all warranties, or merchantability or fitness for a particular purpose or otherwise, express or implied by connection with the sale or furnishing of goods or parts, their design, suitability for use, installation or operation.) We will in no event be liable for any direct, indirect, special or consequential damages or delay resulting from any defect whatsoever, and our liability under no circumstances will exceed the contract price for the goods for which liability is claimed.

4. DELIVERY. Delivery, shipment and installation dates are estimated dates only, and unless otherwise specified, are figured from date of receipt of complete technical data and approved drawings as such may be necessary. In estimating such dates, no allowance has been made, nor shall we be liable directly or indirectly for delays of carriers or delays from labor difficulties, shortages, strikes or stoppages of any sort, fires, accidents, failure or delay in obtaining materials or manufacturing facilities, acts of govemment affecting us directly or indirectly, bad weather, or any causes beyond our control or causes designated Acts of God or force majeure by any court of law, and the estimated delivery date shall be extended accordingly. We will not be liable for any damages or penalties whatsoever, whether direct, indirect, special consequential, resulting from our failure to perform or delay in performing unless otherwise agreed in writing by an authorized officer.

5. OPERATING CONDITIONS AND ACCEPTANCE. Recommendations and quotations are made upon the basis of operating conditions specified by the Purchaser. If actual conditions are different than those specified and performance of the equipment is adversely affected thereby, Purchaser will be responsible for the cost of all expenses incurred in, and reasonable profit for, performance of the equipment is adversely affected thereby, Purchaser will be responsible for the cost of all changes in the equipment required to accommodate such conditions, and we reserve the right to cancel this order and Purchaser shall reimburse us for all costs and expenses incurred in, and reasonable profit for, performance hereunder. We reserve the right to refuse any order based upon a quotation containing an error. The provisions in any specification or char issued by Nickerson Co. are descriptive only and are not warranties or representations; Nickerson Co. will certify to a rated capacity in any particular product upon request. Capacity head and efficiency certifications are based on shop tests and when handling clear, fresh water at a temperature not over 85° F. Certifications are at this specified rating only and do not cover sustained performance over any period of time nor under conditions varying from these.

6. SHIPPING. Unless you specify otherwise in writing, (a) goods will be boxed or crated as we may deem proper for protection against normal handling, and extra charge will be made for preservation, waterproofing, export boxing and similar added protection of goods; (b) routing and manner of shipment will be at our discretion, and may be insured at your expense, value to be stated at order price. On all shipment F.O.B. our plant, delivery of goods to the initial carrier will constitute delivery to you and all goods will be shipped at your risk. A claim for loss of damage in transit must be entered with the carrier and prosecuted by you. Acceptance of material from a common carrier constitutes a waiver of any claims against us for delay or damage or loss.

7. CANCELLATION AND RETURNED EQUIPMENT. Orders may be cancelled only with our written consent and upon payment or reasonable and proper cancellation charges. Goods may be returned only when specifically authorized and you will be charged for placing returned goods in saleable condition, any sales expenses then incurred by us, plus a restocking charge and any outgoing and incoming transportation costs which we pay.

8. CREDIT AND PAYMENT. Payment for products shall be 30 days net. Pro-rata payments shall become due with partial shipments. A late charge of 2 percent per month or the maximum permitted by law, which ever is less, will be imposed on all past due invoices. We reserve the right at any time to alter, suspend, credit, or to change credit terms provided herein, when in our sale opinion your financial condition so warrants. In such case, in addition to any other remedies herein or by law provided. Failure to pay invoices at maturity date at our election makes all. subsequent invoices immediately due and payable irrespective of terms, and we may withhold all subsequent deliveries until the full account is settled, and we may terminate this agreement. Acceptance by us of less than full payment shall not be a waiver of any of our rights. You represent by sending each purchase order to us that you are not insolvent as that term is defined in applicable state or federal statutes. In the event you become insolvent before delivery of any products purchased hereunder, you will notify us in writing. A failure to notify us of insolvency at the time of delivery shall be construed as a reaffirmation of your solvency at that time. Irrespective of whether the products purchased hereunder are delivered directly to you, or to a customer of yours, and irrespective of the size of shipment, we shall have the right to withhold or reclaim goods under the applicable state and federal statutes. Where youCare responsible for any delay in shipment the date of completion of goods may be treated by us as the date of shipment for purposes of payment. Completed goods shall be held at your cost and risk and we shall have the right to bill you for reasonable storage and insurance expenses. Regardless of price quoted, all orders will be invoiced in the minimum amount of $50.00 net.

9. INSPECTION. Inspection of goods in our plant by you or your representative will be permitted insofar as this does not unduly interfere with our workflow, provided that complete details of the inspection you desire are submitted to us in writing in advance.

10. RECORDS, AUDITS AND PROPRIETARY DATA. Unless otherwise specifically agreed in writing signed by an authorized officer, neither you nor any representative of yours, nor any other person, shall have any right to examine or audit our cost accounts, books or records of any kind or on any matter, or be entitled to, or have control over, any engineering or production prints, drawings or technical data which we, in our sale discretion, may consider in whole or part proprietary to ourselves.

The undersigned accepts this quotation and agrees to the warranty terms and conditions printed on this sheet, and acknowledges that he and, or she is bound thereby and it is fully understood and agreed that ownership, title and right of unrestricted repossession of property, shall remain with the Nickerson Company, Inc., until paid for in full. The signers hereof agree that if any default of this contract occurs, they will retum all above merchandise in good order upon demand, and all payments previously made are to be forfeited for rental and use thereof, plus an additional sum for any legal or attorney fees incurred in the enforcement of above provisions.

SIGNED_____TITLE_____DATE_____

Please sign and return to Nickerson Co. with order.

Nickerson Company, Inc.
2301 West Indiana Ave.
Salt Lake City, UT 84104
801-973-8888

QUOTATION - Revised

May 1, 2024

To: COP Construction
Project Name: Little Cottonwood Water Treatment Plant Aquifer Storage and Recovery Pilot Testing
Bid Date: May 10, 2023

We are pleased to quote the following for Section 33 12 30 Submersible Deep Well Pump and Pump Motor with the revised conditions.

Qty (1) National SN6LC-13 Stage Submersible Turbine Pump, NSF61 Certified
-Rated for 200 gpm at 700 ft. TDH
-Cast Iron/Stainless Steel Construction, Epoxy Coating
-416SS Bowl Shaft
-Bronze Bowl and Suction Bearings
-Fabricated Steel Discharge Elbow with 4", 150 lb. Discharge Flange, Epoxy Lined and Coated
-4" Column
-60HP, 3600 RPM, 3/60/460V, Submersible Motor
-Sole Plate
-BASKI Flow Control Valve
  -Two (2) SS Control Lines
  -Control Panel
  -Two (2) Nitrogen Gas Regulators
-Check Valve on discharge side of pump
-Qty (2) PVC Flush Thread Sounder Tube, 1-1/4" Diameter
-Installation at job site, including well head work
-Startup, including support by BASKI for installation and startup of the Flow Control Valve system

Section 33 12 30 Submersible Deep Well Pump and Pump Motor
Para 2.4.H – BASKI Flow Control Valve system – BASKI is taking exception to the following specification requirements:

1. Nitrogen tanks will **not** be provided.
2. The control panel will be provided by BASKI but they will **not** provide an enclosure for the control panel and/or the nitrogen tanks.
3. The concrete pad will **not** be provided by BASKI and will be the responsibility of others.
4. BASKI is **not** providing any PLC Controllers, SCADA system, hardware, software, and testing.
5. BASKI is **not** providing any conduits or other protective enclosure for the control lines from the well head to the control panel.

Para 3.3 – Nickerson Company will disinfect the well during pump installation. Contractor to be responsible for bacteriological testing.

PRICING

Section 33 12 30 Submersible Deep Well Pump and Pump Motor $173,355.00

Price **does not** include any applicable taxes which may apply and would be added to the order. Price **does** include shipping and startup costs.

PRICING DOES NOT INCLUDE CONTROLS, WIRE, ELECTRICAL HOOK - UP, VALVES, AUXILIARY PIPING, FITTINGS, SPECIAL COATINGS, ETC. **OTHER THAN MENTIONED ABOVE.**

STATE AND LOCAL TAXES ARE NOT INCLUDED.

MANUFACTERS STANDARD WARRANTY TO APPLY.

NICKERSON COMPANYS TERMS AND CONDITIONS TO APPLY.

PRICING IS FIRM THROUGH DELIVERY SUBJECT TO ACCEPTANCE WITHIN 30 DAYS.

WE DO NOT ACCEPT LIQUIDATED DAMAGES AS OUR SUPPLIERS DO NOT ACCEPT LIQUIDATED DAMAGES.

PAYMENT TERMS: 95% NET 30, 5% RETAINAGE PAYABLE IN 60 DAYS FROM DATE OF INSTALLATION OF PUMP AND EQUIPMENT OR 30 DAYS FROM DATE OF START UP WHATEVER COMES FIRST.
CREDIT CARD PURCHASES: A 3% CARD PROCESSING GEE WILL BE ASSESSED TO ALL CREDIT CARD PURCHASES GREATER THAN $2000.00.
START UP MUST BE SCHEDULED AT LEAST 2 WEEKS IN ADVANCE
FOB: FACTORY – FREIGHT ALLOWED
ESTIMATED LEAD TIME IS APPROXIMATELY 16-18 WEEKS AFTER SUBMITTAL APPROVAL.
SUBMITTAL LEAD TIME IS APPROXIMATELY 8 WEEKS.

Dean Larson
Nickerson Company, Inc.
801-973-8888

NICKERSON COMPANY, INC. WARRANTY, TERMS AND CONDITIONS OF SALE.

PURCHASER:_____P.O.#_____

DESCRIPTION_____

All orders shall be made out to Nickerson Company, Inc. at P.O. Box 25425, Salt Lake City, Utah 84125 and shall be subject to acceptance by Nickerson Company, Inc.

1. CONSTRUCTION AND LEGAL EFFECT. Our sale to you will be solely upon the terms and conditions set forth herein. They supersede and reject any conflicting terms and conditions of yours, any statement in yours to the contrary notwithstanding. Exceptions to any of our terms and conditions must be contained in a written or typed (not printed) statement received from you; we shall not be deemed to have waived any of our terms and conditions or to have assented to any modification or alteration of such terms and conditions unless such waiver or assent is in writing and signed by an authorized officer. No representation of any kind has been made by us except as set forth herein; this agreement conclusively supersedes all prior writings and negotiations with respect thereto and we will furnish only the quantities and items specifically listed on the face hereof; we assume no responsibility for furnishing other equipment or material shown in any plans and/or specification for a project to which the goods ordered herein pertain. Any action for breach of contract must be commenced within one year after the cause of action has accrued Our quoted prices, discounts, terms and conditions are subject to change without notice.

2. PRICES. Unless otherwise noted on the face hereof, prices are net F.O.B. Point of Origin. Service time of a factory-trained service man is not included and may be charged extra. The amount of any applicable present or future tax or other government charge upon the production, sale, shipment or use of goods ordered or sold will be added to billing unless you provide us with an appropriate exemption certificate.

3. DEFECTIVE EQUIPMENT AND LIMITATION OF WARRANTIES. Providing purchaser notifies us promptly, if within one year from date of shipment equipment sold by Nickerson Company, Inc. fails to function properly under normal, proper and rated use and service because of defects in material or workmanship demonstrated to our satisfaction to have existed at the time of delivery, the company reserving the right to either inspect them in your hands or request their return to us will at our option repair or replace at our expense F.O.B. our Salt Lake City plant, or give you proper credit for such equipment or parts determined by us to be defective, if returned transportation prepaid by purchaser. The foregoing shall not apply to equipment that shall have been altered or repaired after shipment to you by anyone except our authorized employees, and the company will not be liable in any event for alterations or repairs except those made with its written consent. Purchaser shall be solely responsible for determining suitability for use and the company shall in no event be liable in this respect. The equipment or parts manufactured by others but furnished by us will be repaired or replaced only to the extent of the original manufacturer's guarantee. Our obligations and liabilities hereunder shall not be enforceable until such equipment has been fully paid for. Purchaser agrees that if the products sold hereunder are resold by purchaser, he will include in the contract for resale, provisions which limit recoveries against us in accordance with this section. In case of our failure to fulfill any performance representation, it is agreed that we may at our option remove and reclaim the equipment covered by this agreement at our own expense and discharge all liability by repayment to the purchaser of all sums received on account of the purchase price. (The foregoing obligations are in lieu of all other obligations and liabilities including negligence and all warranties, or merchantability or fitness for a particular purpose or otherwise, express or implied by connection with the sale or furnishing of goods or parts, their design, suitability for use, installation or operation.) We will in no event be liable for any direct, indirect, special or consequential damages or delay resulting from any defect whatsoever, and our liability under no circumstances will exceed the contract price for the goods for which liability is claimed.

4. DELIVERY. Delivery, shipment and installation dates are estimated dates only, and unless otherwise specified, are figured from date of receipt of complete technical data and approved drawings as such may be necessary. In estimating such dates, no allowance has been made, nor shall we be liable directly or indirectly for delays of carriers or delays from labor difficulties, shortages, strikes or stoppages of any sort, fires, accidents, failure or delay in obtaining materials or manufacturing facilities, acts of govemment affecting us directly or indirectly, bad weather, or any causes beyond our control or causes designated Acts of God or force majeure by any court of law, and the estimated delivery date shall be extended accordingly. We will not be liable for any damages or penalties whatsoever, whether direct, indirect, special consequential, resulting from our failure to perform or delay in performing unless otherwise agreed in writing by an authorized officer.

5. OPERATING CONDITIONS AND ACCEPTANCE. Recommendations and quotations are made upon the basis of operating conditions specified by the Purchaser. If actual conditions are different than those specified and performance of the equipment is adversely affected thereby, Purchaser will be responsible for the cost of all expenses incurred in, and reasonable profit for, performance of the equipment is adversely affected thereby, Purchaser will be responsible for the cost of all changes in the equipment required to accommodate such conditions, and we reserve the right to cancel this order and Purchaser shall reimburse us for all costs and expenses incurred in, and reasonable profit for, performance hereunder. We reserve the right to refuse any order based upon a quotation containing an error. The provisions in any specification or char issued by Nickerson Co. are descriptive only and are not warranties or representations; Nickerson Co. will certify to a rated capacity in any particular product upon request. Capacity head and efficiency certifications are based on shop tests and when handling clear, fresh water at a temperature not over 85° F. Certifications are at this specified rating only and do not cover sustained performance over any period of time nor under conditions varying from these.

6. SHIPPING. Unless you specify otherwise in writing, (a) goods will be boxed or crated as we may deem proper for protection against normal handling, and extra charge will be made for preservation, waterproofing, export boxing and similar added protection of goods; (b) routing and manner of shipment will be at our discretion, and may be insured at your expense, value to be stated at order price. On all shipment F.O.B. our plant, delivery of goods to the initial carrier will constitute delivery to you and all goods will be shipped at your risk. A claim for loss of damage in transit must be entered with the carrier and prosecuted by you. Acceptance of material from a common carrier constitutes a waiver of any claims against us for delay or damage or loss.

7. CANCELLATION AND RETURNED EQUIPMENT. Orders may be cancelled only with our written consent and upon payment or reasonable and proper cancellation charges. Goods may be returned only when specifically authorized and you will be charged for placing returned goods in saleable condition, any sales expenses then incurred by us, plus a restocking charge and any outgoing and incoming transportation costs which we pay.

8. CREDIT AND PAYMENT. Payment for products shall be 30 days net. Pro-rata payments shall become due with partial shipments. A late charge of 2 percent per month or the maximum permitted by law, which ever is less, will be imposed on all past due invoices. We reserve the right at any time to alter, suspend, credit, or to change credit terms provided herein, when in our sale opinion your financial condition so warrants. In such case, in addition to any other remedies herein or by law provided. Failure to pay invoices at maturity date at our election makes all. subsequent invoices immediately due and payable irrespective of terms, and we may withhold all subsequent deliveries until the full account is settled, and we may terminate this agreement. Acceptance by us of less than full payment shall not be a waiver of any of our rights. You represent by sending each purchase order to us that you are not insolvent as that term is defined in applicable state or federal statutes. In the event you become insolvent before delivery of any products purchased hereunder, you will notify us in writing. A failure to notify us of insolvency at the time of delivery shall be construed as a reaffirmation of your solvency at that time. Irrespective of whether the products purchased hereunder are delivered directly to you, or to a customer of yours, and irrespective of the size of shipment, we shall have the right to withhold or reclaim goods under the applicable state and federal statutes. Where youCare responsible for any delay in shipment the date of completion of goods may be treated by us as the date of shipment for purposes of payment. Completed goods shall be held at your cost and risk and we shall have the right to bill you for reasonable storage and insurance expenses. Regardless of price quoted, all orders will be invoiced in the minimum amount of $50.00 net.

9. INSPECTION. Inspection of goods in our plant by you or your representative will be permitted insofar as this does not unduly interfere with our workflow, provided that complete details of the inspection you desire are submitted to us in writing in advance.

10. RECORDS, AUDITS AND PROPRIETARY DATA. Unless otherwise specifically agreed in writing signed by an authorized officer, neither you nor any representative of yours, nor any other person, shall have any right to examine or audit our cost accounts, books or records of any kind or on any matter, or be entitled to, or have control over, any engineering or production prints, drawings or technical data which we, in our sale discretion, may consider in whole or part proprietary to ourselves.

The undersigned accepts this quotation and agrees to the warranty terms and conditions printed on this sheet, and acknowledges that he and, or she is bound thereby and it is fully understood and agreed that ownership, title and right of unrestricted repossession of property, shall remain with the Nickerson Company, Inc., until paid for in full. The signers hereof agree that if any default of this contract occurs, they will retum all above merchandise in good order upon demand, and all payments previously made are to be forfeited for rental and use thereof, plus an additional sum for any legal or attorney fees incurred in the enforcement of above provisions.

SIGNED_____TITLE_____DATE_____

Please sign and return to Nickerson Co. with order.

Bid Proposal for ASR Well Head Plans 4" Material COP Construction

CUSTOMER

All Bidders

Job
ASR Well Head Plans 4" Material COP Construction
SLC, UT
Salt Lake County
Bid Date: 05/10/2024
Bid #: 3523918

Login Already in Progress

Another session is currently logging in, please wait for it to finish.

CONTACT

Sales Representative
Mark Bischoff
(M) 801-940-1400
(T) 801-280-8485
(F) 801-280-8446
Mark.Bischoff@coreandmain.com

Core & Main
4052 West 8380 South
West Jordan, UT 84088
(T) 8012808485

NOTES

Bid Proposal for ASR Well Head Plans 4" Material COP Construction

All Bidders
Job Location: SLC, UT
Bid Date: 05/10/2024
Core & Main 3523918

Core & Main
4052 West 8380 South
West Jordan, UT 84088
Phone: 8012808485
Fax: 8012808446

Seq#	Qty	Description	Units	Price	Ext Price
20	5	4 FLGXFLG DI PIPE 2' IMP	EA	477.50	2,387.50
30	2	DJ400-4 4 DISMANTLING JT	EA	722.77	1,445.54
40	1	4" FLG TEE W/1" TAP AT "G" LOC	EA	64,588.75	64,588.75
		AND 1" TAP AT "S" LOCATION			
60	1	4 FLG TEE C110 IMP	EA	412.55	412.55
70	1	4" FLG 90/W1" TAP "Y" LOCATION	EA	477.04	477.04
80	1	10X4 FLG RED C110 IMP	EA	557.34	557.34
90	15	4X1/8 FLG ACC RR RING 304SS BN	EA	26.56	398.40
100	1	4" VALMATIC 7804 L&W SWING CHECK VALVE	EA	1,989.34	1,989.34
110	2	4" VALMATIC BFV W/ELEC OPERATO	EA	10,654.44	21,308.88
120	1	4 BLIND FLG DI IMP	EA	126.21	126.21
130	1	4 FLGXFLG DI PIPE 33" IMP	EA	718.94	718.94
		WITH 1/2" TAP AT 3:00			
150	1	DJ400-4 4 DISMANTLING JT	EA	722.77	722.77
160	1	4 FLGXFLG DI PIPE 33" IMP	EA	514.67	514.67
170	1	4 FLGXFLG DI PIPE 1'4" IMP	EA	396.27	396.27
180	2	4 FLG 45 C110 IMP	EA	202.09	404.18
190	1	4 FLGXFLG DI PIPE 0'9" IMP	EA	356.80	356.80
200	1	4 FLGXFLG DI PIPE 1'3" IMP	EA	396.27	396.27
210	1	4 FLGXFLG DI PIPE 2' IMP	EA	601.60	601.60
		WITH SEEP RING			
230	1	4 FLGXFLG DI PIPE 1'3" IMP	EA	396.27	396.27
240	1	4 FLG 90 C110 IMP	EA	235.13	235.13
250	1	4 FLGXFLG DI PIPE 1'8" IMP	EA	509.34	509.34
270		**PRESSURE TRANSDUCER**			
280	1	1X4 BRASS NIPPLE NO LEAD (I)	EA	10.12	10.12
290	1	1 THRD BRONZE BALL VLV NO LEAD	EA	25.40	25.40
300	1	1X1/2 BRASS BUSHING NL (I) NO LEAD	EA	5.46	5.46
310	1	1/2X2 BRASS NIPPLE NO LEAD (I)	EA	3.00	3.00
320		**PRESSURE TRANSDUCER**			
330		**BY OTHERS**			
350		**WELL SERVICE AIR VAC**			
360	1	1X6 BRASS NIPPLE NO LEAD (I)	EA	14.90	14.90
370	1	1 THRD BRONZE BALL VLV NO LEAD	EA	25.40	25.40
380	1	1XCL BRASS NIPPLE NO LEAD (I)	EA	4.69	4.69
390	1	1 BRASS CROSS NO LEAD (I)	EA	21.32	21.32
400	1	1X1/2 BRASS BUSHING NL (I) NO LEAD	EA	5.46	5.46
410	1	1/2X6 BRASS NIPPLE NO LEAD (I)	EA	7.98	7.98
420	1	1/2" VALMATIC 100ST.XF WELL SE	EA	688.82	688.82
430	1	1/2X4 BRASS NIPPLE USA NO LEAD	EA	5.67	5.67
440	1	1/2 BRASS 90 NO LEAD USA	EA	11.81	11.81
450	1	1/2X6 BRASS NIPPLE NO LEAD (I)	EA	7.98	7.98

Bid Proposal for ASR Well Head Plans 4" Material COP Construction

Bid #: 3523918

Seq#	Qty	Description	Units	Price	Ext Price
460	1	1/2X48 BRASS NIPPLE NL (I) NO LEAD	EA	65.52	65.52
470	1	NORTHTOW 1" BUG SCREEN FEMALE	EA	28.55	28.55
480	1	1X1/2 BRASS BUSHING NL (I) NO LEAD	EA	5.46	5.46
490	2	1X3/4 BRASS BUSHING NL (I) NO LEAD	EA	5.46	10.92
500	1	3/4" SS SAMPLING TAP HOSE BIB SMOOTH NOSE STAINLESS STEEL	EA	16.91	16.91
		NO LEAD			
510	1	3/4XCL BRASS NIPPLE NL (I) NO LEAD	EA	3.18	3.18
520	1	3/4 BRASS TEE NO LEAD (I) NO LEAD	EA	8.30	8.30
530	1	3/4X3 BRASS NIPPLE NO LEAD (I)	EA	5.36	5.36
540	1	4-1/2 1279AS PRESSURE GAUGE 0-200 PSI 1/2 LOWER CONNECTION	EA	143.75	143.75
550	1	3/4X1/2 BRASS BUSHING NL (I) NO LEAD	EA	3.61	3.61
570		**SAND TESTER**			
580	1	1/2X1/4 BRASS BUSHING NL (I) NO LEAD	EA	2.61	2.61
590	1	1/4" BALL VALVE	EA	25.32	25.32
600	1	1/4X2 BRASS NIPPLE NO LEAD (I)	EA	2.09	2.09
610	1	ROSSUM SAND TESTER	EA	1,158.75	1,158.75
620	1	3/8X2 BRASS NIPPLE NO LEAD (I)	EA	2.38	2.38
630	1	3/8 BRASS 90 NO LEAD USA	EA	11.81	11.81
640	1	3/8 FIP BALL VALVE 5544	EA	38.50	38.50
660		**AIR RELEASE DETAIL (2EA)**			
670	2	1X6 BRASS NIPPLE NO LEAD (I)	EA	14.90	29.80
680	2	1 THRD BRONZE BALL VLV NO LEAD	EA	25.40	50.80
690	2	1XCL BRASS NIPPLE NO LEAD (I)	EA	4.69	9.38
700	2	1" VALMATIC 201.C COMBINATION	EA	871.80	1,743.60
710	2	1XCL BRASS NIPPLE NO LEAD (I)	EA	4.69	9.38
720	2	1 BRASS 90 NO LEAD (I)	EA	10.42	20.84
730	2	1X4 BRASS NIPPLE NO LEAD (I)	EA	10.12	20.24
740	2	1X48 BRASS NIPPLE NO LEAD (I)	EA	145.43	290.86
750	2	NORTHTOW 1" BUG SCREEN FEMALE	EA	28.55	57.10
				Sub Total	**103,546.82**
				Tax	7,507.15
				Total	**111,053.97**

UNLESS OTHERWISE SPECIFIED HEREIN, PRICES QUOTED ARE VALID IF ACCEPTED BY CUSTOMER AND PRODUCTS ARE RELEASED BY CUSTOMER FOR MANUFACTURE WITHIN THIRTY (30) CALENDAR DAYS FROM THE DATE OF THIS QUOTATION. CORE & MAIN LP RESERVES THE RIGHT TO INCREASE PRICES TO ADDRESS FACTORS, INCLUDING BUT NOT LIMITED TO, GOVERNMENT REGULATIONS, TARIFFS, TRANSPORTATION, FUEL AND RAW MATERIAL COSTS. DELIVERY WILL COMMENCE BASED UPON MANUFACTURER LEAD TIMES. ANY MATERIAL DELIVERIES DELAYED BEYOND MANUFACTURER LEAD TIMES MAY BE SUBJECT TO PRICE INCREASES AND/OR APPLICABLE STORAGE FEES. THIS BID PROPOSAL IS CONTINGENT UPON BUYER'S ACCEPTANCE OF SELLER'S TERMS AND CONDITIONS OF SALE, AS MODIFIED FROM TIME TO TIME, WHICH CAN BE FOUND AT: https://coreandmain.com/TandC/

Bid Proposal

Aquifer Storage & Recovery Pilot Testing Phase 1

COP CONSTRUCTION-033
Job Location: Sandy, UT
Engineer: Hansen Alle
Bid Date: 05/10/2023 (
Bid Due Date:
Addendum Number:
Plan Sheet Date:
Core & Main Bid #: 2904378

Core & Main
4052 West 8380 South
West Jordan, UT 84088 0000
Phone: 801-280-8485
Fax: 801-280-8446

Credit Invoice

Disclaimers

DUE TO CURRENT SUPPLY CHAIN DISRUPTIONS, MATERIALS ARE SUBJECT TO PRICING AT TIME OF SHIPMENT. MATERIAL AVAILABILITY AND TIMELINESS OF SHIPMENTS CANNOT BE GUARANTEED. THIS TERM SUPERSEDES ALL OTHER CONTRACTUAL PROVISIONS.

Seq #	Qty	Description	UoM	Sell	Ext Sell	Flag
		**********				
		BID SCHEDULE B -				
		ASR WELL EQUIPPING				
		**********				
		BID ITEM B12				
		FURNISH & INSTALL WELL HOUSE PIPING				
		FROM PUMP MOTOR				
		LEAD TIME: 12-14 WEEKS				
3350	1	10 VALMATIC SWING FLEX CHECK FLG X FLG 7810LW, DUCTILE IRON BODY & DISC, CLASS 150# FLG ENDS, FUSION BONDED EPOXY COATED IN/OUT, STAINLESS STEEL RETAINING RING, BUNA-N SEAT, OUTSIDE LEVER & WEIGHT OPERATOR	EA	5,810.72	5,810.72	
4590	1	2" VALMATIC 102-WS AIR/VAC VLV MODEL 102WS.XF, CAST IRON BODY 316 SS TRIM, BUNA-N SEAT, NPT THREADED INLET, RATED 300 PSI, FUSION BONDED EPOXY COATED, WITH SST MESH ANT-SURGE INLET SCREEN	EA	1,178.99	1,178.99	
4860	1	2 VALMATIC 202C.2 COM AV W/SS MODEL 202C.2XF-LD, CAST IRON BODY, 316 SS TRIM, BUNA-N SEAT NPT THREADED INLET/OUTLET, LOW DUROMETER SEAT RATED 1-75 PSI, FUSION BONDED EPOXY LINED & COATED	EA	1,141.89	1,141.89	
		SAND TESTER ASSEMBLY				
5030	1	ROSSUM SAND TESTER ASSEMBLY	EA	1,158.75	1,158.75	

5040	1	3/8 BRASS ST 90 NO LEAD (I)	EA	5.01	5.01
5050	1	3/8X6 BRASS NIPPLE NO LEAD (I)	EA	5.56	5.56

Sub Total **9,300.92**

Bid Notes

DI SPOOLS QUOTED WITH TNEMEC N140 PRIMER COAT ONLY & CEMENT LINED.

UNLESS OTHERWISE SPECIFIED HEREIN, PRICES QUOTED ARE VALID IF ACCEPTED BY CUSTOMER AND PRODUCTS FOR MANUFACTURE WITHIN THIRTY (30) CALENDAR DAYS FROM THE DATE OF THIS QUOTATION. CORE & MAIN LP I PRICES TO ADDRESS FACTORS, INCLUDING BUT NOT LIMITED TO, GOVERNMENT REGULATIONS, TARIFFS, TRANSP COSTS. DELIVERY WILL COMMENCE BASED UPON MANUFACTURER LEAD TIMES. ANY MATERIAL DELIVERIES DELA TIMES MAY BE SUBJECT TO PRICE INCREASES AND/OR APPLICABLE STORAGE FEES. THIS BID PROPOSAL IS CONT OF SELLER'S TERMS AND CONDITIONS OF SALE, AS MODIFIED FROM TIME TO TIME,

https://coreandmain.com/TandC/

606 N Marshall Way #103 - Layton, UT 84041 - Phone: 801-298-9772

Change Order

Proposal Submitted to:	COP Construction	Phone	Date
Street		Job Name	Metropolitan Storage and Recovery
City, State, Zip Code		COR #	
Attn:	Bill Crowley	Email	

We hereby submit change orders and estimates for:

Option A (500 kVA to 150kVA)		
Credit for transformer	$	(9,500.00)
-See attached quote sheet		
Credit going from 300HP VFD to 60 HP VFD	$	(32,000.00)
-See attached quote sheet		
Credit for MDP gear sizing reduction	$	(900.00)
-See attached quote sheet		
TOTAL CREDITS	**$**	**(42,400.00)**
Option B (480V service from exisiting gear)		
Credits for Option B	$	(138,350.00)
-See below for material list		
Adders for Option B	$	141,500.00
-See below for material list		
Additional Changes from Original Bid Time Drawings		
Credit from going from 300HP VFD to 60HP VFD	$	(32,000.00)
Credit for MDP downsizing	$	(900.00)
-See attached quote sheets		
Credit for originally quoted instrumentation at bid day	$	(20,832.00)
Cost increase for additional instrumentation added with new drawings and switch to siemens instrumentation per owners request	$	50,552.60
Additional electrical work change order from new drawings	$	14,850.00
- 4 additional level transmitter locations accompanying conduits and excavation		
TOTAL Change order for new drawings	**$**	**2,170.60**

We Propose hereby to furnish material & labor complete in accordance with the above specifications for the sum of:

Dollars ($ **0.00**).

Payment to be made as follows:

Standard payment terms Net 30

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workers Compensation Insurance.

Authorized Signature

Note: This proposal may be withdrawn by us if not accepted within 90 days

Acceptance of proposal--The above prices, specifications, and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature

Date of acceptance

Purchase Order #

MEDIUM VOLTAGE TO 150kVA TRANSFORMER

COUNT	DESCRIPTION
1500'	3" PVC Conduit
9	3" Long Sweep Fiberglass 90 Deg Elbows
25'	2" PVC Conduit
6	2" PVC Female Adaptors
3	2" GRC Ridged 90 Deg Elbows
10'	1/2" PVC Conduit
1	1/2" PVC Male Adaptor
10'	2" GRC Riged Conduit
1	2" Threadless Connector
4500'	#1 15kV AL XLP Medium Voltage Wire
6	15 kV Load Break Elbows
105'	4/0 CU Wire
105'	#6 CU Wire
10'	Deep Uni-strut
2	2" Uni-strut Straps
2	5/8" X 10' Ground Rods
2	5/8" Ground Rod Clamps
1	#2 Single Barrel Lug
4	250 kCMIL Single Barrel Lugs
1	Transformer Pad/Vault
1	150 kVA Transformer 12470 - 480/277V
1	255 Amp 480 Volt 42 Circuit Panel w/Main Breaker
1500'	Trenching

Total $138,350

Lead Times 35-40 weeks after approved submittal

480 V FROM 500kVA TRANSFORMER

COUNT	DESCRIPTION
1500'	4" PVC Conduit
8	4" GRC Ridged 90 Deg Elbows
10'	4" GRC Ridged Conduit
1	4" GRC Ridged Threadless Connector
2	4" PVC Female Adaptors
10'	2" GRC Ridged Conduit
1	2" GEC Ridged Threadless Connector
10'	1/2" PVC Conduit
1	1/2" PVC Male Adaptor
6000'	500 kCMIL CU Wire
40'	4/0 CU Wire
75'	#6 CU Wire
4	500-4/0 Polaris Insulated Multi-tap Connectrors
1	36" x 36" x 12" NEMA 4 Junction Box
1	4" Myers Hub
1	2" Myers Hub
10'	Deep Uni-strut
2	4" GRC Uni-strut Straps
4	750 kCMIL Single Barrel Lugs
1	#2 Single Barrel Lug
3	Quazite PG2436BA24 (24" X 36"X 24") Hand Hole
1	255 Amp 480 Volt 42 Circuit Panel w/Main Breaker
2	5/8" X 10' Ground Rods
2	5/8" Ground Rod Clamps
1500'	Trenching

Total 00

Lead Times 6 weeks

ROYAL WHOLESALE ELECTRIC
1406 W 3300 S
OGDEN UT 84401-3373
TEL: 801 621-6730 FAX: 801 394-1928

SLS: 6899
INSLS: 2321
BY: KK
FOB: SHIPPING POINT
FRT: PREPAID

QUOTE #: 5001392
DATE: 12/06/23
REV #: 000
REV DATE: 12/06/23

CONTACT: KORY KOHLER
kory@royalogden.com
QUOTE FOR: TURNER EXCAVATING & ELECTRIC
ACCT #: 82-84750 TURNER EXCAVATING & ELECTRIC

QUOTE EXPIRES 01/05/2024

95 W 2025 N
CENTERVILLE, UT 84014
TEL: (801)298-9772

CUS PO #: PILOT TESTING XFMER
JOB NAME:

LN	TYPE/DESIG	QTY	MFR	CATALOG#	DESCRIPTION	PRICE	UOM	EXT AMT
01	XFMR	1	FEDPA	3PH 150KVA TRANSFORMER		59,150.00	E	59,150.00
02	XFMR	-1	FEDPA	3PH 500KVA TRANSFORMER		-68,711.00	E	-68,711.00
							MDSE:	**-9,561.00**
							Shipping Charge:	**0.00**
							TOTAL:	**-9,561.00**

PLEASE NOTE: THIS IS NOT AN OFFER TO CONTRACT, BUT MERELY A QUOTATION OF CURRENT PRICES FOR YOUR CONVENIENCE AND INFORMATION. ORDERS BASED ON THIS QUOTATION ARE SUBJECT TO YOUR ACCEPTANCE OF THE TERMS AND CONDITIONS LOCATED AT SALES.OUR-TERMS.COM, WHICH WE MAY CHANGE FROM TIME TO TIME WITHOUT PRIOR NOTICE. WE MAKE NO REPRESENTATION WITH RESPECT TO COMPLIANCE WITH JOB SPECIFICATIONS.

CUSTOMER COPY

Customer Quote For: TURNER EXCAVATING & ELECTRIC

ROYAL - OGDEN **Quote:** Q1103581 **Revision #:** 001

1406 W 3300 S
OGDEN UT 84401
Tel: (801)621-6730 **Fax:** (801)394-1928

Contact Name: KORY KOHLER

Quote Date: 04/17/24
Updated On: 04/17/24
Expires On: 05/17/24

Job Name:
Attn:
Ship To: TURNER EXCAVATING & ELECTRIC
606 NORTH MARSHALL WAY
LAYTON, UT 84041-0000
TEL: (801)544-7666

Customer PO #:
Customer PO Date:
FOB: SHIPPING POINT
Freight: PREPAID

LN	Product	Qty	Price	Per *	Ext Price
01	SPL 60HP 460V 3PH NEMA-12 VFD PANEL	1	$28,105.00	E	$28,105.00
02	SPL 300HP 460V 3PH NEMA 12 VFD PANEL	-1	($60,105.00)	E	($60,105.00)

Merchandise: **($32,000.00)**
Total: **($32,000.00)**

PLEASE NOTE: THIS IS NOT AN OFFER TO CONTRACT, BUT MERELY A QUOTATION OF CURRENT PRICES FOR YOUR CONVENIENCE AND INFORMATION. ORDERS BASED ON THIS QUOTATION ARE SUBJECT TO YOUR ACCEPTANCE OF THE TERMS AND CONDITIONS LOCATED AT SALES.OUR-TERMS.COM, WHICH WE MAY CHANGE FROM TIME TO TIME WITHOUT PRIOR NOTICE. WE MAKE NO REPRESENTATION WITH RESPECT TO COMPLIANCE WITH JOB SPECIFICATIONS.

* Per E = Each, C = Hundred, M = Thousand

Terms and Conditions

Axiom Constructors
7636 Cornia Drive ◦ South Weber, UT 84405
Phone: (801) 675-5294

Change Order Request #2

February 16, 2024

Project: Aquifer MWDSLS
Contractor: COP Concstruction
Work Order Scope: ASR Well House - Project Delays & Remobilization
Notes: Concrete & Labor Rate Increases

Scope of Work Description	Materials					Labor			Equipment		Total Cost
	Item Description	UOM	Qty	Cost Per Unit	Total	MHRS	Rate	Total	Eq. Type	Total	
ASR Well House Project Delays	Mobilization										
	Demobilization	USD	1.00	$637.00	$637.00						$637.00
	Mobilization	USD	1.00	$637.00	$637.00						$637.00
Concrete & Labor Rate Increases	Concrete & Labor Rates										
	Concrete Rate Increase	CY	30.23	$18.00	$544.14						$544.14
	Labor Rate Increase	USD				40.00	$70.19	$2,807.60			$2,807.60
			Subtotals		$1,818.14	40.00		$2,807.60			$4,625.74
			Sales Tax	7.25%	$131.82						$131.82
									Direct Job Expense		$0.00
									Overhead Margin	5.0%	$231.29
									Profit Margin	10.0%	$462.57
									Bond Fee	0.0%	$0.00
										Total Work Order	**$5,451.42**

This Work Order is null & void if not accepted, signed and returned within ten (10) business days from date above or if site conditions change that effect this scope of work.

CONTRACT TIME EXTENSION IN DAYS 114

Ernie Arnold

Project Manager- Axiom Constructors — Contractor — Title / Date

Phone: (808) 292.7832 - Ernie@axiom.work

SECTION 33 12 30
SUBMERSIBLE DEEP WELL PUMP AND PUMP MOTOR

PART 1 GENERAL

1.1 DESCRIPTION

A. Furnish, deliver and install a submersible pump and motor into the well casing to depths as shown on the drawings.

1.2 REFERENCES

A. Work covered by this Specification shall meet or exceed the provisions of the latest editions of the following Codes and Standards in effect at time of award of the Contract:

B. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

1. ANSI B16.1 Cast Iron Pipe Flanges and Flanged Fittings Class 25, 125, 250 and 800
2. ANSI/HI 9.6.4 Rotodynamic Pumps for Vibration Measurements and Allowable Values

C. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

1. ASTM A 36 Structural Steel
2. ASTM A 48 Gray Iron Castings
3. ASTM A 53 Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless
4. ASTM A 108 Steel Bars, Carbon, Cold Finished, Standard Quality
5. ASTM A 269 Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service
6. ASTM A 536 Standard Specification for Ductile Iron Castings
7. ASTM A 582 Standard Specification for Free-Machining Stainless Steel Bars
8. ASTM B 584 Standard Specification for Copper Alloy Sand Castings for General Applications

D. AMERICAN WATER WORKS ASSOCIATION

1. AWWA C 651 Standard for Disinfecting Water Mains
2. AWWA C 654 Standard for Disinfecting of Wells
3. AWWA E 102 Standard Specifications for Submersible Turbine Pumps

E. NATIONAL SANITATION FOUNDATION

1. NSF/ANSI 60 Drinking Water Treatment Chemicals

2. NSF/ANSI 61 Drinking Water System Components – Health Components
3. NSF/ANSI 372 Drinking Water System Components – Lead Content

1.3 SUBMITTALS

A. CONTRACTOR shall submit for review to ENGINEER, sufficient literature, detailed specifications, and drawings to show dimensions, make, style, speed, size, type, horsepower, head-capacity, efficiency, materials used, design features, internal construction, weights, and any other information required by ENGINEER for review of all pumping equipment. No pumping equipment will be accepted, and installation will not be allowed, until such review has been completed. All submittals shall clearly state any deviations from specified requirements. Provide the following with the submittal:

1. Performance data curves showing head, capacity, horsepower demand, and pump efficiency over entire operating range of pump, from shutoff to maximum capacity. The equipment shall indicate separately the head, capacity, horsepower demand, overall efficiency, and minimum submergence required at the specified design point.

2. Equipment manufactured shall provide complete and detailed information regarding the installation of the pumps. Any installation requirements or operating conditions which the supplier or manufacturer' feel to be critical to the safe and reliable operation of the pumps should be identified and described in detail.

3. Shop drawings submitted for review also shall include detailed description of motor, including electrical diagrams, schematic control diagrams, and a detailed description of how the control system is to function, where applicable.

4. Shop drawings of the shroud and calculations indicating that it will provide adequate water flow past the motor.

1.4 OPERATING CONDITIONS

A. Table I indicates the operating conditions of the pumps.

TABLE I - OPERATING CONDITIONS DEEP WELL TURBINE PUMP

ITEM	SPECIFICATION
Design capacity of pump (gpm)	200
Design total dynamic head at discharge of bowl assembly (feet)	700
Pump Setting Depth	670

ITEM	SPECIFICATION
Nominal Operating Speed (rpm)	3,450
Minimum Efficiency at Design Point	78%
Maximum NPSHR at Design Point	20 feet
Motor Horsepower	60
Column Size (diameter)	4-inch
Diameter of Well Casing	20-inch (19.25" I.D.)
Maximum Bowl Diameter (O.D.)	8.0 inches
Approx. Elevation (ft. above MSL)	5,000 feet
Model No: National (or approved equal)	SN6LC
Utility Power (volts, phase, hertz)	480, 3, 60
Electric Motor Shroud	Required. Size for min. water velocity = 0.5 ft/s or higher if required by manufacturer. 316 Stainless Steel

1.5 MECHANICAL DEFECTS AND REJECTIONS

A. CONTRACTOR furnished pumps that have mechanical defects or do not meet the requirements for head-capacity, horsepower, efficiency, and vibration requirements will be rejected, and shall be replaced without additional cost to OWNER for furnishing, removal, reinstallation, and retesting. Mechanical defects shall include excessive vibration, improper balancing of any rotating parts, improper tolerances, binding, excessive bearing or motor heating, defective materials, including materials that do not conform to the Specifications, improper fitting of parts, and any other defect which will in time damage the pump or unreasonably impair its efficiency or operation.

1.6 WARRANTY

A. CONTRACTOR furnished equipment covered by these specifications shall be warranted against defective parts due to faulty material or workmanship for one (1) year after date of start-up. CONTRACTOR shall guarantee to replace any defective parts within the period of time specified at no additional cost to OWNER. If CONTRACTOR has to pull pump to replace defective parts, CONTRACTOR shall guarantee to pull and replace pump at no additional cost to OWNER.

1.7 MEASUREMENT AND PAYMENT

A. The pumping system and motor shall be measured and paid under the bid item for which it relates.

1.8 FACTORY TESTING

A. Factory testing is not required for this project.

1.9 NSF CERTIFCATION

A. The following pump system components shall meet NSF 61 or NSF 372:

1. Pump
2. Motor
3. Motor shroud (if certification is available)
4. Power Cable (if certification is available)
5. Column pipe
6. Foot valve / column check valve
7. Discharge head
8. Sounding and monitoring tubes.
9. Pressure transducer (water level probe) and cable.

B. The flow control valve and nitrogen tubes (Baski Valve System) shall meet NSF 61 or NSF 372 if this certification is available as an option.

PART 2 PRODUCTS

2.1 SUBMERSIBLE DEEP WELL VERTICAL TURBINE PUMP

A. The pump shall be a deep well submersible vertical turbine pump suitable for pumping culinary water.

B. Performance Requirements

1. Pump Speed - The pumps shall operate as specified in Table I.

2. Pump Characteristics - The pump shall be characterized by head capacity curves of steadily decreasing head with increasing capacity. Maximum head shall be at zero flow. The pump shall have a minimum efficiency as provided in Table I during operation against the system head. Pump head - capacity curves shall indicate that these losses have been included. Pumps shall have head-capacity curves similar to that of the specified pump. Pumps having curves that show a flatter or near horizontal slope over a section in the head – capacity curve will not be accepted. Curves with head-capacity curves with slopes of the curve flatter than that shown for the specified pump will not be accepted.

3. The pump and motor shall be capable of producing the flow rate and total dynamic heads indicated in Table I.

4. The pump shall be designed to operate throughout its entire range without excessive vibration. Pump shall meet the requirements of the Hydraulic Institute for vibration limits.

C. Vertical Turbine Pump Components

1. Pumps
   a. The vertical turbine pump for the well shall be as manufactured by National Pump Company or approved equal and shall be a multi-stage submersible bowl assembly (or equal). Equals are: Flowserve, Floway, American Marsh if they meet other specified conditions.

   b. The intermediate pump bowls shall be cast iron, ductile iron or stainless steel. If iron, bowls shall be enamel lined.

   c. The impellers shall be brass, bronze or stainless steel of the enclosed types. Impellers shall be statically balanced. The impeller shaft shall be 416 stainless steel.

   d. The discharge case shall be threaded on the outside for column sizes up to 14 inches and fitted with a cast iron ASTM A48 Class 30 column adaptor of the proper size to connect to the column selected. Likewise, the suction case shall also be threaded on the I.D. and fitted with a cast iron or steel suction adaptor.

2. Discharge Head
   a. The discharge head shall be fabricated steel (ASTM A53 Grade B Pipe and ASTM A 36 Steel Plate or as recommended by the manufacturer) and shall be accurately machined and with a surface discharge. Discharge flange shall be machined and drilled to ANSI standards for 150 lb. rating and shall be sized to match the specified system. Lifting lugs of sufficient strength to support the weight of the complete unit shall be provided. The base shall be round or square. If square, the corners must be rounded or chamfered. Head must be able to accept the monitoring tube, sounding tube, electrical cable, nitrogen lines and well vent if provided at this location as shown on the drawings. CONTRACTOR shall modify the well base dimensions on the drawings to match supplied head.

   b. CONTRACTOR shall be responsible for ensuring that the discharge head is structurally and mechanically adequate for the provided and installed pump configuration.

3. Discharge Pipe
   a. The discharge pipe shall be ASTM A 53 grade B Schedule 40 minimum (or thicker as needed for the application) steel pipe connected by threaded sleeve couplings. The application shall be checked to determine that the strengths of the pipe and threaded joints are adequate. The maximum length of discharge pipe shall be 20-feet.

4. Foot Valve / Column Check Valve
   a. A foot valve or column check valve shall be provided. The valve must be located below the BASKI flow control valve.

5. Suction Pipe and Strainer
   a. A suction pipe shall not be required.
   b. A stainless steel strainer / screen that is integral with the pump intake shall be provided.

2.2 MOTOR

A. Pump motor shall be of the submersible type.

B. CONTRACTOR shall verify and document that the motor manufacturer will warranty this motor/VFD combination and application. All material, manufacturing and performance standards shall be in accordance with AWWA E 101.

C. The motor rating shall be such that at design it will not be loaded beyond nameplate rating and at no place on the pump curve shall the loading exceed the service factor.

D. The submersible pumps and motors shall be designed for continuous submerged operations. The pump motor shall be mounted below the pump. A screen shall be provided at the pump intake.

E. Motor Shroud. A shroud shall be provided for all submersible electrical motors. The shroud shall be constructed and installed to channel water past the electrical motor so as to provide adequate cooling. The CONTRACTOR shall size shrouds so that adequate cooling occurs for the range of flowrates provided in Table 1. Operating Conditions.

2.3 APPURTENANCES

A. Well Monitoring and Sounding Tubes

1. The CONTRACTOR shall furnish and install two 1 ¼" diameter well monitoring tubes in each well consisting of flush thread schedule 80 PVC pipe. The PVC tube shall be joined and banded to the pump column with stainless steel bands at maximum of 10 feet. A minimum of two 1/4-inch diameter vent holes for every 10 feet of length shall

be provided throughout the entire length of the monitoring tube. The depth of the monitoring tube shall be as indicated on the drawings. The bottom end shall be capped with a ¼-inch hole drilled in the end.

B. Well Vent

1. The well vent shall consist of galvanized steel 1 inch diameter pipe through the soul plate extended above the bottom plate of the pump discharge head with a 180 degree bend made of two steel ells. The outlet end of the vent pipe shall be covered with No. 14 stainless steel wire mesh securely fastened by a stainless steel band. The lower end of the vent pipe shall be threaded into the well surface plate and provide a water tight seal. See Drawings.

2.4 FLOW CONTROL VALVE

A. An ASR flow control valve shall be provided. The valve shall alternately control the flowrate into the well during injection and allow a vertical turbine pump to operate. The valve shall be actuated by applying pressurized nitrogen gas or by releasing nitrogen gas.

1. The ASR valve shall be manufactured by:

Baske, Inc.
4002 S Clay St.
Englewood, CO 80110
(303) 789-1200

B. The ASR valve shall be placed above the submersible pump and motor, to control recharge flow rate and/or water levels in the ASR well; and allow pumping to the surface.

C. A check valve (not supplied by ASR valve manufacturer) shall be placed between the ASR valve and the submersible pump and motor to prevent recharge water from going through the pump in reverse flow.

D. All nuts, bolts, washers, and fittings for hose or tubing, shall be type 316 or Duplex 2205 stainless steel.

E. ASR valve to have threads matching the column pipe.

F. ASR valve actuation lines shall be protected at each column pipe coupling with metal shields.

G. Wetted parts must be constructed with the following acceptable materials:

1. Stainless steel 316 in standard or L grades, or Duplex 2205

2. Reinforced natural rubber

3. Other materials as approved by ENGINEER

H. CONTRACTOR shall furnish and install the following required appurtenances:

1. Two (2) compressed nitrogen tanks. The nitrogen tanks shall be of the standard K size. (Normally between 200-250 SCF – Approximately 9” diameter and about 48-54” tall.)

2. Two (2) 2-stage nitrogen regulators. Output pressure is 200 psi (CONTRACTOR shall confirm regulator requirements with FCV supplier).

3. Two (2) stainless steel inflation lines to the valve.

4. One (1) Baski automatic control panel.

5. Two (2) Rosemount 3051T Pressure Transmitters with two (2) Rosemount 306 2-Valve Integral Manifolds and two (2) mounting brackets.

6. One (1) outdoor rated, NEMA 3R or NEMA 4 stand alone steel cabinet of the size greater than or equal to 90” H x 84” W x 24” D. This cabinet shall house the control panel and two nitrogen tanks and be mounted to a concrete pad.

7. One (1) 9’ x 6’ concrete pad. The above-mentioned cabinet will be bolted to the pad.

8. The annular space in the steel cabinet shall be sealed with Sikaflex Construction Sealant or approved equal where the nitrogen exits the cabinet.

I. The ASR manufacturer’s controls for automatic operation shall be designed to operate on 115 VAC, or other voltage approved by ENGINEER.

J. All control lines shall be secured and protected at every coupling joint of the column pipe. Control lines shall be ¼ inch OD Duplex 2205 stainless steel, tested to a minimum of 10,000 psi, or approved equal.

K. The ASR valve manufacturer shall supply stainless steel protectors for each column pipe coupling. These protectors shall be attached with stainless steel “Band-It” brand industrial clamps or equal. The protectors shall be designed such that they cannot slip up or down off the couplings.

L. CONTRACTOR shall install the ASR valve in accordance with the manufacturer’s recommendations.

M. The ASR valve manufacturer shall supply a trained and authorized field service representative for up to two (2) consecutive 8-hour days to act in an advisory capacity

during installation of its equipment. After installation, the representative is excused from any further on-site attendance.

N. The ASR valve manufacturer shall supply a trained and authorized field service representative for one 8-hour day for start-up, testing, and training.

PART 3 EXECUTION

3.1 INSTALLATION

A. Install new pump and motor at the location shown on the drawings and according with manufacturer's recommendations.

3.2 FIELD TESTS

A. After installation, the pump shall be given an operating test to demonstrate freedom from mechanical defects, excessive noise, and vibration. The test shall include operating the pump continuously while throttling the discharge as needed. The operating test shall be performed for a minimum of one hour, or as directed by ENGINEER. Pumps with variable speed drives shall be tested at maximum speed, and at the average and minimum speeds listed under the specification for the pumps. A copy of actual test data shall be furnished to ENGINEER.

3.3 DISINFECTION

A. Source of Water

1. The Contractor shall assume all responsibility to obtain the necessary water supplies for disinfection of the pumping system.

B. Testing Procedure

1. Leakage and pressure testing must be completed, and all leaks repaired prior to disinfection procedures.

2. Pump and related piping installed under this Contract shall be disinfected using an approved disinfection method in accordance with the "American Water Works Association Standard for Disinfecting Water Mains" (AWWA C651) and “American Water Works Association Standard for Disinfecting Wells” (AWWA C654).

3. Upon completion of disinfection, Sodium Bisulfate ($NaHSO_3$) shall be applied to the heavily chlorinated water to neutralize thoroughly the chlorine residual remaining. Water shall be neutralized to less than 1 ppm.

4. After completion of the disinfection, CONTRACTOR shall flush the new system until the chlorine residual is a maximum of 0.3 ppm after which bacteriological test will be performed by OWNER.

5. At the end of 24 hours after the first sample is taken, a second bacteriological test will be performed by OWNER to insure adequate disinfection. If the initial or second disinfection fails to provide satisfactory bacteriological results, or shows the presence of coliform, then the well line shall be re-chlorinated, flushed, and retested until satisfactory results are obtained at the expense to the Contractor.

- END OF SECTION -

SECTION 40 12 50
PRESSURE TRANSMITTER

PART 1 GENERAL

1.1 THE REQUIREMENT

A. The Contractor shall furnish, test, install, and place into satisfactory operation the pressure transmitters, with all spare parts, accessories, and appurtenances as herein specified and as shown on the Drawings.

1.2 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 20 00 – Instruments, General

PART 2 PRODUCTS

2.1 PRESSURE TRANSMITTERS

A. Pipeline Pressure Transmitters

1. Acceptable manufactures are:
   a. Emerson Rosemount 2088 Series
   b. Schneider Foxboro IAP/IAG Series
   c. ABB 266 series
2. Power supply shall be 24VDC, powered from PLC panel power supply. Process connection shall be 1/2-inch female NPT flange adapter. Signal output shall be 4 to 20 mA.
3. Pressure transmitter shall be capacitance or resonant-wire type. Unless otherwise specified, wetted parts shall be ASTM A276, type 316 stainless steel. Span shall be adjustable over a 6:1 or greater range. Over range capacity without affecting calibration shall be not less than 200 percent of maximum specified range. Volumetric displacement shall not exceed 0.01 cubic inch over the specified span. Fill fluid unless otherwise specified shall be silicone oil. Adjustable dampening shall be provided. External zero adjustment shall be provided. Accuracy shall be 0.25 percent of span or better for spans greater than 5 inches water column and 0.5 percent of span or better for spans less than or equal to 5 inches water column.
4. Transmitter shall be provided with the following adjustable range:

Adjustable range of transmitter, water column	Span specified in the instrument schedule, water column
0.5 to 6 inches	0.5 to 5.5 inches
5 to 30 inches	5.5 to 27.5 inches
25 to 150 inches	27.5 to 137.5 inches
125 to 750 inches	137.5 to 750 inches

5. Higher ranges and spans shall be provided as specified in the instrument schedule. Transmitter for spans less than or equal to 25 psig shall be provided with one 1/2-inch flanged process connection and two 1/4-inch drain/vent ports, one plugged and one provided with bleed valve. Transmitter shall be provided with an evacuated sealed chamber and reference diaphragm shall be provided with a weatherproof, bug proof atmospheric vent. Transmitters for spans greater than 25 psig shall be similar except designed for gage pressure service, and overpressure rating shall be greater than the lesser of 2000 psig and 150 percent of maximum range.

B. Submersible Pressure/Level Transmitters

1. Submersible Pressure transmitter shall be Siemens LH300, or equal. Power supply shall be 24VDC, powered from PLC panel power supply. Process connection shall be 1/2-inch female NPT flange adapter. Signal output shall be 4 to 20 mA.
2. Pressure transmitter shall be capacitance or resonant-wire type. Unless otherwise specified, wetted parts shall be ASTM A276, type 316 stainless steel drinking water grade. Span shall be adjustable over a 6:1 or greater range. Over range capacity without affecting calibration shall be not less than 200 percent of maximum specified range. Volumetric displacement shall not exceed 0.01 cubic inch over the specified span. Fill fluid unless otherwise specified shall be silicone oil. Adjustable dampening shall be provided. External zero adjustment shall be provided. Accuracy shall be 0.25 percent of span or better for spans greater than 5 inches water column and 0.5 percent of span or better for spans less than or equal to 5 inches water column.
3. Transmitter shall be provided with the following adjustable range:

Adjustable range of transmitter, water column	Span specified in the instrument schedule, water column
0.5 to 6 inches	0.5 to 5.5 inches
5 to 30 inches	5.5 to 27.5 inches
25 to 150 inches	27.5 to 137.5 inches
125 to 750 inches	137.5 to 750 inches

4. Higher ranges and spans shall be provided as specified in the instrument schedule. Transmitter for spans less than or equal to 25 psig shall be provided with one 1/2-inch flanged process connection and two 1/4-inch drain/vent ports, one plugged and one provided with bleed valve. Transmitter shall be provided with an evacuated sealed chamber and reference diaphragm shall be provided with a weatherproof, bug proof atmospheric vent. Transmitters for spans greater than 25 psig shall be similar except designed for gage pressure service, and overpressure rating shall be greater than the lesser of 2000 psig and 150 percent of maximum range.
5. Transmitters shall be provided with the following pressure ratings:

Well Identification	Pressure Rating
LC-0150-01 (ASR Well)	0 – 300 psi
LC-0151-01 (MW #1)	0 – 200 psi
LC-0151-02 (MW #2)	0 – 200 psi
LC-0151-03 (MW #3B)	0 – 200 psi
LC-0151-04 (MW #4)	0 – 200 psi
LC-0151-05 (MW #5)	0 – 200 psi
LC-0151-06 (MW #35195)	0 – 200 psi
LC-0151-07 (MW #35198)	0 – 200 psi

PART 3 EXECUTION

3.1 REQUIREMENTS

A. Refer to Section 40 20 00.

- END OF SECTION -

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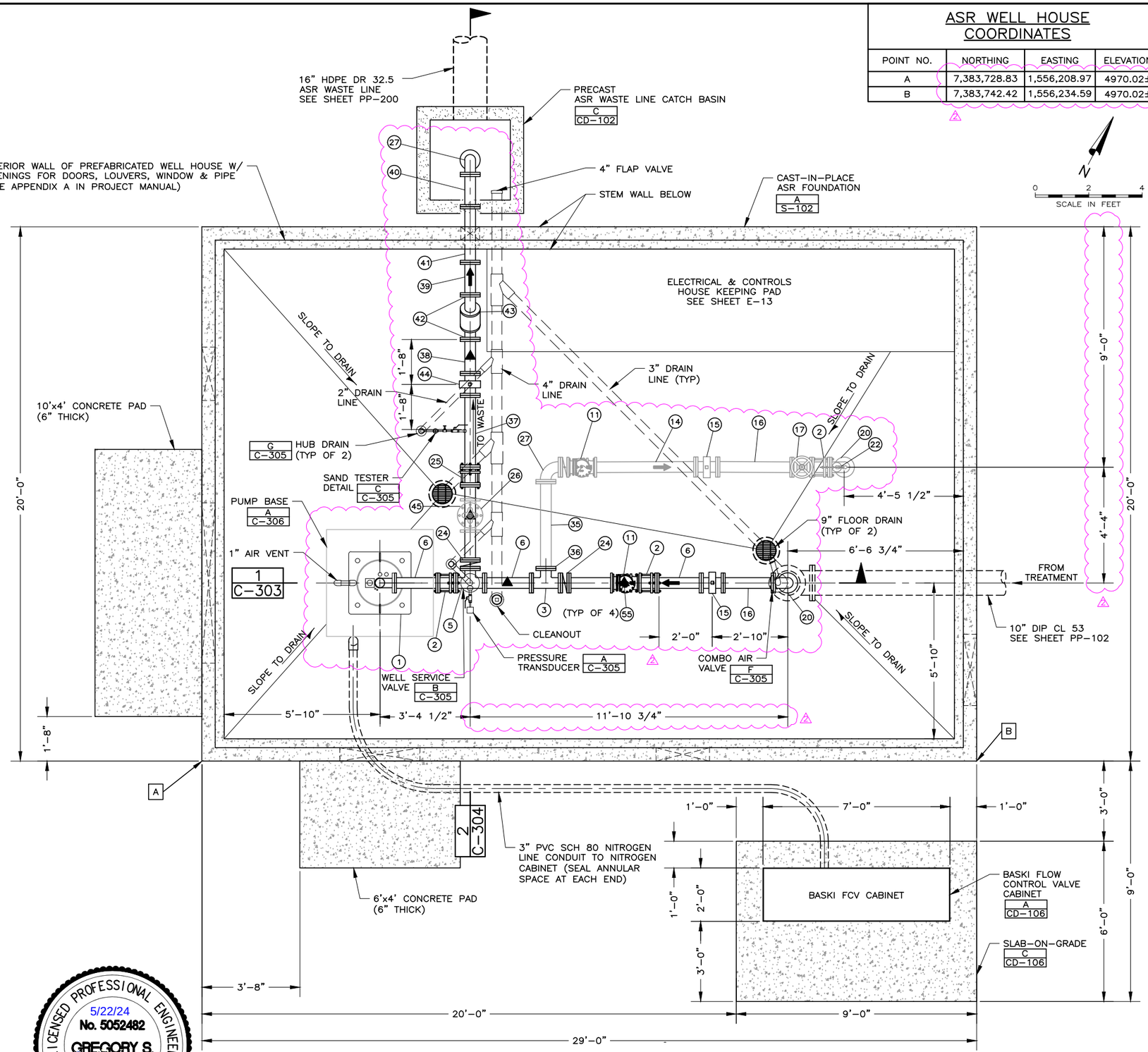


ASR WELL HOUSE COORDINATES

POINT NO.	NORTHING	EASTING	ELEVATION
A	7,383,728.83	1,556,208.97	4970.02±
B	7,383,742.42	1,556,234.59	4970.02±

VALVE & FITTING SCHEDULE

NO.	DESCRIPTION	CONNECTION	SIZE
1	SUBMERSIBLE DISCHARGE HEAD	THD X FLG	4"
2	DISMANTLING JOINT (RESTRAINED ROMAC DJ400)	FLG	4"
3	DI TEE	FLG	4"
4	REDUCING BUSHING	THD	1" X 3/4"
5	DI TEE W/ 2" BOSS	FLG	4"
6	DIP SPOOL (CL 53)	FLG	4"
7	BRASS 90 BEND	THD	1"
8	PRESSURE GAUGE, 4 1/2" (0-50 PSI)	THD	1/2"
9	WELL SERVICE AIR VALVE (VALMATIC 100ST)	THD	1/2"
10	SMOOTH NOISE SAMPLING TAP	THD	3/4"
11	SWING CHECK VALVE	FLG	4"
12	ROSSUM SAND TESTER	THD	–
13	HIGH PRESSURE SHUT-OFF SWITCH	THD	1/2"
14	DIP SPOOL (CL 53)	FLG	4"
15	MAG METER	FLG	4"
16	DIP SPOOL	FLG	4"
17	GATE VALVE	FLG	4"
18	DI 90° ELBOW	FLG X MJ	10"
19	DIP SPOOL (CL 53)	FLG	10"
20	ELBOW W/ 2" BOSS	FLG	4"
21	DIP SPOOL (CL 53)	FLG	4"
22	COMBO AIR VALVE ASSEMBLY	THD	1"
23	REDUCING BUSHING	THD	1" X 1/2"
24	BUTTERFLY VALVE (ELECTRICAL ACTUATION)	FLG	4"
25	DISMANTLING JOINT (RESTRAINED ROMAC DJ400)	FLG	4"
26	FUTURE PUMP CONTROL VALVE (NOT IN CONTRACT)	FLG	4"
27	DI 90° ELBOW	FLG	4"
28	DIP SPOOL (CL 53)	FLG	4"
29	DIP SPOOL W/ SLIT	FLG X PE	4"
30	BRASS NIPPLE	THD	1/2"
31	THRED-O-LET OR TAPPED BOSS	THD	1"
32	BALL VALVE W/ UNION	THD	1"
33	BUSHING	THD	1" X 1/2"
34	PRESSURE TRANSDUCER	THD	–
35	DIP SPOOL (CL 53)	FLG	4"
36	DI BLIND FLANGE	FLG	4"
37	DIP SPOOL (CL 53)	FLG	4"
38	DIP SPOOL (CL 53)	FLG	4"
39	DIP SPOOL (CL 53)	FLG	4"
40	DIP SPOOL (CL 53)	FLG	4"
41	WALL PIECE DIP SPOOL	FLG	4"
42	DI 45° ELBOW	FLG	4"
43	DI FILLER (0'-9" LONG)	FLG	4"
44	MAG METER	FLG	4"
45	DIP SPOOL (CL 53)	FLG	4"
46	BRASS NIPPLE	THD	1"
47	TRUE UNION BALL VALVE	THD	1"
48	BRASS CROSS	THD	1"
49	BRASS TEE	THD	3/4"
50	BRASS NIPPLE	THD	3/4"
51	BRASS PIPE	THD	1"
52	BRASS 90° BEND	THD	1/2"
53	BRASS PIPE	THD	1/2"
54	COMBO AIR VALVE (VALMATIC 201.C.2 LOW HEAD)	THD	1"
55	PIPE SUPPORT (ANVIL FIG 265)	SIZED FOR PIPE	
56	DI REDUCER	FLG	10" X 4"

▲ – PIPE SUPPORT E CD-100

GENERAL SHEET NOTES:
1. ITEMS SHOWN SHADED ARE FUTURE AND NOT IN CONTRACT.

FILE NAME: PROJECTS\262 - METROPOLITAN WATER DISTRICT\08.200 - PHASE I MAR\CAD\C-302 ASR WELL HEAD EQUIPMENT PLAN - CHANGE ORDER 2.DWG
FILE DATE: 5.16.2024 10:21:22 (DCL)

LICENSED PROFESSIONAL ENGINEER
5/22/24
No. 5052482
GREGORY S. THOMAS
STATE OF UTAH

HANSEN ALLEN & LUCE ENGINEERS

DESIGNED	BDM
DRAFTED	MAJ
CHECKED	BDM
DATE	MAY 2023

NO.	DATE	REVISIONS	BY	APVD.
3				
2	05/24	CHANGE ORDER #2	SWM	BDM
1	6/23	CONFORMED DRAWINGS – RELEASED FOR CONSTRUCTION	SWM	GST

SCALE: AS SHOWN

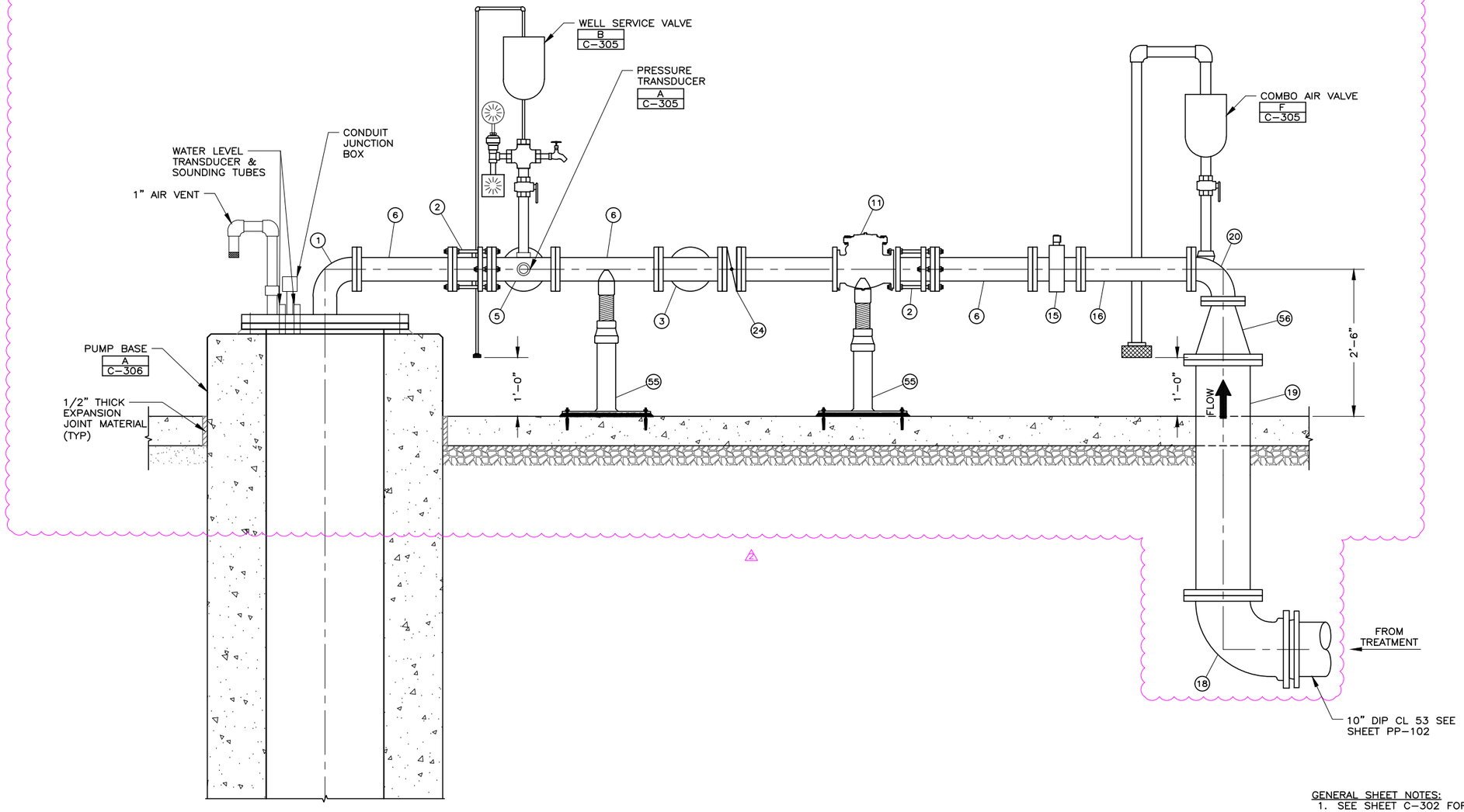
METROPOLITAN WATER DISTRICT
OF SALT LAKE & SANDY
3430 EAST DANISH ROAD
COTTONWOOD HEIGHTS, UT 84093

LC063 ASR PILOT TESTING – PHASE 1
CIVIL
ASR WELL HEAD EQUIPMENT PLAN

BP120

SHEET C-302

262.08.200



GENERAL SHEET NOTES:
1. SEE SHEET C-302 FOR VALVE & FITTING SCHEDULE.

PUMP PIPING SECTION 1 / C-302

SCALE IN FEET

FILE NAME: PROJECTS\262 - METROPOLITAN WATER DISTRICT\08.200 - PHASE I MAR\CAD\C-303 WELL HEAD EQUIPMENT SECTIONS I - CHANGE ORDER 2.DWG
FILE DATE: 5.16.2024 10:22:30 (DCL)

LICENSED PROFESSIONAL ENGINEER
5/22/24
No. 5052482
GREGORY S. THOMAS
STATE OF UTAH

HANSEN ALLEN & LUCE, INC. ENGINEERS

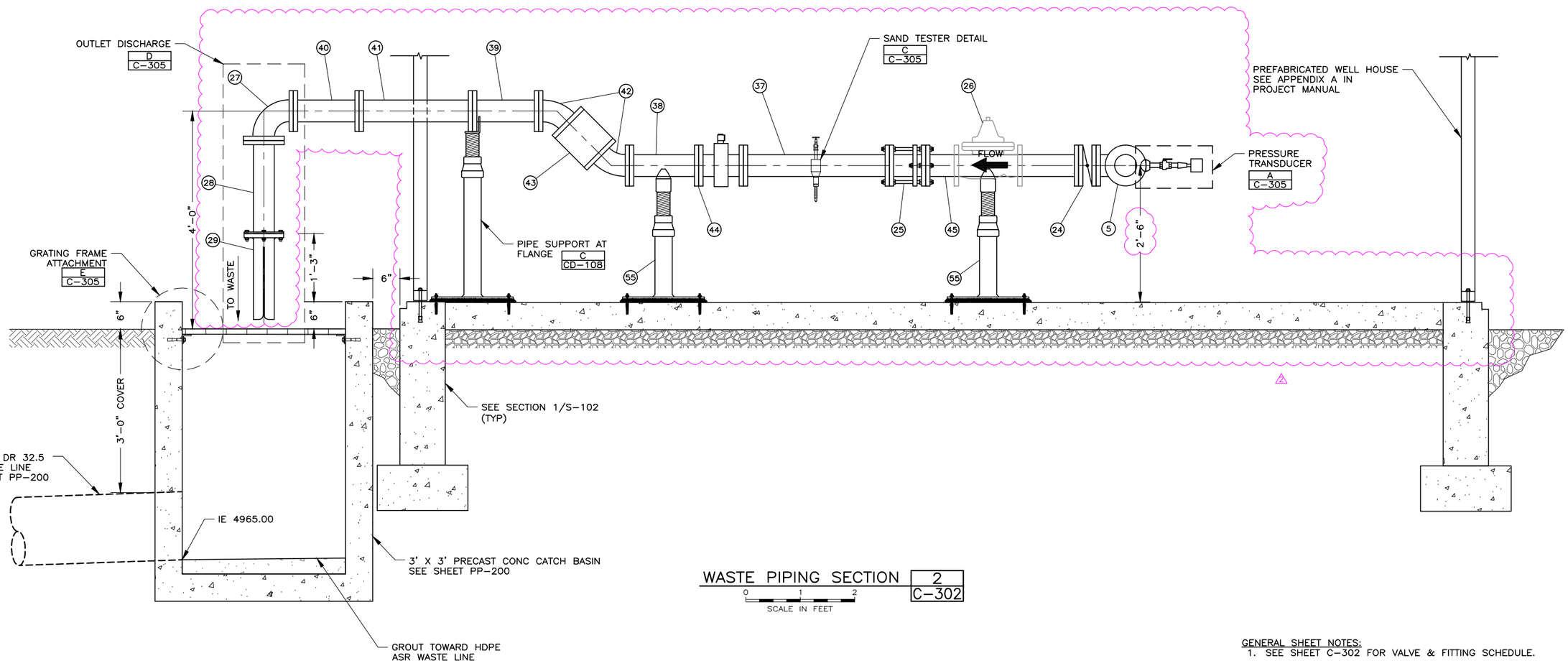
DESIGNED	BDM	3				
DRAFTED	MAJ	2	05/24	CHANGE ORDER #2	SWM	BDM
CHECKED	BDM	1	6/23	CONFORMED DRAWINGS - RELEASED FOR CONSTRUCTION	SWM	GST
DATE	MAY 2023	NO.	DATE	REVISIONS	BY	APVD.

SCALE: AS SHOWN

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY
3430 EAST DANISH ROAD
COTTONWOOD HEIGHTS, UT 84093

LC063 ASR PILOT TESTING - PHASE 1
CIVIL
ASR WELL HEAD EQUIPMENT SECTION I BP 21

SHEET C-303
262.08.200



WASTE PIPING SECTION 2 / C-302

SCALE IN FEET 0 1 2

GENERAL SHEET NOTES:

1. SEE SHEET C-302 FOR VALVE & FITTING SCHEDULE.
2. ITEMS SHOWN SHADED ARE FUTURE.

LICENSED PROFESSIONAL ENGINEER
5/22/24
No. 5052482
GREGORY S. THOMAS
STATE OF UTAH

HANSEN ALLEN & LUCE, Inc. ENGINEERS

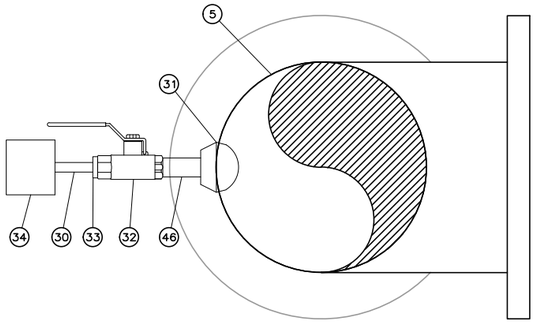
DESIGNED	BDM	3				
DRAFTED	MAJ	2	05/24	CHANGE ORDER #2	SWM	BDM
CHECKED	BDM	1	6/23	CONFORMED DRAWINGS – RELEASED FOR CONSTRUCTION	SWM	GST
DATE	MAY 2023	NO.	DATE	REVISIONS	BY	APVD.

SCALE: AS SHOWN

METROPOLITAN WATER DISTRICT
OF SALT LAKE & SANDY
3430 EAST DANISH ROAD
COTTONWOOD HEIGHTS, UT 84093

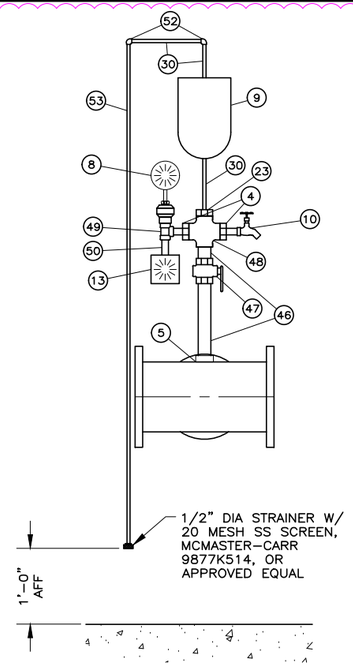
LC063 ASR PILOT TESTING – PHASE 1
CIVIL
ASR WELL HEAD EQUIPMENT SECTION II BP-22

SHEET C-304
262.08.200



PRESSURE TRANSDUCER
NTS

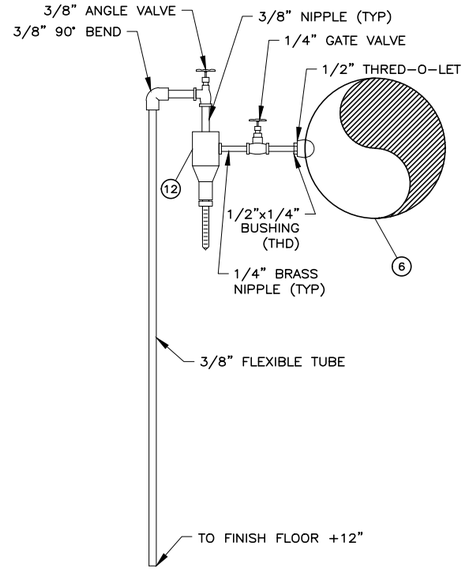
A	A	A
C-302	C-303	C-304



NOTE: PROVIDE PIPE SUPPORTS AS NEEDED.

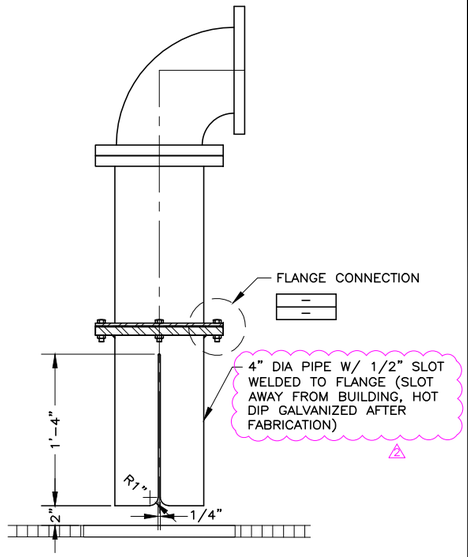
WELL SERVICE VALVE
NTS

B	B
C-302	C-303



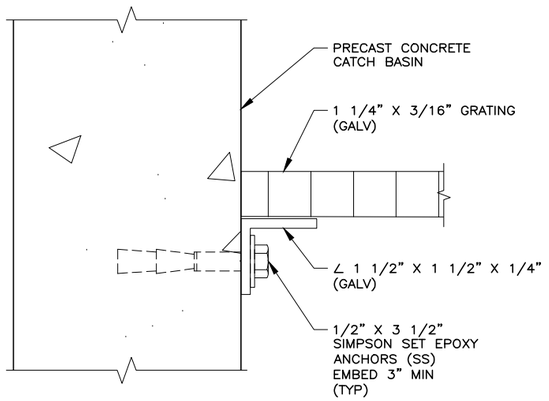
SAND TESTER DETAIL
NTS

C	C
C-302	C-304



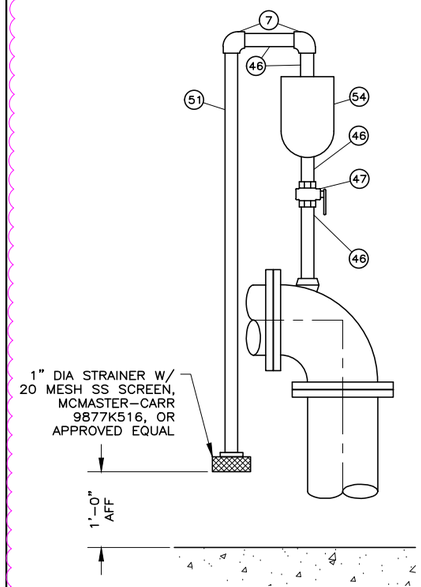
OUTLET DISCHARGE
NTS

D
C-304



GRATING FRAME ATTACHMENT
NTS

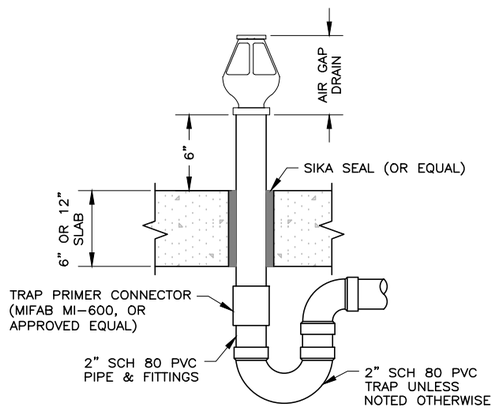
E
C-304



NOTE: PROVIDE PIPE SUPPORTS AS NEEDED.

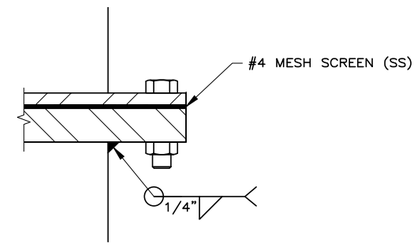
AIR RELEASE DETAIL
NTS

F	F
C-302	C-303



HUB DRAIN
NTS

G
C-302



FLANGE CONNECTION
NTS

H
–

GENERAL SHEET NOTES:
1. SEE SHEET C-302 FOR VALVE & FITTING SCHEDULE.

5/22/24
No. 5052482
GREGORY S. TAYLOR
LICENSED PROFESSIONAL ENGINEER
STATE OF UTAH

NO.	DATE	REVISIONS	BY	APVD.
3				
2	05/24	CHANGE ORDER #2	SWM	BDM
1	6/23	CONFORMED DRAWINGS – RELEASED FOR CONSTRUCTION	SWM	GST

DESIGNED BDM
DRAFTED MAJ
CHECKED BDM
DATE MAY 2023

HANSEN ALLEN & LUCE, inc. ENGINEERS

SCALE: AS SHOWN

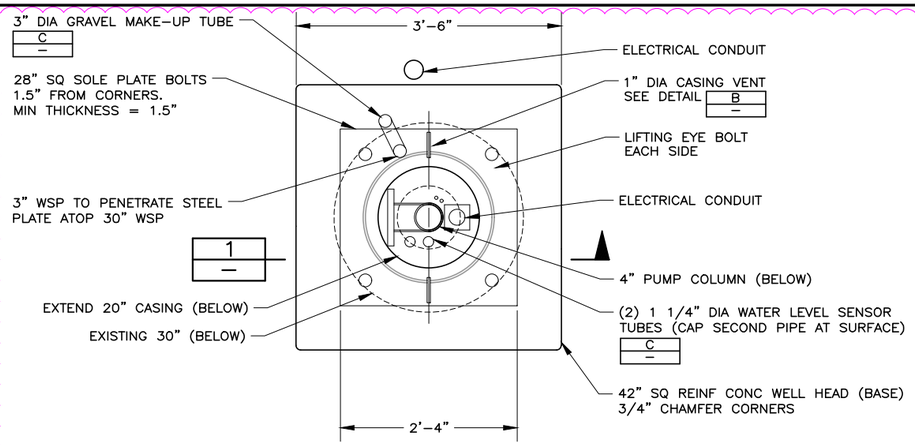
METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY
3430 EAST DANISH ROAD
COTTONWOOD HEIGHTS, UT 84093

LC063 ASR PILOT TESTING – PHASE 1
CIVIL
ASR WELL HEAD EQUIPMENT DETAILS

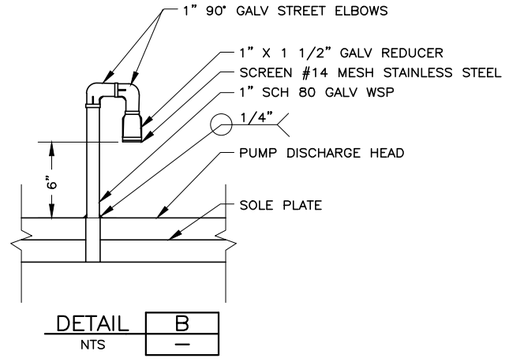
BP 23-262.08.200

SHEET C-305

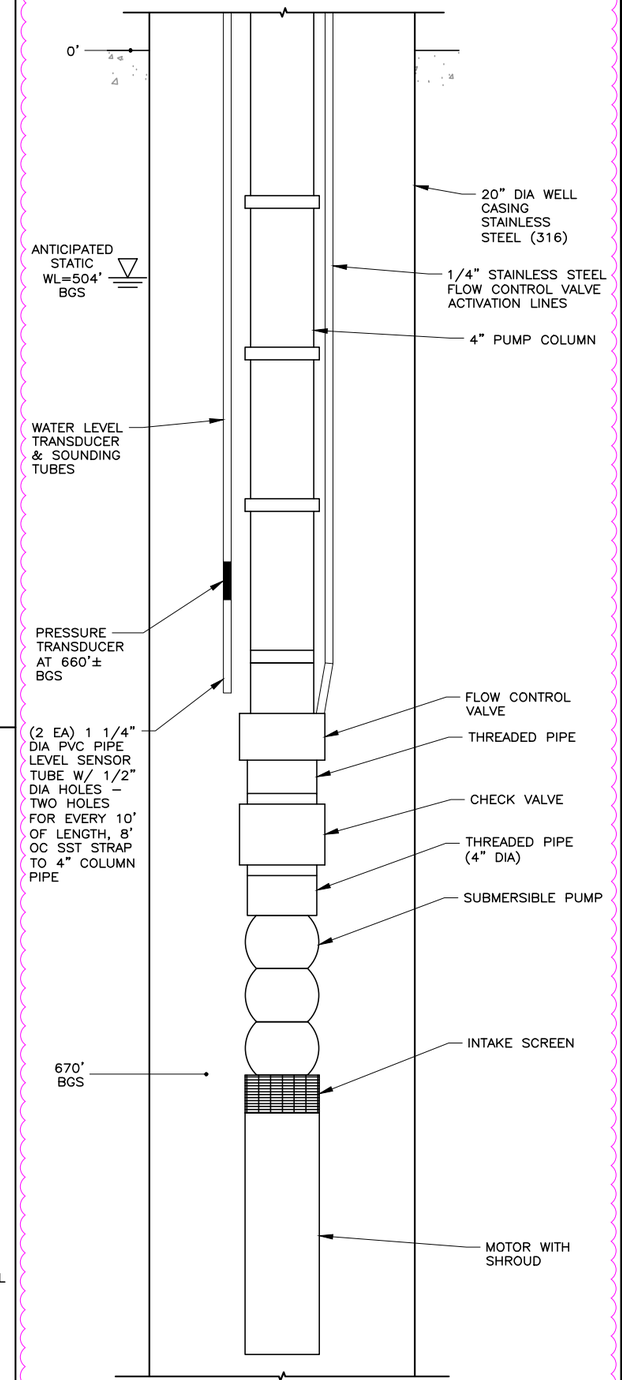
FILE NAME: PROJECTS\262 – METROPOLITAN WATER DISTRICT\08.200 – PHASE I MAR\CAD\C-305 WELL HEAD EQUIPMENT DETAILS – CHANGE ORDER 2.DWG
FILE DATE: 5.16.2024 10:24:45 (DCL)



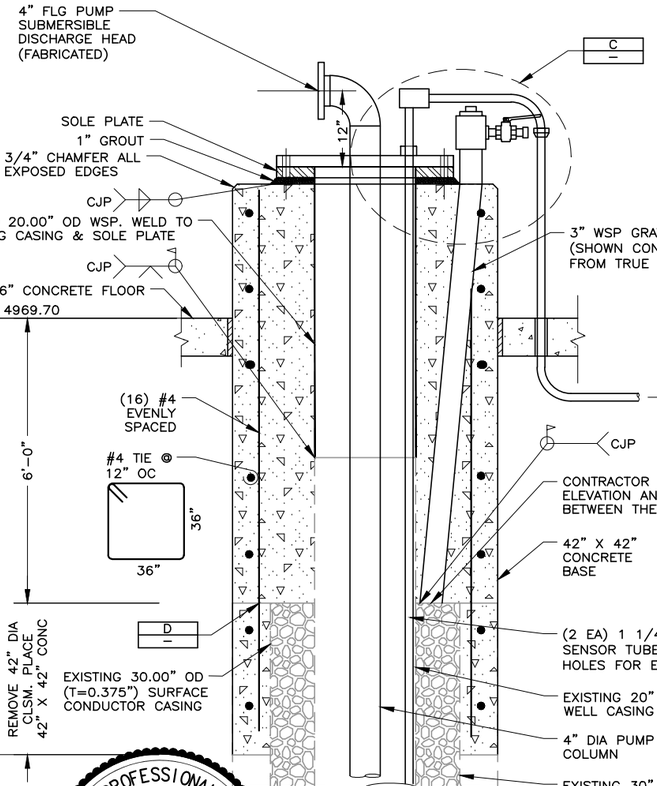
PUMP BASE — NTS — A C-302 — A C-303



DETAIL B — NTS



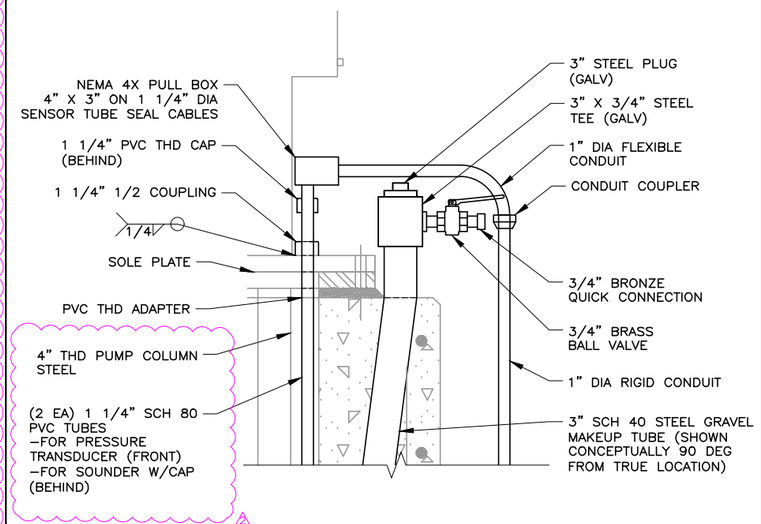
ASR WELL SECTION — NTS — D



SECTION 1 — NTS

GENERAL SHEET NOTES:

1. CJP WELD ALL JOINTS (JTS).
2. CJP DBL FILLET WELD PIPE TO PL (OR FLG) JTS.



DETAIL C — NTS

NO.	DATE	REVISIONS	BY	APVD.
3				
2	05/24	CHANGE ORDER #2	SWM	BDM
1	6/23	CONFORMED DRAWINGS – RELEASED FOR CONSTRUCTION	SWM	GST

DESIGNED BDM
DRAFTED MAJ
CHECKED BDM
DATE MAY 2023

SCALE: AS SHOWN

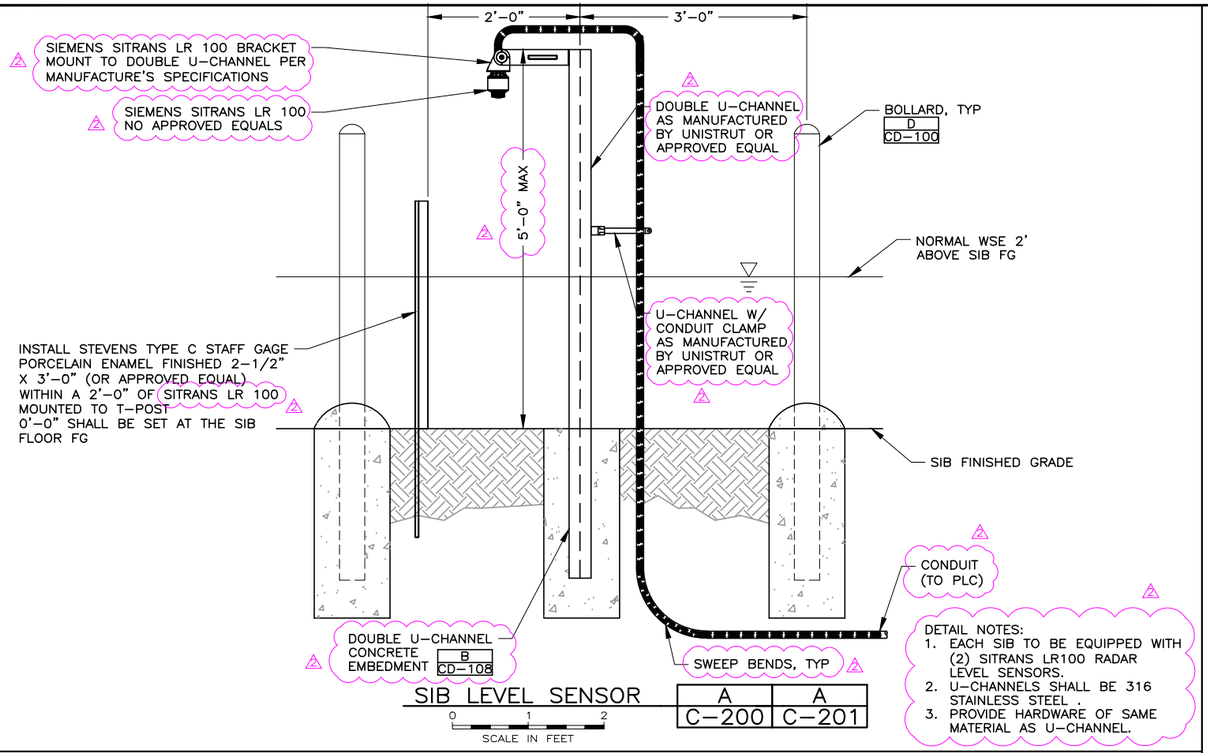
HANSEN ALLEN & LUCE ENGINEERS

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY
3430 EAST DANISH ROAD
COTTONWOOD HEIGHTS, UT 84093

LC063 ASR PILOT TESTING – PHASE 1
CIVIL
ASR WELL HEAD PUMP BASE DETAILS BP124

SHEET C-306
262.08.200

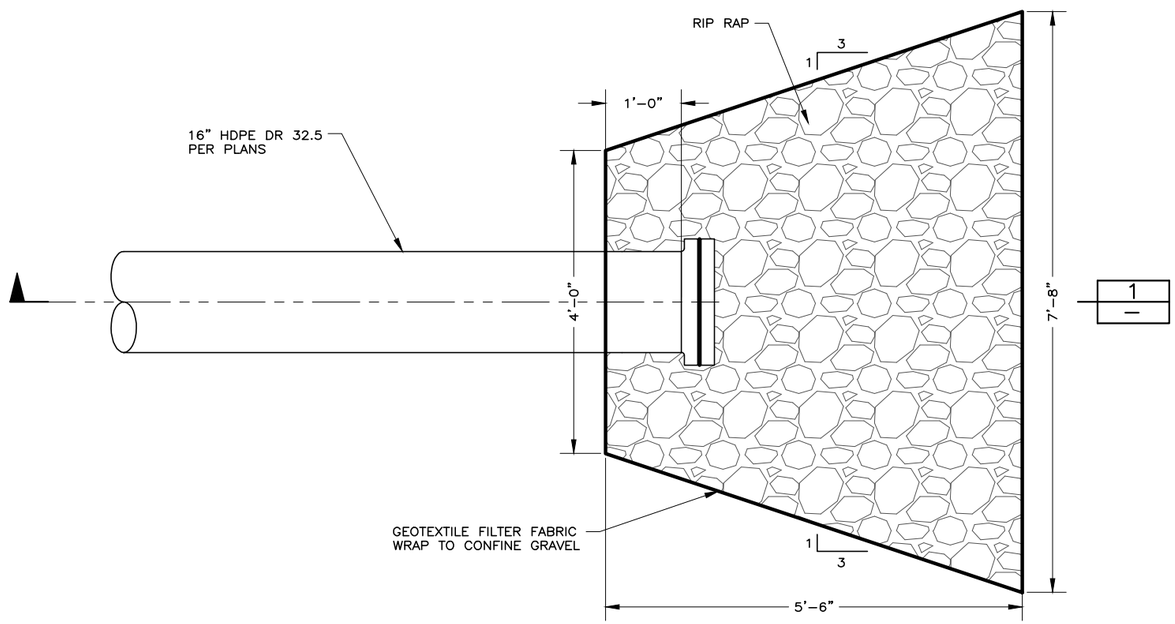
FILE NAME:PROJECTS\262 – METROPOLITAN WATER DISTRICT\08.200 – PHASE I MAR\CAD\C-306 WELL HEAD PUMP BASE DETAILS – CHANGE ORDER 2.DWG
FILE DATE: 5.22.2024 14:07:48 (MAJ)



SIB LEVEL SENSOR

A	A
C-200	C-201

SCALE IN FEET

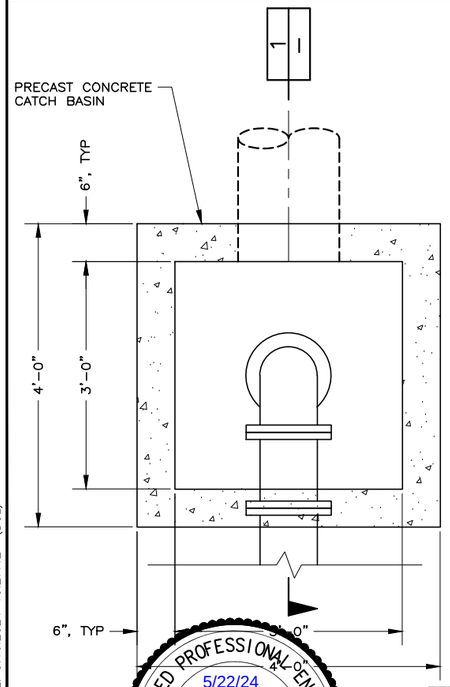


SIB RIPRAP APRON

B	B	B	B
C-200	C-201	PP-303	PP-304

SCALE IN FEET

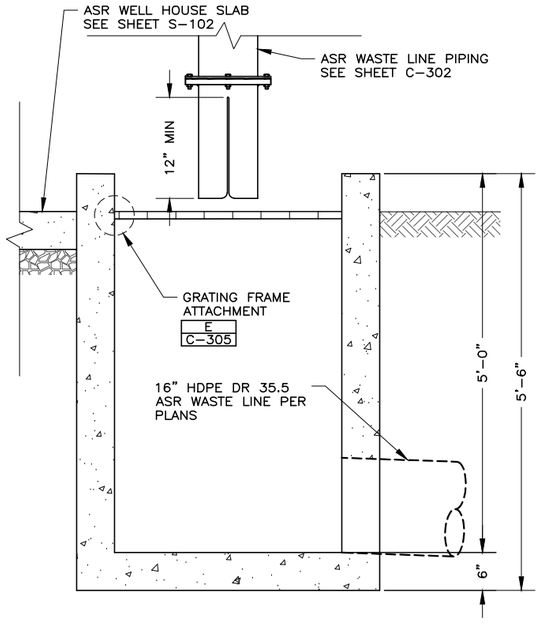
DETAIL NOTES:
1. RIPRAP D_{50} = 12 INCHES



ASR WASTE LINE CATCH BASIN

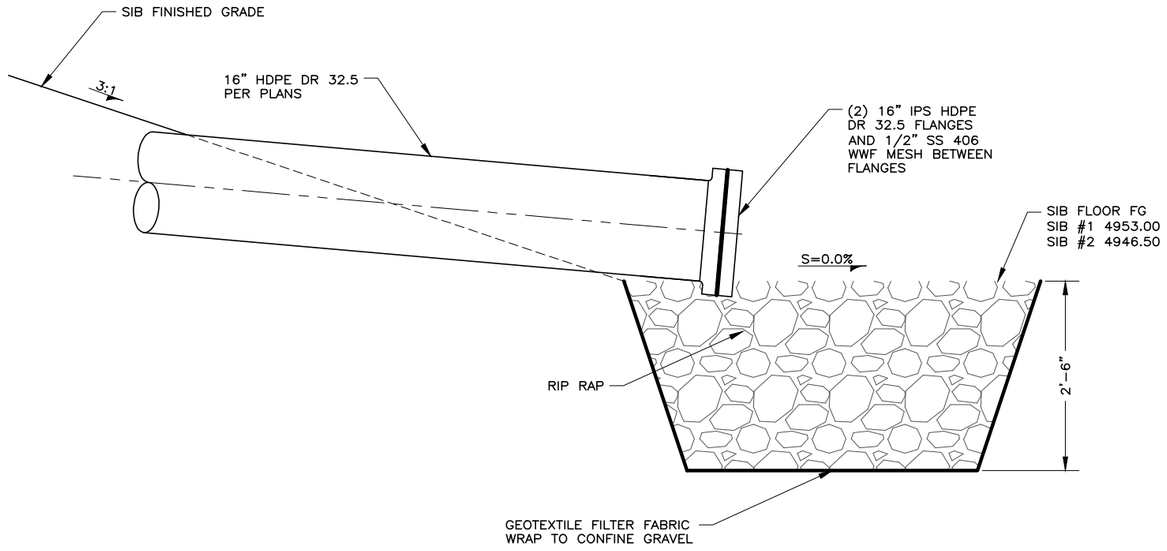
C	C	C
C-302	PP-200	S-102

SCALE IN FEET



SECTION 2

SCALE IN FEET



SECTION 1

SCALE IN FEET

DETAIL NOTES:
1. RIPRAP D_{50} = 12 INCHES

LICENSED PROFESSIONAL ENGINEER
No. 5052482
GREGORY S. TUCKS
STATE OF UTAH
5/22/24

DESIGNED	BJM, SWM	3				
DRAFTED	MAJ, DRW	2	05/24	CHANGE ORDER #2	SWM	GST
CHECKED	GST	1	6/23	CONFORMED DRAWINGS – RELEASED FOR CONSTRUCTION	SWM	GST
DATE	MAY 2023	NO.	DATE	REVISIONS	BY	APVD.

HANSEN ALLEN & LUCE, INC. ENGINEERS

SCALE: AS SHOWN

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY
3430 EAST DANISH ROAD
COTTONWOOD HEIGHTS, UT 84093

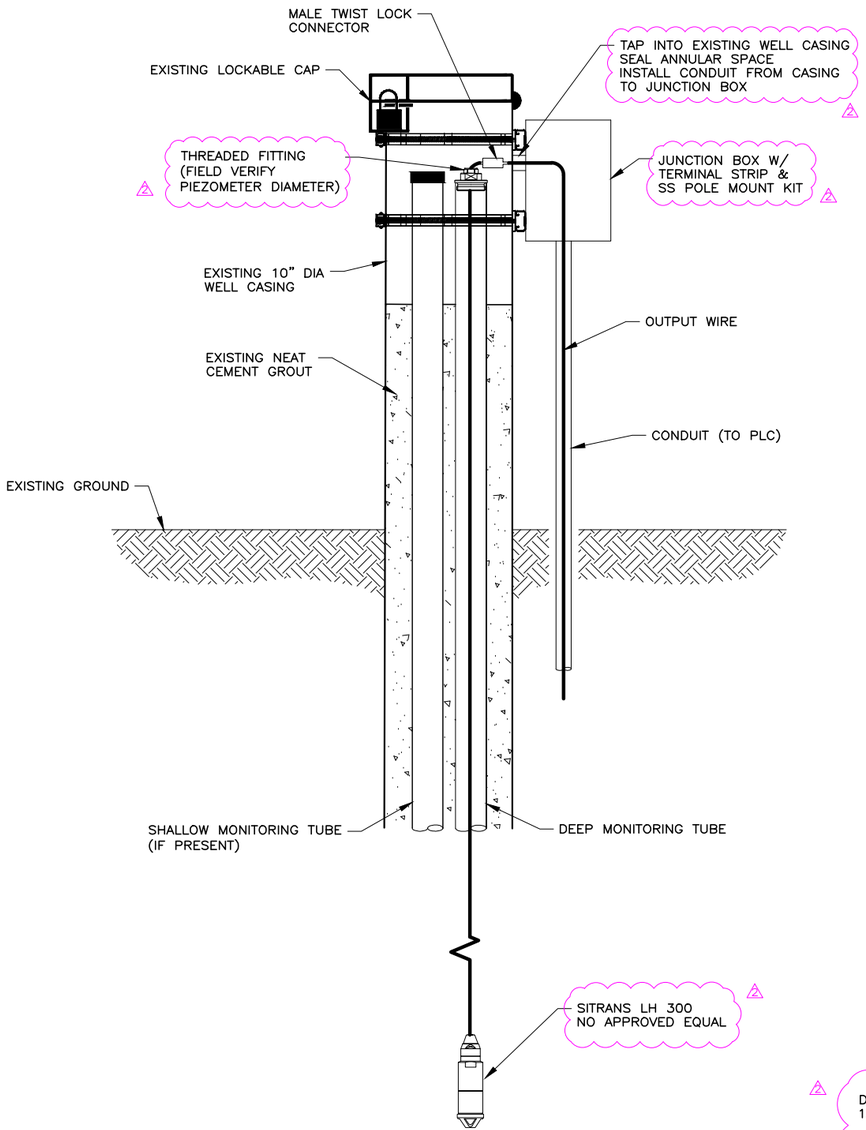
LC063 ASR PILOT TESTING – PHASE 1
CIVIL DETAILS
DETAIL SHEET III

BP125

SHEET CD-102

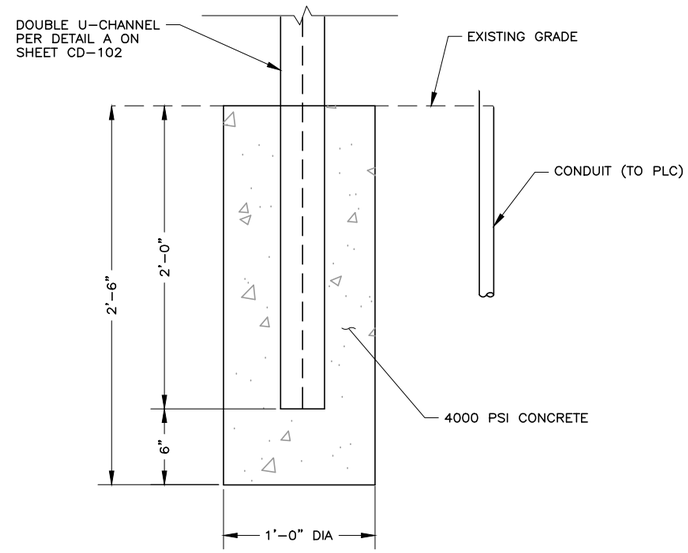
262.08.200

FILE NAME: PROJECTS\262_-_METROPOLITAN WATER DISTRICT\08.200 - PHASE I MAR\CAD\CD-102 DETAIL SHEET III - CHANGE ORDER 2.DWG
FILE DATE: 5.16.2024 10:27:42 (DCL)

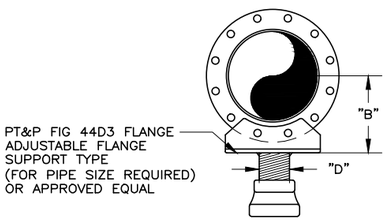


MONITORING WELL COMMUNICATION DETAIL
NTS

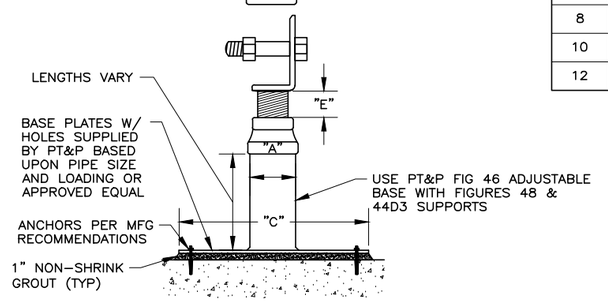
DETAIL NOTES:
1. REMOVE ALL EXISTING PUMPS IN MONITORING WELLS (IF PRESENT) PRIOR TO INSTALLATION OF SUBMERSIBLE TRADUCERS



DOUBLE U-CHANNEL CONCRETE EMBEDMENT — B
NTS — CD-102



DIMENSIONS IN INCHES					
PIPE SIZE	A	B	C (SQ)	D	E
4	3	4.25	9	2.50	3.75
6	3	5.50	9	2.50	4.75
8	3	6.87	9	2.50	4.75
10	3	8.50	9	2.50	4.75
12	3	9.93	9	2.50	4.75



(PT&P = PIPING TECHNOLOGY & PRODUCTS, INC.)

PIPE SUPPORT AT FLANGE — C
NTS — C-305

LICENSED PROFESSIONAL ENGINEER
5/22/24
No. 5052482
GREGORY S. THOMAS
STATE OF UTAH

HANSEN ALLEN & LUCE, INC. ENGINEERS

DESIGNED	BDM	3				
DRAFTED	MAJ	2	05/24	CHANGE ORDER #2	SWM	BDM
CHECKED	BDM	1	6/23	CONFORMED DRAWINGS - RELEASED FOR CONSTRUCTION	SWM	GST
DATE	MAY 2023	NO.	DATE	REVISIONS	BY	APVD.

SCALE: AS SHOWN

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY
3430 EAST DANISH ROAD
COTTONWOOD HEIGHTS, UT 84093

LC063 ASR PILOT TESTING - PHASE 1
CIVIL DETAILS
MONITORING WELL COMMUNICATION DETAILS

SHEET: CD-108
262.08.200

CONTROL CONDUIT SCHEDULE

C001	2 - #16 TSP, 1-#16 GND, 1"C OR 2"C BURIED
C002	3 - #16 TSP, 1-#16 GND, 1"C OR 2"C BURIED
C003	4 - #16 TSP, 1-#16 GND, 1"C OR 2"C BURIED
C007	7 - #16 TSP, 1-#16 GND, 1"C OR 2"C BURIED
C101	4 - #14, 1 - #14 GND, 1"C OR 2"C BURIED
C102	6 - #14, 1 - #14 GND, 1"C OR 2"C BURIED
C103	8 - #14, 1 - #14 GND, 1"C OR 2"C BURIED
C104	10 - #14, 1 - #14 GND, 1"C OR 2"C BURIED
C108	18 - #14, 1 - #14 GND, 1"C OR 2"C BURIED
C109	20 - #14, 1 - #14 GND, 1"C OR 2"C BURIED
C110	22 - #14, 1 - #14 GND, 1"C OR 2"C BURIED
C200	CAT 6 CABLE, 1"C
C201	FLOW ELEMENT CABLE, 1"C
C202	LEVEL ELEMENT CABLE, 1"C
C203	MANUFACTURER'S CABLE, 1"C
C204	VENDOR POWER CABLE INCLUDES INSTRUMENTATION
C205	8 - RTD CABLES, 1-#16GND, 1"C
C206	FIBER OPTIC CABLE - 24 STRAND, 2"C
C300	PULL STRING, 1"C
C301	PULL STRING, 1"C
C302	PULL STRING, 1-1/2"C
C303	PULL STRING, 2"C
C304	PULL STRING, 3"C
C305	PULL STRING, 4"C
C401	PROFIBUS MBP (PA) CABLE, 1"C
C402	PROFIBUS DP CABLE, 1"C

POWER CONDUIT SCHEDULE

3	P001	3-1/C JACKETED 15kV # 1/0 CU MV-105 100% CONCENTRIC NEUTRAL, 220MIL, 133% INSULATION, 105C RATING, P.E. OVERALL JACKET IN NEW HDPE CONDUIT WITH LONG SWEEP FIBERGLASS ELBOWS.	
P100	2	P: 3 - 4/0 N: 1 - 4/0 G: NONE	3"
P101	1	P: 3 - #1 N: NONE G: 1 - #6	1-1/2"
P102	1	P: 3 - #12 N: NONE G: 1 - #12	1"
P103	1	P: 3 - #6 N: NONE G: 1 - #6	1"
P104	1	P: 3 - #1 N: 1 - #1 G: 1 - #8	1-1/2"

PANEL MDP

VOLTAGE: 480/277 V 3Ø 4W | CIRCUIT BREAKER TYPE: | MAIN BREAKER AMPS 225 | BUS AMPS: 225

ENCLOSURE: NEMA 12 GASKETED | INTERRUPTING CAPACITY: 22 KAIC | MOUNTING: SURFACE | COVER TYPE: DOOR-IN-DOOR | LOCATION: IN ASR WELL BUILDING

BRANCH CIRCUIT BREAKER				CONNECTION	DESCRIPTION	PHASE			DESCRIPTION	CONNECTION	BRANCH CIRCUIT BREAKER			
NOTES	#	AMP	P.	LOAD (VA)		A	B	C		LOAD (VA)	P.	AMP	#	NOTES
1	MDP-1	110	3	21329	WELL PUMP	23399			TRANSFORMER	2070	3	50	MDP-2	
	MDP-3	--	--	21329	------		23755		------	2426	--	--	MDP-4	
	MDP-5	--	--	21329	------			22699	------	1370	--	--	MDP-6	
	MDP-7	20	3	100	MOTORIZED VALVE	100			SPARE		1	20	MDP-8	
	MDP-9	--	--	100	------		100		SPARE		1	20	MDP-10	
	MDP-11	--	--	100	------			100	SPARE		1	20	MDP-12	
	MDP-13	20	3	100	MOTORIZED VALVE	100			SPARE		1	20	MDP-14	
	MDP-15	--	--	100	------		100		SPARE		1	20	MDP-16	
	MDP-17	--	--	100	------			100	SPARE		1	20	MDP-18	
	MDP-19	20	1		SPARE	0			SPARE		1	20	MDP-20	
	MDP-21	20	1		SPARE		0		SPARE		1	20	MDP-22	
	MDP-23	20	1		SPARE			0	SPARE		1	20	MDP-24	
	MDP-25				PROVISION	0			PROVISION				MDP-26	
	MDP-27				PROVISION		0		PROVISION				MDP-28	
	MDP-29				PROVISION			0	PROVISION				MDP-30	
	MDP-31				PROVISION	0			PROVISION				MDP-32	
	MDP-33				PROVISION		0		PROVISION				MDP-34	
	MDP-35				PROVISION			0	PROVISION				MDP-36	
	MDP-37				PROVISION	0			PROVISION				MDP-38	
	MDP-39				PROVISION		0		PROVISION				MDP-40	
	MDP-41				PROVISION			0	PROVISION				MDP-42	
	MDP-43				PROVISION	0			PROVISION				MDP-44	
	MDP-45				PROVISION		0		PROVISION				MDP-46	
	MDP-47				PROVISION			0	PROVISION				MDP-48	
	MDP-49				PROVISION	0			PROVISION				MDP-50	
	MDP-51				PROVISION		0		PROVISION				MDP-52	
	MDP-53				PROVISION			0	PROVISION				MDP-54	
					PHASE SUBTOTALS (VA)	23599	23955	22899						
					PHASE TOTALS (KVA)	23.6	24.0	22.9						
					PHASE TOTALS @ 277V (AMPS)	85.2	86.5	82.7						

NOTES:
1. COORDINATE BREAKER SO THAT THE BRANCH CIRCUIT BREAKER OPENS BEFORE THE MAIN BREAKER
2.
3.
4.

PANEL L

VOLTAGE: 208/120 V 3Ø 4W | CIRCUIT BREAKER TYPE: BOLT-ON | MAIN BREAKER AMPS 100 | BUS AMPS: 125

ENCLOSURE: NEMA 12 GASKETED | INTERRUPTING CAPACITY: 10 KAIC | MOUNTING: SURFACE | COVER TYPE: DOOR-IN-DOOR | LOCATION: IN ASR WELL BUILDING

BRANCH CIRCUIT BREAKER				CONNECTION	DESCRIPTION	PHASE			DESCRIPTION	CONNECTION	BRANCH CIRCUIT BREAKER			
NOTES	#	AMP	P.	LOAD (VA)		A	B	C		LOAD (VA)	P.	AMP	#	NOTES
	L-1	20	1	500	PLC	1000			WATER FLOW METER TRANSMITTER	500	1	20	L-2	
	L-3	20	1	1080	RECEPTACLES		1580		WATER FLOW METER TRANSMITTER	500	1	20	L-4	
	L-5	20	1	500	LIGHTING			500	SPARE		1	20	L-6	
	L-7	20	1	150	VALVE POWER	150			SPARE		1	20	L-8	
	L-9	20	1	150	SIB 1 VALVE POWER		150		SPARE		1	20	L-10	
	L-11	20	1	150	SIB 2 VALVE POWER			150	SPARE		1	20	L-12	
	L-13	20	1	200	WINDING HEATER	200			SPARE		1	20	L-14	
	L-15	20	1	696	VENT FAN		696		SPARE		1	20	L-16	
	L-17	20	2	720	HEAT TRACE			720	SPARE		1	20	L-18	
	L-19	--	--	720	------	720			SPARE		1	20	L-20	
	L-21	20	1		SPARE		0		SPARE		1	20	L-22	
	L-23	20	1		SPARE			0	SPARE		1	20	L-24	
					PHASE SUBTOTALS (VA)	2070	2426	1370						
					PHASE TOTALS (KVA)	2.1	2.4	1.4						
					PHASE TOTALS @ 120V (AMPS)	17.3	20.2	11.4						

NOTES:
1.
2.
3.
4.

LIGHTING FIXTURE SCHEDULE

TYPE	ELECTRICAL	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	SOURCE	NOTES
F1	51W 120-277V	LITHONIA	FEM L48 10000LM LPPFL MD MVOLT 50K 80CRI ST5L WLF	4' LED ENCLOSED AND GASKETED STRIP, LOW-PROFILE, FROSTED POLYCARBONATE LENS, IP67, 1500 PSI HOSE-DOWN. PROVIDE WITH STAINLESS STEEL LATCHES.	5000K CCT 10000 Lm 80 CRI	1,2
F2	25W 120-277V	LITHONIA	WST LED P2 40K VF MVOLT DDBXD PE	LED WALL PACK, DIE-CAST ALUMINUM HOUSING, FORWARD THROW OPTICS WITH INTEGRAL PHOTO CELL.	4000K CCT 3000 Lm 70 CRI	1

NOTES:
1. EQUAL FIXTURE SUBSTITUTIONS ALLOWED UPON PRIOR APPROVAL FROM ENGINEER.
2. MOUNT FIXTURE ON CEILING. FIELD COORDINATE.

FILE NAME: 5/22/2024 1:55 PM - I:\2211301 - DWG\ELEC\SHEET\22113-E-02.DWG - BRAD JOHNSON
FILE DATE:

HEATH Engineering Company

HANSEN ALLEN & LUCE inc ENGINEERS

PROFESSIONAL ENGINEER 11573207-2202 ROBERT J. HILLYER 04/12/23 STATE OF UTAH

DESIGNED	RJH	3	05/24	CCD-02		
DRAFTED	KGM	2	03/24	CHANGE ORDER #2	RJH	RJH
CHECKED	RJH	1	6/23	CONFORMED DRAWINGS – RELEASED FOR CONSTRUCTION	RJH	RJH
DATE	November 2023	NO.	DATE	REVISIONS	BY	APVD.

SCALE: NONE

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY
3430 EAST DANISH ROAD
COTTONWOOD HEIGHTS, UT 84093

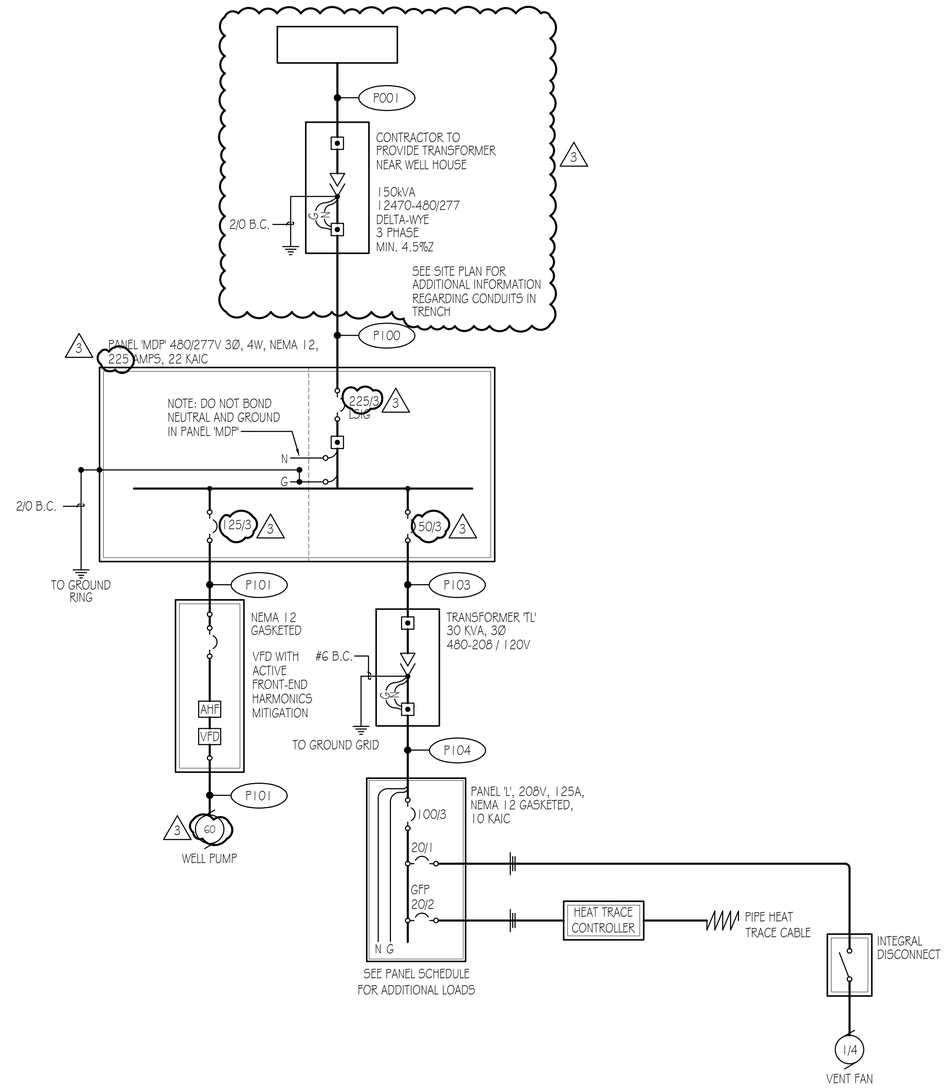
LC063 ASR PILOT TESTING – PHASE 1
ELECTRICAL SCHEDULES

SHEET: E-02

262.08.200

I:\2211301 - DWG\ELEC\SHEET\22113-E-02.dwg, 5/22/2024 1:55:05 PM, Heath Engineering co/bdj

BP127



ONE-LINE DIAGRAM

SCALE: NONE

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FILE DATE: 5/22/2024 1:55 PM - I:\22113\01 - DWG\ELEC\SHEET\22113-E-61.dwg, 5/22/2024 1:55:05 PM, Heath Engineering co\bj

HEATH Engineering Company

HANSEN ALLEN & LUCE inc ENGINEERS

PROFESSIONAL ENGINEER # 11573207-2202 ROBERT J. HILLYER 09/12/23 STATE OF UTAH

DESIGNED	RJH	3	05/24	CCD-02		
DRAFTED	KGM	2	03/24	CHANGE ORDER #2	RJH	RJH
CHECKED	RJH	1	6/23	CONFORMED DRAWINGS – RELEASED FOR CONSTRUCTION	RJH	RJH
DATE	November 2023	NO.	DATE	REVISIONS	BY	APVD.

SCALE: NONE

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY
3430 EAST DANISH ROAD
COTTONWOOD HEIGHTS, UT 84093

LC063 ASR PILOT TESTING – PHASE 1
ELECTRICAL
SCHEDULES

SHEET
E-61
262.08.200

BP128

Metropolitan Water District of Salt Lake & Sandy
Board Meeting Information
Last Update: June 4, 2024

Agenda Item: Consider contract for LCWTP Administration Campus Improvements

Objective: Seek approval for design services for the LCWTP Administration Campus Improvements project.

Background: During design of the Cottonwoods Connection staff identified the need for additional physical space in the server room for new fiber connecting the Big Cottonwood Water Treatment Plant (BCWTP) and Little Cottonwood Water Treatment Plant (LCWTP). At the same time, the District was concluding the server facilities assessment portion of the IT Master Plan and preparing for the LCWTP Rebuild Project. The three projects individually include construction on and around the LCWTP Administration Building.

Cottonwoods Connection: The Cottonwood Conduit Reach 2 (CC-2) will damage a portion of the LCWTP Administration Building parking lot and landscaping. Restoration of these facilities included water-wise landscaping. It was determined full restoration would be removed from the project and placed on the Administration Campus Improvements.

IT Master Plan: The IT Master Plan identifies several deficiencies with the existing server room, including location, HVAC, fire suppression, and available space (both footprint and conduits entering the room). The server room is in need of relocation, preferably near the existing Administration Building for security and accessibility.

LCWTP Rebuild Project: The LCWTP Optimization Study recommends a dual server room setup at LCWTP for redundancy, with the server rooms placed on opposite ends of a fiber ring around the site. The existing server room is not positioned to operate as either of those server rooms due to several issues, including room footprint and conduit capacity. The rebuild project will also require secondary access to the LCWTP during periods of construction.

The LCWTP Administration Campus Improvements will resolve portions of each of the above projects by constructing a new server room and conduit pathways (both of which are expected to further damage the existing parking area); install native, drought-tolerant landscaping; and add a secondary access to the LCWTP from the Administration Building. The project will also consider renewable energy options, electric vehicle charging stations, and security enhancements, which may be installed as budget and needs permit.

In order to effectively operate the Cottonwoods Connection pipeline, it is desired to have the new server room operational by the end of 2026.

A Request for Statements of Qualifications (RSOQ) for project design was advertised on Tuesday, March 19, 2024. Proposals were due Tuesday, April 16, 2024. A conceptual project layout was shared with the RSOQ. Two SOQs were received. The selection committee met on May 2, 2024. The committee's recommendation to begin negotiations with GSBS Architects was

approved by the General Manager. Negotiations with the preferred consultant began on May 3, 2024.

While coordinating the scope, the consultant and staff were unable to receive clear direction from Cottonwood Heights City related to the ability to construct near Deaf Smith Fork ("creek"), which runs north of the Administration Building. The northwest side of the Administration Building is the preferred location for a new server room. It was determined to split the scope to first determine the appropriate, code-compliant, location for the new server room. Once settled, a second scope to complete final design and bidding services for the project will be negotiated and brought forward for approval.

The scope and $54,960 fee for this initial effort is attached. The FY2025 budget for this item (including final design) is $250,000.

Committee Activity: The Engineering Committee discussed this item on June 4, 2024. The committee recommends award of a contract for $54,960 to GSBS Architects for the attached scope.

Suggested Motion: I motion to (approve / table, with direction for staff / deny) a contract with GSBS Architects for preliminary design of the Administration Campus Improvements in the amount of $54,960, pending approval of the FY2025 capital budget.

Attachments:

- Scope and Fee
- Professional Services Agreement

PROFESSIONAL SERVICES AGREEMENT
LCWTP ADMINISTRATION CAMPUS IMPROVEMENTS
PRELIMINARY DESIGN

Last updated: May 23, 2024

This Professional Services Agreement (Agreement) is made and entered into this ___ day of June, 2024, by and between the Metropolitan Water District of Salt Lake & Sandy (District) and GSBS Architects, a Utah corporation (Consultant).

PURPOSES

The expertise of Consultant is required by the District in order to support District staff. Consultant was selected through a competitive Statement of Qualifications process in accordance with Utah Code § 63G-6a-1501, et. seq. and District procurement regulations. The Consultant and its principals and employees are qualified by experience and training to provide, and the Consultant has indicated an interest and a willingness to perform, these services for the District. The parties desire to have in place an agreement which describes the terms and conditions under which Consultant will perform the described work.

TERMS

In consideration of the mutual benefits described in this Agreement, the parties agree as follows:

1. DESCRIPTION OF SERVICES. Consultant will perform those services required for design for the LCWTP Administration Campus Improvements Preliminary Design as described in Exhibit A attached, which is incorporated by reference into this Agreement as if restated here.

2. SERVICES OF CONSULTANT. Consultant shall provide services to District as an independent contractor in accordance with the applicable professional standards of care, and in a reasonably timely, efficient, and professional manner, consistent with this Agreement.

3. RESPONSIBLE STAFF MEMBERS. Responsible principals or staff members of Consultant, and any sub-consultants identified by name in each Task, shall be committed to the Task. Upon submitting a request for payment for services, Consultant shall provide verification of the names of staff members, their respective rates, and the number of hours worked by each staff member. Responsible principals or staff members, or sub-consultants, who retire, quit, or die shall be replaced by individuals who are equally qualified, each of whom shall be subject to District's approval under this Agreement. Failure to comply with the requirements of this provision shall be grounds for terminating this Agreement.

4. CONTRACT PRICE. The services described in Exhibit A for the LCWTP Administration Campus Improvements Preliminary Design is awarded on a time and materials basis not to exceed the amount of $54,960.00. Consultant shall receive payment based on the

hourly rates and expenses described in the Consultant's schedule of fees and expenses included with Exhibit A.

5. SCHEDULE OF PAYMENTS. Consultant shall submit reasonably detailed invoices each month for any work performed. Invoices shall refer to District's project name and number. District shall remit payment to Consultant within thirty (30) days of receipt of each request for payment that is presented in the proper form.

6. PERIOD OF SERVICE. This Agreement shall be effective upon signing and shall terminate on June 30, 2025.

7. DISTRICT'S RESPONSIBILITIES. District shall provide Consultant with such information as is available to the District and as may be reasonably requested by the Consultant related to the work and Consultant shall, to the extent reasonable under the circumstances, be entitled to use and rely upon all such information in performing its services. District will examine all documents submitted by Consultant to District and, if requested by Consultant, District will render decisions relative thereto in a timely manner in order to avoid unreasonable delay in the progress of Consultant's services. District shall provide Consultant access to District facilities and premises, and act reasonably to provide necessary access to private property, as may be reasonably requested by Consultant.

8. SECURITY AND OWNERSHIP OF INFORMATION. District facilities are critical public infrastructure. Certain information that District must provide to Consultant for Consultant to perform its work is very security sensitive. The Consultant will strictly comply with District written security protocols provided by the District to Consultant as these written security protocols may be changed from time to time. Such protocols may include, but are not limited to, restrictions of numbers of copies to be kept in any form by Consultant, the form of the information storage, the security precautions to be followed, restrictions as to who may have access to information, the confidentiality agreement to be signed by individuals before they may be given access, the methods and means by which copies of information will be destroyed upon completion or termination, the methods and means by which destruction will be verified to District, the steps that will be taken by Consultant in the event of any breach or suspected breach of security or security protocols. District security protocols and any changes which are provided to Consultant will be immediately complied with by Consultant. If Consultant has concerns or questions regarding such protocols or changes to protocols such concerns will be brought to District's attention immediately.

Each document and each item of information prepared in the performance of this Agreement, whether in hard copy or electronic form, is the property of District, including, but not limited to, tracings, drawings, estimates, field notes, investigations, design analyses, studies, computer programs, or other data. Consultant shall sign and affix its professional seal(s) to all final plans, technical specifications, and consulting data prepared in the performance of this Agreement.

9. COMPLETENESS AND ACCURACY. Consultant shall be solely responsible for the completeness and accuracy of all of its final work product, including, but not limited to, plans, supporting data and technical specifications prepared pursuant to this Agreement. Consultant shall

be responsible to District for any error or omission by any of its employees, subcontractors or suppliers. Consultant shall correct all errors or omissions at its own expense. This provision is not intended to prevent Consultant from seeking reimbursement or indemnity from any employee, subcontractor or supplier. Any additional cost or damages incurred by District as a result of such errors or omissions shall be the responsibility of Consultant.

10. RIGHT OF TERMINATION. District reserves the right, at its discretion, to terminate this Agreement, or to abandon any portion of Project issued hereunder at any time. In the event District terminates this Agreement or abandons any portion of Project hereunder, District shall notify Consultant in writing. Immediately upon receipt of such notice, Consultant shall discontinue services as directed by District and deliver to District all drawings, technical specifications, hard copy and electronically stored information, computer programs and data, estimates, and any other documents or items of information, in whatever form or media, developed or gathered by Consultant in the performance of this Agreement, whether entirely or partially completed, together with all materials supplied by District. Consultant shall document its services through the termination date, and submit such documentation to District for its evaluation. Consultant shall receive compensation for services performed up through the date of termination or abandonment.

11. INDEMNIFICATION AND INSURANCE. In no event will any fault of Consultant or Consultant's employees or contractors be reapportioned to District, its officers, Trustees or employees. Consultant will indemnify and hold District and its officers, Trustees and employees harmless from any such reapportionment of fault.

To the extent that the District is not otherwise indemnified by a policy of insurance, Consultant will indemnify the District from any claim of third parties to the extent caused by Consultant's breach of this Agreement or by the negligence or other fault of Consultant, or that of any of Consultant's employees or subcontractors. Any invalidity of any portion of this indemnification duty will not defeat any remaining portion of this described indemnification duty. This indemnity shall be interpreted to provide the District and its Trustees and employees with indemnity to the greatest extent allowed by law.

Consultant, at its own cost and expense, shall secure and maintain policies of insurance in accordance with Exhibit B.

12. INSPECTION OF CONSULTANT'S RECORDS. Consultant shall maintain accounting records in accordance with generally accepted accounting principles and practices to substantiate all costs incurred by Consultant and billed to District. Consultant shall maintain records necessary to confirm compliance with District security protocols. Such records shall be available to District during Consultant's normal business hours for a period of one year following the date of final payment under this Agreement.

13. WAIVER OF CLAIMS. Prior to acceptance of final payment, Consultant shall submit in writing to District any known claim that Consultant or any of Consultant's employees, sub-consultants or subcontractors may have against District or any of its employees. The acceptance of final payment by Consultant will constitute a waiver of any such claim other than

those claims previously made in writing and submitted to District. Consultant shall hold District harmless from any claims, including costs and attorneys' fees, by any of Consultant's employees, sub-consultants or subcontractors which are not made in writing prior to acceptance of final payment. The tendering of final payment by District will not constitute a waiver of any claim District might have against Consultant, whether known or unknown at the time such payment is made.

14. SUCCESSORS AND ASSIGNS. The services to be provided by Consultant under this Agreement shall not be subcontracted or assigned without the prior written consent of District. This Agreement shall extend to and be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

15. NOTICES AND APPROPRIATE LINES OF COMMUNICATION. Except to the extent necessary to respond to emergencies, communications regarding material matters relating to this Agreement shall be deemed given when mailed or delivered to:

If to District To:

Metropolitan Water District of Salt Lake & Sandy
Attn: General Manager
3430 East Danish Road
Cottonwood Heights, Utah 84093

If to Consultant To:

GSBS Architects
Attn: Kevin Miller, President & CEO
375 West 200 South, Suite 100
Salt Lake City, Utah 84101

Each party may change the designation of the addressee or the address for that party to receive notice by sending written notice of the change.

16. GOVERNING LAW AND JURISDICTION. This Agreement shall be enforced and governed under the laws of the State of Utah, and jurisdiction for any action based on this Agreement, whether brought by District or Consultant, shall be with the District Court of Salt Lake County, State of Utah.

17. SPECIAL PROVISIONS. Consultant shall comply with all applicable federal, state and local laws and ordinances, and shall not discriminate against any person on the basis of race, color or national origin in the performance of this Agreement. Any terms which District, as a governmental entity is mandated by applicable statute or regulation to include in this Agreement, including any terms which are mandated by applicable provisions of the Utah Procurement Code, shall be considered a part of this Agreement.

18. PARTIAL INVALIDITY. If any portion of this Agreement is determined to be invalid, the remaining portions of this Agreement shall remain valid and enforceable.

19. ENTIRE AGREEMENT. This Agreement constitutes the entire understanding and agreement between the parties and cannot be altered except through a written instrument signed by the parties.

20. NO THIRD PARTY BENEFITS INTENDED. This Agreement is not intended to create rights in any person or entity who is not a party to this Agreement.

21. REPRESENTATION OF AUTHORITY. Those persons signing as representatives of the parties warrant and represent they have been duly authorized to sign on behalf of the party they represent.

IN WITNESS WHEREOF, the parties have executed this Agreement effective the ___ day of June, 2024.

DISTRICT:
Metropolitan Water District of Salt Lake & Sandy

By: _____
Annalee Munsey, General Manager

CONSULTANT:
GSBS Architects

By: _____
Kevin Miller, President

Exhibit A
Scope of Work and Fee

Exhibit B

INSURANCE AND BOND REQUIREMENTS FOR PARTIES ENTERING INTO AGREEMENTS WITH METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY

Last Update: August 8, 2023

Consultant shall maintain, at no cost to the District, the following insurance, and provide evidence of compliance satisfactory to District.

A. MINIMUM LIMITS OF INSURANCE

Except as approved in writing by District in advance, Consultant and all of Consultant's Sub-consultants shall maintain limits no less than:

1. **GENERAL LIABILITY (including claims arising from: premises-operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract.):**
    i. Combined Single Limit (Bodily Injury and Property Damage):
        1. $2,000,000 Per Occurrence
    ii. Personal Injury (including completed operations and products liability):
        1. $2,000,000 Each Occurrence
    iii. General Aggregate:
        1. $3,000,000
    iv. Products - Comp/OP Aggregate:
        1. $3,000,000
    v. Limits to apply to this project individually.

2. **AUTOMOBILE LIABILITY**:
    i. $2,000,000 Per Occurrence
    ii. "Any Auto" coverage required.

3. **WORKERS' COMPENSATION and EMPLOYERS LIABILITY:**
    i. Workers' compensation statutory limits.
    ii. Employers Liability statutory limits.

4. **PROFESSIONAL LIABILITY:**
    i. $2,000,000 Per Claim
    ii. $3,000,000 Aggregate

B. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions (SIRs) must be declared to and approved by the District in writing. At the option of the District, either; the insurer may be required to reduce or eliminate such deductibles or SIRs as respects the District, its trustees, officers, and employees as additional insureds; or the Consultant may be required to procure a bond or other instrument guaranteeing payment of losses and related investigations, claim distribution, and defense expenses of the District, its trustees, officers, and employees as additional insureds.

The District does not ordinarily approve deductibles in an amount exceeding 2.5% of the required minimum limits described above or $50,000, whichever is less. The District does not ordinarily approve SIRs in an amount exceeding 1.0% of the required minimum limits described above or $20,000, whichever is less. With respect to any deductible or SIR, the Consultant shall pay for costs related to losses, investigations, claim distribution, and defense expenses of the District, its trustees, officers, and employees as additional insureds that would otherwise be covered by an insurer under the coverages described in these insurance requirements if no deductible or SIR existed.

C. ACCEPTABILITY OF INSURERS

Insurance and bonds are to be placed with insurers admitted in the State of Utah with a Bests' rating of no less than A-, IX, and in the limits as listed in this document, unless approved in writing by the District.

D. VERIFICATION OF COVERAGE

Consultant and all of Consultant's Sub-Consultant's shall furnish District with certificates of insurance and with original endorsements effecting coverage required by this clause. The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be provided on forms acceptable to the District before work commences. District reserves the right to require complete, certified copies of all required insurance policies, with all endorsements, at any time. Consultant shall provide an insurance certificate and an endorsement evidencing compliance with this provision at least annually. From time to time District may increase the requirement for a liability limit by providing reasonable written notice to Consultant of such a change.

May 22, 2024

Ammon Allen, P.E. Engineering Manager
Metropolitan Water District of Salt Lake & Sandy
3430 East Danish Road
Cottonwood Heights, UT 84093
801-942-9687
allen@mwdsls.gov

Fee Proposal For: **LCWTP Administration Campus Improvements Project**
District Project No. LC071

Dear Ammon:

GSBS Architects and Hazen and Sawyer are pleased to submit the following proposal to provide Conceptual Design services for the LCWTP Administration Campus Improvements Project. We understand the Project to entail:

1) An addition of a 900 SF server room, associated offices, and support space to the existing MWDSLS Administration building located at 3430 East Danish Road. A conceptual layout of the addition and server room is shown on "Attachment 03 and 04." The full space list will be developed during this phase of the project.
2) Site improvements shown on "Attachment 02." Specific site improvements will be further defined during this phase of the project.

The estimated cost of construction for the project described above is $1,949,000 for the building components and $941,000 for the site improvements, for a total estimated construction value of $2,890,000. Further breakdown of the construction cost estimate is shown on "Attachment 01."

Scope of Services
Based on this understanding of the Project, GSBS proposes to provide a feasibility study with the following scope of services:

1) Coordination with Cottonwood Heights to determine the impact of the SLEDS ordinance and other relevant local zoning codes on the proposed project.
2) Develop a preferred list of spaces to be accommodated in each of the options.
3) Evaluate up to 3 different conceptual design options using a combination of 3d massing studies and site and building diagrams and plans.
4) Up to 3 meetings with MWDSLS to evaluate the different options as follows:
    a. Meeting 01 will be a working session with MWDSLS to establish clear goals and objectives for the project, to verify the draft list of spaces, and to understand the site constraints.
    b. Meeting 02 will be to present and review the pros and cons of each of the conceptual design options along with a conceptual level cost estimate of each option.
    c. Meeting 03 will be to review the final development and cost estimate of the preferred concept.
5) Development of a brief technical memorandum including narratives and applicable conceptual level plans and diagrams describing the various systems and disciplines with the project including:
    a. Architectural

b. Landscape
c. Civil
d. Structural
e. Mechanical
f. Electrical
g. Data/IT
h. Cost estimating at a conceptual design level using the narratives and applicable plans described above for each of the 3 options. A final cost estimate will be provided for the preferred option.
i. Quality assurance and quality control. Each discipline will implement its own QA/QC review process to ensure services meet quality expectations.

Not included in our proposal:

1) Geotechnical studies
2) Surveying
3) Construction or permit documents
4) Hazardous materials surveying

Other Terms and Conditions
Reimbursable Expenses are in addition to the compensation for the Basic and Supplemental Services and include expenses incurred by GSBS and its consultants directly related to the project. Reimbursable expenses are billed at the cost of the expense plus ten percent.

Proposed Fee
The proposed fee for the Scope of Services is provided as a Time and Material with an estimated not-to-exceed amount of:

$54,960

A full breakdown of anticipated hours is provided as Attachment 05 and 06.

GSBS will invoice monthly in proportion to services performed. Payment is due and payable upon presentation of the invoice. Amounts unpaid 30 days after the invoice date will bear interest. Invoices unpaid for more than 45 days may result in suspension of our services until the account is made current.

Thank you for your trust and confidence, and for the opportunity to provide this proposal for your project. We look forward to a successful relationship.

Sincerely,

Jesse Allen
for GSBS Architects

ATTACHMENT 1: OPINION OF PROBABLE CONSTRUCTION COST - CONCEPTUAL ESTIMATE SUMMARY

Hazen

Metropolitan Water District of Salt Lake & Sandy

LCWTP Site Improvements and Server Room Expansion

Conceptual Estimate

11/30/2023

	Description	Total
1	Pavement Replacement	$ 250,000
2	Gate Replacement	$ 107,000
3	Refusal Lane	$ 19,000
4	Curb and Gutter	$ 101,000
5	Catch Basins	$ 79,000
6	Fence Realignment	$ 44,000
7	EV Charging (Not Included in Scope)	$ -
8	Pedestrian Access Gate	$ 3,000
9	Plant Access Road	$ 33,000
10	Regrade Around Catch Basins	$ 16,000
11	Additional Parking Area	$ 181,000
12	Fiber Loop	$ 108,000
13	**Site Improvements Subtotal**	**$ 941,000**
14	Demolition	$ 32,000
15	Exterior Shell	$ 889,000
16	Exterior Stairs	$ 58,000
17	First Story Office Area	$ 124,000
18	Existing Garage Area	$ 58,000
19	Fire Suppression System	$ 30,000
20	HVAC	$ 277,000

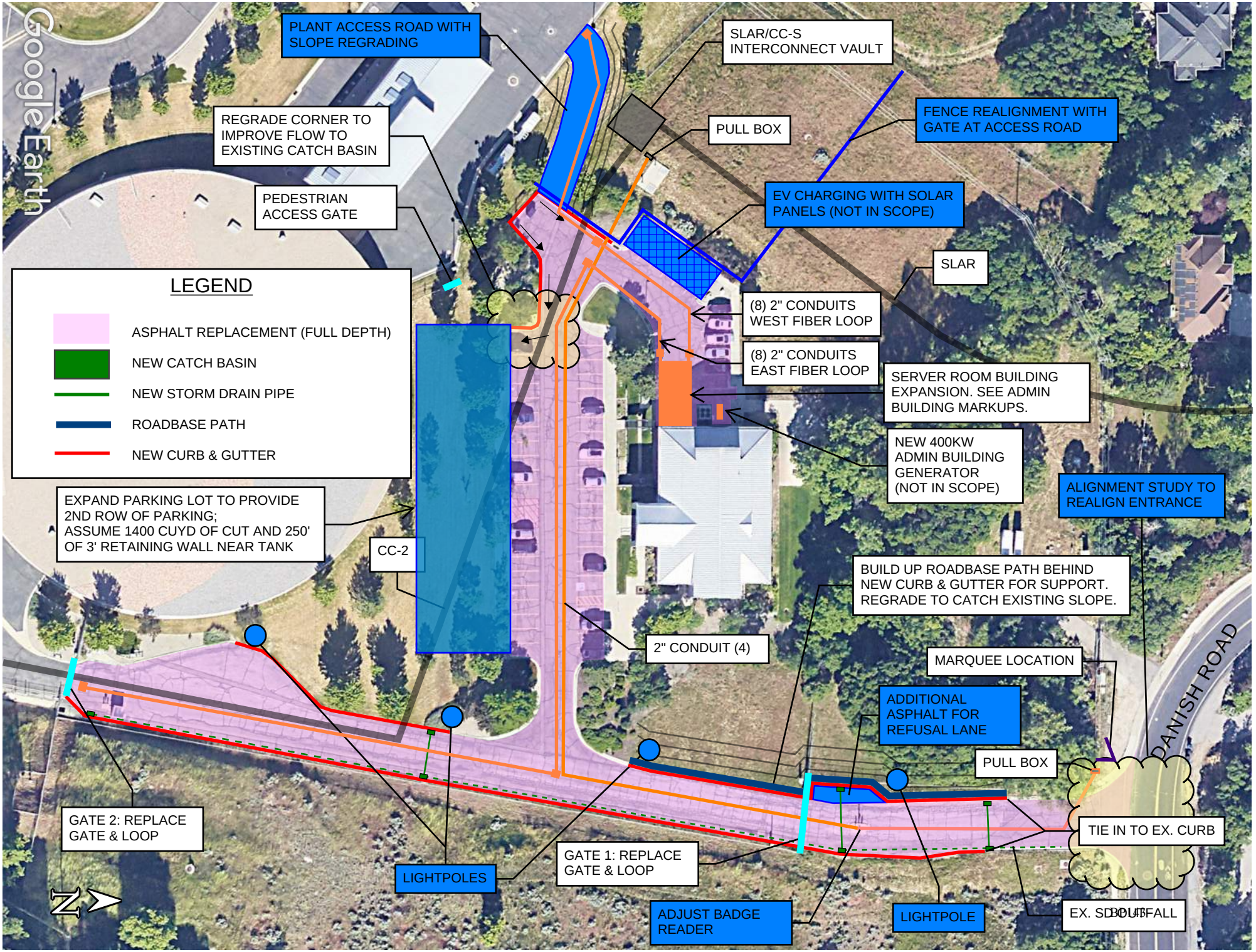
Hazen

Metropolitan Water District of Salt Lake & Sandy
LCWTP Site Improvements and Server Room Expansion
Conceptual Estimate

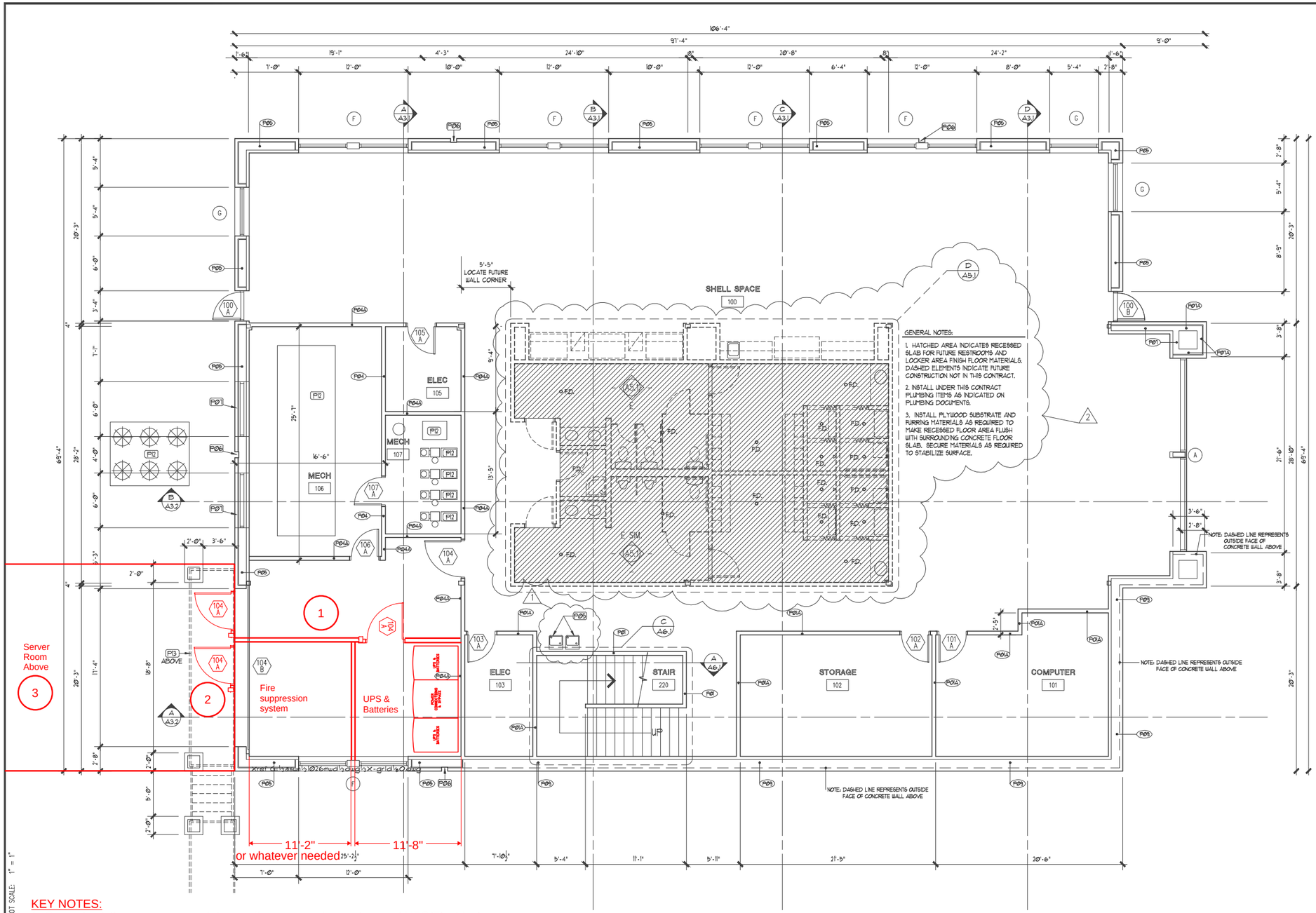
11/30/2023

	Description		Total
21	UPS	$	188,000
22	Server Room Infrastructure	$	99,000
23	Generator (Not Included in Scope)	$	-
24	Fiber Extension	$	73,000
25	Electrical Equipment	$	121,000
26	**Server Room Expansion Subtotal**	**$**	**1,949,000**
27	**Total (rounded):**	**$**	**2,890,000**

ATTACHMENT 2: LCWTP SITE CIVIL IMPROVEMENTS - ALTERNATIVES



ATTACHMENT 3: LCWTP ADMIN BUILDING FIRST FLOOR EXPANSION



KEY NOTES:
1. Convert existing garage space into new fire suppression system and UPS/Electrical Rooms.
2. Fill existing garage door with new wall and man doors as shown.
3. For budget estimating purposes, assume space under new server room will be filled with offices. Exact configuration to be determined during design. See second floor plan for approximate size of expansion.

A FIRST FLOOR PLAN
SCALE: 3/16" = 1'-0"

NORTH

DRAWING FILE: 04\A1.01 PLOT SCALE: 1" = 1"

ASWN
ALLRED SOFFE WILKINSON & NICHOLS INC.
5505 SOUTH 900 EAST, SUITE 200 SALT LAKE CITY, UTAH 84117
P.O. BOX 17193 PHONE (801) 269-0055 FAX (801) 269-1425

OFFICE BUILDING
Metropolitan Water District of Salt Lake City
9000 South Danish Road * Sandy, Utah 84093

OFFICE BUILDING

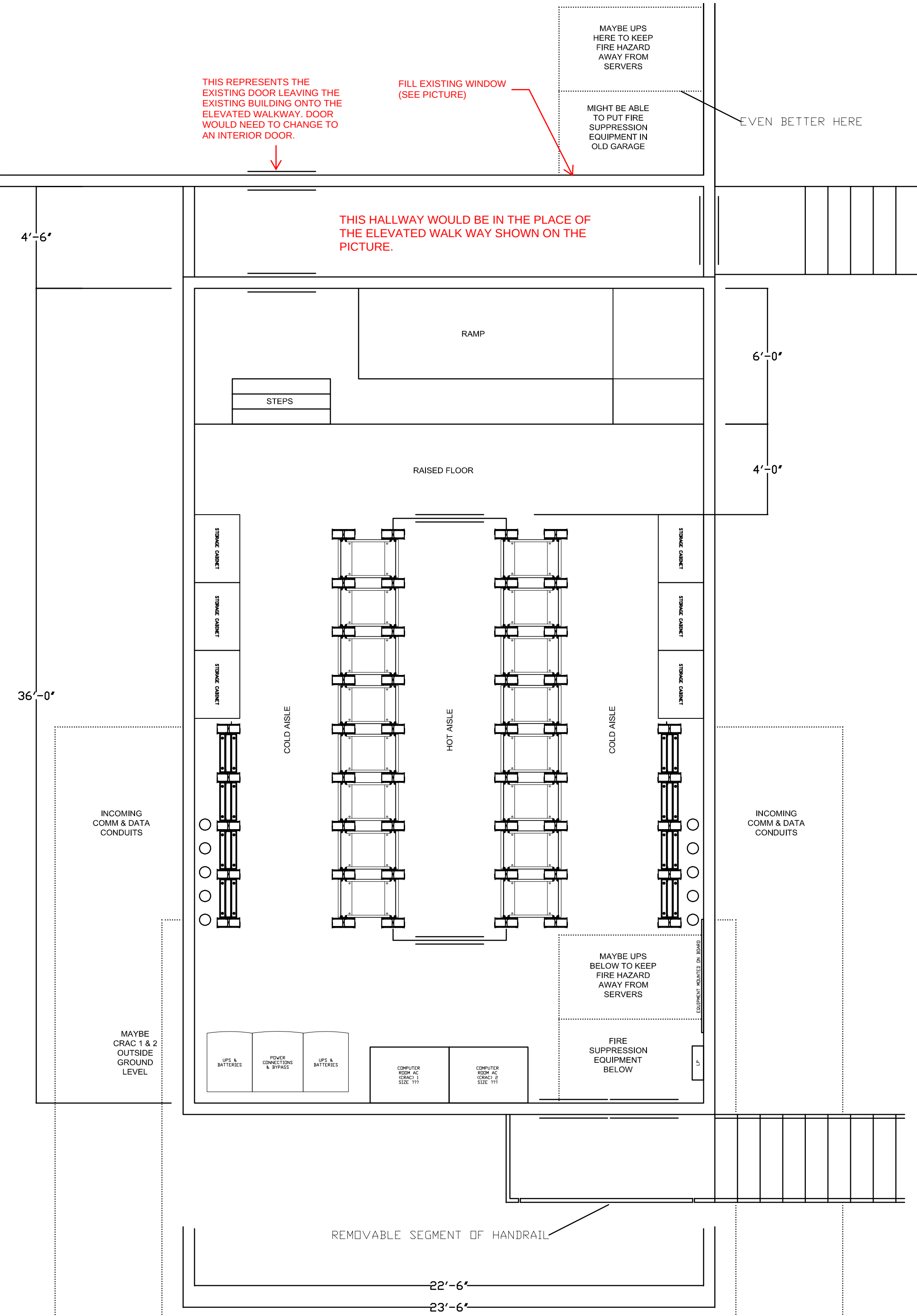
REVISIONS:
1 12/13/99
2 12/30/99

DATE: 12/99

SHEET NO.
A1.1

BP144

ATTACHMENT 4: LCWTP ADMIN BUILDING SECOND FLOOR EXPANSION - SERVER RM



BP145

		GSBS Architects				FOCUS Engineering			Construction Control Corp		
	GSBS ARCHITECTS	Principal	Security Threat Expert	Project Manager	BIM Coordinator	Mechanical Engineer	Mechanical Coordinator	BIM Coordinator	Cost Estimator	Labor Hours	Labor Cost
		250	250	175	105	200	125		125		
100	**Project Management**										
	Team Management, Progress Reporting & Invoicing	8		4						12	2700
	(Meeting 1) Kickoff Meeting and Preparation	4		4						8	1700
	Coordination Calls	8		8						16	3400
	Task 100 - Subtotal	**5000**	**0**	**2800**	**0**	**0**	**0**		**0**	**36**	**7800**
200	**Preliminary Design (30%)**										
	Coordination with Cottonwood Heights on SLEDS	4								4	1000
	Evaluate Building Addition Options	4		8	16					28	4080
	Mechanical Support					12				12	2400
	Cost Estimating	2		2					16	20	2850
	(Meeting 2) Conceptual Design Workshop	4		4						8	1700
	Draft Design Report	2		2	16					20	2530
	QA/QC		4							4	1000
	(Meeting 3) Conceputal Design Review Workshop	4		4						8	1700
	Final Report	2		2	8					12	1690
	Task 200 - Subtotal	**5500**	**1000**	**3850**	**4200**	**2400**	**0**		**2000**	**116**	**18950**

Hazen and Sawyer
10619 South Jordan Gateway, Suite 130
South Jordan, UT 84095

May 20, 2024

Mr. Jesse Allen AIA, ASLA
Principal
GSBS Architects
375 West 200 South, Suite 100
Salt Lake City, UT 84101

Re: MWDSLS LCWTP Administration Campus Improvements Project – Conceptual Design – Scope of Services and Fee Proposal

Dear Mr. Allen:

Per your request, the following scope and fee are to provide conceptual design services as a subconsultant to GSBS Architects for the Little Cottonwood Water Treatment Plant (LCWTP) Administration Campus Improvements Project for the Metropolitan Water District of Salt Lake & Sandy (MWDSLS). The following attachments comprise Hazen's proposal:

Attachment A – Scope of Services

Attachment B – Fee Estimate

Please let me know if you have any questions or comments regarding the following scope and fee.

Sincerely,

Christopher N Thunhorst, PE
Project Manager

Hazen

ATTACHMENT A

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY
LITTLE COTTONWOOD WATER TREATMENT PLANT
ADMINISTRATION CAMPUS IMPROVEMENTS PROJECT

SCOPE OF SERVICES

BACKGROUND AND PROJECT UNDERSTANDING

The Little Cottonwood Water Treatment Plant (LCWTP) Administration Campus (building and parking lot) was constructed in 2000. These facilities accommodate Metropolitan Water District of Salt Lake & Sandy (MWDSLS) staff and Information Technology (IT) infrastructure. A new server room is required to replace antiquated equipment; accommodate additional fiber runs and server equipment; and improve HVAC, UPS, and fire suppression systems. Improvements to the LCWTP access road, parking lot, and infrastructure are also required. Hazen and Sawyer prepared a conceptual level opinion of probable construction cost for the site improvements and Administration Building expansion to the west to accommodate a new server room. Before proceeding with detailed design, MWDSLS would like to evaluate additional concepts for a new server room which may include:

- Expand the Administration Building to the North
- Expand the Administration Building to the South
- Construct a new IT Building

SCOPE OF WORK

GSBS Architects (Consultant) will provide conceptual design services to Metropolitan Water District of Salt Lake & Sandy (Owner) for the LCWTP Administration Campus Improvement Project (Project). Hazen and Sawyer (Subconsultant) will provide conceptual design services for select tasks and subtasks related to the Project as a subconsultant to the Consultant. Subconsultant shall provide engineering services for the following disciplines:

- Civil
- Structural
- Electrical
- Networking

Task 1 – Project Management: Purpose of this task is to manage the Subconsultant's project team throughout completion of all tasks and subtasks associated with this work. Subtasks include invoicing, progress and schedule updates, and management of Subconsultant's project team as necessary to deliver the required scope of services.

A Kickoff Meeting will be held as a working session with the Owner to establish clear goals and objectives for the Project, verify the draft list of spaces, and understand the site constraints. The kickoff meeting will be attended by the Subconsultant's Project Manager and Civil Lead.

The Subconsultant's Project Manager and Civil Lead will also participate in virtual weekly coordination meetings with the Consultant.

Deliverables:

- Monthly Invoices

Task 2 – Conceptual Design: Subconsultant shall perform select subtasks associated with the conceptual design.

Subtask 201 – Evaluate Site Layout

Subconsultant shall prepare and evaluate up to 3 potential site layout concepts. Anticipated key features of the site improvements include:

- Expansion of the existing Administration Building or a New IT Building
- Additional parking
- Provisions for future electric vehicle charging stations
- Additional plant access road from administration campus parking area
- Access gate improvements
- New refusal lane
- Site lighting improvements
- Provisions for future underground utilities

Assumptions:

- Site layout concepts will be prepared as figures
- Site layouts figures will be developed utilizing pdf editing software or AutoCAD at the Subconsultant's discretion

Deliverables:

- Site layout figures (Up to 3 concepts)

Subtask 202 – Structural Support

Subconsultant shall work with the Consultant to identify the anticipated structural system for the Administration Building Expansion or a New IT Building. Subconsultant shall provide Consultant's cost estimator with feedback regarding the anticipated structural design.

Assumptions:

- Structural design services are not included
- No structural drawings or figures will be provided

Subtask 203 – Evaluate Electrical Source

Subconsultant will evaluate the plant electrical distribution system and identify a new electrical source for the Administration Building Expansion or New IT Building.

Assumptions:

- Electrical figures will be limited to markups of existing single line diagrams and markups of existing electrical site plans

Deliverables:

- Electrical Figures – Single line diagram and site plan markups (Up to 3 concepts)

Subtask 4 – Networking Support

Subconsultant will provide feedback to the Consultant regarding server room/networking infrastructure requirements as they relate to architectural layout concepts to be prepared by the Consultant.

Assumptions:

- No networking figures or writeups will be provided

Subtask 5 – Conceptual Design Workshop

A conceptual design workshop will be held to present and review the pros and cons of each of the conceptual design options along with a conceptual level cost estimate for each concept. The Conceptual Design Workshop will be attended by the Subconsultant's Project Manager and Civil Lead.

Assumptions:

- Consultant will prepare conceptual cost estimates

Subtask 6 – Conceptual Design Technical Memorandum (Draft)

Deliverables:

- Brief writeups to be incorporated into the Conceptual Design Technical Memorandum for the disciplines previously defined.
- Updated figures from the Civil and Electrical evaluations with Owner review comments incorporated.

Subtask 7 – Conceptual Design Technical Memorandum Review Workshop

A workshop will be held to review the final development and cost estimate of the preferred concept as well as the Draft Conceptual Design Technical Memorandum. The workshop will be attended by Hazen's Project Manager and Civil Lead.

Subtask 8 – Conceptual Design Technical Memorandum (Final)

Deliverables:

- Updates to the Conceptual Design Technical Memorandum writeups for the disciplines previously defined with Owner review comments incorporated.
- Updated Civil and Electrical figures with Owner review comments incorporated.

SCHEDULE

The work described in the above scope is anticipated to take approximately 2 months to complete. It is anticipated that Hazen will receive Notice to Proceed in June and that work will commence on July 1 and be completed by August 30.

SCHEDULE OF VALUES

The fee estimate for this effort by task is shown in the attached fee breakdown. Payment shall be hourly not-to-exceed, invoiced monthly on a time-and-expense basis. Other Direct Expenses (ODCs) will be billed to the project at cost with no markup. Mileage will be billed to the project at standard IRS rates.

Hazen

ATTACHMENT B

LITTLE COTTONWOOD WATER TREATMENT PLANT
ADMINISTRATION CAMPUS IMPROVEMENTS PROJECT

FEE ESTIMATE

Hazen		Project Manager	Civil Lead	Structural Lead	Electrical Lead	Networking Lead	Hazen			
		$295	$210	$225	$225	$225	Labor Hours	Labor Cost	ODC's	Subtotal
Task 100: Project Management										
101	Team Management, Progress Reporting & Invoicing	4					4	$1,180	$ -	$1,180
102	Kickoff Meeting and Preparation	4	4				8	$2,020	$ -	$2,020
103	Coordination Calls	8	8				16	$4,040	$ -	$4,040
	TASK 100 - SUBTOTAL	16	12	0	0	0	28	$ 7,240	$ -	$ 7,240
Task 200: Conceptual Design										
201	Evaluate Site Layout		16				16	$3,360	$ -	$3,360
202	Structural Support			4			4	$900	$ -	$900
203	Evaluate Electrical Source	4			12		16	$3,880	$ -	$3,880
204	Networking Support					4	4	$900	$ -	$900
205	Conceptual Design Workshop	4	4				8	$2,020	$ -	$2,020
206	Conceptual Design Technical Memorandum - Draft	4	8	4	8		24	$5,560	$ -	$5,560
207	Conceptual Design TM Review Workshop	4	4				8	$2,020	$ -	$2,020
208	Conceptual Design Technical Memorandum - Final	2	4		4		10	$2,330	$ -	$2,330
	TASK 200 - SUBTOTAL	18	36	8	24	4	90	$ 20,970	$ -	$ 20,970
	TOTAL	34	48	8	24	4	118	$ 28,210	$ -	$ 28,210

Metropolitan Water District of Salt Lake & Sandy
Board Meeting Information
Last Update: June 4, 2024

Agenda Item: Consider contract for SLA Hardening – Finished Water Reaches

Objective: Seek approval for design services for the SLA Hardening – Finished Water Reaches project.

Background: The Finished Water Resiliency Program is the District's master planning effort to improve the finished water portion of the District's services and includes the Salt Lake Aqueduct Replacement (SLAR), LCWTP Rebuild, and Salt Lake Aqueduct (SLA) Hardening – Finished Water Reaches along with ancillary projects. In March 2024 the board approved acceptance of a $1,469,000 grant from the Division of Water Resources to cover a portion of the estimated $2,000,000 design. The intention of the design is to bring the project to a "shovel ready" designation, meaning preliminary investigations including pipe alignment, material, and size are complete or near enough to complete that the project could be bid using a cooperative delivery method.

A Request for Statements of Qualifications (RSOQ) for project design was advertised on Tuesday, March 19, 2024. Proposals were due Tuesday, April 16, 2024. Three SOQs were received. The selection committee met on May 2, 2024. The committee's recommendation to begin negotiations with the team of Bowen Collins & Associates and Brown & Caldwell was approved by the General Manager. Negotiation with the preferred consultant began on May 3, 2024.

The scope and fee for this effort is attached. The fee of $1,908,546 is anticipated to take the project through preliminary design. Staff recommends a contract not to exceed $2,000,000 be approved, with the remaining amount used to advance the project as far beyond the preliminary design as possible.

The FY2025 budget for this item is $2,000,000.

Committee Activity: The Engineering Committee discussed this item on June 4, 2024. The committee recommends award of a contract not to exceed $2,000,000 to Bowen Collins & Associates for the attached scope.

Suggested Motion: I motion to (approve / table, with direction for staff / deny) a contract with Bowen Collins & Associates for preliminary design of the Salt Lake Aqueduct Hardening – Finished Water Reaches in an amount not to exceed $2,000,000, pending approval of the FY2025 capital budget.

Attachments:
- Scope and Fee
- Professional Services Agreement

PROFESSIONAL SERVICES AGREEMENT
SALT LAKE AQUEDUCT HARDENING – FINISHED WATER REACHES

Last updated: May 28, 2024

This Professional Services Agreement (Agreement) is made and entered into this ___ day of June, 2024, by and between the Metropolitan Water District of Salt Lake & Sandy (District) and Bowen Collins & Associates, Inc., a Utah corporation (Consultant).

PURPOSES

The expertise of Consultant is required by the District in order to support District staff. Consultant was selected through a competitive Statement of Qualifications process in accordance with Utah Code § 63G-6a-1501, et. seq. and District procurement regulations. The Consultant and its principals and employees are qualified by experience and training to provide, and the Consultant has indicated an interest and a willingness to perform, these services for the District. The parties desire to have in place an agreement which describes the terms and conditions under which Consultant will perform the described work.

TERMS

In consideration of the mutual benefits described in this Agreement, the parties agree as follows:

1. DESCRIPTION OF SERVICES. Consultant will perform those services required for design for the Salt Lake Aqueduct Hardening – Finished Water Reaches as described in Exhibit A attached, which is incorporated by reference into this Agreement as if restated here.

2. SERVICES OF CONSULTANT. Consultant shall provide services to District as an independent contractor in accordance with the applicable professional standards of care, and in a reasonably timely, efficient, and professional manner, consistent with this Agreement.

3. RESPONSIBLE STAFF MEMBERS. Responsible principals or staff members of Consultant, and any sub-consultants identified by name in each Task, shall be committed to the Task. Upon submitting a request for payment for services, Consultant shall provide verification of the names of staff members, their respective rates, and the number of hours worked by each staff member. Responsible principals or staff members, or sub-consultants, who retire, quit, or die shall be replaced by individuals who are equally qualified, each of whom shall be subject to District's approval under this Agreement. Failure to comply with the requirements of this provision shall be grounds for terminating this Agreement.

4. CONTRACT PRICE. The services described in Exhibit A for the Salt Lake Aqueduct Hardening – Finished Water Reaches is awarded on a time and materials basis not to exceed the amount of $2,000,000.00. Consultant shall receive payment based on the hourly rates and expenses described in the Consultant's schedule of fees and expenses included with Exhibit A.

5. SCHEDULE OF PAYMENTS. Consultant shall submit reasonably detailed invoices each month for any work performed. Invoices shall refer to District's project name and number. District shall remit payment to Consultant within thirty (30) days of receipt of each request for payment that is presented in the proper form.

6. PERIOD OF SERVICE. This Agreement shall be effective upon signing and shall terminate on December 31, 2025.

7. DISTRICT'S RESPONSIBILITIES. District shall provide Consultant with such information as is available to the District and as may be reasonably requested by the Consultant related to the work and Consultant shall, to the extent reasonable under the circumstances, be entitled to use and rely upon all such information in performing its services. District will examine all documents submitted by Consultant to District and, if requested by Consultant, District will render decisions relative thereto in a timely manner in order to avoid unreasonable delay in the progress of Consultant's services. District shall provide Consultant access to District facilities and premises, and act reasonably to provide necessary access to private property, as may be reasonably requested by Consultant.

8. SECURITY AND OWNERSHIP OF INFORMATION. District facilities are critical public infrastructure. Certain information that District must provide to Consultant for Consultant to perform its work is very security sensitive. The Consultant will strictly comply with District written security protocols provided by the District to Consultant as these written security protocols may be changed from time to time. Such protocols may include, but are not limited to, restrictions of numbers of copies to be kept in any form by Consultant, the form of the information storage, the security precautions to be followed, restrictions as to who may have access to information, the confidentiality agreement to be signed by individuals before they may be given access, the methods and means by which copies of information will be destroyed upon completion or termination, the methods and means by which destruction will be verified to District, the steps that will be taken by Consultant in the event of any breach or suspected breach of security or security protocols. District security protocols and any changes which are provided to Consultant will be immediately complied with by Consultant. If Consultant has concerns or questions regarding such protocols or changes to protocols such concerns will be brought to District's attention immediately.

Each document and each item of information prepared in the performance of this Agreement, whether in hard copy or electronic form, is the property of District, including, but not limited to, tracings, drawings, estimates, field notes, investigations, design analyses, studies, computer programs, or other data. Consultant shall sign and affix its professional seal(s) to all final plans, technical specifications, and consulting data prepared in the performance of this Agreement.

9. COMPLETENESS AND ACCURACY. Consultant shall be solely responsible for the completeness and accuracy of all of its final work product, including, but not limited to, plans, supporting data and technical specifications prepared pursuant to this Agreement. Consultant shall be responsible to District for any error or omission by any of its employees, subcontractors or suppliers. Consultant shall correct all errors or omissions at its own expense. This provision is not intended to prevent Consultant from seeking reimbursement or indemnity from any employee, subcontractor or supplier. Any additional cost or damages incurred by District as a result of such errors or omissions shall be the responsibility of Consultant.

10. RIGHT OF TERMINATION. District reserves the right, at its discretion, to terminate this Agreement, or to abandon any portion of Project issued hereunder at any time. In the event District terminates this Agreement or abandons any portion of Project hereunder, District shall notify Consultant in writing. Immediately upon receipt of such notice, Consultant shall discontinue services as directed by District and deliver to District all drawings, technical specifications, hard copy and electronically stored information, computer programs and data, estimates, and any other documents or items of information, in whatever form or media, developed or gathered by Consultant in the performance of this Agreement, whether entirely or partially completed, together with all materials supplied by District. Consultant shall document its services through the termination date, and submit such documentation to District for its evaluation. Consultant shall receive compensation for services performed up through the date of termination or abandonment.

11. INDEMNIFICATION AND INSURANCE. In no event will any fault of Consultant or Consultant's employees or contractors be reapportioned to District, its officers, Trustees or employees. Consultant will indemnify and hold District and its officers, Trustees and employees harmless from any such reapportionment of fault.

To the extent that the District is not otherwise indemnified by a policy of insurance, Consultant will indemnify the District from any claim of third parties to the extent caused by Consultant's breach of this Agreement or by the negligence or other fault of Consultant, or that of any of Consultant's employees or subcontractors. Any invalidity of any portion of this indemnification duty will not defeat any remaining portion of this described indemnification duty. This indemnity shall be interpreted to provide the District and its Trustees and employees with indemnity to the greatest extent allowed by law.

Consultant, at its own cost and expense, shall secure and maintain policies of insurance in accordance with Exhibit B.

12. INSPECTION OF CONSULTANT'S RECORDS. Consultant shall maintain accounting records in accordance with generally accepted accounting principles and practices to substantiate all costs incurred by Consultant and billed to District. Consultant shall maintain records necessary to confirm compliance with District security protocols. Such records shall be available to District during Consultant's normal business hours for a period of one year following the date of final payment under this Agreement.

13. WAIVER OF CLAIMS. Prior to acceptance of final payment, Consultant shall submit in writing to District any known claim that Consultant or any of Consultant's employees, sub-consultants or subcontractors may have against District or any of its employees. The acceptance of final payment by Consultant will constitute a waiver of any such claim other than those claims previously made in writing and submitted to District. Consultant shall hold District harmless from any claims, including costs and attorneys' fees, by any of Consultant's employees, sub-consultants or subcontractors which are not made in writing prior to acceptance of final payment. The tendering of final payment by District will not constitute a waiver of any claim District might have against Consultant, whether known or unknown at the time such payment is made.

14. SUCCESSORS AND ASSIGNS. The services to be provided by Consultant under this Agreement shall not be subcontracted or assigned without the prior written consent of District. This Agreement shall extend to and be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

15. NOTICES AND APPROPRIATE LINES OF COMMUNICATION. Except to the extent necessary to respond to emergencies, communications regarding material matters relating to this Agreement shall be deemed given when mailed or delivered to:

If to District To:

Metropolitan Water District of Salt Lake & Sandy
Attn: General Manager
3430 East Danish Road
Cottonwood Heights, Utah 84093

If to Consultant To:

Bowen Collins & Associates, Inc.
Attn: Jason Luettinger, President/CEO
154 East 14075 South
Draper, Utah 84020

Each party may change the designation of the addressee or the address for that party to receive notice by sending written notice of the change.

16. GOVERNING LAW AND JURISDICTION. This Agreement shall be enforced and governed under the laws of the State of Utah, and jurisdiction for any action based on this Agreement, whether brought by District or Consultant, shall be with the District Court of Salt Lake County, State of Utah.

17. NONDISCRIMINATION.

A. Consultant shall comply with the provisions of the Utah Anti-Discrimination Act (Act) of 1965 (Title 34A, Chapter 5 of the Utah Code) and hereby agrees as follows:

i. Consultant will not discriminate against any employee or applicant for employment because of race, color, sex, pregnancy, childbirth, pregnancy-related conditions, age, religion, national origin, disability, sexual orientation, or gender identity.

ii. In all solicitations or advertisements for employees, Consultant will state that all qualified applicants will receive consideration without regard to race, color, sex, pregnancy, childbirth, pregnancy-related conditions, age, religion, national origin, disability, sexual orientation, or gender identity.

iii. Consultant will furnish such information and reports as requested by the Anti-Discrimination Division for the purpose of determining compliance with the Act.

iv. Consultant will include the provisions of sub-sections i. through iii. above in every subcontract or purchase order so that such provisions will be binding upon such subcontractor or vendor unless exempted by law.

B. Consultant's failure to comply with the anti-discrimination terms in this Agreement, the Utah Anti-Discrimination Act, or the rules and regulations promulgated thereunder shall be deemed a breach of this Agreement and may result in cancelation, termination, or suspension of the same in whole or in part.

18. SPECIAL PROVISIONS. Consultant shall comply with all applicable federal, state and local laws and ordinances, and shall not discriminate against any person on the basis of race, color or national origin in the performance of this Agreement. Any terms which District, as a governmental entity is mandated by applicable statute or regulation to include in this Agreement, including any terms which are mandated by applicable provisions of the Utah Procurement Code, shall be considered a part of this Agreement.

19. PARTIAL INVALIDITY. If any portion of this Agreement is determined to be invalid, the remaining portions of this Agreement shall remain valid and enforceable.

20. ENTIRE AGREEMENT. This Agreement constitutes the entire understanding and agreement between the parties and cannot be altered except through a written instrument signed by the parties.

21. NO THIRD PARTY BENEFITS INTENDED. This Agreement is not intended to create rights in any person or entity who is not a party to this Agreement.

22. REPRESENTATION OF AUTHORITY. Those persons signing as representatives of the parties warrant and represent they have been duly authorized to sign on behalf of the party they represent.

IN WITNESS WHEREOF, the parties have executed this Agreement effective the ___ day of June, 2024.

DISTRICT:
Metropolitan Water District of Salt Lake & Sandy

By: _____
Annalee Munsey, General Manager

CONSULTANT:
Bowen Collins & Associates, Inc.

By: _____
Jason Luettinger, President/CEO

Exhibit A
Scope of Work and Fee

Exhibit B

INSURANCE AND BOND REQUIREMENTS FOR PARTIES ENTERING INTO AGREEMENTS WITH METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY

Last Update: August 8, 2023

Consultant shall maintain, at no cost to the District, the following insurance, and provide evidence of compliance satisfactory to District.

A. MINIMUM LIMITS OF INSURANCE

Except as approved in writing by District in advance, Consultant and all of Consultant's Sub-consultants shall maintain limits no less than:

1. **GENERAL LIABILITY (including claims arising from: premises-operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract.):**
    i. Combined Single Limit (Bodily Injury and Property Damage):
        1. $2,000,000 Per Occurrence
    ii. Personal Injury (including completed operations and products liability):
        1. $2,000,000 Each Occurrence
    iii. General Aggregate:
        1. $3,000,000
    iv. Products - Comp/OP Aggregate:
        1. $3,000,000
    v. Limits to apply to this project individually.

2. **AUTOMOBILE LIABILITY**:
    i. $2,000,000 Per Occurrence
    ii. "Any Auto" coverage required.

3. **WORKERS' COMPENSATION and EMPLOYERS LIABILITY:**
    i. Workers' compensation statutory limits.
    ii. Employers Liability statutory limits.

4. **PROFESSIONAL LIABILITY:**
    i. $2,000,000 Per Claim
    ii. $3,000,000 Aggregate

B. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions (SIRs) must be declared to and approved by the District in writing. At the option of the District, either; the insurer may be required to reduce or eliminate such deductibles or SIRs as respects the District, its trustees, officers, and employees as additional insureds; or the Consultant may be required to procure a bond or other instrument guaranteeing payment of losses and related investigations, claim distribution, and defense expenses of the District, its trustees, officers, and employees as additional insureds.

The District does not ordinarily approve deductibles in an amount exceeding 2.5% of the required minimum limits described above or $50,000, whichever is less. The District does not ordinarily approve SIRs in an amount exceeding 1.0% of the required minimum limits described above or $20,000, whichever is less. With respect to any deductible or SIR, the Consultant shall pay for costs related to losses, investigations, claim distribution, and defense expenses of the District, its trustees, officers, and employees as additional insureds that would otherwise be covered by an insurer under the coverages described in these insurance requirements if no deductible or SIR existed.

C. ACCEPTABILITY OF INSURERS

Insurance and bonds are to be placed with insurers admitted in the State of Utah with a Bests' rating of no less than A-, IX, and in the limits as listed in this document, unless approved in writing by the District.

D. VERIFICATION OF COVERAGE

Consultant and all of Consultant's Sub-Consultant's shall furnish District with certificates of insurance and with original endorsements effecting coverage required by this clause. The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be provided on forms acceptable to the District before work commences. District reserves the right to require complete, certified copies of all required insurance policies, with all endorsements, at any time. Consultant shall provide an insurance certificate and an endorsement evidencing compliance with this provision at least annually. From time to time District may increase the requirement for a liability limit by providing reasonable written notice to Consultant of such a change.

DRAFT

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY
Phase 1 Salt Lake Aqueduct Hardening Project – Finished Water Reaches

Bowen Collins & Associates
Scope of Services

DATE:	May 22, 2024
PROJECT:	Salt Lake Aqueduct Hardening Project – Finished Water Reaches
PROJECT MANAGER:	Jason Luettinger, Bowen, Collins & Associates
PROJECT LOCATION:	Salt Lake County, Utah

BACKGROUND

The Salt Lake Aqueduct (SLA) was built between 1939 and 1951 by the Bureau of Reclamation to develop a primary water source for Salt Lake City (SLC) as part of the Provo River Project. The pipeline is mostly 69-inch inside diameter reinforced concrete pipe and was constructed from Deer Creek Reservoir down Provo Canyon and long the Wasatch bench to the District's Terminal Reservoirs near 3300 South in Salt Lake County. The total length of the SLA is approximately 41 miles.

In 1960 the Little Cottonwood Water Treatment Plant (LCWTP) was constructed to treat water in the SLA. The reach of SLA from LCWTP to the Terminal Reservoirs was converted to convey finished water over this approximately 8-mile northern segment.

The finished water SLA is the backbone of water conveyance infrastructure for the east side of Salt Lake County. A breach of the SLA during a seismic event would be catastrophic. Such a breach would eliminate or significantly reduce the ability to deliver finished water to over 450,000 residents of the County.

This Salt Lake Aqueduct Hardening Project will include the risk mitigation work necessary to help harden and increase seismically stability of the finished water SLA. The District's SLA Hazard Mitigation Plan (HMP) identified three critical segments of the finished water SLA that cross active seismic fault zones, posing a significant risk to the delivery of water in the event of an earthquake. The HMP recommends replacing these segments (approximately 14,863-feet or 35-percent of FWSLA) and installing an inner pipe through the remaining eight segments (approximately 27,945-feet or 65-percent of FWSLA) to seismically stabilize the SLA.

Design Objectives

The following design objectives have been established for seismic stabilization of the SLA. These objectives are based upon guidelines outlined by the American Lifelines Alliance (ALA).

- SLA segments crossing active fault zones - Pipe Function Class IV (Essential) with objective to maintain pressure integrity during an event and as undamaged as possible or in a "damaged but intact" condition.

- Remaining SLA segments that are not within active fault zones – Pipe Function Class III (Critical) with objectives to increase the resiliency of the SLA during an event.

Phase 1 Scope Assumptions

Scoping assumptions for this stage of this FWSLA Hardening Project are as follows:

1. The District desires to complete preliminary design under this scope and to progress final design as far as possible by December 31, 2025 while remaining within the funding constraints established for the project, understood to be approximately $2 million.

2. Funding for completion of final design packages (100-percent contract documents) is not yet available and is anticipated to be acquired by MWDSLS in the future.

3. Funding for phased construction of various segments of the FWSLA Hardening Project is not yet available and is anticipated to be acquired by MWDSLS in the future.

4. Given that construction may not take place for several years, it is understood that progression of detailed final design to 100-percent stamped documents (e.g. final utility investigations, final geotechnical field investigations, final detailing of design, surface improvements, contractual bidding requirements, dates, schedules, etc.) will take place in the future under separate final design contracts once these variables are known.

5. It is the intent of this first phase of the FWSLA Hardening Project to evaluate and make appropriate design decisions necessary define the overall approach that will be used for seismically hardening the FWSLA. This information, combined with preliminary construction phasing and sequencing evaluations and current construction cost estimates, will establish a foundation for progression of "shovel ready" projects that can be implemented by the District as additional funding becomes available.

SCOPE OF SERVICES

The following scope of services outlines the tasks that will be performed to achieve the District's goals and objectives for hardening of the finished water segments of SLA.

Task 1 – General Contract Administration/Meetings/Project Coordination

Objective: Provide appropriate management tools and maintain effective communications between the District and entire project team throughout the project duration. Manage schedule and budget including invoicing, project schedule updates, management of project team and subconsultants. Provide detailed Project Management Plan (PMP), conduct of Kickoff meeting, and support design coordination efforts with multiple communication tools.

Activities: Specific work to be completed under this task includes:

T1.01 Project management, contract administration, and general coordination services.

a. Manage project schedule and budget.
b. Manage project team and subconsultants.
c. Monthly internal project team coordination meetings.
d. Review and submit monthly project invoices.
e. General coordination, communication, and scheduling updates.

T1.02 Prepare a Project Management and Quality Management Plan(s) including a project schedule.

T1.03 Organize and conduct a kick-off meeting.
- One 2-hour meeting with project team (in person with virtual option)

T1.04 Monthly project manager update meetings.
- Up to thirty-six 30-minute project manager check-in meetings with District PM and key project staff as needed (virtual bi-weekly)

T1.05 Schedule task workshops focusing on critical areas of the project.
- Workshops included under individual subtask items.

T1.06 Schedule agency coordination meetings.
- Agency meetings included under individual subtask items.

T1.07 Assist with presentations to the MWDSLS Engineering Committee and/or Board of Directors. One anticipated after completion of the Preliminary Design Report and a second near the end of the project.
- Support with up to four total presentations for either Engineering Committee or Board

Deliverables:

D1.01 Monthly project status and invoicing
D1.02 Project Management Plan
D1.03 Presentation materials for the MWDSLS Board of Directors

Task 2 – Preliminary Design Phase

Objective: Assemble a team of specialists to evaluate, investigate, and develop a preliminary design approach including plans and recommendations for seismically hardening the finished water segments of the Salt Lake Aqueduct. Gather relevant data during this phase, perform site investigations, evaluate methods and costs, and document these in a series of Technical Memorandums and decision logs for District review. Our team will then pause for a formal Value Engineering workshop to review and test our recommended design approach and concepts.

Activities: Specific work to be completed under this task includes:

T2.01 Gather relevant data to baseline and document existing conditions.
a. Review District provided design reports and previous studies, such as:

- Seismic evaluation reports prepared by B&C and previous consultants
- Pipeline design and construction documentation
- Historical records
- Existing drawings and geotechnical information
- Existing utility information
- The District will provide pertinent geotechnical, utility survey data, design, and as-built documents pertaining to surrounding developments, the Cottonwood Connection Project, LCWTP, BCWTP, and any other relevant nearby historic planning or construction efforts available. They will help coordinate and collate planning data from member agencies as necessary.

b. Gather SLA record drawings including all turnouts and appurtenant structures.

c. Aerial drone LiDAR survey of FWSLA alignment.
   - Set targets and perform high resolution aerial drone LiDAR survey along entire FWSLA alignment (approximately 42,800 LF). Survey width anticipated to be 250 feet on each side of the SLA alignment to cover ROW and surrounding features.
   - Assume survey projection and ground control coordinates will be provided/obtained from record drawings from past District projects.
   - An allowance is provided for additional field survey work to supplement aerial topographic survey at areas identified along the FWSLA alignment. This work will take place after the preliminary evaluations of pipe replacement versus lining are complete and the scope is better defined.
   - Field survey work will be tracked against the budget allowance and adjusted during design as needed to support the project. BC&A will notify the District when the field survey allowance is 75-percent spent if it appears that additional services may be required.

d. Perform utility search along impacted segments of the alignment.
   - Perform Quality Level D desktop utility investigation, in accordance with ASCE (American Society of Civil Engineers) 38-22 Subsurface Utility Engineering (SUE) standards, and incorporate known utilities into an existing utility file along the alignment.
   - Quality Level D is defined as information gathered and interpreted from existing Third-Party records (Blue Stake database research) and put into context with all other obtained data.
   - A full Subsurface Utility Engineering (SUE) effort is not included in this initial scope of work due to the unknown level of potential utility conflicts.
   - Additional SUE services, including Quality Level A (potholing), B, and C investigations, will be provided separately following further definition of the project scope during design.

e. Document existing and required SLA right-of-way limits.
   - Electronic GIS ROW information to be provided by MWDSLS for incorporation into design plan and profile drawings.

f. Develop preliminary plan and profile drawings of alignment showing all impacted features, ROW limits, etc.
   - Preliminary plan and profile drawings will include aerial imagery, horizontal alignment, ground surface elevation profile, and an approximate profile of

the existing FWSLA (translated based upon best available record drawing information).

- Drawing scale of plan and profile drawings assumed at 1"=40', or approximately 1,000 LF per sheet.
  - It is assumed that the existing BOR drawings show the plan and profile of the pipeline in adequate detail so no effort is required to establish the location or bends of the existing pipeline.
- Drawings will include preliminary location of liner insertion sites and preliminary easement requirements.
- Hazard assessment Investigation
  - Desktop review of database websites within one mile of the alignment to identify potential concerns that could affect environmental conditions and identify locations with potential subsurface chemicals that could impact construction or need remediation prior to construction.

g. Develop overall project schematic diagrams showing SLA turnouts and alternative delivery methods that will be available during required aqueduct shutdowns.

- Up tofive iterations (aligning with workshops) of schematic diagrams will be updated using Microsoft Visio to document project phasing and aqueduct shutdown constraints during construction developed through subtask T2.02 through T2.06. A final iteration of this schematic will be prepared after T2.06 to overlay preferred sequencing.
- It is assumed these figures will focus on the existing SLA hardening strategy which may be used to consider future phases of the parallel SLAR project, but not within the effort herein.
- Turnout sequencing and allowable shutdown windows will be coordinated with District and member cities within subtask T2.07 in addition to definition of potential separate bid packages, prioritized for future construction of FWSLA Hardening segments to coincide with identified funding availability.
- The final iteration of the schematics will be included in the Preliminary Design Report, alongside construction sequencing and schedule constraint documentation. This will ultimately inform project specification requirements for the contractor.

T2.02 Classify hazard zones and develop project seismic design criteria.

a. Outline our approach related to field investigations that may be required
b. Document ALA classification and service goals
c. Define limits of fault crossings, landslide zones and other hazards.

- Compile and review existing hazard information. Compile and review maps, publications, available reports, aerial imagery, and project and publicly available lidar topographic data that will aid in identification and characterization of geologic hazards. This includes historical records and landslide inventories for mass wasting hazards, as well as fault and geomorphic maps, trench logs, earthquake chronologies for fault and seismic hazards, and liquefaction and lateral spread susceptibility/potential/displacement. At a minimum, we will compile

information available from the Utah Geologic Survey (UGS), the Utah Depart of Transportation (UDOT) and the University of Utah.

- Landslide susceptibility evaluation and mapping. This will include geomorphic lidar analysis, inventory mapping of existing landslide deposits, and modelling of shallow landslide, deep-seated landslide, rockfall, and debris flow hazards to produce maps primarily for the pipeline alignment of hazard extent and spatially-distributed estimates of process intensity.
- Fault and lineament mapping to identify potential locations of future surface fault rupture. This will include an interpretation of lidar topographic data and aerial imagery/photography. Early vintage aerial photography, that may predate significant grading and development, will be compiled and interpreted and may represent the best information to constrain fault locations in highly developed areas.
- Liquefaction susceptibility, potential, and displacement mapping. This will be based on existing mapping studies, augmented with limited boring data that may be available along the alignment.
- Field reconnaissance of key locations to better constrain and characterize targeted hazards.
- Seismic ground motion evaluation; design criteria versus deterministic Wasatch Fault. Based on this comparison, provide comment on the suitability of the RFQ design criteria and recommend modifications to those criteria as appropriate.

d. Surface fault rupture hazard evaluation.
   - Characterize the Wasatch fault (including uncertainties) based on published information. The characterization will focus on surface fault trace locations, dimensions and geometry, and earthquake chronologies developed from paleoseismic studies.
   - Perform a probabilistic and deterministic fault displacement hazard analysis for SLA crossings of the Wasatch fault and associated faults.
   - The characterization and analyses will generally conform with guidance from:
     - American Lifelines Alliance – *Seismic Guidelines for Water Pipelines*
     - Utah Geological Survey Circular 128 – *Guidelines for Investigating Geologic Hazards and Preparing Engineering Geology Reports, with a Suggested Approach to Geologic-Hazard Ordinances in Utah*
     - Next-generation fault displacement models developed under the industry-academic collaborative Fault Displacement Hazard Initiative (FDHI) program that is coordinated by the University of California.
     - This guidance above will be modified to suit project goals and conform to updated data and information.

e. Provide soil/rock, displacements, and ground motion parameters for preliminary pipe-soil interaction analyses by Degenkolb. It is assumed that pipe-soil interaction analyses will be performed for up to 3 fault crossings and that earthquake time histories are not needed for these analyses.

f. Scope geotechnical field investigation plan. Develop a geotechnical exploration plan (including field explorations and laboratory testing as appropriate) to support final design based on results of analyses, assumptions, and design performed in the

current preliminary phase. Assume actual geotechnical field explorations (other than site reconnaissance) will be performed in a future design phase. Scope and cost is not included in the current phase.

g. **TM #1** - Geotechnical Hazard Report and Seismic Design Ground Motion Criteria
    - Draft version for District review prior to Workshop #1
    - Final version incorporating comments following Workshop #1
h. **Workshop #1** – Geotechnical Hazard Report and Seismic Design Criteria
    - One 4-hour workshop meeting with project team and District staff (in person with virtual option)

T2.03 Evaluate aqueduct lining options for seismic resiliency.

a. Evaluate aqueduct lining options available for seismic hardening of the SLA.
    - Assumed lining alternatives may include full cylinder steel pipe lining, split can steel pipe lining, HDPE slip lining, compressed fit HDPE lining, and carbon fiber reinforced polymer linings.
    - Develop preliminary concepts for locations of liner insertion pits with identification of pros and cons for each concept.
    - Perform finite element modeling to evaluate the seismic performance of the liner inside of existing reinforced concrete pipe in (1) one non-fault-crossing location, under ground motion deformation hazard scenarios, such as liquefaction, lateral spreading, landslide, or others. The objective of the finite element analysis is to determine the suitability of different liner design options for achieving acceptable seismic performance under different types of ground deformation hazard. Up to (2) two different liner material options will be considered (e.g. welded steel liner and HDEP liner).
b. Evaluate hydraulic capacity impacts of lining alternatives.
    - Model the hydraulic impacts caused by any diameter reductions associated with up to five SLA lining options. This initial assessment will assume segments slated to be replaced in place maintain existing profile elevations.
    - Consider hydraulic impacts corresponding to segments of SLA that may be lined in the future.
    - Evaluate potential reductions in SLA capacity against the District's long-term delivery requirements for its member agencies. Document the additional capacity that may be needed to supplement the seismically hardened SLA (to support future planning for Phases 2 and 3 of SLAR).
c. Perform constructability reviews, develop basis of estimate and budgetary cost comparisons for up to five alternative lining methods
d. **TM #2** - Aqueduct Lining Evaluation and Recommendations
    - Draft version for District review prior to Workshop #2
    - Final version incorporating comments following Workshop #2
e. **Workshop #2** – Aqueduct Lining Options and Recommendations
    - One 4-hour workshop meeting with project team and District staff (in person with virtual option)

T2.04 Evaluate aqueduct replacement options for seismic resiliency.

a. Evaluate options for full replacement of the SLA with new seismically hardened pipeline within active fault zones.
b. Evaluate the capacity of up to three proposed pipe materials and subsequent diameters for the replacement piping. Add the replacement sections into the same model used for lining alternatives to verify the SLA capacity in conjunction with the recommended liner option selected for those segments.
c. Evaluate seismically designed fittings and flexible couplings that may be required to accommodate projected ground displacements withing active fault zones.
d. Perform finite element analysis of pipe-soil reactions to establish pipeline design criteria.
    - Finite element modeling will be performed to evaluate the seismic performance of welded steel replacement pipe at (3) three fault crossing locations. The results of the analysis will be used to assist with the selection of an appropriate pipe section (diameter and thickness) and material in order to achieve acceptable performance under the design fault displacements.
    - Modeling will also consider the option of having a welded steel pipe liner inside of existing RC pipe at (1) one of the 3 fault crossing locations, which will allow trenchless installation of the steel liner inside of the existing concrete pipe. The modeling will consider the option of having an air gap between the liner and existing concrete pipe, which will help the liner deform freely and distribute deformations and strains over its length, which can lead to better seismic performance.
    - The geotechnical engineer will provide fault displacements at fault crossing locations. Up to (3) three faulting scenarios, defined by fault location, strike orientation and dip angle will be considered at each crossing locations.
    - The geotechnical engineer will provide nonlinear soil-spring properties in 4 directions (3 directions + torsion) along pipeline length. Provided spring values should include expected as well as upper/lower bound values for the springs.
e. Perform constructability reviews and budgetary cost comparisons for aqueduct replacement options for up to three alternative replacement methods.
f. **TM#3** - Fault Crossing Evaluation and Recommendations
    - Draft version for District review prior to Workshop #3
    - Final version incorporating comments following Workshop #3
g. **Workshop #3** – Aqueduct Replacement Options and Recommendations for Seismic Hardening
    - One 4-hour workshop meeting with project team and District staff (in person with virtual option)

T2.05 Seismic evaluation of existing structures.

a. Provide a Tier 1 desktop seismic screening of existing structures along the FWSLA.
b. Based upon the structural seismic screening, make recommendations regarding further evaluations of structures or the suitability of the structures to withstand the design seismic event.
    - The screening requires previous definition of the Seismic Hazard Level, the required Performance Level for the structures, and the Level of Seismicity.
        - Assumed Performance Level: Immediate Occupancy (Pipeline is serviceable immediately).

- Assumed Seismic Hazard Level: ASCE 7-16, 2-percent probability in 50 years (2,475-year mean Return Period).
- Assumed Level of Seismicity: High (Corresponds to ASCE 7-16, Seismic Design Category (SDC) D.
- For scoping purposes, any final design of new structures or related improvements will be included separately, if required.
- This task assumes that the seismic evaluation will be limited to manholes, blowoffs, and valve vaults. Pump stations are not included in this assessment.

c. **TM #4** – Seismic Evaluation and Recommendations for Existing Structures
   - Draft version for District review
   - Final version incorporating comments

T2.06 Evaluate project scheduling and construction sequencing options.

a. Review timing of project relative to related plans for LCWTP, BCWTP, and SLAR phases 2 and 3 construction.
b. Prepare up to three preliminary FWSLA Hardening Project sequencing options based on effort conducted through workshops #1 - #3. Use the project schematic diagrams to convey these options prepared under T2.02.
c. Prepare up to two preliminary hardening project sequencing schedules in Microsoft Project, aligning with the perceived fastest and slowest sequencing options.
d. Evaluate project delivery options.
   - Prepare pro and con table outlining applicability of traditional design-bid-build versus alternative delivery methods.
e. **TM#5** - Preliminary Scheduling and Construction Sequencing Evaluation
   - Draft version for District review prior to Workshop #4
   - Final version incorporating comments following Workshop #4
f. **Workshop #4** – Project Scheduling and Construction Sequencing
   - One 4-hour workshop meeting with project team and District staff (in person with virtual option)

T2.07 Agency coordination meetings and permitting.

a. Conduct agency coordination meetings
   - Two 1-hour coordination meetings anticipated with Salt Lake City Department of Public Utilities to discuss turnouts, BCC connection, and other project specific issues.
   - One combined coordination meeting with member agencies and impacted cities to introduce the project, including Sandy City, Cottonwood Heights City, Holladay, Millcreek, and Salt Lake City (in person with virtual option)
b. Evaluate environmental and NEPA permitting requirements
   - Develop high level GIS maps with desktop generated environmental features to determine level of environmental impacts and needs for the pipeline as well as alternatives
   - Prepare a list of anticipated environmental permits (Stream Alteration and ACOE permits), NEPA requirements, and acting agencies who will administer the permit or will be the lead agency for NEPA
   - Prepare a written summary of findings and assumptions related to NEPA requirements

c. Define stakeholder agency permitting requirements
    - Division of Drinking Water
    - City Permits (Cottonwood Heights, Holladay, Millcreek, unincorporated Salt Lake County)
        - Sensitive Lands Evaluation and Development Standards (SLEDS)
        - Right-of-Way Encroachment Permit/Land Disturbance Permits
        - Traffic Control Plans
        - Stormwater Pollution Prevention Plans
    - Utah Department of Transportation, Region II
        - ROW Encroachment Permit
        - Traffic Control Plan

d. **TM #6** – Project Permitting Requirements
    - Draft version for District review
    - Final version incorporating comments

T2.08 Conduct a formal Value Engineering effort for project **(*This subtask has been removed by the District and may be contracted separately following preliminary design*)**.

~~a. Formal VE Work Session~~
- ~~Five-day formal VE workshop anticipated~~
- ~~Up to five subject matter specialists will be provided by SVS for VE workshop~~
- ~~Project design team to present 30-percent design concepts in a 2-hour meeting on Day 1~~
- ~~Project design team to attend one 1-hour mid-week check in meeting with VE team on Day 3~~
- ~~Project design team to attend one 2-hour VE session presentation meeting by VE team at conclusion of workshop on Day 5~~

~~b. VE Report and alternatives review with District staff~~

~~c. Implementation of accepted VE alternatives into 30-percent design package by the project team.~~

T2.09 Preliminary Design Report and 30-Percent Design Package

a. 30-percent drawings illustrating limits of recommended hardening methods and pertinent preliminary design details
b. Develop AACE Class 4 Opinion of Probable Construction Cost (OPCC) aligning with preferred hardening and sequencing strategy
c. Draft and Final versions of PDR prepared by collating final technical memorandums from tasks T2.02 through T2.08 along with an Executive Summary detailing findings, recommendations, and decisions
d. 30-percent Preliminary Design Review Meeting
    - One 2-hour review meeting with project team (in person with virtual option)

Deliverables:

D2.01 Workshop and Meeting Agendas and Notes
D2.02 TM#1 - Geotechnical Report and Seismic Design Criteria
D2.03 TM#2 - Aqueduct Lining Evaluation and Recommendations
D2.04 TM#3 - Fault Crossing Evaluation and Recommendations

D2.05 TM#4 – Seismic Evaluation and Recommendations for Existing Structures
D2.06 TM#5 - Preliminary Scheduling and Construction Sequencing Evaluation
D2.07 TM#6 - Project Permitting Requirements
~~D2.08 Value Engineering Report~~
D2.09 Draft and Final copies of Preliminary Design Report and 30-Percent Design Package

Task 3 – Design Phase (*Allowance Provided)

Objective: Based upon the results and recommendations provided in the final Preliminary Design Report, progress final design of the project as far as possible while remaining within the District's grant funding and budgetary constraints.

***For purposes of budgeting, a contingency allowance has been provided for final design efforts beyond the 30-Percent Design Package. This budget contingency will be utilized for work that is agreed upon and authorized in advance by MWDSLS following completion of Task 2 Preliminary Design.**

Activities: Specific work which may be progressed forward under the remaining design allowance includes:

T3.01 Provide QA/QC and senior review of design deliverables as project progresses.

T3.02 Progress final design to provide additional project definition and an updated cost estimate.

a. Plans and draft specifications
    - Overall P&Ps along entire alignment by BC&A
    - Lining detailing and CAD work by BC
    - Open cut detailing and CAD work by BCA
    - Corrosion and Cathodic Protection design by BCA
    - Delineate the pipe segments identified for rehabilitation using selected liner technology, assessed through preliminary design, to meet seismic performance goals.
    - Develop general, civil, and structural drawing list for final design of pipe and a list of technical specifications.
        - Assume there are no sectionalizing valve vaults
        - Assume details are manholes, blowoffs and air release valves for new pipe.
        - Assume no road restoration drawings
        - Assume no traffic control drawings
        - Assume no hazardous materials that require remediation
    - BCA will provide an electronic CAD file cloud sharing site for design file coordination.
    - Identify long lead items that should be procured in advance of construction.
b. Prepare an approximate Class 3 OPCC
c. Design review meeting (in person with virtual option)
d. Submit plans to stakeholders for preliminary review. (BCA)

Deliverables:

D3.01 Agendas and Notes
D3.02 Final Design Review Package and Class 3 OPCC

EXCLUSIONS

The following items are not included in this scope but can be added separately if desired by the District to support the project as it is further developed.

1. Value Engineering services including all meetings and support services from the engineering team and subconsultants.
2. Public information services.
3. Traffic control plans and specifications are not included. If required, these services will be added following further definition of the project scope (i.e. identification of open cut segments with surface impacts that will affect streets and traffic flow).
4. Final design of replacements or structural/mechanical improvements required to vaults and other appurtenant structures along the alignment.
5. Replacement or upgrades associated with electrical and SCADA systems along the alignment.
6. Property boundary investigations, easement verification, title research, and other right-of-way related services.
7. Design level geotechnical field investigations.
8. Property acquisition support for additional temporary or permanent easements.
9. SUE Quality Level A (potholing), B, and C investigations. These services are anticipated to be required for full final design and will be scoped separately once the extent of potential utility conflicts are better understood.
10. Design progression and validation that will be required under future phases as necessary to progress design to 100-percent complete contract documents.
11. If the project is paused during the design phase and is shelved for more than a year, there may be significant effort required to reconfirm status of the drawings and specification to determine level of completion and coordination between disciplines, along with confirming compliance with any regulatory or code changes that may have occurred. Separately, if the project personnel change due to a variety of reasons and a new Engineer of Record or key design team members are required, additional effort will be required to review and confirm the design for the engineer taking over with responsible charge.
12. The project design objectives are a project target, but the overall risk that a major seismic event may create damage to the SLA cannot be removed through current design methods, especially considering the length and soil/rock variability along the SLA. The desktop and field investigations will have limits on available subsurface data with some data being relied upon without the ability for the project team to independently verify. The design will be based upon best practices, design standards, and codes in force at the time of the design. It is, however, possible that unforeseen soil/rock conditions along the SLA, and/or the possibility of unrecognized faults and related seismic risks may not be identified as part of the study and field investigations. Therefore, it should be understood this projects' goal will be to increase the SLA resilience but we cannot guarantee all issues will be identified and addressed nor that the industry's current understanding of all seismic risks, associated movements and loads, and recommended design approaches will fully address

any situation the SLA may be put in from a seismic events. The SLA should be investigated following any notable seismic events to determine if movements or damage has occurred so they can be properly addressed to restore resilience prior to another event.

SCHEDULE

Work will begin following approval by the District. Work under this design phase is anticipated to be complete by December 31, 2025 to meet the District's grant funding deadline.

BUDGET

Services included in this Scope of Work will be provided on an hourly time and materials basis within a not-to-exceed contract amount of $2,000,000 without prior written approval by the District. A detailed breakdown of hours and expenses is provided in the attached fee schedule.

ATTACHMENT A

FEE SCHEDULE

Metropolitan Water District of Salt Lake & Sandy

FINISHED WATER SLA HARDENING PROJECT
Engineering Fee Estimate 05-22-2024

		Bowen Collins & Associates Staff																	
	Labor Category	Office/ Editor	Office/ Acct'ing	CAD5 Design	CAD6 CAD Mgr	LA9 Env Perm	LA3 Env Perm	E1 Staff Eng	E4 Corr Eng	EE1 Corr Elec	E4 Pipeline	E7 Sr. Pipeline	E9 Sr. Pipeline QC	SE3 Structural	SE8 Structural/ Seismic	SE10 Sr. Structural QC	E10 Principal Eng	E10 Principal Eng	E11 PM/PIC
	Staff	Hilbert	Skousen	Riggs	Anderson	Tsandes	Glabau	Hunter	Egbert	Wasden	Mink	Nelson	Olsen	Smoot	Cohen	Davis	Larsen	Loscher	Luettinger
	Labor Rate 2024	$111	$126	$140	$152	$192	$135	$131	$161	$135	$161	$192	$218	$156	$210	$235	$229	$229	$238
	Labor Rate Adjusted Through 2025	$115	$131	$146	$158	$200	$140	$136	$167	$140	$167	$200	$227	$162	$218	$244	$238	$238	$248
Task No.	**Task Description**																		
1	**General Contract Administration/Meetings/Project Coordination**																		
1.01	**Project Management, Contract Administration, and Coordination**	8	10																320
1.02	**Project Management Plan**							4											20
1.03	**Kickoff Meeting**								2		2	2			2				2
1.04	**Project Management Update Meetings**																		18
1.07	**MWDSLS Board Presentation Support**																		16
	BC Task 1 Hours																		
	Task 1 Sub-Total	**8**	**10**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**2**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**376**
2	**Preliminary Design Phase**																		
2.01	**Data Gathering and Review**																		
2.01.a	Review Existing Design Reports							16			4	4			4				12
2.01.b	Gather SLA Record Drawings							16											4
2.01.c	Aerial Drone LiDAR Survey										4								4
2.01.d	QL D Utility Investigation										4								4
2.01.e	Document SLA ROW			8							12								2
2.01.f	Preliminary Plan and Profile Base Drawings			360							360	90							16
2.01.g	Project Schematic Diagrams			8					8		4	8					16	4	8
	BC Subtask 2.01 Hours																		
2.01	***Subtotal***	***0***	***0***	***376***	***0***	***0***	***0***	***32***	***8***	***0***	***388***	***102***	***0***	***0***	***4***	***0***	***16***	***4***	***50***
2.02	**Hazard Zone Classification and Seismic Design Criteria**																		
2.02.a	Outline Approach to Geotechnical Field Investigations											4							2
2.02.b	Document ALA Classification and Service Goals											4			4	2			4
2.02.c	Define Limits of Fault Crossings, Landslide Zones, Other Hazards			8								8			4	2			4
2.02.d	Surface Fault Rupture Hazard Evaluation										4	4			4	2			2
2.02.e	Pipe-Soil Interaction Analysis										12	12				2			4
2.02.f	Geotechnical Field Investigation Plan Scoping										4	4							2
2.02.g	TM#1 - Geotechnical Hazard Report and Seismic Ground Motion Criteria	2										8	2		4				4
2.02.h	Workshop #1 - Geotechnical Hazard Report and Seismic Criteria											4			4				4
	BC Subtask 2.02 Hours																		
2.02	***Subtotal***	***2***	***0***	***8***	***0***	***0***	***0***	***0***	***0***	***0***	***20***	***48***	***2***	***0***	***20***	***8***	***0***	***0***	***26***
2.03	**SLA Lining Segment Evaluation**																		
2.03.a	Evaluate Lining Options											40							30
2.03.b	Hydraulic Capacity Impacts of Lining Alternatives											4					4		2
2.03.c	Constructability Reviews and Basis of Cost Comparisons							12				8							4
2.03.d	TM #2 - Aqueduct Lining Evaluation and Recommendations	2									12	12	2						4
2.03.e	Workshop #2 - Aqueduct Lining Options and Recommendations											4							4
	BC Subtask 2.03 Hours																		
2.03	***Subtotal***	***2***	***0***	***0***	***0***	***0***	***0***	***12***	***0***	***0***	***12***	***68***	***2***	***0***	***0***	***0***	***4***	***0***	***44***
2.04	**SLA Replacement Segment Evaluation**																		
2.04.a	Evaluate Replacement Options							30			30	40							20
2.04.b	Evaluate Hydraulic Capacity of Replacement Options											4							2
2.04.c	Evaluate Seismic Fittings and Flexible Couplings							24				20							12
2.04.d	Perform Finite Element Analysis of Pipe-Soil Reactions for Design Criteria										4	8							4
2.04.e	Constructability Reviews and Basis of Cost Comparisons							12											4
2.04.f	TM #3 - Fault Crossing Evaluation and Recommendations	4		8				20			40	20	2						4
2.04.g	Workshop #3 - Aqueduct Replacement Options and Recommendations							4			4	4							4
	BC Subtask 2.04 Hours																		
2.04	***Subtotal***	***4***	***0***	***8***	***0***	***0***	***0***	***90***	***0***	***0***	***78***	***96***	***2***	***0***	***0***	***0***	***0***	***0***	***50***

FINISHED WATER SLA HARDENING PROJECT
Engineering Fee Estimate 05-22-2024

		Brown & Caldwell Staff													Subtotal Hours	Subtotal Labor
	Labor Category	APM	PA	Design Lead	Rehab SME	Modeling SME	Modeling Support	Scheduler	Ops SME	QAQC	Cost Estimator	Geotech SME	Senior Project Engineer	Design Engineer	CADD	
	Staff	Sorenson	Guy	McReynolds	Poppe	Fugal	Ricks	Villanueva	Hardy	Holland	Manocchio	Pennington	Sochanska	Rojas	Davidse	
	Labor Rate 2024	$214	$118	$335	$281	$281	$172	$174	$264	$335	$209	$335	$201	$132	$181	
	Labor Rate Adjusted Through 2025	$220	$121	$343	$287	$288	$176	$178	$270	$343	$213	$343	$206	$135	$185	
Task No.	**Task Description**															
1	**General Contract Administration/Meetings/Project Coordination**															
1.01	**Project Management, Contract Administration, and Coordination**														338	$ 81,590
1.02	**Project Management Plan**														24	$ 5,504
1.03	**Kickoff Meeting**														10	$ 2,000
1.04	**Project Management Update Meetings**														18	$ 4,464
1.07	**MWDSLS Board Presentation Support**														16	$ 3,968
	BC Task 1 Hours	*292*	*36*	*66*	*66*	*20*	*9*	*6*	*8*	*6*	*11*	*11*	*16*	*14*	*0*	*560*	*$ 133,963*
	Task 1 Sub-Total	**292**	**36**	**66**	**66**	**20**	**9**	**6**	**8**	**6**	**11**	**11**	**16**	**14**	**0**	**966**	**$ 231,489**
2	**Preliminary Design Phase**															
2.01	**Data Gathering and Review**															
2.01.a	Review Existing Design Reports														40	$ 7,492
2.01.b	Gather SLA Record Drawings														20	$ 3,168
2.01.c	Aerial Drone LiDAR Survey														8	$ 1,660
2.01.d	QL D Utility Investigation														8	$ 1,660
2.01.e	Document SLA ROW														22	$ 3,668
2.01.f	Preliminary Plan and Profile Base Drawings														826	$ 134,648
2.01.g	Project Schematic Diagrams														56	$ 11,516
	BC Subtask 2.01 Hours	*16*	*0*	*23*	*11*	*2*	*34*	*0*	*6*	*0*	*0*	*2*	*6*	*0*	*0*	*100*	*$ 24,669*
2.01	***Subtotal***	***16***	***0***	***23***	***11***	***2***	***34***	***0***	***6***	***0***	***0***	***2***	***6***	***0***	***0***	***1,080***	***$ 188,481***
2.02	**Hazard Zone Classification and Seismic Design Criteria**															
2.02.a	Outline Approach to Geotechnical Field Investigations														6	$ 1,296
2.02.b	Document ALA Classification and Service Goals														14	$ 3,152
2.02.c	Define Limits of Fault Crossings, Landslide Zones, Other Hazards														26	$ 5,120
2.02.d	Surface Fault Rupture Hazard Evaluation														16	$ 3,324
2.02.e	Pipe-Soil Interaction Analysis														30	$ 5,884
2.02.f	Geotechnical Field Investigation Plan Scoping														10	$ 1,964
2.02.g	TM#1 - Geotechnical Hazard Report and Seismic Ground Motion Criteria														20	$ 4,148
2.02.h	Workshop #1 - Geotechnical Hazard Report and Seismic Criteria														12	$ 2,664
	BC Subtask 2.02 Hours	*4*	*0*	*12*	*4*	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*0*	*8*	*0*	*36*	*$ 9,968*
2.02	***Subtotal***	***4***	***0***	***12***	***4***	***0***	***0***	***0***	***0***	***0***	***0***	***8***	***0***	***8***	***0***	***170***	***$ 37,520***
2.03	**SLA Lining Segment Evaluation**															
2.03.a	Evaluate Lining Options														70	$ 15,440
2.03.b	Hydraulic Capacity Impacts of Lining Alternatives														10	$ 2,248
2.03.c	Constructability Reviews and Basis of Cost Comparisons														24	$ 4,224
2.03.d	TM #2 - Aqueduct Lining Evaluation and Recommendations														32	$ 6,080
2.03.e	Workshop #2 - Aqueduct Lining Options and Recommendations														8	$ 1,792
	BC Subtask 2.03 Hours	*22*	*6*	*28*	*94*	*25*	*66*	*0*	*8*	*4*	*50*	*0*	*24*	*76*	*0*	*403*	*$ 90,352*
2.03	***Subtotal***	***22***	***6***	***28***	***94***	***25***	***66***	***0***	***8***	***4***	***50***	***0***	***24***	***76***	***0***	***547***	***$ 120,136***
2.04	**SLA Replacement Segment Evaluation**															
2.04.a	Evaluate Replacement Options														120	$ 22,050
2.04.b	Evaluate Hydraulic Capacity of Replacement Options														6	$ 1,296
2.04.c	Evaluate Seismic Fittings and Flexible Couplings														56	$ 10,240
2.04.d	Perform Finite Element Analysis of Pipe-Soil Reactions for Design Criteria														16	$ 3,260
2.04.e	Constructability Reviews and Basis of Cost Comparisons														16	$ 2,624
2.04.f	TM #3 - Fault Crossing Evaluation and Recommendations														98	$ 16,474
2.04.g	Workshop #3 - Aqueduct Replacement Options and Recommendations														16	$ 3,004
	BC Subtask 2.04 Hours	*10*	*2*	*16*	*4*	*23*	*46*	*0*	*0*	*0*	*30*	*2*	*0*	*10*	*0*	*143*	*$ 32,225*
2.04	***Subtotal***	***10***	***2***	***16***	***4***	***23***	***46***	***0***	***0***	***0***	***30***	***2***	***0***	***10***	***0***	***471***	***$ 91,173***

BOWEN COLLINS & ASSOCIATES

FINISHED WATER SLA HARDENING PROJECT
Engineering Fee Estimate 05-22-2024

	Labor Category	Subtotal Expenses	% increase	Mileage	Travel	Geotech/ Seismic	Pipe/Soil FE Analysis	Survey	Utility Search	Univ CO	USU	VE	Const	Total Cost
	Staff		Avg '24-'25			S&W	Degenkolb	Horrocks	Horrocks	B3W	Brady Cox	SVS	Whitaker	
	Labor Rate 2024		*4.0%*	*$0.75*								*(NIC)*		
	Labor Rate Adjusted Through 2025													
Task No.	**Task Description**													
1	**General Contract Administration/Meetings/Project Coordination**													
1.01	**Project Management, Contract Administration, and Coordination**	$ 28,800		*$200*		*$6,336*	*$7,084*			*$7,260*	*$7,920*			$ 110,390
1.02	**Project Management Plan**	$ -												$ 5,504
1.03	**Kickoff Meeting**	$ 3,212				*$572*				*$660*	*$1,980*			$ 5,212
1.04	**Project Management Update Meetings**	$ -												$ 4,464
1.07	**MWDSLS Board Presentation Support**	$ -												$ 3,968
	BC Task 1 Hours	*$ 400*		*$400*										*$ 134,363*
	Task 1 Sub-Total	**$ 32,412**		***$600***	***$0***	***$6,908***	***$7,084***	***$0***	***$0***	***$7,920***	***$9,900***	***$0***	***$0***	**$ 263,901**
2	**Preliminary Design Phase**													
2.01	**Data Gathering and Review**													
2.01.a	Review Existing Design Reports	$ 7,348					*$2,728*			*$2,640*	*$1,980*			$ 14,840
2.01.b	Gather SLA Record Drawings	$ 100		*$100*										$ 3,268
2.01.c	Aerial Drone LiDAR Survey	$ 56,538						*$56,538*						$ 58,198
2.01.d	QL D Utility Investigation	$ 59,047							*$59,047*					$ 60,707
2.01.e	Document SLA ROW	$ -												$ 3,668
2.01.f	Preliminary Plan and Profile Base Drawings	$ -												$ 134,648
2.01.g	Project Schematic Diagrams	$ -												$ 11,516
	BC Subtask 2.01 Hours	*$ -*												*$ 24,669*
2.01	***Subtotal***	***$ 123,033***		***$100***	***$0***	***$0***	***$2,728***	***$56,538***	***$59,047***	***$2,640***	***$1,980***	***$0***	***$0***	***$ 311,514***
2.02	**Hazard Zone Classification and Seismic Design Criteria**													
2.02.a	Outline Approach to Geotechnical Field Investigations	$ 4,708				*$4,708*								$ 6,004
2.02.b	Document ALA Classification and Service Goals	$ 572				*$572*								$ 3,724
2.02.c	Define Limits of Fault Crossings, Landslide Zones, Other Hazards	$ 141,422				*$141,422*								$ 146,542
2.02.d	Surface Fault Rupture Hazard Evaluation	$ 45,914				*$45,914*								$ 49,238
2.02.e	Pipe-Soil Interaction Analysis	$ 4,554				*$4,554*								$ 10,438
2.02.f	Geotechnical Field Investigation Plan Scoping	$ 8,712				*$8,712*								$ 10,676
2.02.g	TM#1 - Geotechnical Hazard Report and Seismic Ground Motion Criteria	$ 66,154				*$66,154*								$ 70,302
2.02.h	Workshop #1 - Geotechnical Hazard Report and Seismic Criteria	$ 36,346		*$200*		*$11,396*	*$5,940*			*$8,250*	*$10,560*			$ 39,010
	BC Subtask 2.02 Hours	*$ 1,100*		*$300*	*$800*									*$ 11,068*
2.02	***Subtotal***	***$ 309,482***		***$500***	***$800***	***$283,432***	***$5,940***	***$0***	***$0***	***$8,250***	***$10,560***	***$0***	***$0***	***$ 347,002***
2.03	**SLA Lining Segment Evaluation**													
2.03.a	Evaluate Lining Options	$ 28,204					*$28,204*							$ 43,644
2.03.b	Hydraulic Capacity Impacts of Lining Alternatives	$ -												$ 2,248
2.03.c	Constructability Reviews and Basis of Cost Comparisons	$ 6,248											*$6,248*	$ 10,472
2.03.d	TM #2 - Aqueduct Lining Evaluation and Recommendations	$ 8,316				*$572*	*$7,744*							$ 14,396
2.03.e	Workshop #2 - Aqueduct Lining Options and Recommendations	$ 14,236		*$200*		*$2,288*	*$4,576*			*$4,620*	*$1,320*		*$1,232*	$ 16,028
	BC Subtask 2.03 Hours	*$ 2,150*			*$2,150*									*$ 92,502*
2.03	***Subtotal***	***$ 59,154***		***$200***	***$2,150***	***$2,860***	***$40,524***	***$0***	***$0***	***$4,620***	***$1,320***	***$0***	***$7,480***	***$ 179,290***
2.04	**SLA Replacement Segment Evaluation**													
2.04.a	Evaluate Replacement Options	$ -												$ 22,050
2.04.b	Evaluate Hydraulic Capacity of Replacement Options	$ -												$ 1,296
2.04.c	Evaluate Seismic Fittings and Flexible Couplings	$ -												$ 10,240
2.04.d	Perform Finite Element Analysis of Pipe-Soil Reactions for Design Criteria	$ 98,252					*$98,252*							$ 101,512
2.04.e	Constructability Reviews and Basis of Cost Comparisons	$ 4,268											*$4,268*	$ 6,892
2.04.f	TM #3 - Fault Crossing Evaluation and Recommendations	$ 16,060				*$572*	*$15,488*							$ 32,534
2.04.g	Workshop #3 - Aqueduct Replacement Options and Recommendations	$ 22,156		*$200*		*$2,288*	*$11,836*			*$5,280*	*$1,320*		*$1,232*	$ 25,160
	BC Subtask 2.04 Hours	*$ 50*		*$50*										*$ 32,275*
2.04	***Subtotal***	***$ 140,786***		***$250***	***$0***	***$2,860***	***$125,576***	***$0***	***$0***	***$5,280***	***$1,320***	***$0***	***$5,500***	***$ 231,959***

FINISHED WATER SLA HARDENING PROJECT
Engineering Fee Estimate 05-22-2024

		Bowen Collins & Associates Staff																	
	Labor Category	Office/ Editor	Office/ Acct'ing	CAD5 Design	CAD6 CAD Mgr	LA9 Env Perm	LA3 Env Perm	E1 Staff Eng	E4 Corr Eng	EE1 Corr Elec	E4 Pipeline	E7 Sr. Pipeline	E9 Sr. Pipeline QC	SE3 Structural	SE8 Structural/ Seismic	SE10 Sr. Structural QC	E10 Principal Eng	E10 Principal Eng	E11 PM/PIC
	Staff	Hilbert	Skousen	Riggs	Anderson	Tsandes	Glabau	Hunter	Egbert	Wasden	Mink	Nelson	Olsen	Smoot	Cohen	Davis	Larsen	Loscher	Luettinger
	Labor Rate 2024	$111	$126	$140	$152	$192	$135	$131	$161	$135	$161	$192	$218	$156	$210	$235	$229	$229	$238
	Labor Rate Adjusted Through 2025	$115	$131	$146	$158	$200	$140	$136	$167	$140	$167	$200	$227	$162	$218	$244	$238	$238	$248
Task No.	**Task Description**																		
2.05	**Seismic Evaluation of Existing Structures**																		
2.05.a	Tier 1 Seismic Screening of Existing Structures													150	40	4			
2.05.b	Recommend Seismic Suitibility of Existing Structures													20	40	4			
2.05.c	TM #4 - Seismic Evaluation and Recommendations for Existing Structures	4													40	4			
	BC Subtask 2.05 Hours																		
2.05	***Subtotal***	***4***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***170***	***120***	***12***	***0***	***0***	***0***
2.06	**Project Scheduling and Construction Sequencing Options**																		
2.06.a	Review Timing of FWSLA Hardening Relative to Other Projects											8					8		8
2.06.b	Prepare Project Sequencing Options																4		
2.06.c	Prepare Preliminary Sequencing Schedules in Microsoft Project																		
2.06.d	Evaluate Project Delivery Options											12							8
2.06.e	TM #5 - Preliminary Scheduling and Construction Sequencing Evaluation	2															4		8
2.06.f	Workshop #4 - Project Scheduling and Sequencing											4					4		4
	BC Subtask 2.06 Hours																		
2.06	***Subtotal***	***2***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***24***	***0***	***0***	***0***	***0***	***20***	***0***	***28***
2.07	**Agency Coordination Meetings and Permitting**																		
2.07.a	Agency Coordination Meetings											8							8
2.07.b	Evaluate Environmental and NEPA Permitting Requirements		1	4		24	60												
2.07.c	Define Agency Permitting Requirements							20			8								4
2.07.d	TM #6 - Project Permitting and Funding Requirements	4						20			8								4
	BC Subtask 2.07 Hours																		
2.07	***Subtotal***	***4***	***1***	***4***	***0***	***24***	***60***	***40***	***0***	***0***	***16***	***8***	***0***	***0***	***0***	***0***	***0***	***0***	***16***
2.08	**Value Engineering (Removed from Phase 1 Scope)**																		
2.08	***Subtotal***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
2.09	**Preliminary Design Report and 30-Percent Design Package**																		
2.09.a	30-Percent Drawings			360					20	20	360								20
2.09.b	AACE Class 4 OPCC							24				8							4
2.09.c	Preliminary Design Report and 30-Percent Design Package					8	8	40	8		40	40	20		8	2	4		40
2.09.d	Preliminary Design Review Meeting										4	4			4				4
	BC Subtask 2.09 Hours																		
2.09	***Subtotal***	***0***	***0***	***360***	***0***	***8***	***8***	***64***	***28***	***20***	***404***	***52***	***20***	***0***	***12***	***2***	***4***	***0***	***68***
	Task 2 Sub-Total	**18**	**1**	**756**	**0**	**32**	**68**	**238**	**36**	**20**	**918**	**398**	**26**	**170**	**156**	**22**	**44**	**4**	**282**
3	**Final Design Phase (Allowance Provided for Progression of Final Design)**																		
3.01	**QA/QC Senior Review of Design Deliverable**																		
3.02	**Final Design**																		
3.02.a	Progress Plans and Specifications																		
3.02.b	Class 3 OPCC																		
3.02.c	Design Review Meetings																		
3.02.d	Submit Design Package to Stakeholders for Review																		
	BC Subtask 3.02 Hours																		
3.02	***Subtotal***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
	Task 3 Final Design Allowance (To be Authorized by MWDSLS beyond 30%)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Total Hours	**26**	**11**	**756**	**0**	**32**	**68**	**242**	**38**	**20**	**920**	**400**	**26**	**170**	**158**	**22**	**44**	**4**	**658**
	Total Cost																		

Expenses include:
Mileage reimbursement at $0.75/mile
10% markup on project related expenses (No markup included on BC Fees)

FINISHED WATER SLA HARDENING PROJECT
Engineering Fee Estimate 05-22-2024

Task No.	Labor Category	APM	PA	Design Lead	Rehab SME	Modeling SME	Modeling Support	Scheduler	Ops SME	QAQC	Cost Estimator	Geotech SME	Senior Project Engineer	Design Engineer	CADD	Subtotal Hours	Subtotal Labor
		Brown & Caldwell Staff															
	Staff	Sorenson	Guy	McReynolds	Poppe	Fugal	Ricks	Villanueva	Hardy	Holland	Manocchio	Pennington	Sochanska	Rojas	Davidse		
	Labor Rate 2024	$214	$118	$335	$281	$281	$172	$174	$264	$335	$209	$335	$201	$132	$181		
	Labor Rate Adjusted Through 2025	$220	$121	$343	$287	$288	$176	$178	$270	$343	$213	$343	$206	$135	$185		
2.05	**Seismic Evaluation of Existing Structures**																
2.05.a	Tier 1 Seismic Screening of Existing Structures															194	$ 33,996
2.05.b	Recommend Seismic Suitibility of Existing Structures															64	$ 12,936
2.05.c	TM #4 - Seismic Evaluation and Recommendations for Existing Structures															48	$ 10,156
	BC Subtask 2.05 Hours															*0*	*$ -*
2.05	***Subtotal***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***306***	***$ 57,088***
2.06	**Project Scheduling and Construction Sequencing Options**																
2.06.a	Review Timing of FWSLA Hardening Relative to Other Projects															24	$ 5,488
2.06.b	Prepare Project Sequencing Options															4	$ 952
2.06.c	Prepare Preliminary Sequencing Schedules in Microsoft Project															0	$ -
2.06.d	Evaluate Project Delivery Options															20	$ 4,384
2.06.e	TM #5 - Preliminary Scheduling and Construction Sequencing Evaluation															14	$ 3,166
2.06.f	Workshop #4 - Project Scheduling and Sequencing															12	$ 2,744
	BC Subtask 2.06 Hours	*40*	*6*	*38*	*30*	*0*	*0*	*66*	*14*	*24*	*0*	*0*	*52*	*82*	*0*	*352*	*$ 76,715*
2.06	***Subtotal***	***40***	***6***	***38***	***30***	***0***	***0***	***66***	***14***	***24***	***0***	***0***	***52***	***82***	***0***	***426***	***$ 93,449***
2.07	**Agency Coordination Meetings and Permitting**																
2.07.a	Agency Coordination Meetings															16	$ 3,584
2.07.b	Evaluate Environmental and NEPA Permitting Requirements															89	$ 13,915
2.07.c	Define Agency Permitting Requirements															32	$ 5,048
2.07.d	TM #6 - Project Permitting and Funding Requirements															36	$ 5,508
	BC Subtask 2.07 Hours	*28*	*0*	*12*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*36*	*60*	*0*	*136*	*$ 25,794*
2.07	***Subtotal***	***28***	***0***	***12***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***36***	***60***	***0***	***309***	***$ 53,849***
2.08	**Value Engineering (Removed from Phase 1 Scope)**																
2.08	***Subtotal***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***$ -***
2.09	**Preliminary Design Report and 30-Percent Design Package**																
2.09.a	30-Percent Drawings															780	$ 123,780
2.09.b	AACE Class 4 OPCC															36	$ 5,856
2.09.c	Preliminary Design Report and 30-Percent Design Package															218	$ 41,820
2.09.d	Preliminary Design Review Meeting															16	$ 3,332
	BC Subtask 2.09 Hours	*8*	*0*	*37*	*42*	*0*	*0*	*0*	*0*	*16*	*45*	*0*	*98*	*180*	*460*	*886*	*$ 170,995*
2.09	***Subtotal***	***8***	***0***	***37***	***42***	***0***	***0***	***0***	***0***	***16***	***45***	***0***	***98***	***180***	***460***	***1,936***	***$ 345,783***
	Task 2 Sub-Total	**128**	**14**	**166**	**185**	**50**	**146**	**66**	**28**	**44**	**125**	**12**	**216**	**416**	**460**	**5,245**	**$ 987,480**
3	**Final Design Phase (Allowance Provided for Progression of Final Design)**																
3.01	**QA/QC Senior Review of Design Deliverable**															0	$ -
3.02	**Final Design**																
3.02.a	Progress Plans and Specifications															0	$ -
3.02.b	Class 3 OPCC															0	$ -
3.02.c	Design Review Meetings															0	$ -
3.02.d	Submit Design Package to Stakeholders for Review															0	$ -
	BC Subtask 3.02 Hours															*0*	*$ -*
3.02	***Subtotal***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***$ -***
	Task 3 Final Design Allowance (To be Authorized by MWDSLS beyond 30%)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$ -**
	Total Hours	**420**	**50**	**232**	**251**	**70**	**155**	**72**	**36**	**50**	**136**	**23**	**232**	**430**	**460**	**6,211**	
	Total Cost																**$ 1,218,969**

Expenses include:

Mileage reimbursement at $0.75/mile

10% markup on project related expenses (No markup included on BC Fees)

FINISHED WATER SLA HARDENING PROJECT
Engineering Fee Estimate 05-22-2024

Task No.	Labor Category	Subtotal Expenses		Mileage	Travel	Geotech/ Seismic	Pipe/Soil FE Analysis	Survey	Utility Search	Univ CO	USU	VE	Const	Total Cost
	Staff		Avg '24-'25			S&W	Degenkolb	Horrocks	Horrocks	B3W	Brady Cox	SVS	Whitaker	
	Labor Rate 2024		*4.0%*	*$0.75*								*(NIC)*		
	Labor Rate Adjusted Through 2025													
2.05	**Seismic Evaluation of Existing Structures**													
2.05.a	Tier 1 Seismic Screening of Existing Structures	$	10,860	*$300*		*$10,560*								$ 44,856
2.05.b	Recommend Seismic Suitibility of Existing Structures	$	-											$ 12,936
2.05.c	TM #4 - Seismic Evaluation and Recommendations for Existing Structures	$	-											$ 10,156
	BC Subtask 2.05 Hours	*$*	-											*$ -*
2.05	***Subtotal***	***$***	***10,860***	***$300***	***$0***	***$10,560***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$ 67,948***
2.06	**Project Scheduling and Construction Sequencing Options**													
2.06.a	Review Timing of FWSLA Hardening Relative to Other Projects	$	-											$ 5,488
2.06.b	Prepare Project Sequencing Options	$	1,892										*$1,892*	$ 2,844
2.06.c	Prepare Preliminary Sequencing Schedules in Microsoft Project	$	-											$ -
2.06.d	Evaluate Project Delivery Options	$	-											$ 4,384
2.06.e	TM #5 - Preliminary Scheduling and Construction Sequencing Evaluation	$	-											$ 3,166
2.06.f	Workshop #4 - Project Scheduling and Sequencing	$	1,432	*$200*									*$1,232*	$ 4,176
	BC Subtask 2.06 Hours	*$*	*50*	*$50*										*$ 76,765*
2.06	***Subtotal***	***$***	***3,374***	***$250***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$3,124***	***$ 96,823***
2.07	**Agency Coordination Meetings and Permitting**													
2.07.a	Agency Coordination Meetings	$	-											$ 3,584
2.07.b	Evaluate Environmental and NEPA Permitting Requirements	$	-											$ 13,915
2.07.c	Define Agency Permitting Requirements	$	-											$ 5,048
2.07.d	TM #6 - Project Permitting and Funding Requirements	$	-											$ 5,508
	BC Subtask 2.07 Hours	*$*	*75*	*$75*										*$ 25,869*
2.07	***Subtotal***	***$***	***75***	***$75***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$ 53,924***
2.08	**Value Engineering (Removed from Phase 1 Scope)**													
2.08	***Subtotal***	***$***	***-***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$ -***
2.09	**Preliminary Design Report and 30-Percent Design Package**													
2.09.a	30-Percent Drawings	$	-											$ 123,780
2.09.b	AACE Class 4 OPCC	$	4,092										*$4,092*	$ 9,948
2.09.c	Preliminary Design Report and 30-Percent Design Package	$	6,160				*$6,160*							$ 47,980
2.09.d	Preliminary Design Review Meeting	$	100	*$100*										$ 3,432
	BC Subtask 2.09 Hours	*$*	*50*	*$50*										*$ 171,045*
2.09	***Subtotal***	***$***	***10,402***	***$150***	***$0***	***$0***	***$6,160***	***$0***	***$0***	***$0***	***$0***	***$0***	***$4,092***	***$ 356,185***
	Task 2 Sub-Total	**$**	**657,165**	***$1,825***	***$2,950***	***$299,712***	***$180,928***	***$56,538***	***$59,047***	***$20,790***	***$15,180***	***$0***	***$20,196***	**$ 1,644,646**
3	**Final Design Phase (Allowance Provided for Progression of Final Design)**													
3.01	**QA/QC Senior Review of Design Deliverable**	$	-											$ -
3.02	**Final Design**													
3.02.a	Progress Plans and Specifications	$	-											$ -
3.02.b	Class 3 OPCC	$	-											$ -
3.02.c	Design Review Meetings	$	-											$ -
3.02.d	Submit Design Package to Stakeholders for Review	$	-											$ -
	BC Subtask 3.02 Hours	*$*	*-*											*$ -*
3.02	***Subtotal***	***$***	***-***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$ -***
	Task 3 Final Design Allowance (To be Authorized by MWDSLS beyond 30%)	**$**	**-**	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	**$ 91,454**
	Total Hours													
	Total Cost	**$689,577**		$ 2,425	$ 2,950	$ 306,620	$ 188,012	$ 56,538	$ 59,047	$ 28,710	$ 25,080	$ -	$ 20,196	**$ 2,000,000**

Expenses include:
Mileage reimbursement at $0.75/mile
10% markup on project related expenses (No markup included on BC Fees)

Metropolitan Water District of Salt Lake & Sandy
Board Meeting Information
Last Update: June 4, 2024

Agenda Item: Consider contract for LCWTP Solids Removal Project 2024

Objective: Approve award of the Solids Removal Project 2024.

Background: Solids accumulate in drying basins throughout the year as part of plant operations. These solids must be periodically removed from the beds and disposed, typically in a landfill. There is a need in summer 2024 to remove solids from LCWTP Basins 4 and 5.

A Notice Inviting Bids was advertised beginning May 20, 2024. Three bids were received and opened on June 3, 2024.

Bidder	Bid Total
Lyndon Jones	$74,566.20
Pacific West Environmental and Infrastructure	$81,120.00
TLC Rock	$66,040.20

The apparent low bid from TLC Rock was $66,040.20. Materials will be removed in July and August.

This is an O&M expense in cost center 23 (Maintenance) with a fiscal year 2025 tentative budget of $150,000.00.

Committee Activity: The Engineering Committee discussed this item on June 4, 2024. The committee recommends award of $66,040.20 to TLC Rock for the project.

Suggested Motion: I motion to (approve / table, with direction for staff / deny) a contract with TLC Rock for the LCWTP Solids Removal Project 2024 in an amount of $66,040.20, pending approval of the FY2025 capital budget.

Metropolitan Water District of Salt Lake & Sandy
Board Meeting Information
Last Update: June 4, 2024

Agenda Item: Consider FY2025 fleet procurement

Objective: To procure budgeted fleet vehicles.

Background: The FY2025 tentative capital budget is $185,000 and includes replacing three ¾-ton pickups:

- TK55, surplus score 13.45;
- TK59, surplus score 11.00; and
- TK60, surplus score 12.89.

Scores are the sum of 1 point for each 20,000 miles, 1 point per two years of service, and 1 point for every $16,000 in maintenance cost. Vehicles exceeding 10 points are eligible for replacement. TK55 will be replaced with a 1-ton utility truck. TK59 and TK60 will be replaced with ½-ton pickups.

The District standardizes its fleet with Ford vehicles to improve maintenance efficiency and reduce shelf parts. Staff spoke with state-contract Ford dealers beginning in December 2023. Vehicle pricing is volatile until the order is placed, thus staff are seeking Board authorization to spend up to $75,000 for the utility truck and up to $55,000 each for the ½-ton pickups. Current quotes suggest $66,583.34 for the utility truck (including the utility bed) and $47,272.88 for the ½-ton pickups.

Committee Activity: The Engineering Committee discussed this item on June 4, 2024. The committee recommends approval of vehicle procurement, under state contract, for a one-ton utility truck not exceeding $75,000 and two ½ ton pickups not exceeding $55,000 each.

Suggested Motion: I motion to (approve / table, with direction for staff / deny) procurement, under state contract, of a one-ton utility truck not exceeding $75,000 and two ½ ton pickups not exceeding $55,000 each, pending approval of the FY2025 budget.

Metropolitan Water District of Salt Lake & Sandy
Board Meeting Information
Last Update: June 4, 2024

Agenda Item: Consider purchase of SLA Intake trash rake replacement

Objective: To procure a new trash rake for the Salt Lake Aqueduct Intake

Background: The trash rake at the Salt Lake Aqueduct Intake at the base of Deer Creek Dam was installed in 2001 and is at the end of its service life, failing, and replacement parts are not available. As the primary source of water to the Little Cottonwood Water Treatment Plant, the intake should be addressed as soon as possible.

This is a non-standard selection process, described in Utah Code Title 63G, Chapter 6a, Part 8. Particularly, § 63G-6a-801(1)(c) allows "the award of a contract without engaging in a standard procurement process . . . under circumstances, described in rules adopted by the rulemaking authority, that make awarding the contract through a standard procurement process impractical and not in the best interest of the procurement unit." The District's Policies & Procedures Chapter 6-802 allows for an award of contract without engaging in standard procurement process, with a notice of determination from the Board of Trustees.

The existing trash rake, installed by Atlas Polar, served the District well. Portions of the trash rake system will remain in place and their removal and replacement would greatly increase the replacement cost and constructability. Staff obtained a quote from Atlas Polar in the amount of $229,602.48. Because the cost exceeds $50,000, the District published the attached Notice of Proposed Sole Source Procurement on the District's website as required by state code.

Due to the complexity of replacing the system, staff desires authorization not to exceed $250,000 to resolve unforeseen conditions related to the replacement.

Committee Activity: The Engineering Committee discussed this item on June 4, 2024. The committee recommends award in an amount not to exceed $250,000 to Atlas Polar for a new Salt Lake Aqueduct Intake trash rake, pending approval of the FY2025 budget and outcome of the sole source procurement notice.

Suggested Motion: I motion to (approve / table, with direction for staff / deny) an award in an amount not to exceed $250,000 to Atlas Polar for a new Salt Lake Aqueduct Intake trash rake, pending approval of the FY2025 budget and outcome of sole source procurement notice.

Attachment:

- Notice of Proposed Sole Source Procurement

Notice of Proposed
Sole Source Procurement

Metropolitan Water District
Of Salt Lake & Sandy
3430 Danish Road
Cottonwood Heights, UT 84093
Telephone: 801-942-1391
Fax: 801-942-3674
www.mwdsls.org

Notice Number: 20240606-01

Date Posted: June 6, 2024

Due Date for Comments: June 16, 2024
At 5:00 pm

The Utah Procurement Code provides that a procurement may be made without competition when there is only one source for the required supply or service. Therefore, a "sole source" procurement is justified if there is only one product or service that can reasonably meet the District's need and there is only one vendor who can provide the product or service.

The District has acknowledged the request to make the following sole source procurement.

Requesting Agency: Metropolitan Water District of Salt Lake & Sandy

Product and/or Service to be purchased:
Hydrorake ST9000; trash rake rebuild/refurbish at Salt Lake Aqueduct Intake Structure and update all mechanical, electrical and control components.
Proposed Sole Source Supplier:
Atlas Polar
Sole Source Justification:
Transitional costs are a significant consideration in selecting this procurement item. The result of a cost-benefit analysis demonstrates that
transitional costs are unreasonable and cost-prohibitive. Some existing components of the trash rake system, including the railing, will remain.
If for any reason any party does not agree with the proposed sole source procurement, please email Gordon Cook at cook@mwdsls.gov prior to the "Due Date for Comments" indicated above.

For Office Use Only

of Responses: _____
Challenged: Y_____ N_____
Final Decision:_____
_____
_____
Signed: _____
Date: _____

Metropolitan Water District of Salt Lake & Sandy
Board Meeting Information
Last Update: June 4, 2024

Agenda Item: Consider FY2025 Capital Budget Modifications

Objective: Modify the FY2025 tentative budget, Capital.

Background: Since presenting the tentative budget, changes to two project categories have occurred. Staff seeks the following modification to the FY2025 tentative budget, Capital.

Non-Capacity Capital:
Salt Lake Aqueduct Intake Trash Rake Replacement: On May 15, staff was notified that the trash rake at the Salt Lake Aqueduct Intake at the base of Deer Creek Dam was failing and replacement parts are not available. As the primary source of water to the Little Cottonwood Water Treatment Plant, the intake should be addressed as soon as possible. Staff asks $250,000 be added to the capital Repair and Replace budget for this item.

Project	FY2025 Tentative Budget	FY2024 Proposed Budget	Net Change Increase/(Decrease)
SLA Intake Trash Rake	$0	$250,000	$250,000

Capacity Capital:
Managed Aquifer Recharge Design and Construction: Delays from well development and backordered electrical equipment will push the project further into FY2025. Staff forecasted a remaining budget of $425,000 in the tentative budget. The updated estimate is $1,750,000, made up of $1,562,000 for construction, $150,000 for engineering, and $38,000 for programming. The contractor is scheduled to have 95% of the project complete by December 2025. The transformer is scheduled to arrive in April 2025. This request moves work between fiscal years and does not increase the overall project budget.

Project	FY2025 Tentative Budget	FY2024 Proposed Budget	Net Change Increase/(Decrease)
Managed Aquifer Recharge	$425,000	$1,750,000	$1,325,000

Committee Activity: The Engineering Committee discussed this item on June 4, 2024. The committee recommends to amend the FY2025 capital budget by adding $250,000 to the non-capacity capital budget – Repair and Replace for the Salt Lake Aqueduct Intake Trash Rake Replacement and change the Managed Aquifer Recharge project from $425,000 to $1,750,000.

Suggested Motion: I move to (approve / table, with direction for staff / deny) to amend the FY2025 capital budget by adding $250,000 to the non-capacity capital budget – Repair and Replace for the Salt Lake Aqueduct Intake Trash Rake Replacement and change the Managed Aquifer Recharge project from $425,000 to $1,750,000.

Attachment:
- Summary of budget modifications

Metropolitan Water District of Salt Lake & Sandy
FY2025 Capital Budget
Last Updated: June 4, 2024

			Previous	Change
ROUTINE NON-CAPACITY IMPROVEMENT PROJECTS				
Salt Lake Aqueduct Replacement Reach 1 - Cottonwoods Conduits[1]	$	23,049,083		
Salt Lake Aqueduct Replacement Reaches 2 and 3[1]	$	200,000		
Salt Lake Aqueduct Hardening[1]	$	1,000,000		
Little Cottonwood Conduit Replacement and Intake Modifications[1]	$	1,000,000		
Little Cottonwood Water Treatment Plant Site Improvements[1]	$	250,000		
Fleet Replacement Program	$	185,000		
Little Dell Dam Improvements[1]	$	430,000		
Repair and Replace	$	1,122,000	$ 872,000	$ 250,000
Subtotal	$	27,236,083		
CAPACITY IMPROVEMENT PROJECTS				
Salt Lake Aqueduct Replacement Reach 1 - Cottonwoods Conduits[1]	$	12,829,236		
Managed Aquifer Recharge	$	1,750,000	$ 425,000	$ 1,325,000
Subtotal	$	14,579,236		
OTHER CAPITAL IMPROVEMENT PROJECTS				
Jordan Aqueduct System and 150th South Pipeline	$	3,064,528		
Central Utah Project (CUP) Capital	$	3,815,423		
Subtotal	$	6,879,951		
TOTAL PROJECTS	$	48,695,270	$ 47,120,270	$ 1,575,000
OUTSIDE FUNDING SOURCES				
Loans, Grants, Assessments	$	13,863,736		
Subtotal	$	13,863,736		
NET TOTAL PROJECTS	$	34,831,534	$ 33,256,534	$ 1,575,000

[1] Multi-year project; see individual project detail.

Metropolitan Water District of Salt Lake & Sandy
Board Meeting Information
Last Update: June 4, 2024

Agenda Item: Consider approval of Exchange Agreement

Objective: Approve the Beaver Shingle Creek Exchange Agreement

Background: Beaver Shingle Creek Irrigation Company (BSC) approached the Provo River Water Users Association about the prospect of getting the water represented by its 700 shares of Association stock to Great Salt Lake. BSC was already working with the Great Salt Lake Watershed Enhancement Trust to get the water there. Rather than involve the United States in a change application and administration of the Provo River Project water rights, the District, the Association, and the Trust agreed to simply exchange the up to 700 AF of Provo River Project water for a like amount of ODT water. This allows the District to enjoy the storage associated with the BSC shares, allows the District and the Association to use their resources and flexibility to assist in GSL support, and allows BSC and the Trust to enjoy the steady availability of the ODT water and related use of PRP facilities and capacity without US intrusion. A bit of a win-win.

Background Facts: BSC owns 700 shares of stock in the Association. The BSC Shares represent an annual allocation of up to one acre-foot of water per Association share for a total annual allocation of up to 700 AF from storage under the water rights of the PRP. BSC's PRP water may also be held over in storage in Deer Creek Reservoir on a space available basis. In very wet years extra allotment PRP water may also be available to the BSC Shares, but extra allotment PRP water will not be involved in the exchange.

BSC, Utah DWR, Utah FFSL, and the Trust are parties to a separate water lease agreement that the District is not a party to, by which BSC agreed to lease to Utah DWR and FFSL ODT water received by BSC in exchange for its PRP water under its shares for delivery to and beneficial use at GSL.

The District holds Association shares. The District also owns Water Right Number 55-11103, which allows the District to divert and use a portion of the flow of water from the ODT year-round. The District's share of the ODT flow varies year to year and through the year but is typically something roughly close to 5 cfs. The District's ODT water is under lease to JSSD. Under that lease, JSSD has the right to take and use all of the District's ODT water, but JSSD is not currently using all of the District's ODT water and is not expected to do so for some time. JSSD is also required to provide replacement water to the District.

The District's capacity rights in the Provo River Aqueduct and the Jordan Aqueduct allow the District to take and use PRP and ODT water mostly interchangeably. Accordingly, the District can, and under this Exchange Agreement will, exchange with BSC the water available from storage under the BSC Shares for an identical volume of the District's ODT water (or replacement water from JSSD). There will be little if any operational change to the District.

A wasteway pipeline that serves the function of both the PRA and the JA can carry water from the PRA and/or the JA to the Jordan River at a point below Turner Dam. The wasteway has a capacity of approximately 21 cfs. The District's use of that wasteway is by permission of the Association, is secondary to and subject to the use of the wasteway for operation of the PRA and JA, and is also subject to the use by others with PRP and/or JA capacity rights if they also wish to deliver water to the Jordan River. A meter will need to be installed on the wasteway; it has not yet been decided who will pay for the meter.

In order to allow for BSC to enter the Lease and commit the ODT water available to BSC under this Exchange Agreement to GSL the District, as the ODT Right owner, together with the State agencies, will file with the Utah Division of Water Rights a 10-year fixed time change application seeking approval for the conveyance and use of up to 700 AF of ODT water to GSL annually. Consent to use of the wasteway may require the written support of the Association and others.

For the ODT water to reach the Jordan River and then GSL, District capacity in the JA and the PRA that is surplus to District needs must be employed. The District must coordinate in real time with others to use the available wasteway capacity. Some of the time, the use of the District's JA capacity to carry non-CUP water may cause the District to incur power interference charges. Therefore, the District will need to guide the timing and direction of the exchange of ODT water for PRP water and the delivery ODT water to the Jordan River. The District will also be responsible for increased water delivery costs for the increased capacity use of the JA, which we do not anticipate will be substantial.

The terms of the agreement will be for as long as the change application is effective, but the District can terminate as needed with a year's notice.

The exchange agreement was provided to Tom Ward and Laura Briefer on May 8, 2024 for their review and comments. Both support the agreement. On May 13, 2024, the Beaver Shingle Creek Board approved the exchange agreement. The Utah Division of Forestry, Fire and State Lands has reviewed and approved the attached agreement.

Committee Activity: The Engineering Committee discussed this item on June 4, 2024. The committee recommends to approve the exchange agreement as presented.

Suggested Motion: I move to (approve / table, with direction for staff / deny) the Exchange Agreement between the District, Beaver Shingle Creek Irrigation Company, et. al. as attached.

Attachment:

- Exchange Agreement

EXCHANGE AGREEMENT

This EXCHANGE AGREEMENT ("**Exchange Agreement**") is entered into on this _____ day of _____ 2024 (the "**Effective Date**") among the METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY, a Utah special district ("**District**"); BEAVER SHINGLE CREEK IRRIGATION COMPANY ("**BSC**"), a Utah mutual irrigation company and Utah nonprofit corporation; UTAH DIVISION OF WILDLIFE RESOURCES ("**DWR**"), an agency of the state of Utah within the Utah Department of Natural Resources; the UTAH DIVISION OF FORESTRY, FIRE AND STATE LANDS ("**FFSL**"), an agency of the State of Utah within the Utah Department of Natural Resources; the NATIONAL AUDUBON SOCIETY, INC., ("**NAS**"), a New York non-profit corporation; and THE NATURE CONSERVANCY ("**TNC**"), a District of Columbia non-profit corporation. Individually, or collectively, these entities may be referred to as a "**Party**" or the **"Parties**" as the context may require. **DWR** and **FFSL** may also be referred to collectively as the "**Lessees**" and **NAS** and **TNC** may be referred to as the "**Co-managers**."

BACKGROUND FACTS AND PURPOSES

A. **BSC** owns 700 shares of stock ("**BSC Shares**") in the Provo River Water Users Association (the "**Association**").

B. The **BSC Shares** represent an annual allocation of up to one acre-foot (**AF**") of water per **Association** share for a total annual allocation of up to 700 AF from storage under the water rights of the Provo River Project ("**PRP**"). **BSC's PRP** water may also be held over in storage in Deer Creek Reservoir on a space available basis. In very wet years extra allotment **PRP** water may also be available to the **BSC Shares**, but extra allotment **PRP** water will not be involved in the exchange described in this **Exchange Agreement**.

C. **BSC**, **Lessees**, and the **Co-managers** are parties to a separate water lease agreement (the "**Lease**") by which **BSC** agreed to lease to Lessees Ontario Drain Tunnel ("**ODT**") water received by **BSC** in exchange for **PRP** water under the terms of this **Exchange** Agreement for delivery to and beneficial use at Great Salt Lake ("**GSL**").

D. Under the **Lease**, the **Co-managers**, which co-manage the Great Salt Lake Watershed Enhancement Trust (the "**Trust**") pursuant to the Great Salt Lake Watershed Enhancement Program, UTAH CODE §§ 65A-16-101, *et seq.*, agreed to pay or cause the **Trust** to pay the costs of the **Lease** on behalf of **Lessees** in order for the amount of **ODT** water **BSC** receives under the terms of this **Exchange Agreement** to be committed to **GSL**.

E. The **District** also holds **Association** shares.

F. The **District** owns Water Right Number 55-11103, which allows the **District** to divert and use a portion of the flow of water from the **ODT** year-round (the "**ODT Right**"). The **District's** share of the **ODT** flow varies year to year and through the year but is typically something roughly close to 5 cfs. The **District's ODT** water is under lease to Jordanelle Special Service District ("**JSSD**"). Under that lease **JSSD** has the right to take and use all of the **District's ODT** water, but **JSSD** is not currently using all of the **District's ODT** water and is not expected to do

so for some time. **JSSD** is also required to provide replacement water ("**Replacement Water**") to the **District**.

G. The **District's** capacity rights in the Provo River Aqueduct ("**PRA**"), an **Association** facility, and the Jordan Aqueduct System ("**JA**"), a Central Utah Project ("**CUP**") facility allow the **District** to take and use **PRP** and **ODT** water mostly interchangeably. The PRA and JA are depicted in **Exhibit 1**, attached. Accordingly, the **District** can, and under this **Exchange Agreement** will, exchange with **BSC** the water available from storage under the **BSC Shares** for an identical volume of the **District's ODT** water.

H. A wasteway pipeline that serves the function of both the **PRA** and the **JA** can carry water from the **PRA** and/or the **JA** to the Jordan River at a point below Turner Dam. The wasteway has a capacity of approximately 21 cfs. The **District's** use of that wasteway is by permission of the **Association**, is secondary to and subject to the use of the wasteway for operation of the **PRA** and **JA**, and is also subject to the use by others with **PRP** and/or **JA** capacity rights if they also wish to deliver water to the Jordan River.

I. In order to allow for **BSC** to enter the **Lease** and commit the **ODT** water available to **BSC** under this **Exchange Agreement** to **GSL** the **District**, as the **ODT Right** owner, together with **Lessees,** will file with the Utah Division of Water Rights (the "**State Engineer**") a 10-year fixed time change application seeking approval for the conveyance and use of up to 700 AF of **ODT** water to **GSL** annually (the "**Application**"). Consent to use of the wasteway may require the written support of the **Association** and others.

J. For the **ODT** water to reach the Jordan River and then **GSL**, **District** capacity in the **JA** and the **PRA** that is surplus to **District** needs must be employed. The **District** must coordinate in real time with others to use the available wasteway capacity. Some of the time the use of the **District's JA** capacity to carry non-CUP water may cause the **District** to incur power interference charges. Therefore, the **District** will need to guide the timing and direction of the exchange of **ODT** water for **PRP** water and the delivery **ODT** water to the Jordan River.

NOW, THEREFORE, in consideration of the mutual covenants, conditions, agreements, representations and warranties contained herein, the receipt, adequacy, and legal sufficiency of which are hereby acknowledged by the **Parties**, the **Parties** hereto agree as follows:

AGREEMENT

1. Exchange of Water.

a. During the **Term** of this **Exchange Agreement**, **BSC** and the **District** hereby agree to exchange annually the **PRP** water from storage available to the **BSC Shares** up to 700 AF for an equal amount of water available under the **ODT Right**. The amount of water available under this exchange may vary from year to year and will be determined and administered by the **Association** in conjunction with the **Provo River Commissioner** and others. When the **Association** declares the final **PRP** allotment for the water year

BSC will give **Lessees,** and **Co-managers** reasonably prompt notice of that final allotment.

b. **BSC** and **Lessees** may only use **ODT** water for purposes authorized under the **Application**.

c. The amount and timing of **ODT** water available to **BSC** under this **Exchange Agreement** is subject to the lease of **ODT** water to **JSSD**.

d. The amount of water the **District** may use each year under the BSC Shares will be equal to the amount of water available to **BSC** under the **ODT Right**, and vice versa.

e. To the extent that it becomes necessary for the District to use **Replacement Water** from JSSD, as opposed to water available under the District's ODT water rights, to exchange for BSC Provo River Project water, the Parties will reasonably cooperate to seek any approvals necessary to use that **Replacement Water** for the exchange.

2. Space Available Use of District Capacity Rights.

The **District** agrees to act reasonably to utilize its **PRA** and **JA** capacity rights that are surplus to **District's** use to allow the **ODT** water to reach the Jordan River and then **GSL**. However, the **District** will not be obligated to utilize the **JA** when doing so might result in a power interference charge. In so doing, the **District** will consult with the other **Parties** but will have all right and discretion to affect the timing and quantities of conveyance of **ODT** water. If the **District** modifies the timing and quantities of conveyance of the **ODT** water in a way that reduces the amount of water conveyed to the Jordan River, the **District** will notify the other Parties in writing of such reductions and reduce its use of the **BSC Shares** by a corresponding amount. The **District** agrees to bear the usual costs associated with the conveyance of **ODT** water through the **PRA** and **JA**.

3. Fixed-Time Change Application.

a. Applicable statute requires that **Lessees** and the **District** jointly file the **Application** with the **State Engineer** for **Lessees** to convey and use the **ODT** water in **GSL** to contribute to the propagation or maintenance of wildlife and/or the reasonable preservation or enhancement of the natural aquatic environment. The **Application** shall be in substantially the same form as **Exhibit 2**.

b. The **District** and **Lessees** will file and reasonably prosecute the **Application**. The **District** will pay the costs of filing the **Application** and the **Parties** will be responsible for any other costs they incur in preparing, reviewing, and prosecuting the **Application**.

c. If any person or entity protests the **Application**, the **Parties** agree that **Lessees** will respond to the protest(s) after reasonable consultation among all **Parties** and confirmation from all **Parties** they desire to proceed with the **Application**. **District**, and

the **Co-managers** may participate in any administrative or judicial proceedings, including but not limited to any hearings, involving the **Application**, but will have no obligation to do so. Each **Party** will bear its own costs in responding to any protests. No **Party** will take a position in the **Application** process any other **Party** deems to be prejudicial to their entitlements or interests.

d. If the **State Engineer** rejects the **Application** or approves it with conditions that are unacceptable to any of the **Parties**, any **Party** may terminate this **Agreement** by providing written notice to the other **Parties**. **Lessees** and **District** may only request reconsideration or appeal a denial or an unacceptable decision issued by the **State Engineer** if the other **Parties** agree in writing.

4. Term. The term ("**Term**") of this **Exchange Agreement** will begin on the **Effective Date** and will expire on the date the **Application** expires.

5. Termination.

a. The **District** may terminate this **Exchange Agreement** before the **Term** expires by providing advance written notice to the other **Parties** by November 30 of the year it issues the notice. If **District** issues a timely notice under this Section, this **Exchange Agreement** will terminate on November 30 of the following year.

b. The **Lease** allows the **BSC**, **Lessees**, and the **Co-managers** to terminate the **Lease** prior to the expiration of the **Application** under certain conditions. If the **Lease** is terminated for any reason prior to the completion of the **Term** of this **Exchange Agreement**, this **Exchange Agreement** will terminate when the **Lease** terminates. The entity terminating the **Lease** will provide written notice of the same to **District**.

6. Warranty of Title. BSC warrants that it is the owner of record of **Association** stock and warrants at the time of the signing of this **Lease** that **BSC** neither knows, nor has reason to know, of the existence of any outstanding claims that are hostile to **BCS** ownership of the **BCS Shares**. **BCS** will pay all assessments and otherwise keep the **BCS Shares** in good standing. **BSC** is only transferring the right to use **PRP** water available to the **BCS Shares** as expressly stated in this **Exchange Agreement** and otherwise retains all right, title and interest in the **BSC Shares**, including, but not limited to, the right to vote the **BCS Shares** on all matters that come before **Association** shareholders for vote.

7. No Warranty as to Quantity, Quality, or Fitness. The **Parties** make no representations or warranties of any kind as to the quantity, quality, or fitness for purpose of the **BCS Shares**, the **ODT Right**, the **ODT,** or the **PRP** water, or the likelihood of the **State Engineer** approving the **Application**.

8. Successors and Assigns. All the terms and conditions contained herein will inure to the benefit of, and will be binding upon, the **Parties** and their respective officers, directors, trustees, employees, representatives, successors, and assigns. Except as otherwise provided in this Section, no **Party** will assign in whole or in part its interest in this **Exchange Agreement** without

the prior written consent of the other **Parties**. No such assignment will operate to enlarge the obligations or diminish the rights of any **Party**, and any such assignment will be made expressly subject to the terms and conditions of this **Exchange Agreement** and will require the assignee to agree in writing to assume all of the obligations hereunder of the assignor; provided, however, that the **Co-managers** may assign their interest in this **Exchange Agreement** to a successor manager of the **Trust**, if: (1) **FFSL** has approved the successor manager pursuant to its authority to oversee the Great Salt Lake Watershed Enhancement Program; and (2) the **Co-managers** provide sixty (60) days written notice to the other **Parties**. No such assignment will be effective as between the **Parties** hereto until delivery to the non-assigning **Parties** of satisfactory evidence of such assignment and assumption.

9. Limitation of Liability. Each **Party** will be responsible for any claims, demands, causes of action, damages, judgments, losses, liabilities, costs, and expenses (collectively "**Claims**") arising from its activities and those of its officers, directors, trustees, members, employees, and agents under this **Exchange Agreement**. Under no circumstances will any **Party** or its officers, trustees, or employees be liable for consequential, incidental, or special damages or for **Claims** caused by the negligent or willful act or omission of the other **Parties**. The **District** and **Lessees**, who are government entities entitled to the protection of UTAH CODE §§ 63G-7-101 through 63G-7-904, the Governmental Immunity Act of Utah, do not waive or relinquish any rights or defenses they may have under that act by virtue of this paragraph or by entering into this **Exchange Agreement**. No **Party** will be liable for damages for any non-compliance that is caused in whole or in part by conditions or events beyond that **Party's** reasonable control.

10. Entire Agreement. Except for the **Lease** between **BSC**, **Lessees**, and the **Co-managers**, this **Exchange Agreement** constitutes the entire agreement between the **Parties** and supersedes and replaces any and all prior negotiations, representations, understandings, preliminary agreements, or contracts between the **Parties** relating to the subject matter herein.

11. Modification. This **Exchange Agreement** may not be modified or amended except by the express written agreement of the Parties.

12. Default. An "**Event of Default**" will occur under this **Exchange Agreement** if any **Party** fails to perform its obligations hereunder when those obligations are due and the defaulting **Party** has not performed the delinquent obligations within twenty (20) days following delivery to the delinquent **Party** of written notice of such delinquency.

13. Remedies. Upon the occurrence of an **Event of Default**, the non-defaulting **Party** will first submit written notice of a claim or dispute. The **Parties** will meet and confer in good faith in an effort to resolve such claim or dispute. As used in this Section "good faith" means only that the **Parties** will meet at reasonable times, with a view toward reaching a consensus and does not impose an obligation to act on any **Party** in such a way that may then be contrary to that **Party's** own best interests as seen by that **party**. If the matter is not resolved satisfactorily, the dispute or claim will be submitted to non-binding mediation, with a qualified mediator selected by the **Parties,** with each **Party** sharing the cost of that non-binding mediation. After and only if these processes are first followed and the non-defaulting **Party's** dispute or claim remains unresolved, an

action may be brought in the Third Judicial District Court of the State of Utah in and for Salt Lake County.

14. Governing Law. This **Exchange Agreement** will be enforced and governed under the laws of the State of Utah, and jurisdiction for any action based on this **Exchange Agreement** will be with the District Court of Salt Lake County, State of Utah.

15. No Waiver. A Party's failure to enforce any provision of this **Exchange Agreement** will not constitute a waiver of the right to enforce such provision or any other provision, nor will any waiver constitute a continuing waiver. The provisions of this **Exchange Agreement** may be waived only in writing by the **Party** intended to be benefited by the provisions and a waiver by a **Party** of a breach hereunder will not be construed as a waiver of any succeeding breach of the same or other provisions.

16. Successor Legislation. Any statute referred to in this **Exchange Agreement** will be deemed to include that statute as amended, restated, and/or replaced from time to time, and any successor legislation to the same general intent and effect.

17. Legal Review. The Parties represent and agree that they each had an opportunity to review this **Exchange Agreement** with their respective attorneys and that they accept the terms hereof. The rule that an agreement is to be construed against its drafter will not apply to this **Exchange Agreement**.

18. No Relationship. Nothing in this **Exchange Agreement** will be construed to create any partnership, joint venture or fiduciary relationship between the **Parties**.

19. Conflicts of Interest. The Parties represent that none of their officers or employees are officers or employees of any of the other Parties.

20. Compliance with Laws. In executing and implementing this **Exchange Agreement**, the **Parties** represent, warrant, and agree that they will comply with all applicable statutes, laws, ordinances, executive orders, rules, regulations, court orders, and other governmental requirements, including, without limitation, all applicable anti-bribery or anti-corruption laws and regulations and all applicable counterterrorism, anti-money laundering and economic sanctions laws.

21. Notices. All notices and other communications, required or permitted to be given hereunder, will be in writing and will be deemed to have been duly given and delivered as of the date the notice is sent, if delivered by mail or email to the following, which the **Parties** may change from time to time in writing:

Beaver Shingle Creek Irrigation Company
373 S. 300 E.
Kamas, UT 84036
Attn: Scott Simpson
Email: bsci@allwest.net

Utah Division of Wildlife Resources
PO Box 146301
Salt Lake City, UT 84114-6301
Attn: Eric Anderson
Email: ericanderson@utah.gov

Utah Division of Forestry Fire and State Lands
P.O Box 14610
Salt Lake City, UT 84114-5703
Attn: Director
jamiebarnes@utah.gov

With a copy to (which will not constitute notice):
P.O Box 14610
Salt Lake City, UT 84114-5703
Attn: Deputy Director of Lands and Minerals
Email: bstireman@utah.gov

National Audubon Society
225 Varick St., 7th Floor
New York, NY 10014
Attn: General Counsel
Email: contracts@audubon.org

With a copy to (which will not constitute notice):
231 West 800 South, Ste. E
Salt Lake City, UT 84101
Attn: Director, National Audubon Saline Lakes Program
Email: marcelle.shoop@audubon.org

The Nature Conservancy
559 E. South Temple
Salt Lake City, UT 84102
Attn: Utah State Director
Email: Ekitchens@tnc.org

With a copy to (which will not constitute notice):
The Nature Conservancy
559 E South Temple
Salt Lake City, UT 84102
Attn: Utah Conservation Director
Email: kelley.hart@tnc.org

Metropolitan Water District of Salt Lake and Sandy
To the Attention of the General Manager
3430 Danish Road
Cottonwood Heights, UT 84093
Attn: General Manager
Email: munsey@mwdsls.org

22. Counterparts. This **Exchange Agreement** may be executed in one or more counterparts, each of which will be deemed an original, but all of which will constitute one and the same instrument. This **Exchange Agreement** may be executed through electronic means.

23. Authority to Sign. Each person signing this **Exchange Agreement** on behalf of a **Party** represents that such person was duly and fully authorized to do so, that each is acting pursuant to the power and authority granted them, and that no further approvals are required.

24. Fees and Expenses. Each **Party** will bear its own expenses, including legal, accounting, and other advisory fees and expenses in connection with this **Exchange Agreement**, except as provided herein or as otherwise agreed to by the **Parties** in writing.

25. Interpretation. In this **Exchange Agreement**, unless the context otherwise requires:

a. The captions and section headings used in this **Exchange Agreement** are for descriptive purposes only and do not limit, define, or enlarge the terms of this **Exchange Agreement**.

b. Use of the singular, plural, or a gender will include the other, and the use of the words "include" and "including" will mean "without limitation" or "but not be limited to."

c. The word “may” is permissive;

d. The words “will not” are prohibitive;

e. The words “will” and “will” are mandatory or required; and

f. The present tense includes the future tense, unless otherwise specified.

26. No Third-Party Beneficiary Rights. The **Parties** do not intend to create in any other individual or entity the status of third-party beneficiary, and this **Exchange Agreement** will not be construed to create such status. The rights, duties, and obligations contained in this **Exchange Agreement** will operate only between the **Parties** to this **Exchange Agreement** and will inure solely to the benefit of the **Parties** to this **Exchange Agreement**. The provisions of this **Exchange Agreement** are intended only to assist the **Parties** in determining and performing their obligations under this **Exchange Agreement**.

27. Publicity. The **Parties** will reasonably coordinate with each other on press releases or undertaking other publicity efforts regarding this **Exchange Agreement**. The **Parties** agree that the **Co-managers** may publish and circulate materials and information describing the work of the **Trust** including this **Exchange Agreement** (e.g., reports to the State of Utah, brochures, websites, publications, fact sheets, social media posts, etc.). Notwithstanding the foregoing, any **Party** seeking to use a logo or mark of another **Party** may do so only with written permission from the other **Party**.

28. Incorporation of Recitals and Exhibits. All recitals and exhibits are incorporated fully as part of this **Exchange Agreement**.

[*execution on following pages*]

IN WITNESS WHEREOF, the Parties have duly executed this **Exchange Agreement** as of the **Effective Date**.

BEAVER SHINGLE CREEK IRRIGATION COMPANY

By: _____

Name: _____

Its: _____

Date: _____

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY

By: _____

Name: Annalee Munsey

Its: General Manager

Date: _____

UTAH DIVISION OF WILDLIFE RESOURCES

By: _____

Name: _____

Its: _____

Date: _____

Approved As to Form

SEAN D. REYES
Utah Attorney General

_____
By: Charles Lyons

Its: Assistant Attorney General, Counsel for the Utah Division of Wildlife

Date: _____

UTAH DIVISION OF FORESTRY, FIRE AND STATE LANDS

By: _____

Name: _____

Its: _____

Date: _____

Approved As to Form

SEAN D. REYES
Utah Attorney General

_____
By: Emma K. Whitaker
Its: Assistant Attorney General, Counsel for the Utah Division of Forestry, Fire and State Lands

Date: _____

NATIONAL AUDUBON SOCIETY

By: _____

Name: _____

Its: _____

Date: _____

THE NATURE CONSERVANCY

By: _____

Name: _____

Its: _____

Date: _____

EXHIBIT 1

Distribution Infrastructure

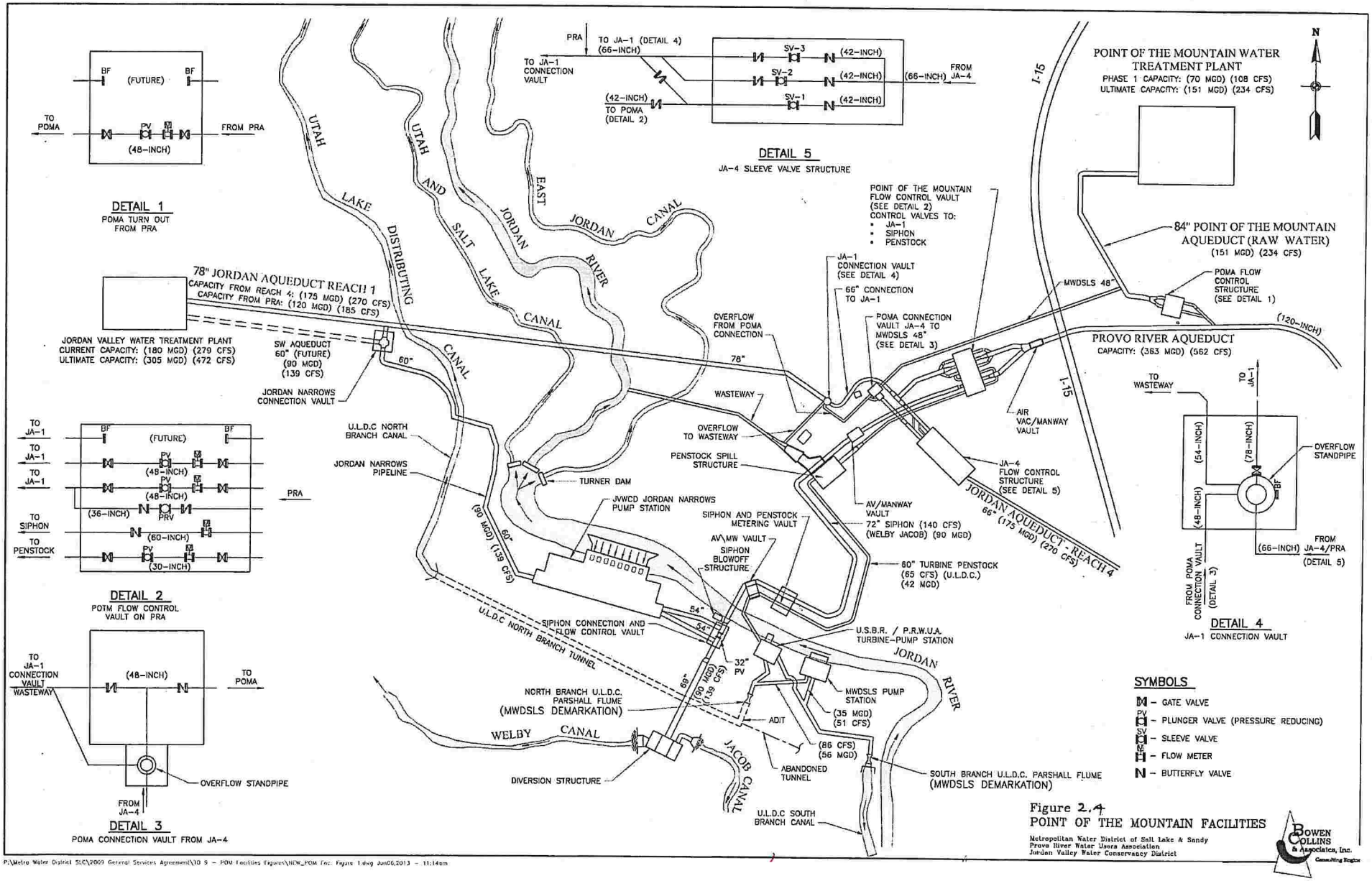


Figure 2.4
POINT OF THE MOUNTAIN FACILITIES

Metropolitan Water District of Salt Lake & Sandy
Provo River Water Users Association
Jordan Valley Water Conservancy District

Bowen Collins & Associates, Inc.

P:\Metro Water District SLC\2009 General Services Agreement\10 9 – POM Facilities Figures\NEW_POM Fac. Figure 1.dwg Jun06,2013 – 11:14am

EXHIBIT 2

Fixed Time Change Application for Ontario Right

APPLICATION FOR FIXED TIME CHANGE OF WATER

STATE OF UTAH

Receipt by:_____

Fee Rec.:_____

Receipt #_____

For the purpose of obtaining permission to make a fixed time change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated, as amended. Fixed time change applications are limited to a fixed period of time exceeding one year but not exceeding 10 years.

---

*__WATER RIGHT NO__. 55-11103 *__APPLICATION NO__. f_____

Changes are proposed in (check those applicable)

■ point of diversion ■ place of use ■ nature of use ☐ period of use ☐ split season ☐ storage

1. OWNER INFORMATION **County Tax ID**_____

Name(s): Metropolitan Water District of Salt Lake & Sandy Interest: 100 %

Address: 10 Exchange Place, #1100

City: Salt Lake City State: Utah Zip Code: 84111

Phone Number 801-942-1391

2. *PRIORITY OF CHANGE:_____ ***FILING DATE:**_____

*Is this change amendatory? (Yes/No):_____

3. RIGHT EVIDENCED BY: 1921 Provo River Decree

Prior Approved Change Applications for this right: t49914; a45046

**********HERETOFORE**********

4. QUANTITY OF WATER: 10.36 cfs and/or_____ac-ft.

5. SOURCE: Ontario Drain Tunnel

6. COUNTY: Wasatch

7. POINT(S) OF DIVERSION:

1. S 1640 ft W 1750 ft from NE corner, Sec 24 T 2S R 4E SLBM

Description of Diverting Works: Ontario Drain Tunnel

8. POINT(S) OF REDIVERSION

The water will be rediverted from_____at a point:_____

Description of Diverting Works:_____

9. POINT(S) OF RETURN

The water will be returned to the natural stream/source at a point(s): _____

10. NATURE AND PERIOD OF USE

Irrigation:	From_____ to _____
Stockwatering:	From_____ to _____
Domestic:	From_____ to _____
Municipal:	From_____ to _____
Mining:	From_____ to _____
Power:	From_____ to _____
Other:	From _____ to _____
Other: See below	From Jan 1 to Dec 31

11. PURPOSE AND EXTENT OF USE

Irrigation:_____acres. Sole supply of _____acres.

Stockwatering (number and kind): _____

Domestic:_____Families and/or_____Persons.

Municipal (name): _____

Mining:_____Mining District in the_____Mine.

Ores mined: _____

Power Plant name:_____Type:_____Capacity:_____

Other (describe): Generation of power and for other purposes, including irrigation etc. AF contributed by this right: Unevaluated

12. PLACE OF USE

Legal description of place of use by 40 acre tract(s):

13. STORAGE

Reservoir Name:_____Storage Period: from _____to_____ Capacity:_____ac-ft. Inundated Area: _____acres.

Height of dam:_____feet.

Legal description of inundated area by 40 tract(s):

_____

_____

_____

***************************THE FOLLOWING CHANGES ARE PROPOSED****************

14. QUANTITY OF WATER:_____cfs and/or 700 ac-ft.

15. SOURCE: Ontario Drain Tunnel
Balance of the water will be abandoned:_____, or will be used as heretofore: X

16. COUNTY: Wasatch

17. POINT(S) OF DIVERSION. Changed as Follows:

1. S 1640 feet W 1750 feet from NE corner, Sec 24 T 2S R 4E SLBM (**Same as Heretofore**)
   Diverting Works: Ontario Drain Tunnel
   Source: Ontario Drain

18. POINT(S) OF REDIVERSION

The water will be rediverted from:

1. N 278 ft E 1199 ft from 54 corner. Sec 27 T 55 R 3E SLBM
   Diverting Works: Olmstead Diversion Dam
   Source: Provo River
2. S 853 ft W 1064 ft from E4 corner, Sec 6 T 6S R 3E SLBM
   Diverting Works: Murdock Diversion Dam
   Source: Provo River
3. S 772 ft East 1,150 ft from N4 Corner, Sec 26, T 4S, R 1W, SLBM
   Diverting Works: Spillway at Point of the Mountain
   Source: Provo River
4. N 275 ft E 840 ft from SW corner, Sec 14 T 1S R 1W SLBM
   Diverting Works: Jordan River Surplus Canal Diversion 2100
   Source: Jordan River
5. N 0 ft W 500 ft from SE corner, Sec 20 T 2N R 1W SLBM
   Diverting Works: New State-Burton Dam Diversion
   Source: Jordan River
6. N 25 ft E 1225 ft from SW corner, Sec 28 T 2N R 1W SLBM
   Diverting Works: State Canal Headworks
   Source: Jordan River
7. S 3749 ft W 1075 ft from NE corner, Sec 29 T 2N R 1W SLBM
   Diverting Works: New State-Diverting Canal feeding Sewer Ditch
   Source: Jordan River
8. S 100 ft W 100 ft from NE corner, Sec 29 T 2N R 1W SLBM
   Diverting Works: New State-East Canal Diversion
   Source: Jordan River
9. S 1913 ft E 695 ft from N4 corner, Sec 25 T 1N R 2W SLBM
   Diverting Works: Water Control Structure
   Source: Goggin Drain
10. N 1380 ft E 1196 ft from S4 corner, Sec 13 T 1N R 2W SLBM
    Diverting Works: Water Control Structure
    Source: Husted Dam
11. N 255 ft W 85 ft from S4 corner, Sec 12 T 1N R 2W SLBM
    Diverting Works: Water Control Structure
    Source: Ambassador Cut

19. POINT(S) OF RETURN

The water will be returned to the natural stream/source at a point(s): _____

20. NATURE AND PERIOD OF USE

Irrigation:	From _____	to _____
Stockwatering:	From _____	to _____
Domestic:	From _____	to _____

Municipal:	From_____	to _____
Mining:	From_____	to _____
Power:	From_____	to _____
Other: public use, wildlife mgmt., fishing, and recreational activities-refer to att.	From January 1st	to December 31st

21. PURPOSE AND EXTENT OF USE

Irrigation:_____acres. Sole supply of _____acres.
Stockwatering (number and kind): _____
Domestic:_____Families and/or _____Persons.
Municipal (name): _____
Mining:_____Mining District at the_____Mine.
Ores mined: _____
Power: Plant name:_____Type:_____Capacity:_____
Other (describe): See Explanatory for details.

22. PLACE OF USE

Legal description of place of use by 40 acre tract(s): See Explanatory

23. STORAGE

Reservoir Name:_____Storage Period: from _____to_____ Capacity: _____ac-ft. Inundated Area:_____acres. Height of dam:_____feet.
Legal description of inundated area by 40 tract(s):
_____

24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose. (Use additional pages of the same size if necessary).

HEREAFTER PLACE OF USE:

Any unsurveyed lands below the 1855 meander line of Great Salt Lake, including Gilbert Bay, Farmington Bay and portions of Farmington Bay Waterfowl Management Area as identified in Attachment A. The place of use identified above excludes areas to which water is applied pursuant to water right permit numbers 57-3572, 31-3864, 31-81, 57-7662, 57-3576, 57-3577, 57-7533, 59-3459, 59-3582 and 59-3571.

EXPLANATORY:

This is a fixed-time change application filed under Utah law, including but not limited to Utah Code Section 73-3-30 and Utah Code Section 23A-6-403, by the Metropolitan Water District of Salt Lake & Sandy (MWDSLS), and the Utah Division of Wildlife Resources (DWR) and the Utah Division of Forestry Fire and State Lands (FFSL) (the Divisions), to convey surface water from water right 55-11103 sourced in the Ontario Drain Tunnel to Great Salt Lake. The purpose of this change application is to deliver water from the Ontario Drain to Great Salt Lake, including Gilbert Bay, Farmington Bay, and areas of Farmington Bay Wildlife Management Area that do not currently have water rights associated with them. Pursuant to the Divisions' authorities under Utah law, including but not limited to the Utah Code sections referenced above, the water will be for the use and benefit of Great Salt Lake's sovereign lands and the public, through the reasonable preservation or enhancement of Great Salt Lake including the operation and maintenance of Great Salt Lake's wildlife management areas, fishing waters, recreational activities, as well as for the benefit, support, and propagation of wildlife, including migratory shorebirds, waterfowl and other waterbirds, and the

support and propagation of hydrophytic vegetation, food resources, and habitat in Great Salt Lake including Farmington Bay and Gilbert Bay.

The underlying water right has a point of diversion from the mouth of the Ontario Drain Tunnel. This water right is owned and managed by the MWDSLS. The water available under this right is considered import water to the Provo River Drainage, as confirmed by the Provo River Decree. It is diverted and used by MWDSLS for the benefit of its member cities and others by agreement.

Under this proposed fixed time change application the water will enter Jordanelle Reservoir and be released downstream into the middle Provo River, pass through Deer Creek Reservoir, and travel down the lower Provo River. Depending on flow conditions, time of year, and management decisions by the managing entities (including MWDSLS, the Provo River Water Users Association, and the Provo River Commissioner), the water will then be rediverted at either the Olmstead Diversion Dam or the Murdock Dam:

(1) If rediverted at Olmstead, the flow will enter the Jordan Aqueduct, the water will reach a spillway at the Point of the Mountain and enter the Jordan River just below Turner Dam.
(2) If rediverted at Murdock, the water travel in the Provo River Aqueduct to the same spillway at Point of the Mountain and enter the Jordan River just below Turner Dam.

From the spillway, the water will continue to flow downstream in the Jordan River to the water control structure located at 2100 South/Surplus Canal. Depending on runoff conditions and management of water by Salt Lake County Flood Control, Salt Lake City Public Utilities and the Lower Jordan River Commissioner, the water may either:

(1) Stay in the Jordan River to points of rediversion downstream of the Burnham Dam located west of 1900 South in North Salt Lake, as identified in section 18 above. Farmington Bay Waterfowl Management Area and New State Duck Club have water control structures that will be used to convey the water to its place of use, the unimpounded areas of Farmington Bay in Great Salt Lake.
(2) Be rediverted from the Jordan River at 2100 South, North 275 ft., East 840 ft. from the Southwest corner of Section 14, Township 1 South, Range 1 West SLB&M. The water will flow down the Surplus Canal and be rediverted either (1) through the Goggin Drain Diversion and out to Gilbert Bay of Great Salt Lake, (2) through the Husted Dam Water Control Structure off the Surplus Canal to the South Shore Associated Duck Clubs, which have water control structures that will be used to convey the water to the unimpounded areas of Farmington Bay of Great Salt Lake, and/or (3) through the Ambassador Cut Diversion to South Shore Associated Duck clubs, which have water control structures that will be used to convey the water to the unimpounded areas of Farmington Bay of Great Salt Lake.

The use of the water will be managed by the DWR and FFSL under an exchange agreement between MWDSLS, Beaver Shingle Creek Irrigation Company, DWR, and FFSL, in collaboration with the Great Salt Lake Watershed Enhancement Trust being implemented by National Audubon Society and the Nature Conservancy of Utah under Utah Code Ann. 65A-16-201. The proposed use is consistent with the purposes of the Trust because it will be used to "enhance water flows to sustain the Great Salt Lake and the Great Salt Lake's wetlands." Id. The total use of water under this change application will not exceed 700 acre-feet and will be used throughout the year at varying flow rates.

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, including maps and other documents attached, at the time of filing, rests with the applicant(s).

Utah Division of Forestry Fire & State Lands

_____
Signature of Applicant

By_____
Authorized Agent (please print)

Metropolitan Water District of Salt Lake & Sandy

_____
Signature of Applicant

By_____
Authorized Agent (please print)

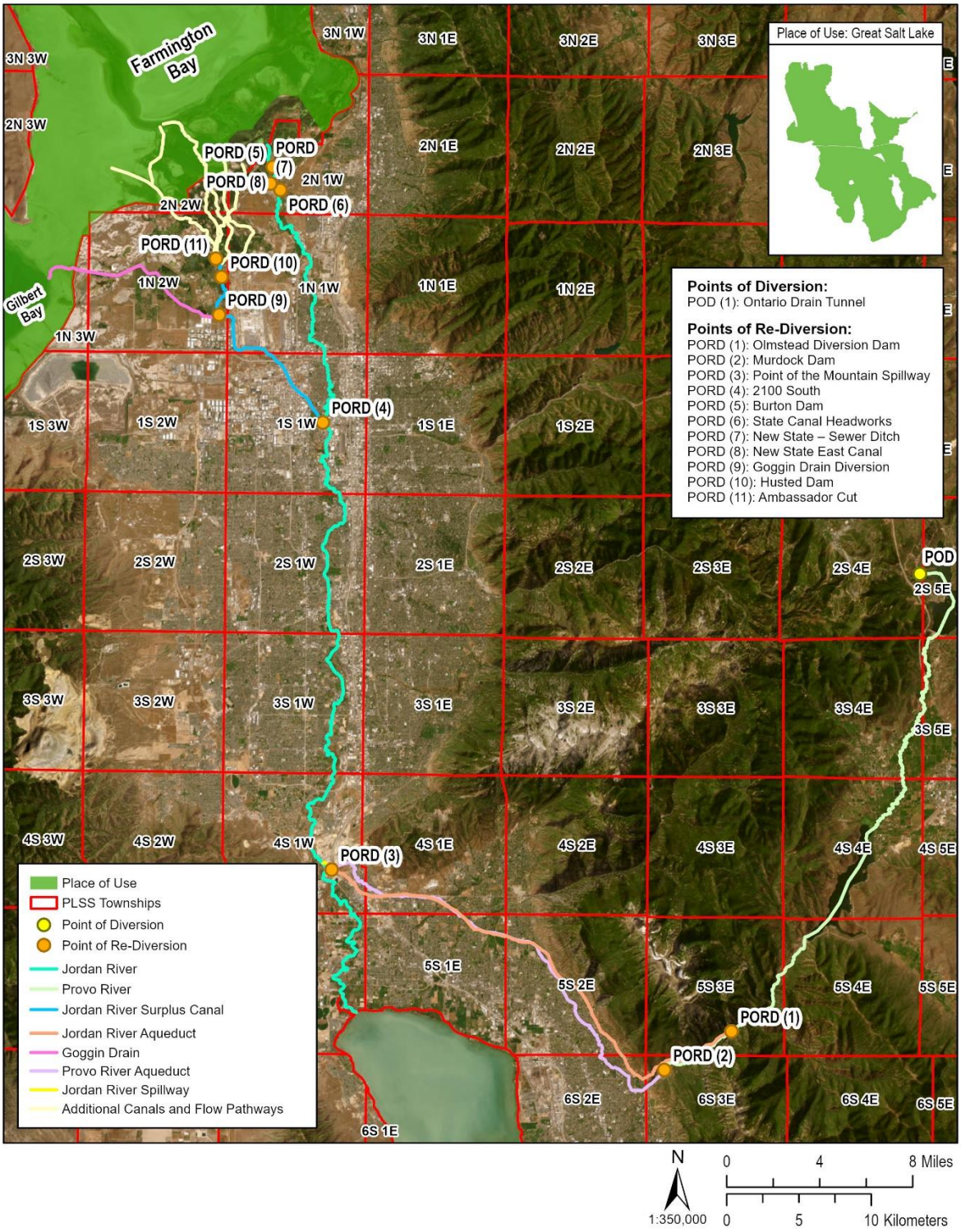
Utah Division of Wildlife Resources

_____
Signature of Applicant

By_____
Authorized Agent (please print)

Attachment A: Fixed Time Change Application Map

Fixed Time Change Application: _____ **Water Right No.: 55-11103**



I/we _____, hereby acknowledge that this map was prepared in support of Application _____. I/we hereby submit this map as a true representation of the facts shown thereon to the best of my/our knowledge and belief.

_____ _____

Applicant(s) Date

Metropolitan Water District of Salt Lake & Sandy
FY2024 CAPITAL PROJECTS REPORT
June 2024

Last updated: June 4, 2024

Routine Non-Capacity Improvement Projects

SCS Hardware and Software Replacement Project (LC067)

Purpose: Replace and update security control system (SCS) hardware at LCWTP and POMWTP.

Update: Project complete.

District Project Manager:	Darin Klemin	
Design Engineer / Contractor:	Avtec	
Final Completion Date:	June 30, 2024	
Project Budget:		$600,000.00
Contract Amount:		$584,126.40
Change Orders / Percent:		-$10,369.83 / -1.8%
	FY23	FY24
FY Budget:	$600,000.00	$100,000.00
Spent to Date:	$409,529.29	$70,197.88
District Purchases:	$4,813.50	$778.00
Expenses to Date / Percent Spent:		$485,318.67 / 80.9%

LCC Replacement and Intake Modifications

Purpose: Replace the raw water Little Cottonwood Conduit and modify the lower intake structure. This is a multi-year project (through FY2026).

Update: Staff is preparing for additional geotechnical investigation and design in FY2025.

District Project Manager:	Gardner Olson
Design Engineer:	Bowen Collins & Assoc.
Preliminary Design Completion Date:	June 30, 2024
FY2024 Budget:	$200,000.00
FY2024 Contract Amount:	$200,000.00
Change Orders / Percent:	$0.00 / 0.0%
Spent to Date:	$135,177.17
District Purchases:	$0.00
FY2024 Expenses to Date / Percent Spent:	$135,177.17 / 67.6%

POMWTP PC/S Hardware Replacement Project

Purpose: Replace and update Process Control / SCADA system hardware at POMWTP.

Update: Equipment is installed. Staff is working with SKM to complete programming.

District Project Manager:	Gardner Olson	
Design Engineer / Contractor:	SKM	
Final Completion Date:	June 30, 2024	
	FY23	FY24
FY Budget:	$200,000.00	$250,000.00
Contract Amount:	$182,358.73	$207,888.80
Change Orders / Percent:	$0.00 / 0.0%	$14,212.00 / 6.8%
Spent to Date:	$156,665.00	$152,537.06
District Purchases:	$0.00	$2,723.00
Expenses to Date / Percent Spent:	$311,925.06 / 69.3%	

Fleet Program Replacement:

Purpose: Purchase two trucks and two SUVs.

Update: Two trucks were received in August 2023. A utility van was received in November 2023. An SUV was received in December 2023. Procurement is complete for fiscal year 2024.

District Project Manager:	Michael Carter
Project Budget:	$200,000.00
Project Spent to date:	$176,855.33 / 88.4%

Little Dell Dam Improvements:

Purpose: Salt Lake City plans to replace a control panel in FY24.

Update: Design is underway with anticipated bid advertisement in 2024. Staff was notified of several emergency procurements in FY24, including slope repairs near the penstock and a commercial mower.

District Project Manager:	Bernard Mo, SLCDPU
Project Budget:	$400,000.00
Project Spent to date:	$0.00 / 0.0%

Repair and Replace

LCWTP Ozone Control Valve Replacement

Purpose: Control valves on the LCWTP ozone system were inspected in 2021. The valves are wearing from use, with five of the eleven valves identified for replacement over the next four years, beginning with ozone destruct.

Update: The control valve was installed on February 28, 2024. Project is complete.

District Project Manager:	Gardner Olson
Project Budget:	$12,000.00
Project Spent to date:	$11,567.33 / 96.4%

LCWTP Flash Mix Replacement

Purpose: The LCWTP flash mixers introduce and mix chemical into water upstream of flocculation. One flash mix gear box was replaced in FY23. The second will be replaced in FY24.

Update: The equipment was received. Procurement is complete.

District Project Manager:	Andy Reidling
Project Budget:	$50,000.00
Project Spent to date:	$44,770.40 / 89.5%

POMFWP RVSS Replacement

Purpose: The Point of the Mountain Finished Water Pump Station has five pumps - two pumps are operated with variable frequency drives (VFD) and three with reduced-voltage soft starts (RVSS). The equipment has reached the end of its design life and is experiencing increased maintenance and operation issues. One RVSS was replaced in FY22 and the two VFDs were replaced in FY23. An RVSS is being replaced in FY24. Staff plans to replace the final RVSS in FY25.

Update: Project is complete.

District Project Manager:	Scot Collier
Contractor:	EMC
Final Completion Date:	June 30, 2024
Project Budget[1]:	$90,000.00
Contract Amount:	$87,285.16
Spent to Date:	$87,285.16
Other Costs:	$1,085.55
Project Spent to date:	$88,370.71 / 98.2%

[1] Project budget was reduced at the February 26, 2024 board meeting.

CCTV Hardware Replacement

Purpose: The District's closed circuit television (CCTV) security system is 20 years old at LCWTP and 14 years old at POMWTP. The equipment has exceeded its expected life and is no longer supported by the manufacturer. The remaining two years of this project will split camera replacement at POMWTP.

Update: Project is complete.

District Project Manager:	Brian Pehrson
Contractor:	Avtec
Final Completion Date:	June 30, 2024
Budget[1]:	$135,000.00
Contract Amount:	$116,836.02
Change Orders / Percent:	$16,870.35 / 14.4%
Spent to Date:	$133,736.37
District Purchases:	$0.00
Project Spent to Date:	$133,736.37 / 99.1%

[1] Project budget was increased at the February 26, 2024 board meeting.

UPS Replacement

Purpose: Two UPS systems at the LCWTP are scheduled for replacement.

Update: The UPS systems were received in December 2023. Project is complete.

District Project Manager:	Scot Collier
Project Budget[1]:	$40,000.00
Project Spent to date / Percent Spent:	$37,891.06 / 97.7%

[1] Project budget was decreased at the February 26, 2024 board meeting.

Lab Equipment Replacement

Purpose: The lab department requires replacement of an organics laboratory dishwasher, auto titrator, microscope, and inductively coupled plasma mass spectrometry (ICP/MS) instrument. The purge and trap and autosampler installed in FY23 experienced issues, were returned, and will be replaced.

Update: The ICP/MS, microscope, purge and trap and autosampler, autotitrator, and organics laboratory dishwasher are installed. Project is complete.

District Project Manager:	Jeff Matheson
Project Budget:	$283,500.00
Project Spent to date / Percent Spent:	$281,122.50 / 99.2%

Annual Network Server Replacement

Purpose: The District operates servers on multiple networks. These servers have a life expectancy of seven years. New servers host the most critical services for the first three to five years of the lifecycle and then are moved to a less critical role for the remainder of the life cycle.

Update: Four servers were received. A fifth server is on order.

District Project Manager:	Darin Klemin
Project Budget:	$70,000.00
Project Spent to date / Percent Spent:	$57,273.52 / 81.8%

Miscellaneous: Two chlorinators were received and installed to replace failing units at the LCWTP.

District Project Manager:	Ammon Allen
Project Budget[1]:	$50,000.00
Project Spent / Percent Spent:	$21,811.38 / 43.6%

Non-Routine O&M (Selected Projects)

LCWTP Arc Flash Coordination

Purpose: LCWTP Arc Flash Coordination: The National Fire Protection Association (NFPA) Standard for Electrical Safety in the Workplace mandates reviewing the arc flash study of a facility a maximum of every five years. Recent changes at the LCWTP make this effort timely.

Update: Data collection, labels, and the final report are complete. One-line diagrams and panel schedules are in progress.

District Project Manager:	Gardner Olson
Contractor:	Powmation
Final Completion Date:	June 30, 2024
Project Budget:	$200,000.00
Contract Amount:	$149,700.00
Project Spent to date:	$103,800.00 / 51.9%

Financial Strategist

Purpose: Application assistance for WIFIA funding for MWDSLS long term Capital Finance program.

Update: Two tasks began in April – 1) development of a funding plan / strategy for external funding sources and 2) assistance with a BRIC scoping application for the LCWTP Rebuild.

District Project Manager:	Annalee Munsey		
Project Budget:	$100,000.00		
Contractor:	AE2S	AE2S - Funding	AE2S – BRIC
Final Completion Date:	December 31, 2023	June 30, 2024	June 30, 2025
Contract Amount:	$20,000.00	$49,910.00	$24,330.00
Project Spent to date:	$19,424.50 / 19.4%	$9,982.00 / 20.0%	$0.00 / 0.0%

IT Master Plan

Purpose: The Information Technology department has many project needs. A master plan will be developed to prioritize and define these projects.

Update: Staff is reviewing the server room assessment. The consultant is currently working on the HMI evaluation and mapping remote site infrastructure.

District Project Manager:	Ryan Nicholes
Contractor:	Hazen and Sawyer
Final Completion Date:	June 30, 2024
Project Budget:	$150,000.00
Contract Amount:	$149,905.00
Project Spent to date:	$80,374.26 / 53.6%

Capacity Improvement Projects

Managed Aquifer Recharge Pilot Testing and Phase 1 (LC063)

Purpose: The District will construct two infiltration basins and an injection well at the LCWTP. These facilities will recharge an estimate 29 acre-feet of water into the aquifer per day. The water can then be extracted through any number of customer-owned wells down-gradient and within the same aquifer.

Update: Construction is on hold with the well house on order and the transformer and ancillary piping awaiting approval of Change Order No. 2. All work save the transformer is anticipated to be complete by December 31, 2024. The electric transformer is anticipated to arrive in April 2025.

May 28, 2024: Overall site progress.

Design			
District Project Manager:	Ammon Allen		
Design Engineer:	Hansen, Allen and Luce		
Final Completion Date:	December 31, 2024		
Implementation Plan Spent (FY21):			$78,487.55
Engineering Design Contract Amount:			$961,937.15
Fiscal Year:	2022	2023	2024
Spent to date:	$78,431.03	$420,598.75	$230,662.78
Engineering Design Spent to date:			$729,692.56 / 75.9%

Wells Construction		
Contractor:	Hydro Resources	
Final Completion Date (est.):	June 30, 2024	
Contract Amount:		$3,674,441.00
Change Orders / Percent:		-$18,157.00 / -0.5%
	2023	2024
Wells Spent to date	$2,504,420.15	$823,320.85
Total Spent to date:		$3,327,741.00 / 91.0%

SIB and Infrastructure Construction	
Contractor:	COP Construction
Final Completion Date (est.):	January 31, 2025
Contract Amount:	$5,550,687.00
Change Orders / Percent:	-$11,727.75 / -0.2%
SIB and Infrastructure Spent to date:	$4,012,619.25 / 71.6%

Other Project Costs	
Contractor:	SKM
Final Completion Date (est.):	March 30, 2025
Budget:	$94,500.00
Contract Amount:	$39,890.00
Change Orders / Percent:	$0.00 / 0.0%
SKM Spent to date:	$827.50 / 2.2%
District Purchases	$1,204.00
Total Other Costs Spent to date:	$2,031.50 / 2.2%

Total Project Budget:	$10,821,309.10
ARPA Grant:	$3,000,000.00
ASR Reserve (as of June 30, 2022):	$4,115,104.90
Non-ASR Reserve:	$3,706,204.20
Total Project Spent to date:	$8,168,971.69 / 75.5%

Finished Water Resiliency Program

Purpose: The Finished Water Resiliency Program is the title for the next phase of the District's Master Plan of System Improvements. The program includes the Cottonwoods Connection, LCWTP Rebuild, SLA Hardening, SLAR Reaches 2 and 3, and ancillary projects and is anticipated to run through 2040. The 2020 Master Plan and 2023 System-wide Hazard Mitigation Plan identify the finished water portion of the District's facilities as the highest priority for rehabilitation. District staff is currently reviewing each of the projects included in this program to appropriately identify and resolve risk.

Salt Lake Aqueduct Replacement - Cottonwoods Conduit (SLAR-CC):
Purpose: The Big Cottonwood Water Treatment Plant (BCWTP) is in need of replacement. The SLAR-CC is a pipeline that connects the BCWTP and the Little Cottonwood Water Treatment Plant (LCWTP) to bring raw water from Big Cottonwood Creek to the LCWTP for treatment. Without this infrastructure, the District will incur an additional demand of up to 24,000 ac-ft annually during the BCWTP replacement.

Update:
Construction: On May 12, 2024, COP Construction began installing traffic control at Fort Union Boulevard in preparation for road excavation and installation of 36" steel pipe diameter. The first stick of pipe was set on May 14, 2024. Seven additional sticks have followed. Welding, backfill, compaction and other pipe installation work continues daily.

Easement Acquisition: There are 59 permanent easements (54 residential, 5 non-residential) and 6 temporary easements being acquired. Offers were extended to all property owners. Forty-six offers have been accepted, of which 42 have closed.

May 29, 2024: Pipe construction on Big Cottonwood Road east of Wasatch Boulevard.

Design			
District Project Manager:	Kelly Stevens		
Design Engineer:	Hazen and Sawyer		
Final Completion Date:	30-Jun-24		
Original Contract Amount:			$ 2,355,137.00
Contract Amendments:			$ 1,321,445.00
Total Contract Amount:			$ 3,676,582.00
Fiscal Year:	2022	2023	2024
Spent to Date:	$ 36,856.25	$ 1,999,946.56	$ 1,404,030.45
Engineering Spent to Date:		$ 3,440,833.26 / 93.6%	

Public Engagement			
District Project Manager:	Kelly Stevens		
Design Engineer:	Wall Consulting Group		
Final Completion Date:	30-Jun-24		
Original Contract Amount:			$ 108,388.75
Contract Amendments:			$ -
Total Contract Amount:			$ 108,388.75
Fiscal Year:	2022	2023	2024
Spent to Date:	$ 4,455.46	$ 32,879.88	$ 46,009.48
Engagement Spent to Date:		$ 83,344.82 / 76.9%	

Easement Acquisition			
District Project Manager:	Kelly Stevens		
Acquisition Budget:			$ 3,000,000.00
Acquisition Agent:	Davenport Consulting		
Final Completion Date:	30-Jun-25		
Original Contract Amount:			$ 97,350.00
Contract Amendments:			$ -
Total Contract Amount:			$ 97,350.00
Fiscal Year:	2024	2025	
Agent Spent to Date:	$ 22,200.00	$ 0.00	
Easement Costs:	$ 1,120,766.00	$ 0.00	
Acquisition Spent to Date:		$ 1,142,966.00 / 38.1%	

No construction invoices have been received to date.

Salt Lake Aqueduct Hardening
Purpose: The 2020 SLA Hazard Mitigation Plan identifies 12 segments of the SLA to replace and 32 segments to slipline with a steel pipe to improve pipeline resiliency. The full replacement and slipline schedules are collectively referred to as hardening the SLA. The replacement sections cross and/or closely parallel known fault lines. This project will complete design to harden the finished water SLA, which includes 11 segments, 3 of which are identified for replacement.

Update: Proposals were received from design consultants in April 2024. A recommendation for award will be provided at the June Engineering Committee and board meetings.

Salt Lake Aqueduct Reaches 2 and 3
Purpose: The Salt Lake Aqueduct Replacement Reaches 2 and 3 will continue the SLAR from Fort Union Boulevard to the Terminal Reservoirs. The pipeline will provide redundancy and reliability to the SLA and allow the District to meet contractual obligations to convey 145 mgd north of the LCWTP. This fiscal year 2025 task is to identify an alignment and pipe size for future design considerations. This project is contingent on award of a BRIC grant, for which the District applied in 2023. Award notices are anticipated in August 2024. Early definition of this project will allow District staff to determine appropriate timing and budget.

Update: Staff is waiting on notice of award to proceed.

Little Cottonwood Water Treatment Plant Rebuild
Purpose: Risk of mechanical and structural failures and damage from natural hazards suggests the LCWTP is in need of attention. This project will define a level of service, perform a condition assessment, analyze future regulatory and equipment needs, and provide recommendations to address identified deficiencies. Staff is preparing to hire a consultant in FY2026 to begin this effort. Work is ongoing to prepare for this effort.

Update: Staff will continue to update the Engineering Committee and board periodically as we prepare to advertise for consultant assistance on the project.

Jordan Valley Water Conservancy District (JVWCD)
Jordan Aqueduct System and 150th South Pipeline – Capital Projects

The District is responsible for 2/7 of Jordan Aqueduct (JA) system improvements which include JA Reaches 1 – 4, Jordan Valley Water Treatment Plant (JVWTP), and the JA Terminal Reservoir. The District is responsible for one half of improvements associated with the 150th South pipeline. Projects identified for FY2024 include:

Major Rehabilitation or Replacement of Existing Facilities

• JA Normal, Extraordinary Maintenance and Replacement	$ 142,857
• 150th South Pipe Normal Maintenance and Replacement	$ 62,500
• JA TR Basins 3, 4 Roof Deck Joint Sealant Replacement	$ 142,857
• JVWTP Normal, Extraordinary Maintenance and Replacement	$ 342,857
• JVWTP Floc/Sed Basins 3-6 Mechanical Equipment Replacement	$ 385,714
• JVWTP Floc/Sed Basins 1-2 Mechanical Equipment Replacement	$ 285,714

New Non-Capacity Facilities (Compliance/Functional Upgrade)

• JVWTP Filter and Chemical Feed Upgrades	$ 885,714
• JVWTP Floc/Sed 1-2 Seismic Upgrade	$ 662,143
• Jordan Aqueduct Seismic Resiliency	$ 14,286

JVWTP Project Management Expenses	$ 50,000
Total Request FY2024:	$2,974,643
Anticipated Expenditures FY2024:	$ 836,040

This report is taken from JVWCD's June 2024 board packet and covers April 13, 2024 to May 10, 2024.

A kickoff meeting will be held in June for the Jordan Aqueduct Seismic Resiliency Study, which recently received both a FEMA BRIC grant and a State of Utah grant.

Work on the JVWTP Filter and Chemical Feed Upgrades and Expansion Project is progressing, with the team focused on meeting building code requirements for Herriman City and Unified Fire Authority.

The JVWTP Sedimentation Basins 1-2 Seismic and Capacity Upgrades Project is awaiting the status of a BRIC grant, anticipated in August 2024. If successful, the project will bid in February 2025. 95% design drawings were due June 1, 2024 for process, mechanical, and structural design. Electrical design is at 60% completion.