NIBLEY CITY

Ridgeline Park | Phase 1

December 18, 2023

Prepared By:

NIBLEY CITY
455 WEST 3200 SOUTH
NIBLEY, UTAH 84321

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INVITATION TO BID

PART 1 GENERAL

1.1 CONSTRUCTION CONTRACT

A. Bidders are invited to bid on the Construction Contract known as ***Ridgeline Park | Phase 1***

B. The location of the work is in Nibley City, between W 2600 S to the north and West 3200 S to the south, and between Main Street to the east and the Nibley City Hall to the west, at the following site:

401 West Ropelato Drive, Nibley, UT 84321

C. The work to be performed consists of furnishing, providing, and installing the facilities, equipment, services, and appurtenances thereto as included in the Contract Documents. The Work, shown as Phases 1, generally includes, but is not limited to:

Constructing an approximate 7.7 acre city open space including a restroom building, a naturalized water feature, small pavilions and medium sized pavilions, nine square, cornhole, a gaga pit, pickleball courts, stone seat walls, a playground, a bouldering wall and area, site furnishings, sidewalks, site lighting, water lines, grading and drainage, sewer lines, gas line, landscaping, and irrigation.

D. All work shown as Future Phase will be bid and constructed at a future time and is not considered a part of this contract.

E. Meet all specific requirements of the plans and instructions included in this document.

F. For information about the award of this Construction Contract, contact ***Mr. Tom Dickinson, Nibley City Engineer, 455 W 3200 S, Nibley, UT 84321. Phone: (435) 757-9848. Email: td@nibleycity.com.***

1.2 CONSTRUCTION CONTRACTOR QUALIFICATION

A. Nibley City will only consider bids for award of this park contract from contractors who have performed the construction work on five similar projects since the year 2017.

B. Those references or contact information for each of those project owners shall be included in the bid.

1.3 BID LOCATION AND OPENING

A. Bids for the construction of the Nibley City [OWNER], ***Ridgeline Park | Phase 1*** will be electronically submitted via email to Tom Dickinson, td@nibleycity.com ***until 5:00 PM*** local standard time, on ***January 29, 2024***. Bids received after said date and time will not be accepted.

B. The bidder shall indicate the Construction Contract title, the name and address of the Bidder, and the date and time of Bid opening and the Bidder's return mailing address.

1.4 BID SECURITY

A. Bid security in the amount of 5% (five percent) of the Bid must accompany each Bid in accordance with the Instructions to Bidders. Bid Security will be returned to each unsuccessful Bidder after tabulation and award of the Construction Contract.

1.5 CONTRACT TIME

A. ***The Work will be substantially Completed and ready for operation before October 1, 2024.***

1.6 EXAMINATION AND PROCUREMENT OF DOCUMENTS

A. Complete sets of Contract Documents may be examined and obtained from the OWNER at the City's website: https://nibleycity.com/public-works/ beginning ***4:00 PM on December 19, 2023***. The project will also be advertised online at the Utah Public Procurement Place Website (SciQuest).

B. All questions shall be submitted in writing or via e-mail to Tom Dickinson, td@nibleycity.com. Deadline for questions is **1:00 PM on January 19th, 2024.**

1.7 RIGHT TO REJECT BIDS

A. The OWNER reserves the right to reject any or all bids or to waive any informality or technicality in any bid if deemed to be in the best interest of the OWNER.

1.8 VALIDITY PERIOD FOR BIDS

A. Bids shall remain valid for 30 days after the day of Bid opening. Bidders who withdraw their bid after Bid opening, but before expiration of said period, shall forfeit their bid security if Notice of Intent to Award to the successful Bidder is made by OWNER.

1.9 BASIS OF BIDS

A. Bids shall be on a unit price/lump-sum basis. Unsealed or segregated Bids will not be accepted.

1.10 PRE-BID CONFERENCE

A. ***Nibley City will be holding a mandatory Pre-Bid Meeting on Thusday, January 4, 2024 at 10:00 AM. This meeting will be held at Nibley City Hall with a site visit immediately following.***

1.11 GOVERNING LAWS AND REGULATIONS

A. All work shall conform to the requirements of the Construction Specifications and Drawings, Contract Documents, Nibley City Standards, Utah Chapter APWA 2017 edition as amended by Nibley City, Federal, State, and Local Permit requirements, and easement of use of property agreement or conditions. In case of conflict, the Contractor shall notify the Engineer for clarification and directions on which requirement to follow.

B. This project is partially funded with LWCF grant funds. Specific requirements associated with this funding include:

1. “Equal Opportunity Clause”, in compliance with Executive Order 11246, as amended by Executive Order 11375, and as supplemented by Department of Labor regulations (41 CFR Part 60).

2. Americans with Disabilities Act (ADA). All work on this project requires that ADA standards are met. This project has been designed to meet ADA standards.

3. Compliance with applicable environmental laws including but not limited to the Clean Water Act of 1970, the Federal Pollution Control Act, Executive Order 11738, Environment Protection Agency regulations, and other applicable environmental laws.

C. Bidders on this Work will be subject to the applicable provisions of all federal rules, laws and regulations or orders.

1. Contractor is responsible for compliance with Section 70914 of the Bipartisan Infrastructure Law (Build America, Buy American) P.L. 117-58. Contractor is responsible for compliance with the OWCF Act, LWCF grant requirements, Department of Interior Standard Award Terms and Conditions effective December 2, 1029 – revised June 19, 2020 (except the provision related to the Davis-Bacon Act Section VII) and the provisions, policies, and procedures contained in Volume 71 of the Land and Water Conservation Fund State Assistance Program Federal Financial Assistance Manual, which became effective on March 11, 2021 (“The LWCF Manual”). The LWCF Manual is applicable to the Project Sponsor’s implementation of, and continued maintenance of, the Project. Local Sponsor should carefully read and understand the LWCF Manual, which is hereby incorporated into this Project Agreement by reference. Local Sponsor is responsible for compliance with Section 70914.

First Publication: _____

Second Publication: _____

END OF DOCUMENT

DOCUMENT 00 21 13
INSTRUCTIONS TO BIDDERS

PART 1 GENERAL

1.1 DESCRIPTION OF THE WORK

A. The Work to be performed consists of furnishing and installing the equipment, facilities, services, and appurtenances thereto as included in the Contract Documents. A general description of the Work is set forth in the Invitation to Bid (Document 00 11 16).

B. General Conditions: as published in Document 00 72 00 in the Manual of Standard Specifications by the Utah Chapter of the American Public Works Association 2017 Edition as amended by Nibley City.

1.2 COPIES OF BID DOCUMENTS

A. Bidders must use complete sets of Bid Documents in preparing Bids. OWNER maintains a complete set on file at the address set forth in the Invitation to Bid, and bidders may review the file copy upon request during regular business hours. Bidders are solely responsible for verifying whether their sets of Bid Documents are complete.

B. Bid Documents are made available to bidders only for the purpose of obtaining Bids on the Work. No license or grant for any other use is given.

C. Bidding Document copyrights shall remain with either the OWNER or ENGINEER.

D. All provisions of the Manual of Standard Specifications, 2017 Edition, as amended by Nibley City, published by the Utah Chapter of the American Public Works Association that are applicable to the Work are hereby made a part of the Contract Documents by reference. The publications may be purchased separately from the Utah LTAP Center, Utah State University 4111 Old Main Hill, Logan UT 84322-4111.

E. The LWCF Manual is applicable to the implementation of, and continued maintenance of, the project and is hereby incorporated into the Contract Documents by reference.

1.3 PRE-BID CONFERENCE

A. If a pre-bid conference is held, the time, place and nature of the conference will be stated in the Invitation to Bid. Representatives of OWNER and

ENGINEER will be present to discuss the Project. The OWNER shall not be bound by any statements, representations, conclusions, or assumptions made by any party, whether oral or written, except for written statements that are issued in an Addendum by the ENGINEER to all prospective bidders.

1.4 PHYSICAL CONDITIONS

A. **In General**: Prior to submitting a Bid, each Bidder is responsible to review all available explorations, tests and data concerning surface conditions, subsurface conditions, and Underground Facilities at or contiguous to the site, or otherwise, which may affect cost, progress, performance or furnishing of the Work in accordance with the time, price and other terms and conditions of the Contract Documents.

B. **Surface and Subsurface Conditions**: Provisions concerning surface and subsurface conditions, if any, are set forth in a document titled Geotechnical Data (Document 00 31 32). The document provides the identification of:

1. Those reports of explorations and tests of subsurface conditions at the site which have been utilized in preparing the Contract Documents; and

2. Those drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities) which are at or contiguous to the site which have been utilized in preparing the Contract Documents.

C. **Underground Facilities**: Information and data indicated in the Contract Documents regarding Underground Facilities at or contiguous to the site is based upon information and data furnished to OWNER and ENGINEER by owners of such Underground Facilities. The OWNER does not assume responsibility for the accuracy or completeness thereof other than as provided in paragraph 4.3A.2 of the General Conditions or unless expressly provided in the Supplemental General Conditions (Document 00 73 00).

D. **Additional Explorations and Tests**: If feasible as determined by OWNER, the OWNER will provide each Bidder access to the site to conduct any explorations and tests as each Bidder deems necessary for submission of a Bid. Bidder shall obtain permits, fill all holes, clean up and restore the site to its former condition upon completion of such explorations. By requesting such an exploration or test, Bidder agrees to release, indemnify, defend, and save the OWNER harmless from all costs damages and liabilities an any kind whatsoever, including reasonable attorneys' fees, that may arise in connection with or as a result of the performance of such explorations or tests.

1.5 COMPENSATION AND QUANTITIES

A. **In General**: The bid price for any lump sum or unit price contract includes all labor, materials, and incidental work to fully complete the Work in a satisfactory manner under the terms of the Contract Documents. Bidders are responsible to inform themselves of the character of the Work to be performed.

B. **Lump Sum Work**: If the Work is to be paid for on a lump sum basis, the lump sum will be the only sum paid.

C. **Unit Price Work**: If any portion of the Work is to be paid for on a unit price basis, payment will cover only work actually performed and materials actually supplied at the unit prices bid and on the terms set forth in the Contract Documents, irrespective of any quantity approximations in the Bid Documents. Any quantity approximations in the Bid Documents are stated as a basis for determining bids, and they do not fix the amount of Work to be done or materials to be furnished. Stated quantities are estimates for the purpose of doing the class of work required. Actual quantities will vary. The OWNER may deviate in either direction from any indicated quantities. The Bidder shall have no claim for any variation in quantity, except to the extent permitted in the General Conditions.

1.6 EXAMINATION OF SITE AND CONTRACT DOCUMENTS

A. **In General**: The OWNER shall not be bound by any statements, representations, conclusions, or assumptions made by any party, whether oral or written, except for written statements that are issued in an Addendum.

B. **Access**: The Contract Documents designate the site for performance of the Work. Bidder is responsible to investigate the site and understand all access requirements. All additional off site lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by Bidder.

C. **Bidder's Obligations**: In addition to Bidder's other responsibilities and obligations in connection with submitting a Bid, it is the responsibility of the Bidder before submitting a Bid, to:

1. Examine the Contract Documents thoroughly;

2. Visit the site to become familiar with local conditions that may affect cost, progress, performance or furnishing of the Work;

3. Investigate all applicable construction and labor conditions, quantities, and the character of the Work as they affect cost, progress, performance, or furnishing of the Work;

4. Consider federal, state and local Laws and Regulations that may affect cost, progress, performance or furnishing of the Work;

5. Study and carefully correlate Bidder's observations with the Contract Documents;

6. Attend any pre-bid conference, which shall be mandatory if so designated in the Invitation to Bid;

7. Review all available explorations and data concerning surface and subsurface conditions as set forth in Section 1.4 above; and

8. Identify and notify ENGINEER in writing in the manner set forth in article 2.1 below of all specific conflicts, omissions, errors, or discrepancies in the Contract Documents, or if Bidder doubts their meanings.

The failure or omission of any Bidder to take any of the foregoing actions shall not in any way relieve Bidder of its Bid, or its obligation to furnish all material, equipment, labor and services necessary to carry out the provisions of the Contract Documents and to complete the contemplated Work for the consideration set forth in its Bid. Submission of a Bid shall constitute prima facie evidence of compliance with these instructions.

D. **Deviations from the Terms of the Contract Documents**: OWNER will not accept any deviations whatsoever from the printed terms of the Agreement and the Contract Documents, except by Addendum or Change Order.

1.7 EFFECT OF SUBMITTING A BID

A. Bidders are responsible to carefully examine the Contract Documents, visit the site, and fully inform themselves so as to include in the Bid a sum to cover the cost of all items. Bidder’s failure or omission to receive or examine any form, instrument, addendum or other document, visit the site and become acquainted with existing conditions, or attend any pre-Bid Conference, shall in no way relieve Bidder from any obligations with respect to Bidder’s Bid or the Construction Contract.

B. By submitting a Bid, Bidder represents that Bidder has complied with all requirements of the Bid Documents; that the Bid is premised on properly performing and furnishing the Work required by the Contract Documents within the times specified; that the Bidder is informed of the conditions to

be encountered and the character, quality and quantities of the Work; and that the Bidder believes the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

C. Submission of a Bid constitutes a promise that the Bidder will enter the Contract Documents in the form presented in the Contract Documents. Bidders should carefully examine all Contract Documents, including the required Bonds and insurance to be provided by the Bidder.

1. The Performance Bond is a guarantee of faithful performance of the requirements of the Contract Documents, including all applicable warranties. The Payment Bond is a guarantee of payment of all labor, materials, or supplies used directly or indirectly in the prosecution of the Work provided in the Construction Documents.

2. The sum of the Performance Bond and the Payment Bond shall be increased or decreased during the course of the Work in the event that Contract Modifications, Change Orders or Addenda increase or decrease the total contract price. The sum of each bond shall be in an amount equal to the completed contract price at the completion of the Work.

3. OWNER does not provide any release of Performance Bonds or Payment Bonds. The bonds are in effect throughout all periods during which a suit may be brought under the provisions of applicable law.

D. By submitting a Bid, Bidder represents that the matters stated therein are true and correct.

PART 2 BIDDING PROCEDURES

2.1 INTERPRETATIONS AND ADDENDA

A. All requests for interpretation of the Contract Documents shall be made in writing and delivered to the OWNER or ENGINEER no later than seven (7) calendar days prior to opening of Bids. In the OWNER’s or ENGINEER's discretion, OWNER or ENGINEER will send the written interpretation to all persons receiving a set of Bid Documents in the form of an Addendum. If the OWNER or ENGINEER does not respond to a Bidder's request for interpretation the Bidder shall comply with the intent and terms of the Contract Documents.

B. No oral interpretations shall be made to any Bidder. The OWNER shall not be responsible for or bound by any statements, interpretations, explanations, representations, conclusions or assumptions made by any party, whether oral or written, except for written statements that are issued in an Addendum by the ENGINEER to all prospective bidders.

C. Each statement made in an Addendum is part of the Contract Documents at the location designated in the Addendum. A statement issued in an Addendum shall have the effect of modifying a portion of the Bid Documents when the statement in the Addendum specifies a particular section, paragraph or text and states that it is to be so modified. Only the specified section, paragraph or text shall be so modified, and all other portions of the Bid Documents shall remain in effect.

D. Bidders shall acknowledge receipt of all Addenda in the space provided on the Bid Form.

E. Except to postpone the Bid opening, no Addenda shall be issued within 48 hours of the Bid opening.

2.2 EQUIPMENT AND MATERIAL OPTIONS PRIOR TO BID OPENING

A. If a Bidder or Supplier wishes to supply a product other than that identified in the Contract Documents, said Bidder or Supplier shall submit a written request for approval to the OWNER or ENGINEER at least ten (10) calendar days prior to the date set for opening of bids.

B. The procedure for submission of any such product option shall be as set forth in Article 6.4 of the General Conditions. It is the sole responsibility of the Bidder or Supplier to submit complete descriptive and technical information so that OWNER or ENGINEER can make a proper appraisal.

C. OWNER or ENGINEER’s failure to act upon such a request within five (5) days after receipt shall be deemed a denial thereof.

D. Any such approval is at the sole discretion of the OWNER or ENGINEER and will be in the form of an Addendum issued to all Bidder's holding Bid Documents indicating that the additional equipment or materials are approved as equal to those specified for the Project.

E. The Construction Contract, if awarded, will be on the basis of materials and equipment specified in the Drawings and Specifications and any changes permitted in any Addenda.

2.3 BID SECURITY

A. **Amount of Bid Security**: A Bid Security must accompany each Bid. The total amount of the Bid on which Bid security is to be based shall be the sum of all items of the Bid constituting the maximum amount of the possible award to the Bidder. The Bid Security amount must equal at least five (5) percent of the total amount of the Bid.

B. **Form of Bid Security**: The Bid Security may be in the form of a certified check, cashier's check, cash, or Bid Bond. No other form of Bid Security will be accepted. A Bid Bond must be issued by a licensed Utah agency on behalf of a surety company licensed to do business in the State of Utah. A cashier's check must be drawn on a bank doing business in the State of Utah and made payable to OWNER. If a cashier's check is used in lieu of a Bid Bond, or if the Bid Bond does not specifically so provide, a certificate from an approved surety company guaranteeing execution of performance and payment bonds in the full amount of the bid must accompany the bid.

C. **Purpose of Submission**. By submitting a Bid Bond Bidder assures OWNER it will take all steps necessary to properly execute the Contract Documents.

D. **Return of Bid Security**: OWNER will return Bid securities to Bidder within seven (7) days after award of the Construction Contract. Bid Bonds and cashier's checks of all Bidders will be held until the Construction Contract is awarded or all bids have been rejected. The liability of OWNER in regards to the checks shall be limited only to the return of the checks.

E. **Default**: In the event of failure or refusal of the Bidder to timely provide subcontractors and suppliers reports as provided herein or to enter into the Construction Contract and the delivery to the OWNER a Performance Bond, Payment Bond and any other Bonds or documents required by the Contract Documents after Notice of Award by the OWNER, the Bidder forfeits the sum of the Bid Bond or cashier's check as liquidated damages to the OWNER.

2.4 COMPLETING BID DOCUMENTS

A. The General Conditions identify all forms comprising the Bid Documents. Additional copies may be obtained from the OWNER or ENGINEER. The Bidder shall make no stipulations or alterations on the Bid forms. The Bidder must use and execute only the Bid Form and Bid Schedules provided in the Contract Documents. The Bidder shall complete and submit the separate, unbound Bid Form, Document 00 41 43 and the Bid Bond, Document 00 43 13 provided.

B. The Bidder must fill in all items in the Bid Form in ink or by typewriter. If applicable, furnish both the unit and total costs for each item. The total Bid price is the full price for the performance of all Work under the Contract Documents. Bidder shall initial in ink any corrections, interlineations, alterations, or erasures made by the Bidder on Bidder's entries in the Bid Documents.

C. Any work or material which is specified in the Contract Documents or which is necessary because of the nature of the Work, but which is not listed separately in the Bid Schedule shall not be measured or paid for separately. The cost of such work or material shall be considered as included in the Contract Price.

D. Bids by corporations must be executed in the corporate name by a corporate officer authorized to sign, and must be properly attested to as an official act of the corporation. At the OWNER's request, authority to sign shall be submitted.

E. Bids by partnerships, joint ventures, or limited liability companies must be executed in the partnership, joint venture, or limited liability company name and signed by a partner, joint venturer, or manager whose title and official address must be shown. If a partnership, joint venture, or limited liability company is the low bidder, the partnership, joint venture, or limited liability company must also submit evidence to the OWNER of the responsibility of the partnership, joint venture, or limited liability company as a bidder in the manner directed by the ENGINEER.

F. Where the Bidder is wholly owned subsidiary of another company, the Bid must so state, and the owner or parent corporation also must agree to sign and be bound with the Bidder.

G. All names must be typed or printed under or near the signature. Signatures shall be in longhand.

H. The Bid shall contain an acknowledgment of receipt of all Addenda. The Addenda numbers must be filled in on the Bid Form.

I. The Bidder's address, telephone number, and facsimile number for communications regarding the Bid must be shown on the first page of the Bid Form.

J. The divisions and sections of the specifications, and the identifications of any Drawings, shall not control Bidder in dividing the Work among subcontractors or suppliers, or delineating the Work to be performed by any specific trade.

K. The base Bid and alternates shall include all Work required to be performed by the Contract Documents.

2.5 CONFLICT OF INTEREST, SUBCONTRACTORS

A. Conflict of interest pertaining to Subcontractors is described in paragraph 6.5H of the General Conditions.

B. Bidder shall not subcontract more than 50 percent of the dollar value of the total contemplated Work (exclusive of the supply of materials and equipment to be incorporated in the Work) without OWNER's prior written approval.

2.6 SUBMISSION OF BIDS

A. Bids shall be submitted at the time and place indicated in the Invitation to Bid and should be enclosed in a sealed envelope, marked with the Construction Contract name and number, the name and address of the Bidder, and the date and the opening time for Bids. If the Bid is sent through the mail or other delivery system the sealed envelope should be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it. It is the sole responsibility of the Bidder to deliver the Bid before the scheduled time. Bids received after due date and time will not be accepted.

B. Bidder will make no recapitulations, stipulations, alterations, alternate submissions, or modifications in any manner to any of the Contract Documents.

C. Bidder must submit a Bid by completing all of the Bid Form documents, which are:

1. The Bid portion of the Bid Form which is included in these Contract Documents, which shall be in the form of a lump sum, or in the form of unit pricing pursuant to the Bid Schedule, as called for in the Bid Form.

2. The Bid Security.

D. Alternate bids, other than those called for in the Bid Form, will not be considered.

E. No oral, telegraphic, telephonic, facsimile or modified bids will be considered.

2.7 MODIFICATION AND WITHDRAWAL OF BIDS

A. At any time prior to the opening of Bids, Bids may be modified or withdrawn if a written notice of modification or withdrawal is signed by Bidder and delivered to the place where Bids are to be submitted. Bid Security will be returned upon proper withdrawal of a Bid prior to the time for Bid opening.

B. Within 24 hours after Bids are opened, any Bidder may file written notice with OWNER that there was a substantial mistake made in the preparation of its Bid. Bidder must thereafter promptly demonstrate Bidder's mistake. The OWNER has sole discretion to determine whether to permit any modification or withdrawal or the return of any Bid Security.

C. When it appears a mistake has been made, or when the OWNER desires an assurance of any matter, the OWNER may request a Bidder to confirm the Bid in writing.

2.9 BIDS SUBJECT TO ACCEPTANCE FOR 30 DAYS

A. All bids remain subject to acceptance for 30 days after the day of the Bid opening. OWNER may, in its sole discretion, release any Bid and return the Bid security prior to that date.

PART 3 EVALUATION AND AWARD

3.1 SUBMITTALS REQUIRED FOR EVALUATION

A. After Bid opening, the Bidder, whose Bid is under consideration, must submit the following at the times specified:

1. **Bidder Status Report**: Document 00 45 43. The Bidder shall submit this form within 24 hours of Notice of Award.

2. **Subcontractor and Supplier Report**: Document 00 45 13. The Bidder shall submit this report form within 24 hours of Notice of Award, or sooner if requested by ENGINEER.

3.2 EVALUATION OF BIDDER'S QUALIFICATIONS

A. Within seven (7) calendar days of OWNER’s or ENGINEER's request, a Bidder, whose Bid is under consideration for award shall submit to the OWNER or ENGINEER the following information for the Bidder. OWNER or ENGINEER may request like information on Bidder's Subcontractors, Bidder's Suppliers or any other information the OWNER or ENGINEER may require.

1. A current financial statement for the Work (as provided to bonding company);

2. A chronological list of "in progress" and "completed" construction work done by Bidder during the last 3 years; including project name, address, owner, contract name, and current telephone number;

3. Present construction commitments other than items listed in paragraph 2 above;

4. Proposed organizational structure such as firm ownership, project manager, progress scheduler, and superintendent for the Work of this Project;

5. Owned and rented equipment which is to be used to do the Work;

6. Investigations, arbitration, litigation or claims which are pending, threatened, settled or otherwise disposed of within the last three (3) years;

7. Evidence of ability to perform and complete the Work in a manner and within the time limit specified. As a minimum, identify specific experience on projects similar to the Work in physical size, cost, and commercial nature. If the work experiences of the project manager and superintendent designated to construct this project are different than that of the company, provide resumes of their work history. Include their actual project titles and indicate their actual responsibilities on each given project;

8. All matters consistent with federal, state and local Laws and Regulations; and

9. Such other data as may be called by the OWNER or ENGINEER.

B. If Bidder believes any information should be held confidential for business reasons, Bidder must submit a written claim of business confidentiality for that particular information and include a specific statement of the reasons supporting the claim pursuant to Utah Code Ann. § 63-2-101, *et seq.*

C. Untimely response or failure to provide the requested information by Bidder will release OWNER of any obligation to further consider the Bidder's Bid.

3.3 EVALUATION OF BIDS

A. OWNER reserves the right to reject any and all Bids or any part thereof; to award, any, all, or any number of Bid Schedule(s); to waive any informalities

in the Bid Schedule(s) and elsewhere; to negotiate and agree to contract terms with the successful Bidder; to disregard nonconforming, nonresponsive, unbalanced or conditional Bids; and to withhold the award for any reason deemed in the best interests of the OWNER, as solely determined by OWNER.

B. OWNER reserves the right to reject any Bid if OWNER believes that it would not be in the best interest of the Project or the OWNER. Without limitation, such rejection may be because the Bid is not responsive, or the Bidder is unqualified or of doubtful ability or the Bid or Bidder fails to meet any other pertinent standard or criteria established by OWNER, as solely determined by OWNER.

C. If the OWNER intends to make an award to a Bidder, a Notice of Award will be issued.

D. OWNER may consider all information which OWNER believes is relevant when evaluating a Bid, including, without limitation:

1. The qualifications and experience of the Bidder and of the Subcontractors, Suppliers, and other persons and organizations proposed (whether or not the Bid otherwise complies with the prescribed requirements).

2. Such alternates, unit prices and other data, as may be requested in the Bid Form, Bid Schedule, or written requests issued prior to OWNER's Notice of Award the Construction Contract.

3. Operating costs, maintenance requirements, performance data, and guarantees of ability to provide the required materials and equipment.

4. Corporate organization and capacity for any party.

5. Ability to perform and complete the Work in the manner and within the time specified.

6. Pending litigation.

7. The amount of the Bid.

8. Proper licensing to do the Work in compliance with licensing laws of the State of Utah for contractors and subcontractors.

9. All other relevant matters, consistent with OWNER's procurement code and administrative rules, OWNER's ordinances and program policies.

F. To establish qualifications of Bidder, OWNER may request such data indicated in the Bid Documents, conduct such investigations as OWNER deems appropriate, and consider any other information (whether obtained from the Bid, the Bidder, or any other source).

G. If the Construction Contract is to be awarded, it will be awarded to the most responsive, qualified, and responsible Bidder as determined by the OWNER. Alternates may be accepted depending upon availability of OWNER's funds and as determined by the OWNER. Accepted alternates will be considered in determining the most responsive, qualified, and responsible Bidder.

H. Bid Schedules will be evaluated as follows:

1. Discrepancies in the multiplication of quantities of Work items and unit prices will be resolved in favor of the unit prices. OWNER may correct Bid Schedule calculation errors accordingly.

2. Prices written out in words shall govern over prices written out in numbers.

3. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

4. Bids shall not contain any recapitulations of or changes in the work to be done.

I. The OWNER, in the OWNER’s sole discretion, shall make determinations as to disqualification of Bidders or rejection of Bids. Such matters may include, without limitation, submission of more than one Bid by the Bidder (whether under the same or different names); evidence of collusion among Bidders; other commitments of Bidder which, in the OWNER’s sole judgment, might hinder the Work; previous defaults, Bid irregularities when not waived in the best interests of the OWNER, delays or poor performance by Bidder on any project; official action against Bidder; and any other cause which, in the OWNER’s sole discretion and judgment, is sufficient to justify disqualification of a Bidder or rejection of a Bid.

3.4 **ADJUSTMENTS TO THE COST OF THE WORK AFTER OPENING OF BIDS**

A. The Contract Price identified in the Agreement represents the cost of the work which is to be paid by the OWNER to the CONTRACTOR.

B. Adjustments to the Contract Price which are agreed to between the OWNER and the successful Bidder shall be effected by signing an Agreement Supplement.

3.5 SUBSTITUTIONS

A. The Construction Contract, if awarded, will be on the basis of materials and equipment described in the Drawings, Specifications and any Addenda.

B. After the Effective Date of the Construction Contract, the procedure for submitting an application for substitution is set forth in Article 6.4 of the General Conditions.

3.6 SUBMITTALS REQUIRED FOR AWARD OF CONTRACT

A. The OWNER's requirements as to performance and payment Bonds are as set forth in the Supplemental General Conditions (Document 00 73 00). Specific requirements are set forth in the Performance Bond (Document 00 61 13.13) and the Payment Bond (Document 00 61 13.16).

1. The form of the Bonds should be carefully examined by the Bidder.

2. When the successful Bidder delivers the executed Construction Contract to OWNER, it must be accompanied by the required Performance and Payment Bonds.

B. When a determination has been made to award the Construction Contract, Bidder is required, prior to the award or after the award, or both, to furnish such other information as the ENGINEER requests.

3.7 SIGNING OF AGREEMENT

A. Within 10 working days after OWNER gives Notice of Award the Construction Contract to the successful Bidder, the Bidder shall pick up, sign and return to OWNER, the required number of copies of the Construction Contract, bonds and insurance. A minimum of two (2) originals will be signed and returned to the OWNER. One executed original will be returned to the Bidder. Bidder shall comply with all execution requirements.

B. All of Bidder’s executions and submittals must be delivered to the OWNER before OWNER will execute the Construction Contract. The Construction Contract will not be deemed awarded and shall not be binding on the OWNER until it has been approved and executed by the OWNER, and a fully executed copy is formally delivered to the CONTRACTOR. The OWNER reserves the right to rescind its Notice of Award without liability, except for the return of Bidder’s Bid Security, at any time before the

Construction Contract has been fully executed by all parties and delivered to the CONTRACTOR.

C. Transfers, delegations or assignments of interests in the Contract Documents are prohibited, unless prior written authorization is received from the OWNER.

F. At the time of Bidding, and the signing of the Agreement, and at all times during the Work, Bidder shall be properly licensed to do the Work and shall be in compliance with the license laws of the State of Utah, and Herriman City. The Bidder shall also require all Subcontractors to do the same.

G. If a Bidder fails to fully and properly execute the Construction Contract and provide all submittals required therewith within ten (10) days after the date of the Notice of Award, the OWNER may elect to rescind the Notice of Award, and the OWNER shall be entitled to the full amount of Bidder's Bid Security, not as a penalty, but in liquidation of and compensation for damages sustained. In the OWNER's sole discretion, a Notice of Award may then be provided to another bidder whose Bid is most advantageous to the OWNER, price and other factors considered.

END OF DOCUMENT

civilsolutionsgroup inc.

GEOTECHNICAL ENGINEERING INVESTIGATION

Ridgeline Park Geotechnical Investigation

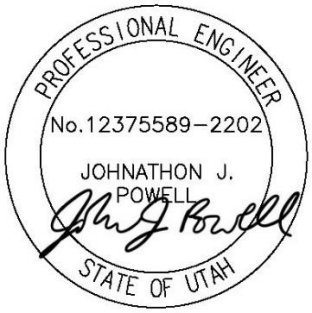
Prepared For:

Blu Line Designs
Attn: Rob Donigan
8719 S Sandy Parkway
Sandy, UT 84070

Prepared By:

Civil Solutions Group, Inc.
John Powell, P.E.
Aaron Mackliet, Geotechnical Technician
498 West 100 South
Providence, Utah 84332

Original Submittal: April 18, 2023
Job Number: 22-270



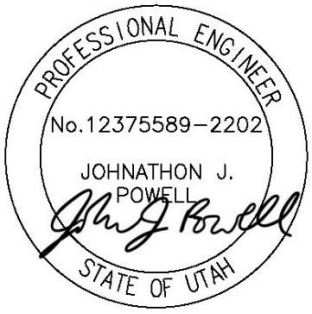
RE: Ridgeline Park Geotechnical Investigation

Dear Mr. Donigan,

Per your request this geotechnical engineering investigation is submitted for the subject property located approximately at 52965 S Ropelato Drive in Nibley, UT. This report contains the findings of the field investigation and the analysis conducted by Civil Solutions Group (CSG). This report also contains recommendations pertaining to construction and design of earth related portions of this project.

CSG completed the field investigation on January 6, 2023, February 3, 2023, and March 20, 2023 at which time nine test pits were excavated, examined, and recorded in detail. The test pit locations were selected based upon the proposed location of the building footprint and other site features. CSG recommends the site is suitable for proposed construction within the parameters defined within this report. Thank you for the opportunity to provide these services to you.

Sincerely,



John Powell, P.E.
Civil Solutions Group, Inc.

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Executive Summary

A geotechnical study was performed for the subject property at 52965 S Ropelato Drive in Nibley, UT. Our scope of services included excavating nine test pits designated TP-1 to TP-9. The test pits were excavated with a backhoe and mini-excavator and advanced to a maximum depth of 7.5-feet below existing site grade. All field work was contained in the proposed development area and was completed on January 6, 2023, February 3, 2023, and March 20, 2023.

The findings and recommendations generated from this exploration are summarized below:

- Onsite Soil – The site is composed mostly of poorly graded sandy gravel, silty sand, and low plasticity clay. Layers of low plasticity silt were encountered during the field investigation. Groundwater was encountered at 2.5-feet below existing grade.
- Foundations - The planned structure should be supported entirely on continuous spread footings or spot footings. The recommended bearing capacity of in-situ soil is 1,500 pounds per square foot.
- Seismic Considerations - The 2018 International Building Code Seismic Design Category for this site is Category D (Risk Category II), with a soil site class of E.
- Pavement - Minimum pavement sections are as follows:

Section	Recommended Pavement Sections (Inches)				
	Asphalt Concrete	Portland Cement Concrete	Untreated Base Course	Granular Borrow	Total
Automobile Parking	3.0	-	8.0	-	11.0
	-	5.0	6.0	-	11.0
Dumpster Pads	-	6.0	6.0	-	12.0

This summary should be used in conjunction with the entire report for design purposes. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein. The entire report should be read for an understanding of the report limitations.

Introduction

General

Civil Solutions Group, Inc. (CSG) was contacted by Mr. Donigan and was asked to conduct a geotechnical engineering investigation on the subject property located at 52965 S Ropelato Drive in Nibley, UT. The general location of the site may be seen in Figure 1, Vicinity Map. A more detailed location of the site showing the proposed development and surrounding improvements is shown in Figure 2, Site Map. It was described that the proposed construction for the Ridgeline Park is anticipated to be parking lots, walkways, sports courts, pavilions and a small restroom.

Objectives and Scope

The objectives and scope of our study were defined between Mr. Donigan and Mr. Weston Southwick of CSG. In general, the objectives of this study were to:

- Define and evaluate subsurface soil and groundwater conditions across the site
- Provide foundation, earthwork, drainage, and geo-seismic recommendations

To accomplish these objectives, our scope has included the following:

- A field program consisting of the excavating, logging, and sampling of the nine test pits
- A laboratory testing program
- An office program consisting of correlating available data, engineering analyses, and report preparation

Authorization

CSG was authorized to proceed with this scope of work through an executed contract returned to our office by Mr. Donigan of Blu Line Designs. The executed contract was dated August 6, 2022.

Professional Statements

CSG certifies that our professional services have been performed, our findings developed, and our recommendations prepared in accordance with generally accepted engineering principles and practices in this area at this time. Supporting data upon which our recommendations are based is presented in the subsequent sections of this report. Recommendations made herein are governed by the physical properties of the soils encountered in the exploration test pits, observed and projected groundwater conditions, and the layout and design data as summarized in the Proposed Construction section of this report. If subsurface conditions other than those described in this report are encountered and/or if design and layout changes are implemented, CSG must be informed so that our recommendations can be reviewed and amended, if necessary.

Proposed Construction

The proposed construction is as follows: A restroom, several pavilions, sports courts, and parking areas. If structural engineering plans are different than assumed, they should be provided to our office for review.

The site development will likely require moderate earthwork. It is estimated that in certain areas 4 to 5-foot cuts and/or fills will be required to achieve site grades and tie in-to the adjacent properties.

Traffic is assumed to consist of automobiles and occasionally medium to heavy weight trucks.

Column and wall loadings are anticipated to be on the order of 20-45 kips and 1-3.75 kips per lineal foot respectively.

Existing Site Conditions

General

The site lies approximately at 52965 S Ropelato Drive in Nibley, UT. The Existing property contains an old barn. The surrounding property is a residential subdivision. The surface and subsurface soils that were explored appeared to be free of hazardous debris and other foreign objects.

Site Topography & Drainage Features

The site has a gradual slope upwards to the north with a high spot on the northwest portion of the site. On-site there was a creek running east two west through the center of the site. There was also a significant amount of standing water on either side of the creek. were no other springs, streams, canals or standing water observed at the time of the site visit.

Site Soils

The soil conditions encountered in each of the nine test pits, to the depths explored, were relatively similar. In test pit number 5 (TP-5), there was approximately 1-foot of topsoil with roots extending from vegetation. From approximately 1-foot beneath existing grade to 3-feet we encountered dark gray low plasticity clay. From 3-feet to full depth explored, 6-feet, we encountered dark gray poorly graded gravel with sand. The remaining test pits throughout the site had similar characteristics as B-5. Groundwater was encountered at 2.5-feet. Soil encountered during the investigation can be referenced in the Soil Logs in the Appendix of this report. Materials encountered in the test pits are anticipated to exhibit strength and compressibility characteristics under the anticipated loading range.

Subsurface Exploration and Testing Programs

General

To define and evaluate the subsurface soil and groundwater conditions across the site, nine test pits were excavated to depths of up to 7.5-feet below existing grade. The test pits were excavated using a CASE 580sk Turbo backhoe and bobcat e55 mini excavator. Soil sampling was done by hand with the aid of the backhoe or mini excavator to retrieve disturbed samples of the in-situ soil. Locations of the test pits are presented in Figure 2.

Field Program

Due to the onsite conditions through winter, the field portion of our study was conducted on January 6, 2023, February 3, 2023, and March 20, 2023. Continuous logs of the subsurface findings were created and maintained as part of the field program. The field portion of our study was under the direct control and continual supervision of an experienced member of our geotechnical staff. Field classifications were logged, and any adjustments made once the laboratory data and analyses were received.

The CSG geotechnical team collected disturbed samples of typical soils that were found in the test pits. The disturbed samples were taken using bagged grab samples.

Graphical depictions of the subsurface findings are shown in the Soil Logs contained within the Appendix of this report.

Laboratory Program

CSG partnered with RB&G Engineering to conduct a laboratory testing program on the samples retrieved from the sites. This laboratory testing program was conducted to provide data necessary for our engineering analyses. The program included moisture, partial gradation (sieve) analysis, Atterberg limits (if applicable), and chemical tests. The following describes the tests and summarize the test data. Samples from the field will be maintained in our office for a period of 90 days at which time they will be disposed of unless a written request is received from Blu Line Designs that they should be retained.

Moisture and Density

Moisture and density tests were performed on selected relatively undisturbed samples collected from the test pits. Understanding the relationship between moisture and density in the in-situ soil aids in classifying the soils. The results of these tests are presented on the Soil Logs found in the Appendix.

Sieve Analysis

Gradation tests (sieve analysis) were conducted on disturbed samples which were collected from the site. The gradation test aids in classifying the soils and can provide general index parameters. Gradation tests aid the design team in determining the overall composition of the soil and behaviors that the soil may exhibit under certain situations. The results of the tests are shown in Table 1 below:

Table 1 - Gradation & Soil Classifications

Test Pit Sample No.	Depth (feet)	Percent Passing #200 Sieve	Soil Classification
TP-2.1	3.5 – 4	2	GP
TP-4.1	4.5 – 5	78	CL
TP-6.3	6.5 – 7	43	SM
TP-8.1	5.5 – 6	57	ML

Atterberg Limits

Atterberg Limits were performed on relatively undisturbed samples to understand the plastic and liquid limits of the cohesive soil. Atterberg limits allow the design team to understand the potential for the soil to shrink and expand based on water content. The results are presented in Table 2 below:

Table 2 - Atterberg Limits

Test Pit Sample No.	Depth (feet)	Classification	Liquid Limit (LL)	Plastic Limit (PL)	Plasticity Index (PI)
TP-4.1	4.5 – 5	CL	28	20	8
TP-6.3	6.5 – 7	SM	--	--	NP
TP-8.1	5.5 – 6	ML	--	--	NP

Chemical

To determine if the site soils will react detrimentally with concrete, a chemical sulfate test was performed on a representative sample of the natural soils at approximately the depth of the soil that will come into direct contact with concrete improvements for the proposed development. The results of the chemical tests are shown in Table 3 below:

Table 3 - Chemical Properties of Soil

Test Pit Sample No.	Depth (feet)	Sulfate (mg/kg)
TP-6.1	2-2.5	381

Discussions & Recommendations

Summary of Findings

It is recommended that the owner have a CSG field engineer or a qualified assistant oversee the site work, especially the footing excavation and preparation. Also, the building code requires inspection and reports on all structural site work.

Detailed discussions pertaining to earthwork, structural considerations, geoseismic setting, and groundwater are included in the following sections:

Earthwork

Site Preparation

Initial site preparation will consist of the removal of surface vegetation, topsoil, root balls, sod or any other deleterious materials extending at least three feet beyond the perimeter of all areas to be developed. Non-engineered fills will be completely removed three feet beyond the extents of all spread and continuous footings, rigid pavement areas, floor slabs and other areas that require a stabilized foundation. Stripped materials consisting of vegetation and organic materials should be wasted from the site or used to revegetate landscape areas.

Non-engineered fills may remain in areas where flexible pavements are to be placed if they are properly prepared. Proper preparation will consist of scarifying and moisture conditioning the upper nine inches and recompacting to the requirements of structural fill. It should be noted that compaction of fine-grained soils (silts and clays) as site grading fill will be very difficult, if not impossible, during wet and cold periods of the year.

The exposed natural subgrade should be proof-rolled prior to the placement of structural site grading fill, footings, floor slabs, or any other structural improvement made to the site. The proof-roll should be completed by driving a loaded piece of construction equipment, mounted with rubber tires, over the exposed natural subgrade surface at least twice. A CSG field engineer should oversee the proof roll and provide recommendations as needed. Soft spots should be completely excavated and removed if they are discovered. The soft spots should be replaced with granular structural fill. It is not anticipated that removal depth would be more than 2 vertical feet. If an excavation of more than 2 vertical feet is required, CSG should be notified to provide further recommendation.

In flexible pavement areas, unsuitable materials encountered during compaction and proof-rolling operations must be removed to a maximum depth of two feet and replaced with compacted granular structural fill.

Although evidence of underground facilities such as utilities, septic tanks, cesspools, basements, etc. was not observed during the field investigation, such features could be encountered during construction. If unexpected fills, debris or underground facilities are encountered, such features should be removed, and the excavation thoroughly cleaned prior to backfill placement and/or construction.

Temporary Excavations

All temporary excavations should follow OSHA Sloping and Benching – 1926 Subpart P App B requirements, which take precedence over any recommendations presented in this report.

Temporary excavations in cohesive soil, above or below the water table, not exceeding four feet in depth, may be excavated with nearly vertical sideslopes. Excavations within loose and/or cohesionless soils will be very difficult as they tend to flow into the excavation. They will require very flat sideslopes and/or shoring, bracing and dewatering.

All excavations must be inspected periodically by qualified personnel. If any signs of instability, excessive sloughing or other signs of potential failure are noted, immediate remedial action shall be initiated.

Structural Fill

The on-site native soils were either poorly graded sands and gravels, or finer by nature and cannot be used as structural fill. However, the on-site soils can be used as fill in landscape areas that are not expected to carry a load. The use of fine-grained soils (silts and clays) as landscape fill will be very difficult, if not impossible, during wet and cold periods of the year. Proper moisture control and conditioning will be required.

Fine-grained soils (silts and clays) are not recommended as structural fill in confined areas, such as around foundations and within utility trenches. This fill material should be composed of granular material.

All imported granular structural fill should consist of a fairly well-graded mixture of sand and gravel containing less than 15 percent fines (percent by weight of material passing the No. 200 sieve).

To stabilize soft subgrade conditions (if required), a mixture of coarse gravels and cobbles (stabilizing fill) should be utilized. A layer of 12 to 18 inches thick of stabilizing fill is typically sufficient to stabilize most soft/disturbed areas.

Table 4 shown below is indicative of the material that should be used as structural fill and road base throughout the site:

Table 4 – Structural Fill Gradation Requirements

Fill Type *	**Application**	**Requirements**		
		Gradation		**Plasticity**
		Size	**% Finer by Weight**	
Structural Fill	Required for all fill under foundations and floor slabs	3-inch No. 4 Sieve No. 200 Sieve	100 25 - 60 15-max	Liquid Limit 30-max Plasticity Index 6-max
Site Grading Fill	Fill in pavement and non-structural areas	4-inch No. 200 Sieve	100 35-max	Liquid Limit 36-max Plasticity Index 10-max
Stabilization Fill	Fill used to stabilize soft, potentially pumping subgrade	5-inch No. 200 Sieve	100 5-max	NA
Free Draining Granular Backfill	Retaining Walls	1½-inch 1-inch ½-inch No. 4	100 95 – 100 25 – 60 5-max	NA
Road Base	Fill used under the pavement sections	3/4” 3/8” No. 10 No. 40 No. 200	100 78-92 55-67 28-38 7-11	Non-Plastic

*All fill should consist of approved materials that are free of organic matter and debris. Frozen material should not be used, and fill should not be placed on a frozen subgrade. A sample of each material type should be submitted to the geotechnical engineer for evaluation.

Fill Placement and Compaction

All fill should be placed in lifts not exceeding 8 inches in loose thickness. Moisture should be adjusted to within ± 2% of optimum moisture content. Lifts will need to be compacted in thinner lifts if smaller compaction equipment is used. Structural fills should be compacted in accordance with the percent of maximum dry density as determined by the AASHTO T-180 (ASTM D-1557) compaction criteria and according to Table 5 below:

Table 5 - Fill Compaction Requirements

Location	Total Fill Thickness (feet)	Minimum Percentage of Maximum Dry Density
Beneath an area extending at least 3 feet beyond the footprint of a structure	0 to 8	95
Beneath pavements and travelled ways	0 to 8	95
Landscaped areas or areas not expected to carry a load	0 to 5	85
Landscaped areas or areas not expected to carry a load	5 to 8	92
Road Base	-	96

Prior to placement of fills, the subgrade must be prepared as discussed in the Site Preparation section of this report. In confined areas, subgrade preparation should consist of the removal of all loose and disturbed soils. Fill should be tested frequently for moisture content and compaction during placement. Should the results of the in-situ density tests indicate the specified moisture or compaction limits have not been met, the area represented by the test should be reworked and retested as required until the specified compaction is achieved. This may require adjustment of the moisture content.

Utility Trenches

We recommend that all utility trenches on-site or as a part of this site, should utilize a Type A-1a or A-1b (AASHTO Designation) soil as backfill material. The on-site materials can be used for trench backfill if they meet these classifications and are properly moisture conditioned. This should be verified by the materials testing agency. All utility trenches which will ultimately bear structural loads should be compacted at the structural density requirements established in Table 5.

Drainage

Positive drainage should be provided during construction and maintained throughout the life of the development. Infiltration of water into utility trenches or foundation excavations should be prevented. Planters and other surface features which might retain water in areas adjacent to the buildings or pavements should be sealed, mechanically drained, or eliminated. In areas where sidewalks or paving do not immediately adjoin the structure, we recommend that protective slopes be provided with a minimum grade of approximately five percent for at least 10 feet from perimeter walls. Backfill against footings, exterior walls, and in utility and sprinkler line trenches should be well compacted and free of all construction debris to reduce the possibility of moisture infiltration. Roof runoff should be collected in rain gutters and downspouts. Downspouts, roof drains or scuppers should discharge into extensions when the ground surface beneath such features is not protected by exterior slabs or paving to divert collected water a minimum of 10 feet away from structures. Sprinkler systems should not be installed within five feet of foundation walls. Landscaped irrigation adjacent to the foundation systems should be minimized.

Structural Considerations

Spread and Continuous Wall Foundations

It is understood that the proposed structure will be supported on conventional spread and continuous wall foundations. These foundations should be established on undisturbed native soils. Under no circumstances shall footings be placed overlying non-engineered fills, loose soils, frozen soils, soil containing foreign debris, and any other deleterious material. Unsuitable material must be removed and replaced with an adequate structural fill as discussed in this report. For structural fill replacement beneath footings, the width of the structural fill shall be equal to width of the footing plus one foot on each side for each foot of fill thickness. For example, if the depth of structural fill is three feet, then three feet of structural fill needs to extend past the edge of the footing on each side.

Due to the shallow groundwater on site, it is recommended that helical piers be used for the foundation of the pedestrian boardwalk. The helical pier design and installation would need to be coordinated with a helical pier installation company as it is a design build item.

For design, the following parameters are provided:

Table 6 - Structural Design Parameters

Design Element	Standard
Recommended minimum depth of embedment for frost conditions	30-inches
Recommended minimum depth of embedment for non-frost conditions	15-inches
Recommended maximum bearing capacity of in-situ soil	1,500 pounds per square foot
Recommended width for continuous wall footings	18 to 30-inches
Recommended width for isolated spread footings	36 to 66-inches
Recommended bearing pressure increase for seismic loading	33%
Coefficient of friction between footing and native clay soils	0.35
Coefficient of friction between footing and native sandy soils	0.45

Settlement of foundation elements are expected to be on the order of 1" or less with approximately 50% occurring during construction. This settlement is expected if the project is constructed in accordance with recommendations found within this report.

Lateral Resistance

Passive resistance provided by properly placed and compacted native material fill above the water table may be considered to a fluid with a pressure of 360 pounds per cubic foot (K_p =3.0). Active resistance may be considered equivalent to a fluid with a pressure of 40 pounds per cubic foot (K_a = 0.33). Lateral earth pressure can be assumed to be much higher if material behind structural walls is not free draining. Passive and active resistance pressures will vary if groundwater is encountered. At this site, groundwater should be below the anticipated depth of foundations and therefore should not affect lateral resistance.

Floor slabs

Due to the intended use and anticipated loading, floor slabs should be constructed with a minimum of 4" of concrete (4,000 psi, air-entrained – 6% ± 1%) over 4" of clean gravel material. The subgrade material shall be properly prepared as discussed previously in this report. Under no circumstances should floor slabs be established over non-engineered fill, loose or disturbed soils, sod, rubbish, construction debris, other deleterious materials, frozen soils, or soils with ponded water. If constructed in accordance with this section, settlements of at-grade floor slabs supporting loads of 200 pounds per square foot should be on the order of ¼" or less.

Where appropriate, saw-cut control joints should be placed in the slab to help control the location and extent of cracking. For additional recommendations refer to the ACI Design Manual. Joints or any cracks that develop should be sealed with a water-proof, non-extruding compressible compound specifically recommended for heavy duty concrete pavement and wet environments.

The use of a vapor barrier should be considered beneath concrete slabs on grade that will be covered with wood, tile, carpet or other moisture sensitive or impervious coverings, or when the slab will support equipment sensitive to moisture. When conditions warrant the use of a vapor barrier, the slab designer should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding the use and placement of a vapor barrier.

Pavements

Pavement sections were designed using AASHTO 93 design methodologies and assumed traffic volumes. Based on laboratory test results and N-values obtained from the SPT tests during the field exploration a CBR value of 5% was used for the underlying subgrade soils. This resulted in a subgrade resilient modulus (M_{RSG}) of 7,157 pounds per square inch. The anticipated traffic loading consists of mostly automobiles with the occasional medium to heavy weight truck. The following design traffic (18-k Equivalent Single Axle Loads) were assumed.

Section	Design ESALs*
Automobile Parking	7,000

*If the traffic anticipated on site is different from that assumed, Civil Solutions Group should be notified.

Considering the underlying subgrade material and anticipated traffic and loading, the following pavement sections are recommended as shown in Table 7:

Table 7 - Pavement Recommendations

Section	Recommended Pavement Sections (Inches)				
	Asphalt Concrete	Portland Cement Concrete	Untreated Base Course	Granular Borrow	Total
Automobile Parking	3.0	-	8.0	-	11.0
	-	5.0	6.0	-	11.0
Dumpster Pads	-	6.0	6.0	-	12.0

The rigid pavement section is for non-reinforced Portland cement concrete. Concrete should be designed in accordance with the American Concrete Institute (ACI). The concrete should have a minimum 28-day unconfined compressive strength of 4,000 pounds per square inch and contain 6 percent ± 1 percent air entrainment.

Pavement Maintenance

All paved areas should have adequate crown and slope to provide positive drainage and prevent ponding of surface water and infiltration below the pavement section. Water collection devices such as gutters and ditches should be incorporated into the parking lot design to prevent percolation of surface water below the pavement section.

Pavement sections have not been designed to support construction equipment. As such, the contractor should protect pavement areas from damage that may result from construction traffic.

The pavement sections provided in this report are minimums for the given design criteria. Periodic maintenance is critical to the long-term performance of the pavement sections. A maintenance program that includes surface sealing, joint cleaning and sealing, joint grinding, repair and replacement of cracked slabs and timely repair of cracks and deteriorated areas will be critical to the pavement meeting its design life.

Soil Corrosiveness

The soil was sampled for sulfate levels at soil depths that will come into direct contact with the footings and foundations. These chemical levels are shown in Table 3 for reference.

Cement Use

Type I or IA mixes may be used in the design of these improvements. The soil tested contained a negligible amount of water soluble sulfates. Based on our test results, concrete in contact with the in-situ soils will have a low potential for sulfate reaction and therefore the mix types of I or IA are acceptable. Other types of mixtures may be used by the design team if other strength/functionality parameters are desired.

Construction Considerations

On most project sites, the site grading is generally accomplished early in the construction phase. However, as construction proceeds the subgrade may be disturbed due to utility excavations, construction traffic, desiccation, rainfall, etc. As a result, the floor slab or footing subgrade may not be suitable for placement of crushed gravel and concrete and corrective action will be required. We recommend areas underlying floor slabs and footings be rough graded and then thoroughly proof-

rolled with a loaded tandem axle water or dump truck prior to final grading and placement of crushed gravel or concrete. Attention should be given to high traffic areas that were rutted and previously disturbed and to areas containing backfilled trenches. Areas where unsuitable conditions are located should be repaired by removing and replacing the affected material with properly compacted structural fill. All structural subgrade areas should be moisture conditioned and properly compacted to the recommendations in this report immediately prior to placement of the gravel and concrete.

Geoseismic Setting

Faulting

Based on a review of Utah Geological Survey fault maps, the site is approximately 2-miles west of the East Cache Fault Line, Central Section.

Soil Class

A site-specific seismic analysis was not a part of this scope of work, nor was it performed for the site at this time. The seismic values provided are determined using the ASCE 7 Hazard tool using the following inputs.

The soil site class is E (S_1 =0.357 g & S_S = 1.062 g), with a Seismic Design Category D (Risk Category II) in accordance with Chapter 20 of ASCE 7-16 and IBC 2018.

Liquefaction

The site is in an area that has been classified as high to moderate liquefaction potential by the Utah Geological Survey. Liquefaction requires water, seismic activity, and loose sandy soils. Due to the nature of the project, and the anticipated structures on site, a full liquefaction analysis was not completed.

Groundwater

Immediately following excavating operations, the groundwater was measured in each test pit. Seasonal and longer-term groundwater fluctuations on the order of one and one-half to three feet are projected, with the highest seasonal levels generally occurring during the late spring and early summer months. The groundwater measurements (as measured down from existing grade) are tabulated in Table 8 below:

Table 8 - Groundwater Depth

Test Pit Number	Time of Excavating (feet)
TP-1	4.5
TP-2	2.5
TP-3	3
TP-4	Not Encountered
TP-5	Not Encountered
TP-6	5.75
TP-7	5.5

TP-8	6.25
TP-9	4

Closure

CSG should be retained to provide observations during grading, excavation, foundation construction, and other earth-related construction activities related to this project. The conclusions and recommendations presented in this report are based on the results of the field and laboratory tests which, in our opinion, define the characteristics of the soils at this site in a satisfactory manner. However, this report does not reflect variations that may occur between test pits, across the site, or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. If during or after construction, conditions are encountered which appear to be different than those presented in this report, it is requested that our office be advised, in order that appropriate action be taken.

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. Any persons using this report for bidding or construction purposes should perform independent investigations as they deem necessary to determine subsurface conditions. The scope of services for this project does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either express or implied, are intended or made. Site safety, excavation support, and dewatering requirements are the responsibility of others. If changes in the nature, design, or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless CSG reviews the changes and either verifies or modifies the conclusions of this report in writing.

Glossary/Explanation of Terms or Procedures

Throughout this report, we have used a number of words or phrases which may be unfamiliar in nature. Also, several procedural concepts have been mentioned repeatedly. For this reason, we have decided to define or discuss these items to better communicate with the reader(s).

Compaction and Lift Size - Contractors should be aware that there is direct relationship between lift size and size of the compacting equipment. The smaller the compactor, the smaller the maximum lift height. With "wacker" compactors, the maximum lift should be held at about 3-4-inches. With walk-behind trench compactors (2-tons or so), the lifts should be no more than 6-inches thick. Eight-inch lifts can be used with large ride-on devices (7-10-tons or greater) that roll and vibrate/pound. Hoe pack devices on track hoes or backhoes can compact 6-8-inch lifts depending on size. However, the maximum lift size should not exceed 8-inches for most compactors. Note: a lift is defined as the loose or un-compacted thickness of the soil layer being compacted

Groundwater level - The groundwater level is a "rough guess" of where the uppermost water level is in a soil. We look for the first sign of free water coming in from the trench walls or appearing on the soil. In the soil logs, the groundwater level is identified by a solid or darkened triangle with a wavy line below it.

Liquefaction - Loss of bearing strength of saturated and very fine-grained silts and sands during severe earthquakes. This strength-loss is due to the slow dissipation of pore pressure (due to low permeability) and the subsequent reduction of particle-to-particle contact induced by the shaking motion of the earthquake.

Piezowater or Piezometer - To measure the groundwater level after a soil test pit is excavated, a pipe (a piezometer) is placed in the pit and left for at least 48-hours. The bottom 12-inches of the piezometer is slotted and capped to keep soil from entering and plugging up the pipe. The piezometer is then backfilled. After 48-hours, the water level in the piezometer is recorded. This level is the piezowater level. It is often higher than the point where water is first seen in a test pit during excavation. The importance is that the piezometer level is the potential depth of the groundwater for a site location should a 'dig' be done at the site. However, this level may change over time depending on weather conditions (wet or dry years and periods); rust or mottling of the soils may indicate an historical level of the water. In the soil logs, the piezowater level is a line with an "open" triangle above it and a wavy line below the triangle. The "open" triangle signifies the fact that the overlying soil "cap" has been removed.

Topsoil - It is generally defined as surface soils (silts or clays) with greater than 2-percent organics; this soil is often dark brown to black in color. It generally has visible roots or organic matter and is highly compressible. Topsoil should never be used under a footing or load bearing structure; it is generally, too compressible and with loading, settles over time. It should be stockpiled for use in landscaped areas, used for wetland mitigation/re-seeding, as a pond liner, or exported from the site.

Undisturbed soil - This is soil in its natural state, undisturbed by past excavation, farming, construction, or perturbation of any type. It is a most important feature. Areas that have been filled are always considered disturbed. On the other hand, "cut" areas can be considered undisturbed if the soil was cut with a straight bladed bucket edge, and not tines. If soils are disturbed, and footings or walls will be bear on these soils, they must be re-compacted.

Non-Engineered Fill – Non-engineered fill material is non-native (imported) material that has not been tested in the lab for engineering properties nor has a record of proper placement and compaction. Therefore, it should not be used for structural fill. This material can be used if properly prepared, but Civil Solutions Group recommends any non-engineered material in which loads will bear on be tested prior to placement. Once placed, this material should be tested to ensure structural properties are met. Recommendations in this report are based upon the materials encountered during the field investigation.

Appendix

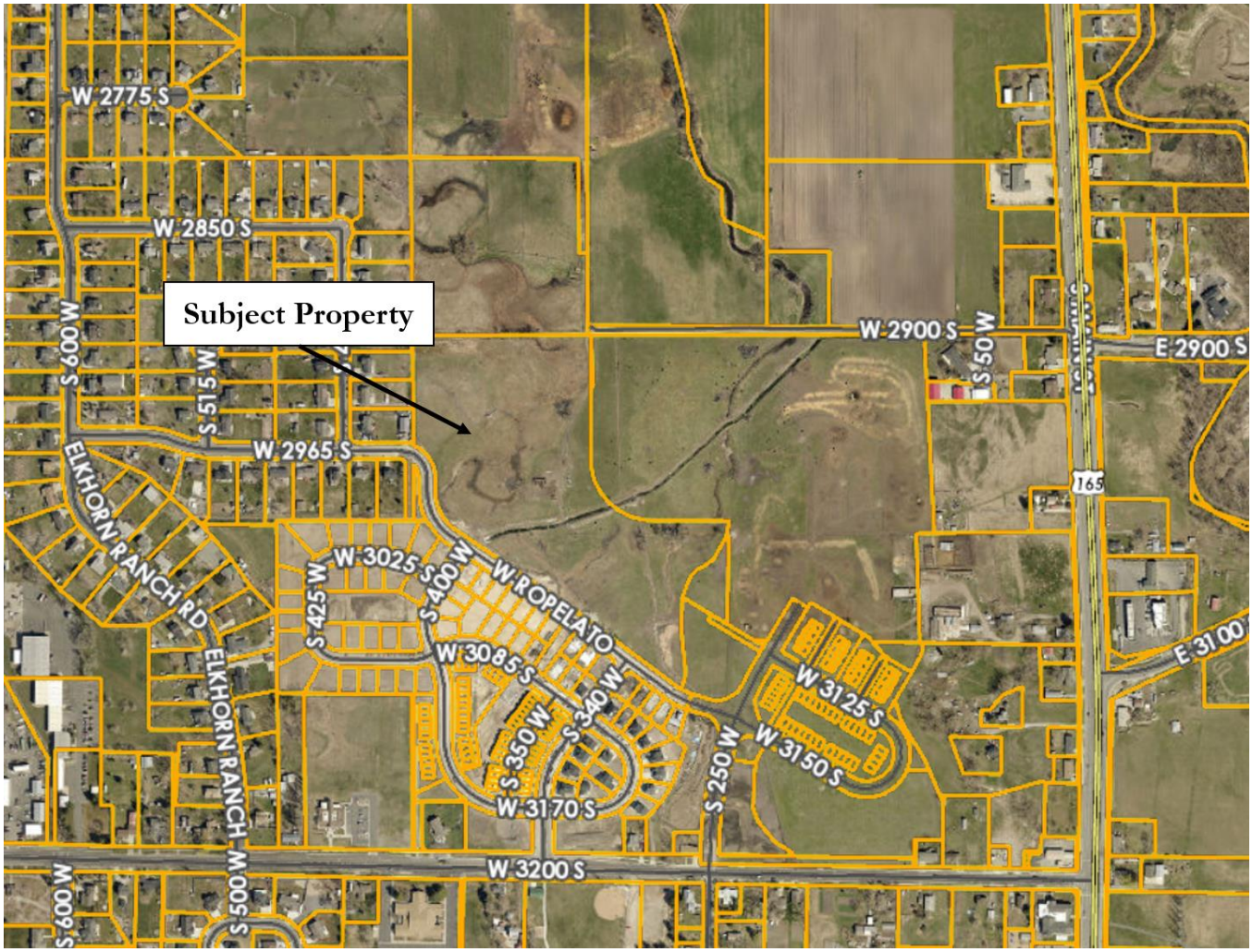

Figure 1 - Vicinity Map

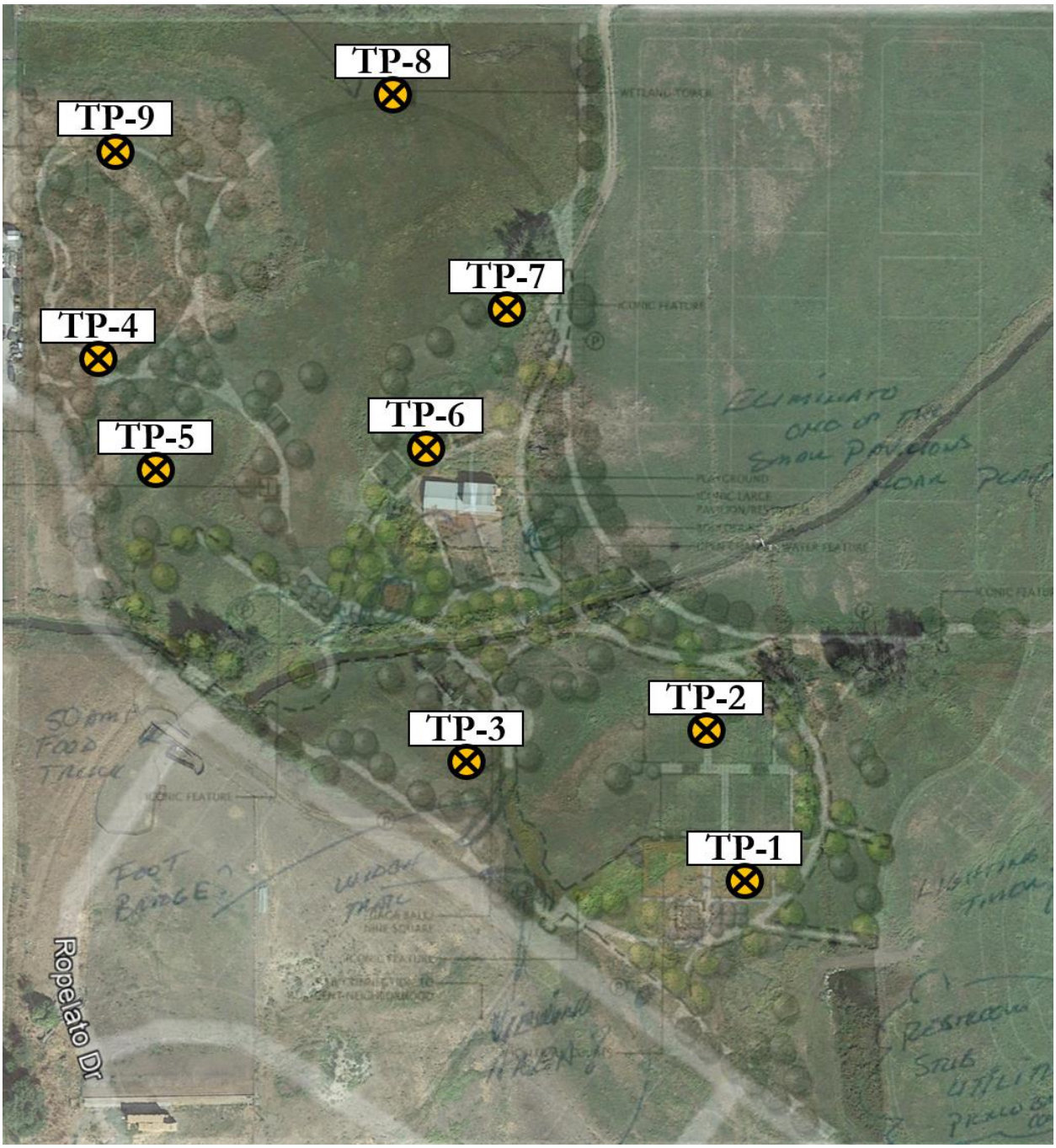

Figure 2 - Site Map

Figure 3 - Looking East

Figure 4 – Looking Northeast

Figure 5 – Looking South

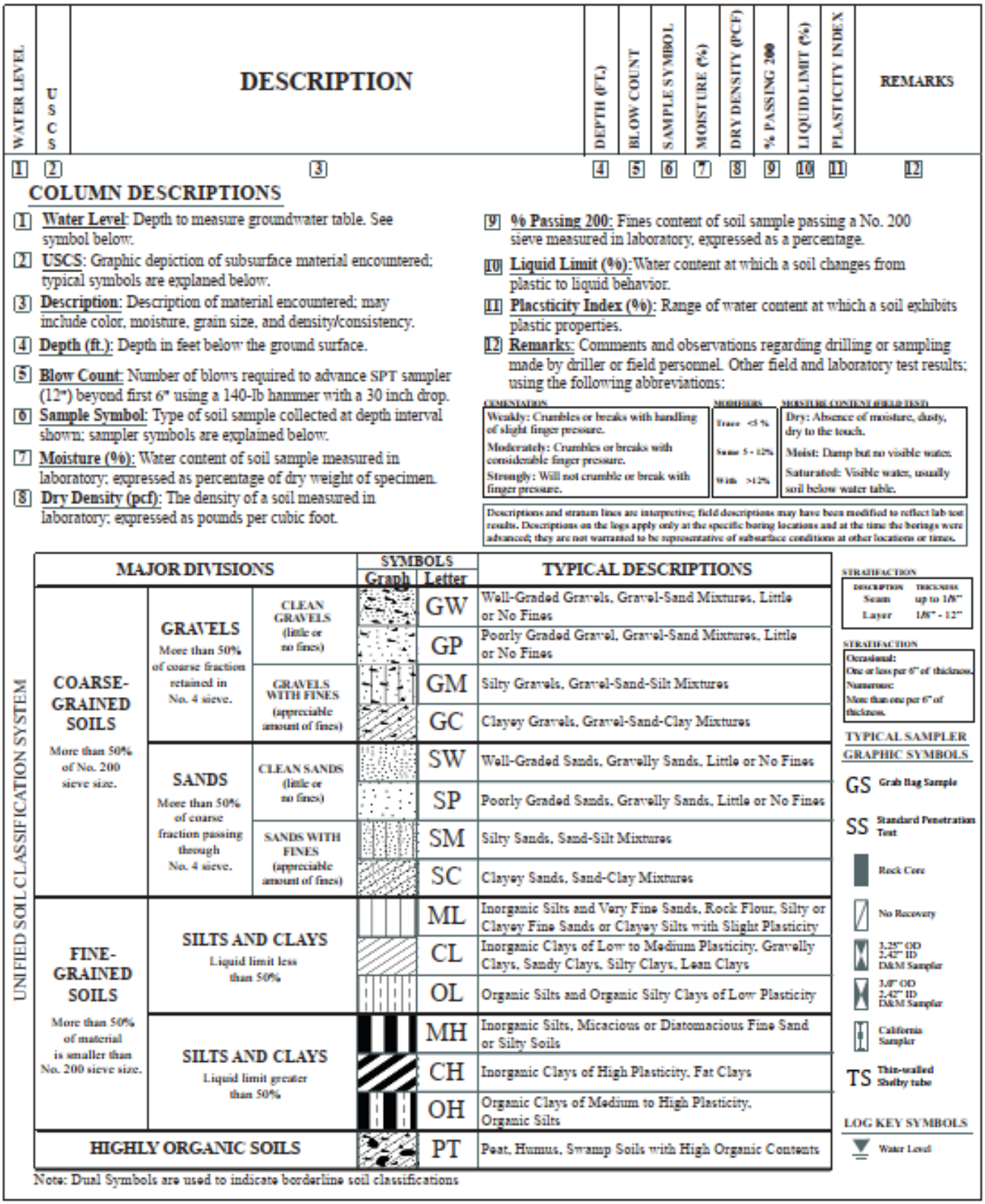

Figure 6 – Key to Soil Logs

BORE LOG: TP-1

LOGGED BY: AM REVIEWER: JP ADDRESS: 2965 S Ropelato Drive, Nibley, Utah

LATITUDE: -111.83979 NOTES:

LONGITUDE:41.67717

ELEVATION:

DATE: January 6, 2023

Depth	Lithologic Description	Symbol	Sample Type	Gradation (%)				Atterberg Limits		Moisture (%)	Blow Count	Standard Penetration Test (SPT)
				Gravel	Sand	Silt (%)	Clay (%)	LL (%)	PL (%)			
	Ground Surface EL 0 ft											
0	**Topsoil**											
1	Topsoil											
2	2 ft EL -2 ft											
3	**Poorly Graded Gravel With Sand, GP**		GB									
4	Brownish gray, Moist-wet											
5	4.5 ft EL -4.5 ft											
6	**Poorly Graded Gravel With Sand, GP**											
7	Brownish gray, Wet											
8	5.5 ft EL -5.5 ft											
9	Test Hole Terminated at 5.5-ft											
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

civilsolutionsgroup INC.

PROJECT TITLE: Ridgeline Park

CLIENT: Visionary Park

PROJECT NO.: 22-270

SHEET: 1 of 1

BORE LOG: TP-2

LOGGED BY: AM REVIEWER: JP ADDRESS: 2965 S Ropelato Drive, Nibley, Utah

LATITUDE: -111.83989 NOTES:

LONGITUDE:41.67758

ELEVATION:

DATE: January 6, 2023

Depth	Lithologic Description	Symbol	Sample Type	Gradation (%)				Atterberg Limits		Moisture (%)	Blow Count	Standard Penetration Test (SPT)
				Gravel	Sand	Silt (%)	Clay (%)	LL (%)	PL (%)			
	Ground Surface EL 0 ft											
0	**Topsoil** Topsoil											
2 ft	EL -2 ft											
	Poorly Graded Gravel With Sand, GP Grayish brown, Wet		GB	73	25	2				5.7		
5 ft	EL -5 ft											
	Test Hole Collapsed at 5-feet											

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PROJECT TITLE: Ridgeline Park

CLIENT: Visionary Park

PROJECT NO.: 22-270

SHEET: 1 of 1

BORE LOG: TP-3

LOGGED BY: AM REVIEWER: JP ADDRESS: 2965 S Ropelato Drive, Nibley, Utah

LATITUDE: -111.8402 NOTES:

LONGITUDE:41.67799

ELEVATION:

DATE: January 6, 2023

Depth	Lithologic Description	Symbol	Sample Type	Gradation (%)				Atterberg Limits		Moisture (%)	Blow Count	Standard Penetration Test (SPT)
				Gravel	Sand	Silt (%)	Clay (%)	LL (%)	PL (%)			
	Ground Surface EL 0 ft											
0	**Topsoil** Topsoil											
3	3 ft EL -3 ft **Poorly Graded Gravel With Sand, GP** Gray, Wet											
6.5	6.5 ft EL -6.5 ft Test Hole Collapsed at 6.5-feet											

civilsolutionsgroup INC.

PROJECT TITLE: Ridgeline Park

CLIENT: Visionary Park

PROJECT NO.: 22-270

SHEET: 1 of 1

BORE LOG: TP-4

LOGGED BY: AM REVIEWER: JP ADDRESS: 2965 S Ropelato Drive, Nibley, Utah

LATITUDE: -111.84238 NOTES:

LONGITUDE:41.67924

ELEVATION:

DATE: January 6, 2023

Depth	Lithologic Description	Symbol	Sample Type	Gradation (%)				Atterberg Limits		Moisture (%)	Blow Count	Standard Penetration Test (SPT)
				Gravel	Sand	Silt (%)	Clay (%)	LL (%)	PL (%)			
	Ground Surface EL 0 ft											
0	**Topsoil**											
1	Topsoil											
	1.5 ft EL -1.5 ft											
2	**Low Plasticity Clay With Sand, CL**											
3	Grayish brown, Moist											
4												
	5 ft EL -5 ft		GB	0	22	78		28	20	20.2		
5	Test Hole Terminated at 5-feet											
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
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22												
23												
24												
25												

civilsolutionsgroup INC.

PROJECT TITLE: Ridgeline Park

CLIENT: Visionary Park

PROJECT NO.: 22-270

SHEET: 1 of 1

BORE LOG: TP-5

LOGGED BY: AM REVIEWER: JP ADDRESS: 2965 S Ropelato Drive, Nibley, Utah

LATITUDE: -111.84231 NOTES:

LONGITUDE:41.67882

ELEVATION:

DATE: February 3, 2023

Depth	Lithologic Description	Symbol	Sample Type	Gradation (%)				Atterberg Limits		Moisture (%)	Blow Count	Standard Penetration Test (SPT)
				Gravel	Sand	Silt (%)	Clay (%)	LL (%)	PL (%)			
	Ground Surface EL 0 ft											
0	**Topsoil**											
1	Topsoil											
	1 ft EL -1 ft											
2	**Low Plasticity Silt With Sand, ML**											
	Dark gray, Wet		GB									
3	3 ft EL -3 ft											
4	**Poorly Graded Gravel With Sand, GP**											
	Dark gray, Wet		GB									
5												
6	6 ft EL -6 ft											
7	Test Hole Terminated at 6-feet											
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

civilsolutionsgroup INC.

PROJECT TITLE: Ridgeline Park

CLIENT: Visionary Park

PROJECT NO.: 22-270

SHEET: 1 of 1

BORE LOG: TP-6

LOGGED BY: JP REVIEWER: JP ADDRESS: 2965 S Ropelato Drive, Nibley, Utah

LATITUDE: -111.84083 NOTES:

LONGITUDE:41.67896

ELEVATION:

DATE: March 20, 2023

Depth	Lithologic Description	Symbol	Sample Type	Gradation (%)				Atterberg Limits		Moisture (%)	Blow Count	Standard Penetration Test (SPT)
				Gravel	Sand	Silt (%)	Clay (%)	LL (%)	PL (%)			
	Ground Surface EL 0 ft											
0	**Topsoil**											
1	Topsoil											
	1 ft EL -1 ft											
2	**Silty Sand With Gravel, SM** Brown, Moist-wet		GB									
3												
4	4 ft EL -4 ft											
5	**Low Plasticity Clay With Sand, CL** Brown, Moist-wet		GB									
	5 ft EL -5 ft											
6	**Silty Sand With Gravel, SM** Brown, Wet		GB	2	55	43				25.4		
7	7 ft EL -7 ft											
8	Test Hole Terminated at 7-feet											
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

civilsolutionsgroup INC.

PROJECT TITLE: Ridgeline Park

CLIENT: Visionary Park

PROJECT NO.: 22-270

SHEET: 1 of 1

BORE LOG: TP-7

LOGGED BY: JP
REVIEWER: JP
ADDRESS: 2965 S Ropelato Drive, Nibley, Utah
LATITUDE: -111.84067
NOTES:
LONGITUDE:41.67947
ELEVATION:
DATE: March 20, 2023

Depth	Lithologic Description	Symbol	Sample Type	Gradation (%)				Atterberg Limits		Moisture (%)	Blow Count	Standard Penetration Test (SPT)
				Gravel	Sand	Silt (%)	Clay (%)	LL (%)	PL (%)			
	Ground Surface EL 0 ft											
0	**Topsoil**											
1	Topsoil											
	0.83 ft EL -0.83 ft											
2	**Low Plasticity Clay With Sand, CL** Gray, Moist-wet		GB									
3												
4	4 ft EL -4 ft											
5	**Poorly Graded Gravel With Sand, GP** Gray, Wet											
6												
7	7 ft EL -7 ft											
	Test Hole Terminated at 7-feet											
8												
9												
10												
11												
12												
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23												
24												
25												

civilsolutionsgroup INC.

PROJECT TITLE: Ridgeline Park
CLIENT: Visionary Park
PROJECT NO.: 22-270
SHEET: 1 of 1

BORE LOG: TP-8

LOGGED BY: JP REVIEWER: JP ADDRESS: 2965 S Ropelato Drive, Nibley, Utah

LATITUDE: -111.84142 NOTES:

LONGITUDE:41.68006

ELEVATION:

DATE: March 20, 2023

Depth	Lithologic Description	Symbol	Sample Type	Gradation (%)				Atterberg Limits		Moisture (%)	Blow Count	Standard Penetration Test (SPT)
				Gravel	Sand	Silt (%)	Clay (%)	LL (%)	PL (%)			
	Ground Surface EL 0 ft											
0	**Topsoil**											
1	Topsoil											
	1.3 ft EL -1.3 ft											
2	**Poorly Graded Gravel With Sand, GP**											
3	Brownish gray, Dry-moist											
	3.25 ft EL -3.25 ft											
4	**Low Plasticity Silt With Sand, ML**											
5	Gray, Dry-moist											
6	6.25 ft EL -6.25 ft		GB	1	42	57				32.5		
7	**Poorly Graded Gravel With Sand, GP**											
	Gray, wet											
8	7.5 ft EL -7.5 ft											
	Test Hole Terminated at 7.5-feet											
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

civilsolutionsgroup INC.

PROJECT TITLE: Ridgeline Park

CLIENT: Visionary Park

PROJECT NO.: 22-270

SHEET: 1 of 1

BORE LOG: TP-9

LOGGED BY: JP REVIEWER: JP ADDRESS: 2965 S Ropelato Drive, Nibley, Utah

LATITUDE: -111.84232 NOTES:

LONGITUDE:41.67995

ELEVATION:

DATE: March 20, 2023

Depth	Lithologic Description	Symbol	Sample Type	Gradation (%)				Atterberg Limits		Moisture (%)	Blow Count	Standard Penetration Test (SPT)
				Gravel	Sand	Silt (%)	Clay (%)	LL (%)	PL (%)			
	Ground Surface EL 0 ft											
0	**Topsoil**											
1	Topsoil											
	1.5 ft EL -1.5 ft											
2	**Poorly Graded Gravel With Sand, GP**											
3	Brown, Dry-moist											
4	▽											
5												
6												
7	7 ft EL -7 ft											
8	Test Hole Terminated at 7-feet											
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

civilsolutionsgroup INC.

PROJECT TITLE: Ridgeline Park

CLIENT: Visionary Park

PROJECT NO.: 22-270

SHEET: 1 of 1

DOCUMENT 00 41 43
BID FORM

PART 1 GENERAL

1.1 **BIDDER**

A. The Bidder is as follows

Name: _____

Address: _____

_____

Telephone number: _____ Fax number: _____

Tax identification number: _____

B. Bidder holds license number _____, issued on the _____ day of _____, _____, by the Utah State Department of Commerce, Division of Occupational and Professional Licensing. Bidder is licensed to practice as a _____ Contractor. License renewal date is the _____ day of _____, _____.

C. The undersigned hereby acknowledges receipt of the following Addenda.

_____

_____

(list Addenda numbers here)

1.2 **BID PROPOSAL**

A. After having personally and carefully examined all conditions surrounding the Work and the Contract Documents, the undersigned proposes to furnish all labor, equipment, tools and machinery, and to furnish and deliver all materials not specifically mentioned as being furnished by the OWNER, which is required in and about the construction of the Construction Contract known as

Ridgeline Park | Phase 1

B. The undersigned proposes to complete the Work for the price or prices listed in the Bid Schedule and that all pricing should include all labor,

materials, equipment, permits, fees, coordination, management, surveying/staking, etc. required for a complete project.

C. The undersigned proposes to furnish bonds with the Contract, signed by a surety company satisfactory to the OWNER, in an amount equal to the Contract amount conditioned to ensure compliance with all requirements of the Contract Documents.

E. The undersigned proposes to execute the attached contract within ten (10) days after the Notice of Award, and to begin work within ten (10) days after being notified to do so by the OWNER.

F. If OWNER finds it necessary to further define the Work, Contract Price, Contract Time, or some other portion of the Construction Contract, after Bid opening, the Bidder promises to execute an Agreement Supplement prior to or concurrent with the execution of the Agreement, if the Agreement Supplement is acceptable to the Bidder.

G. The Contract will be awarded as a Lump Sum contract by Phase as delineated in the bid form below. It is understood that the OWNER has the right to reject this proposal or to accept it, or any portion therein, at the prices listed in the Bid Schedule.

1.3 REFERENCES

A. APWA 01 29 00: Payment Procedures.

B. Document 00 52 43: Agreement.

1.4 SCHEDULE TO BE ADDED TO THE AGREEMENT

A. This document will be added to the Agreement by reference.

PART 2 BID SCHEDULE

2.1 **BASE BID**

A. The Base Bid includes all work and materials necessary to complete the Project including but not limited to mobilization; demolition and removal; clearing and grubbing; construction staking and layout; traffic control; grading and excavation; drainage improvements; erosion control and SWPPP; utilities; open channel water feature improvements; concrete sidewalks and hardscape; parking lot/spaces and curb and gutter; concrete steps and walls; pedestrian bridges; preparation of playground area; pickleball courts and fencing; three rail fence; electrical and lighting improvements; restroom; pavilion; climbing boulder; gaga pit; nine square; cornhole; site furniture; artificial turf; landscaping and irrigation; and all necessary permitting and coordination with agencies, jurisdictions, utility providers, etc. Base bids are broken down by separate major components of the project for evaluation and organizational purposes. The intent in to award all components to one Contractor as a lump sum. Bid alternate items are listed separately. Musco lighting will be a future phase and is not a part of the base bid or bid alternates.

TOTAL BID PRICE FOR **DEMOLITION, CLEARING AND GRUBBING, AND REMOVAL**

_____ DOLLARS ($ _____)
(use words)

TOTAL BID PRICE FOR **EXCAVATION, GRADING, AND DRAINAGE**

_____ DOLLARS ($ _____)
(use words)

TOTAL BID PRICE FOR **UTILITIES INCLUDING WATER AND SEWER**

_____ DOLLARS ($ _____)
(use words)

TOTAL BID PRICE FOR **ELECTRICAL, POWER, LIGHTING, AND SOUND INCLUDING STUBS FOR FUTURE PHASES**

_____ DOLLARS ($ _____)
(use words)

TOTAL BID PRICE FOR **CONCRETE WORK AND PAVING, INCLUDING SIDEWALKS, HARDSCAPE, CURB AND GUTTER, ASPHALT, STRIPING, CONCRETE EDGER**

_____

_____DOLLARS ($_____)

(use words)

TOTAL BID PRICE FOR **PICKLEBALL COURTS (4) INCLUDING FENCING AND GATES**

_____

_____DOLLARS ($_____)

(use words)

TOTAL BID PRICE FOR **OPEN CHANNEL WATER FEATURE INCLUDING ALL STONE WORK AND FLAGSTONE**

_____

_____DOLLARS ($_____)

(use words)

TOTAL BID PRICE FOR **PEDESTRIAN BRIDGES**

_____

_____DOLLARS ($_____)

(use words)

TOTAL BID PRICE FOR **RECREATIONAL AMENITIES INCLUDING CORNHOLE, CLIMBING BOULDER, GAGA PIT, AND NINE SQUARE INCLUDING ASSOCIATIVE ARTIFICIAL TURF**

_____

_____DOLLARS ($_____)

(use words)

TOTAL BID PRICE FOR **SITE FURNISHINGS INCLUDING PAVILION, BENCHES, TABLES, TRASH RECEPTACLES, AND LINEAR STONE SEATING**

_____

_____DOLLARS ($_____)

(use words)

TOTAL BID PRICE FOR **CXT RESTROOM**

_____

_____DOLLARS ($_____)

(use words)

TOTAL BID PRICE FOR **LANDSCAPING INCLUDING TREES, PLANTS, GRASS, SEED, MULCH, BOULDERS, AND TOPSOIL**

_____ DOLLARS ($ _____)
(use words)

TOTAL BID PRICE FOR **IRRIGATION SYSTEM INCLUDING WATER CONNECTION, CONTROLLER, AND ALL EQUIPMENT**

_____ DOLLARS ($ _____)
(use words)

TOTAL BID PRICE FOR **ONE-YEAR LANDSCAPE MAINTENANCE THROUGH ONE-YEAR WARRANTY PERIOD FROM DATE OF FINAL ACCEPTANCE**

_____ DOLLARS ($ _____)
(use words)

TOTAL BASE BID PRICE FOR **ALL PROJECT COMPONENTS** (Sum of the above)

_____ DOLLARS ($ _____)
(use words)

2.2 BID ALTERNATES

A. The Bid Alternates include all work and materials necessary to install the listed elements below. Bid Alternates may be individually selected/awarded or excluded at the discretion of the Owner. Bid Alternates that replace improvements included in a base bid item above should include a credit for the replaced improvements.

BA1. TOTAL BID ALTERNATE PRICE FOR **WETLAND BOARDWALK AND CONNECTING SIDEWALKS**

_____ DOLLARS ($ _____)

(use words)

BA2. TOTAL BID ALTERNATE PRICE FOR **OVERLOOK DECK AND ASSOCIATED BENCHES**

_____ DOLLARS ($ _____)

(use words)

BA3. TOTAL BID ALTERNATE PRICE FOR **ICONIC FEATURE NO. 1**

_____ DOLLARS ($ _____)

(use words)

BA4. TOTAL BID ALTERNATE PRICE FOR **ICONIC FEATURE NO. 2**

_____ DOLLARS ($ _____)

(use words)

BA5. TOTAL BID ALTERNATE PRICE FOR **CXT RESTROOM, 20' DIA. PAVILION, AND ASSOCIATED LANDSCAPING, IRRIGATION, PICNIC TABLES, AND TRASH RECEPTACLE AT PICKLEBALL COURTS INCLUDING ASSOCIATED UTILITY CONNECTIONS, POWER, AND LIGHTING**

_____ DOLLARS ($ _____)

(use words)

BA6. TOTAL BID ALTERNATE PRICE FOR **CONCRETE SIDEWALK, PICKLEBALL SHADE CANOPIES, AND ASSOCIATED LANDSCAPING, IRRIGATION, PICNIC TABLES, AND TRASH RECEPTACLE AT PICKLEBALL COURTS INCLUDING POWER OUTLETS FOR CANOPIES**

_____ DOLLARS ($ _____)

(use words)

BA7. TOTAL BID ALTERNATE PRICE FOR **20' DIA. PAVILION, CONCRETE SIDEWALK, ASSOCIATED LANDSCAPING, IRRIGATION, PICNIC TABLES, AND TRASH RECEPTACLE INCLUDING PAVILION OUTLETS AND LIGHTING**

_____ DOLLARS ($ _____)

(use words)

BA8. TOTAL BID ALTERNATE PRICE FOR **PICNIC TABLE AND ASSOCIATED CONCRETE PAD AT OPEN CHANNEL WATER FEATURE**

_____ DOLLARS ($ _____)

(use words)

BA9. TOTAL BID ALTERNATE PRICE FOR **ONE BENCH AT CORNHOLE AREA**

_____ DOLLARS ($ _____)

(use words)

BA10. TOTAL BID ALTERNATE PRICE FOR **TWO 30' DIA. PAVILIONS, CONCRETE SIDEWALK, ASSOCIATED LANDSCAPING, IRRIGATION, PICNIC TABLES, AND TRASH RECEPTACLES INCLUDING PAVILIONS' OUTLETS AND LIGHTING**

_____ DOLLARS ($ _____)

(use words)

BA11. TOTAL BID ALTERNATE PRICE FOR **ADDITIONAL CLIMBING BOULDER IN BOULDERING AREA**

_____ DOLLARS ($ _____)

(use words)

BA12. TOTAL BID ALTERNATE PRICE FOR **PARK ENTRY SIGN**

_____ DOLLARS ($ _____)

(use words)

BA13. TOTAL BID ALTERNATE PRICE FOR **PARK SIGNAGE PER OVERALL SIGN PLAN**

_____ DOLLARS ($ _____)

(use words)

Respectfully Submitted,

_____
Bidder

(Corporate Seal)
If bid is by corporation

By: _____
Name and Title

_____
Witness

DOCUMENT 00 43 13
BID BOND

KNOW ALL MEN BY THESE PRESENTS, THAT WE _____

_____

as Principal, hereinafter called the Principal, and _____

_____

a corporation duly organized under the laws of the State of _____
as Surety, hereinafter called the Surety, are held and firmly bound unto _____

_____

as Obligee, hereinafter called the Obligee, in the sum of _____
_____ Dollars ($_____),
for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the principal has submitted a bid for _____

_____

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and materials furnished in the prosection thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this _____ day of _____, 20___.

_____
(Principal)

By: _____
(Title)

Witness: _____

_____
(Surety)

By: _____
(Title)

Witness: _____

END OF DOCUMENT

DOCUMENT 00 43 36
SUBCONTRACTOR AND SUPPLIER REPORT

PART 1 GENERAL

1.1 **BIDDER**

A. Name: _____

Address: _____

_____

B. Telephone Number: _____

1.2 **CONSTRUCTION CONTRACT**

A. The Construction Contract is known as:

NIBLEY CITY
Ridgeline Park | Phase 1

PART 2 REPORT

2.1 **SUBCONTRACTOR AND SUPPLIER REPORT**

A. Failure of the Bidder to specify a Subcontractor for any portion of the Work constitutes an agreement by the Bidder that the Bidder is fully qualified to perform that portion, and that Bidder shall perform that portion.

B. Bidder will be fully responsible to OWNER for the acts and omissions of Subcontractors and Suppliers and of persons either directly or indirectly employed by them, as Bidder is for the acts and omissions of persons employed by Bidder directly.

C. Nothing contained in the Contract Documents shall create any contractual relationship between any Subcontractor or Supplier and the OWNER. Bidder agrees each subcontract with Bidder's Subcontractor will disclaim any third party or direct relationship between OWNER and any Subcontractor or Supplier.

D. The names and addresses of the Subcontractors and Suppliers who will work under the terms of the Contract Documents and the estimated dollar

amount of each subcontract (in excess of 2 percent of the Bid sum) are set forth as follows:

Table 1 - BASE BID

SUBCONTRACTORS		
Name and Address	**Nature and Extent of Work to be Sublet**	**Amount**
1.		
2.		
3.		
4.		
5.		
6.		
SUPPLIERS		
Name and Address	**Nature and Extent of Work to be Sublet**	**Amount**
1.		
2.		
3.		
4.		
5.		
6.		

PART 3 EXECUTION

3.1 EFFECTIVE DATE

A. Bidder executes this Subcontractor and Supplier report and declares it to be a supplement to the Bid and in effect as of _____, 20__.

3.2 BIDDER'S SUBSCRIPTION

A. Bidder's signature: _____

B. Please print Bidder's name here: _____

C. Title: _____

END OF DOCUMENT

DOCUMENT 00 45 13
CONTRACTOR'S PROJECT REFERENCE FORM

Identify representative construction projects similar to that being bid, completed by your organization within the past 5 years.

1. Project Name _____
   Client_____
   Contact Name _____Phone_____
   Total Contract Construction Costs $_____
   Total # of Change Orders _____ Amount $_____
   General Description of Project_____
   _____
   _____
   _____

2. Project Name _____
   Client_____
   Contact Name_____ Phone_____
   Total Contract Construction Costs $_____
   Total # of Change Orders _____ Amount $_____
   General Description of Project_____
   _____
   _____
   _____

3. Project Name _____
   Client_____
   Contact Name_____ Phone_____
   Total Contract Construction Costs $_____
   Total # of Change Orders _____ Amount $_____
   General Description of Project_____
   _____
   _____
   _____

4. Project Name _____
   Client_____
   Contact Name _____ Phone_____
   Total Contract Construction Costs $_____
   Total # of Change Orders _____ Amount $_____
   General Description of Project_____
   _____
   _____
   _____

DOCUMENT 00 45 43
BIDDER STATUS REPORT

PART 1 GENERAL

1.1 **BIDDER**

A. Name: _____

B. Address: _____

_____

C. Telephone number: _____

1.2 **CONSTRUCTION CONTRACT**

A. The Construction Contract is known as:

NIBLEY CITY
Ridgeline Park | Phase 1

PART 2 REPORT

2.1 **BIDDER STATUS REPORT**

A. Bidder affirms the following information is true and correct.

1. Number of employees: _____

2. Bidder's firm is: (check the following as applicable)
[___] Independently owned and operated.
[___] An affiliate of*
[___] A subsidiary of*
[___] A division of*
[___] A business with gross revenue in excess of
$_____
[___] A business with gross revenue below
$_____

* PARENT COMPANY:
Name: _____

Address: _____

_____

Telephone number: _____

Fax Number: _____

PART 3 EXECUTION

3.1 EFFECTIVE DATE

A. Bidder executes this status report and declares it to be a supplement to the Bid and in effect as of _____, _____.

3.2 BIDDER'S SUBSCRIPTION

A. Bidder's Signature: _____

B. Please print Bidder's name here: _____

C. Title: _____

END OF DOCUMENT

NIBLEY CITY

Ridgeline Park | Phase 1

CONTRACTING REQUIREMENTS

AGREEMENT FORMS

BONDS AND CERTIFICATES

OTHER FORMS

CONDITIONS OF CONTRACT

DOCUMENT 00 51 00
NOTICE OF AWARD

Date: PROJECT NO.: _____

TO: _____
(Bidder)

ADDRESS: _____

_____

CONTRACT FOR ***Nibley City Ridgeline Park | Phase 1***

The OWNER has considered the BID dated _____, 20_____, submitted by you for the above described WORK in response to its Invitation for Bids and Information for Bidders.

You are hereby notified that you BID has been accepted for items in the amount of: _____
_____ and No/100----------Dollars ($).

You must comply with the following conditions precedent within fifteen (15) days of the date of this Notice of Award, that is by _____, 20____.

1. You must deliver to the Owner any remaining information requested by Engineer or otherwise identified in the Information for Bidders.
2. You must deliver Performance Bond, Payment Bond, and Certificates of Insurance as specified in the Instructions to Bidders, General Conditions.

If you fail to execute said Agreement and to furnish said Bonds within fifteen (15) days from the date of the Notice, OWNER will be entitled to consider all your rights arising out of the OWNER's acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return acknowledged copies of the NOTICE OF AWARD to the OWNER. A copy will be returned to the CONTRACTOR of all the executed Contract Documents when all the signatures have been obtained.

OWNER: Nibley City

By: _____

Title: City Manager

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged by _____
_____ this _____ day of _____, 20_____.

By: _____

Title: _____

DOCUMENT 00 52 43
AGREEMENT

PART I GENERAL

1.1 CONTRACTOR

A. Name: _____

B. Address: _____

C. Telephone number: _____

D. Facsimile number: _____

E. E-Mail addresses: _____

1.2 OWNER

A. Nibley City, a municipal corporation of the State of Utah, 455 West 3200 South, Nibley, Utah 84321.

1.3 CONSTRUCTION CONTRACT

The Construction Contract is known as

NIBLEY CITY
Ridgeline Park | Phase 1

1.4 ENGINEER

A. ***Tom Dickinson, PE, or his designee*** is the Engineer who has the rights, authority and duties assigned to Engineer in the Contract Documents; provided, however, Engineer shall not have authority to increase the contract price to an amount that exceeds the amount budgeted for the project by the Owner for the Project.

1.5 AGREEMENT PERFORMANCE

A. The Contractor shall perform everything required to be performed by Contractor in the Contract Documents, shall provide and furnish all labor, tools and equipment, and shall furnish and deliver all materials not specifically stated in the Contract Documents as being furnished by the Owner, to complete all the work necessary to complete the Project in Nibley City, State of Utah in the best and most workmanlike manner, and in strict conformity with the provisions of this Agreement. The plans and specifications and the proposals are hereby made a part of the agreement

as fully and to the same effect as if the same had been set forth at length in the body of this Agreement. In the event of inconsistencies within or among parts of this Agreement, the Contract Documents or among Contract Documents, this Agreement, and applicable standards, codes, and references to previous versions of the Manual of Standard Specifications or Manual of Standard Plans, the Contractor shall (i) provide the better quality or greater quantity of work; or (ii) comply with the more stringent requirement; either or both in accordance with Engineer's interpretation.

B. It is agreed that the status of the Contractor under this agreement is that of Independent Contractor rather than that of an Employee of the Owner. Accordingly, the Contractor, in performance of his obligations hereunder, is independent and free from control of the Owner in all that pertains to the execution of the work and shall perform the work according to the Contractor's own methods without being subject to the rule, control or direction of the Owner or its representatives, save and except as to the results obtained. The finished work and the materials furnished must, however, conform strictly to this contract, the proposal, and the plans and specifications, and are subject to the final approval of the Owner and its authorized representatives, who may exert such direction and control thereof as may be necessary to achieve that conformity. All provisions in the specifications with respect to the direction and control of the work shall be construed so as to make effective this provision. It is agreed that the status of the Contractor under this agreement is that of Independent Contractor rather than that of an Employee of the Owner. Accordingly, the Contractor, in performance of his obligations hereunder, is independent and free from control of the Owner in all that pertains to the execution of the work and shall perform the work according to the Contractor's own methods without being subject to the rule, control or direction of the Owner or its representatives, save and except as to the results obtained. The finished work and the materials furnished must, however, conform strictly to this contract, the proposal, and the plans and specifications, and are subject to the final approval of the Owner and its authorized representatives, who may exert such direction and control thereof as may be necessary to achieve that conformity. All provisions in the specifications with respect to the direction and control of the work shall be construed so as to make effective this provision. It is agreed that the status of the Contractor under this agreement is that of Independent Contractor rather than that of an Employee of the Owner. Accordingly, the Contractor, in performance of his obligations hereunder, is independent and free from control of the Owner in all that pertains to the execution of the work and shall perform the work according to the Contractor's own methods without being subject to the rule, control or direction of the Owner or its representatives, save and except as to the results obtained. The finished work and the materials furnished must, however, conform strictly

to this contract, the proposal, and the plans and specifications, and are subject to the final approval of the Owner and its authorized representatives, who may exert such direction and control thereof as may be necessary to achieve that conformity. All provisions in the specifications with respect to the direction and control of the work shall be construed so as to make effective this provision. It is agreed that the status of the Contractor under this agreement is that of Independent Contractor rather than that of an Employee of the Owner. Accordingly, the Contractor, in performance of his obligations hereunder, is independent and free from control of the Owner in all that pertains to the execution of the work and shall perform the work according to the Contractor's own methods without being subject to the rule, control or direction of the Owner or its representatives, save and except as to the results obtained. The finished work and the materials furnished must, however, conform strictly to this contract, the proposal, and the plans and specifications, and are subject to the final approval of the Owner and its authorized representatives, who may exert such direction and control thereof as may be necessary to achieve that conformity. All provisions in the specifications with respect to the direction and control of the work shall be construed so as to make effective this provision.

PART 2 TIME AND MONEY CONSIDERATIONS

2.1 CONTRACT PRICE

A. The Contract Price includes the cost of the Work specified in the Contract Documents, and the cost of all bonds, insurance, permits, fees, and all charges, expenses or assessments of whatever kind or character. The Owner shall pay the Contractor, as full consideration for the performance of this contract, the contract bid price per item as shown in the proposal, for the quantities of work actually performed and accepted.

B. The Contract Price is: _____ Dollars ($ _____).

2.2 CONTRACT TIME

A. The work shall commence on the date set forth in the written Notice to Proceed from the Owner or its agent to Contractor and shall be completed and ready for Owner's substantial completion prior to October 1, 2024.

B. Any time specified in work sequences in the Summary of Work (Section 01 11 10) shall be a part of the Contract Time.

2.3 PUNCH LIST TIME

A. The Work will be complete and ready for final payment within 30 calendar days after the date Contractor receives Engineer's Final Inspection Punch List unless exemptions of specific items are granted by Engineer in writing or an exception has been specified in the Contract Documents.

B. Permitting the Contractor to continue and finish the Work or any part of the Work after the time fixed for its completion, or after the date to which the time for completion may have been extended, whether or not a new completion date is established, shall in no way operate as a waiver on the part of the Owner of any of Owner's rights under this Agreement.

2.4 LIQUIDATED DAMAGES

A. **Late Completion**: Time is the essence of the Contract Documents. Contractor agrees that Owner will suffer damage or financial loss if the Work is not completed on time or within any time extensions allowed in accordance with Part 12 of the General Conditions (Document 00 72 00). Contractor and Owner agree that proof of the exact amount of any such damage or loss is difficult to determine. Accordingly, instead of requiring any such proof of damage or specific financial loss for late completion, Contractor agrees to pay to Owner the amount of ***$1,000*** for each calendar day that extends after the Contract Time until the Work is accepted as Substantially Complete as provided in Article 14.5 of the General Conditions.

B. **Survey Monuments**: No land survey monument will be disturbed or moved until Engineer has been properly notified and the Engineer's surveyor has referenced the survey monument for resetting. The parties agree that upon such an unauthorized disturbance it is difficult to determine the damages from such a disturbance, and the parties agree that Contractor will pay as liquidated damages the sum of $1,000 to cover such damage and expense.

C. **Interruption of Public Services**: No interruption of public services shall be caused by Contractor, its agents or employees, without the Engineer's and Owner’s prior written approval. Owner and Contractor agree that in the event Owner suffers damages from such interruption, liquidated damages as stipulated above shall not be deemed to be a limitation upon Owner's right to recover the full amount of damages.

D. **Deduct Damages from Moneys Owed Contractor**: Owner shall be entitled to deduct and retain liquidated damages out of any money which may be due or become due the Contractor. To the extent that the liquidated damages exceed any amounts that would otherwise be due the Contractor, the Contractor shall be liable for such amounts and shall

return such excess to the Owner.

2.5 RETAINAGE

A. **Retainage is Owner's Option**: Owner may, in its sole discretion, retain five (5) percent of the value of all Work done and materials or equipment supplied as part security for the fulfillment of the Construction Contract by the Contractor. If, in Engineer's opinion, the Work is proceeding in accordance with Contractor's approved progress schedule, and all progress schedule submittals are current and up to date, and all required payrolls, Shop Drawings, and miscellaneous submittals are current and up to date, the Owner may choose not to withhold retainage.

1. **Reducing the Retainage**: As the Work nears completion and solely at the Engineer's discretion, the Owner may reduce the retainage to an amount more in line with the Work actually remaining.

2. **Retainage Held Until Final Payment**: The Owner reserves the right to retain all amounts previously withheld or due the Contractor, including liquidated damages, until all Punch List items are complete. However, at Engineer's sole option, Engineer may authorize the release of up to all retained amounts except any liquidated damages and double Engineer's best estimate of the Contractor's cost to complete all remaining Punch List items.

B. **Interest**: Except for money retained for items not provided or installed in accordance with the Contract Documents, any money retained by the Owner will be placed in an interest-bearing account held by the Owner in its Utah State Treasury Pool. The interest accrued thereon shall be the only interest paid to Contractor on the money retained and will be due and payable to the Contractor when the retained monies are paid.

2.6 PAYMENT PROCEDURES

A. **Progress Payments**: Contractor shall submit Applications for Payment in accordance with Part 14 of the General Conditions (Document 00 72 00) and Section 01 29 00 (Payment Procedure). Payment will become due or payable only for items provided or installed by Contractor. If required by the Owner, any request or application by the Contractor for a partial payment shall be accompanied and supported by data establishing payment or satisfaction of all Contractor obligations for payroll, bills for materials and equipment, and other indebtedness, with such data establishment to be evidenced by receipts, releases and waivers of lien, arising out of the contract, to the extent and in such form as may be designated as acceptable and satisfactory by the Owner. The Owner may require such data, including but not limited to, and executed, completed

lien waiver and release from all subcontractors, lower-tier subcontractors and suppliers. The submission of these items, if requested by the Owner with the Contractor's application or request for a partial payment shall constitute a condition precedent to the Contractor's right to any such partial payment, and any particular application or request for partial payment submitted without these items, if so requested by the Owner, shall be deemed incomplete.

1. **Withholding Payment**: Owner reserves the right to withhold payment from Contractor for noncompliance with any provision of the Contract Documents.

2. **Price Adjustments**: Owner will consider making partial payment to the Contractor for certain nonconforming work in advance of any negotiated settlement reached between the Contractor and the Owner, provided the Contractor requests in writing that this be done. Contractor agrees that any such payments made by the Owner are "payments in advance" and that any money which becomes due when the final settlement is negotiated will not constitute payments "withheld" or "retained" under State law.

B. **Final Payment**: After completion of all Work and Punch List items, Owner shall pay the Contract Price due after deducting therefrom all previous payments, unit price quantity adjustments, penalties, liquidated damages, and other amounts to be retained. All prior progress payments shall be subject to correction in the final payment. The final payment shall not be due and payable until the expiration of 30 days from approval of the request for final payment of Contractor by Engineer and Owner. Final payment, constituting the entire unpaid balance of the contract sum, shall be paid by the Owner to the Contractor when the work has been completed, the contract fully performed, and a final certificate for payment has been issued by the Engineer. Neither the final payment nor the remaining retainage shall become due until the Contractor submits to the Owner through the Engineer, (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the work for which the Owner might in any way be responsible, have been paid or otherwise satisfied, (2) consent of surety to final payment, and (3) if required by the Owner, other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens arising out of the contract, to the extent and in such form as may be designated by the Owner. If after substantial completion of the work, final completion thereof is materially delayed through no fault of the Contractor or by the issuance of change orders affecting final completion, and the Engineer so confirms, the Owner shall, upon application by the Contractor and certification by the Engineer and without terminating the contract, make payment of the balance due for that portion of the work fully completed and accepted. If the remaining balance for work not fully completed or

corrected is less than the retainage stipulated in the contract documents, and if bonds have been furnished, the written consent of the Surety of the payment of the balance due for that portion of the work fully completed and accepted shall be submitted by the Contractor to the Engineer prior to certification of such payment. Such payment shall be made under the terms and conditions governing payments as heretofore set forth, except that it shall not constitute a waiver of claims. The making of final payment shall constitute a waiver of all claims by the Owner except those arising from: (1) unsettled liens; (2) faulty or defective work; (3) failure of the work to comply with the requirements of the contract documents; or (4) terms of any special warranties required by the contract documents. The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and identified by the Contractor as unsettled at the time of the final application for payment. All provisions of this agreement, including without limitation those establishing obligations and procedures, shall remain in full force and effect notwithstanding the making or acceptance of final payment.

1. **Submittal**: Final payment shall not be made until the Contractor has delivered and Engineer has accepted all submittals specified in Article 14.8 of the General Conditions (Document 00 72 00).

2. **Owner Released From Claims**: The payment and acceptance of the final Contract Price due and the adjustment and payment for any Work done in accordance with any alterations of the same, shall release the Owner from any and all claims of Contractor on account of Work performed under the Contract Documents or any Modification thereof, except for those claims specifically agreed to as reserved and unresolved by the Owner.

2.7 EXTRA WORK

A. No money will be paid to the Contractor for any additions, deletions or revisions in the Work as stipulated in Article 10.1 of the General Conditions (Document 00 72 00), unless a contract Modification for such has been made in writing and validly executed by the Owner and Contractor.

PART 3 COVENANTS

3.1 ASSIGNMENT NOT BINDING WITHOUT WRITTEN CONSENT

A. Owner and Contractor agree no assignment of any right or interest in the Contract Documents will be made without the written consent of the Owner and the Contractor. No assignment will release or discharge the Owner or the Contractor from any duty or responsibility under the Contract Documents unless specifically stated to the contrary in any written consent to an assignment.

B. Contractor shall make no assignment of money that is due without the Owner's written consent (except to the extent that the effect of this restriction may be limited by Law or Regulation).

3.2 BINDING TERMS

A. The Agreement, with all its forms, plans, specifications and stipulations, shall be binding upon the heirs, executors, administrators, successors and assigns of the respective parties.

3.3 INDEMNIFICATION

A. Provisions concerning indemnification are set forth in Article 6.17 of the General Conditions (Document 00 72 00) as modified by Supplemental General Conditions (Document 00 73 00).

3.4 DISPUTE RESOLUTION

A. **In General**:

1. Unless a decision shall be held by an appropriate court of law to have been procured by fraud or to be arbitrary and capricious or so grossly erroneous as necessarily to imply bad faith, any factual decision made under this Article shall be final and binding in any suit or action arising under this Construction Contract, including any actions by Contractor or others against Owner or any of Owner's agents, consultants, or employees.

2. Compliance with provisions of this Article shall be a condition precedent prior to any legal action by the Contractor or any of Contractor's Subcontractors and Suppliers against Owner or any of Owner's agents, consultants, or employees.

3. The provisions of this Article shall not preclude or limit judicial review of issues of law.

B. **Disputes Not Related to the Guarantee of the Work**: Any dispute arising under the Construction Contract concerning a question of fact, not related to the guarantee of the Work (Part 13 of the General Conditions (Document 00 72 00)), which is not disposed of by contract Modification shall be decided pursuant to the following procedure.

1. Any decision by Engineer interpreting the requirements of the Contract Documents may be appealed in writing to the Engineer. The Engineer's decision shall be reduced to writing and a copy shall be mailed or otherwise furnished to the Contractor. The decision of Engineer shall be final and conclusive unless, within 30 days from the date of receipt of such copy, the Contractor mails or otherwise furnishes to Engineer a written appeal to the Owner.

2. Within 15 days from the receipt of any such appeal, the City Manager shall issue a decision in writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the City Manager shall be final and conclusive unless, within 15 days from the date of receipt of such decision, the Contractor mails or otherwise furnishes to the City a written appeal to a Dispute Committee.

3. The Dispute Committee shall consist of the Owner's Attorney, the Mayor, and an independent engineer selected by the Owner.

4. Said Committee shall have authority to investigate the appeal.

5. The decision of said Committee shall be rendered in writing within 15 days from receipt of the appeal and mailed or otherwise delivered to the Contractor.

6. The decision of said Committee shall be the final binding interpretation of the facts which are the subject of the appeal.

C. **Disputes Related to the Guarantee**: Except as otherwise provided by contract Modification, any dispute concerning a question of fact involving or arising out of the guarantee required by the Contract Documents (Article 13.1 of the General Conditions (Document 00 72 00)), which is not disposed of by contract Modification shall be decided pursuant to the provisions of Paragraph 3.4B above.

D. **Work During Appeal**: Notwithstanding the pendency of any protest or appeal provided above, Contractor shall, if so ordered by Engineer, proceed with the Work under the Contract Documents according to Engineer's direction and according to the decision on any appeal. The existence of a claim or protest shall not excuse Contractor from the

requirements of the Contract Documents, including, but not limited to, the Contract Time.

E. **Appeals of Termination or Suspension**: Any decision of Owner to terminate or suspend the Work shall not be subject to the provisions of this Article.

3.5 ATTORNEY'S FEES.

A. In the event that either party institutes any action or proceeding against the other relating to the breach of any term of this agreement, then the unsuccessful party in such action or proceeding agrees to reimburse the successful party for the reasonable expenses of such action including reasonable attorney fees, incurred therein by the successful party.

3.6 CONTRACTOR'S REPRESENTATIONS.

The Contractor represents and warrants the following to the Owner (in addition to any other representations and warranties contained in the Contract Documents), as an inducement to the Owner to execute this Agreement, which representations and warranties shall survive the execution and delivery of this Agreement, any termination of this Agreement, and the final completion of the Work:

A. that it and its Subcontractors are financially solvent, able to pay all debts as they mature, and possessed of sufficient working capital to complete the Work and perform all obligations hereunder;

B. that it is able to furnish the plant, tools, materials, supplies, equipment, and labor required to complete the Work and perform its obligations hereunder;

C. that it is authorized to do business in the State of Utah and properly licensed by all necessary governmental and public and quasi-public authorities having jurisdiction over it and over the Work and the Project;

D. that its duly authorized representative has visited the site of the Project, familiarized himself with the local and special conditions under which the Work is to be performed, and correlated his observations with the requirements of the Contract Documents; and

E. that it possesses a high level of experience and expertise in the business administration, construction, construction management, and superintendence of projects of the size, complexity, and nature of this particular Project, and it will perform the Work with the care, skill and diligence of such a contract.

The foregoing warranties are in addition to, and not in lieu of, any and all other liability imposed upon the Contractor by law with respect to the Contractor's duties, obligations, and performance hereunder. The Contractor acknowledges that the Owner is relying upon the Contractor's skill and experience in connection with the work called for hereunder.

3.7 CONTRACT DOCUMENTS.

Contract Documents include the *APWA Manual of Standard Specifications, 2017 Edition*, as amended by Nibley City, published by Utah LTAP Center, Utah State University, and *Manual of Standard Plans, 2017 Edition*, as amended by Nibley City, published by Utah LTAP Center, Utah State University, and those documents included in the term "Contract Documents" as defined therein.

PART 4 EXECUTION

4.1 EFFECTIVE DATE.

A. Owner and Contractor executed this Agreement and declared it in effect as of the _____ day of _____, 20__.

IN WITNESS WHEREOF, we have hereunto set our hands and seal at Nibley, Utah, on the day and year first above written:

NIBLEY CITY, OWNER

By_____
Justin Maughan, City Manager

Attest:

_____
City Recorder

Approved as to form:

_____
City Attorney

_____
[Contractor]

By_____

Its_____

Attest:

_____

By_____

DOCUMENT 00 55 00
NOTICE TO PROCEED

Date:

TO: _____ Project No. _____
(Contractor)

ADDRESS: _____

_____

CONTRACT FOR _____
(Insert name of Contract as it appears in the Bidding Documents)

You are notified that the Contract Time under the above contract will commence to run on _____0____, 20___. By that date, you are to start performing your obligations under the Contract Documents. The dates of Substantial Completion and Final Completion are _____, 20____ and _____, 20__, respectively.

Before you may start any Work at the Site, you and Owner must each deliver to the other (with copies to Engineer) certificates of insurance which each is required to purchase and maintain in accordance with the Contract Documents.

Also before you may start any Work at the Site, you must

(add other requirements)

Nibley City
(OWNER)

_____
(Authorized Signature)

City Manager
(Title)

ACCEPTANCE OF NOTICE

Receipt of the foregoing Notice to Proceed is hereby acknowledged:

By: _____. this _____ day of _____, 20___.

By: _____

Title: _____

DOCUMENT 00 61 13.13
PERFORMANCE BOND

PART 1 GENERAL

1.1 **BOND**

A. Number: _____

B. Amount: _____

_____ Dollars ($ _____).

1.2 **SURETY**

A. Name: _____

B. Address: _____

_____

C. Telephone number: _____

D. Facsimile number: _____

1.3 **CONTRACTOR**

A. Name: _____

B. Address: _____

_____

C. Telephone number: _____

D. Facsimile number: _____

1.4 **OWNER**

A. ***Nibley City***

1.5 **CONSTRUCTION CONTRACT**

A. The Construction Contract is known as ***Ridgeline Park | Phase 1***

1.6 **DEFINED TERMS**

A. Terms used in this Performance Bond which are defined in Article 1.1 of the General Conditions will have the meanings indicated in the General Conditions.

PART 2 COVENANTS

2.1 **SURETY'S AND CONTRACTOR'S RELATIONSHIP**

A. Surety as surety, and CONTRACTOR as principal, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the OWNER as obligee, for the performance of the Construction Contract, whether awarded or about to be awarded.

B. If CONTRACTOR performs the Construction Contract, the Surety and the CONTRACTOR shall have no obligation under this Bond, except to participate in conferences indicated in Article 2.3.

2.2 **NOTICE**

A. Notice to the Surety, the OWNER or the CONTRACTOR shall be sent by certified mail, facsimile, or hand delivered to the address shown on this Bond agreement.

B. Notices sent as required by paragraph 2.2A shall be effective on the date on which such notice was sent.

C. Notice may be sent by facsimile. Facsimile notice shall be effective on the date of transmission provided that a confirmation establishing the successful transmission of the notice is sent by first-class mail, postage prepaid, along with a copy of the notice transmitted, no later than twenty-four (24) hours after the facsimile notice is transmitted.

D. If any notice requires a period of less than seven (7) days for response, the notice shall be sent by facsimile.

E. If the time for response to any notice expires on a Saturday, Sunday or a legal holiday in the State of Utah, the time shall be extended to the next working day.

2.3 PROCEDURE TO INVOKE SURETY'S OBLIGATION

A. If the CONTRACTOR fails to perform or to comply with the terms of the Construction Contract, and such failure to perform or to comply has not been waived by the OWNER, the OWNER may notify the CONTRACTOR and the Surety, at their addresses described above, that the OWNER is considering declaring the CONTRACTOR in default.

B. Before declaring the default, the OWNER shall request and attempt to arrange a conference with the CONTRACTOR and the Surety to be held at a time and place required by the OWNER to discuss methods of performing the Work.

C. If the CONTRACTOR does not attend the conference or agree to cure any deficiencies in the CONTRACTOR's performance of the Work to the satisfaction of the OWNER, the OWNER may declare the CONTRACTOR in default and formally terminate the CONTRACTOR's right to complete the Work. Such default shall not be declared earlier than 10 days after the CONTRACTOR and the Surety have received notice as provided in article 2.2.

D. If the Contract with the CONTRACTOR is terminated, the OWNER agrees to pay the unpaid Balance of the Contract Price to the Surety for completion of the Work in accordance with the terms of the Construction Contract or to a contractor selected by the Surety to perform the Work in accordance with the terms of the Construction Contract.

2.4 SURETY'S OPTIONS AT CONTRACTOR TERMINATION

A. Surety Completes the Work: The Surety may undertake to perform and complete the Work itself, through its agents or through independent contractors.

B. Surety Obtains Bids or Proposals: The Surety may obtain bids or negotiated proposals from qualified contractors acceptable to the OWNER for a contract for performance and completion of the Work.

1. Such bids or proposals shall be prepared by the Surety for execution by the OWNER and the completion contractor selected.

2. Surety shall secure the contract with Performance and Payment Bonds executed by a qualified surety equivalent to this Performance Bond and the Payment Bond (Document 00 61 13.16); and

3. Surety shall pay to the OWNER the amount of damages as described in paragraph 2.6 in excess of the balance of the Contract Price incurred by the OWNER resulting from the CONTRACTOR's default.

C. Surety to Pay OWNER: Surety may determine the amount not to exceed the amount of this bond specified in paragraph 1.1B, for which Surety believes it may be liable to pay, and tender payment therefore to the OWNER. OWNER has sole discretion to accept payment. If the OWNER refuses the payment tendered, or the Surety has denied liability in whole or in part, without further notice the OWNER shall be entitled to enforce any remedy available to the OWNER.

2.5 PROCEDURE FOR OWNER TO DECLARE SURETY IN DEFAULT

A. The OWNER may declare the Surety to be in default upon the following procedures.

1. The OWNER shall issue an additional written notice to the Surety, after declaring the CONTRACTOR in default as provided in Article 2.3, demanding that the Surety perform its obligations under this Bond.

2. Surety shall respond to the OWNER within 15 days after receipt of the OWNER's additional notice, either denying the claim or accepting liability and exercising its' options under Article 2.4.

2.6 SURETY'S OBLIGATIONS

A. After the OWNER has terminated the CONTRACTOR's right to complete the Construction Contract, and if the Surety elects to complete the Construction Contract as provided in Article 2.4, then the responsibilities of the Surety to the OWNER shall not be greater than those of the CONTRACTOR under the Construction Contract, and the responsibilities of the OWNER to the Surety shall not be greater than those of the OWNER under the Construction Contract.

B. To the limit of the amount of this Bond, but subject to commitment by the OWNER to pay all valid and proper payments made to or on behalf of the CONTRACTOR under the Construction Contract, the Surety is obligated, without duplication, for:

1. the responsibilities of the CONTRACTOR for correction of Defective Work and completion of the Construction Contract;

2. design professional and delay costs resulting from the CONTRACTOR's default, and resulting from the actions or failure to act of the Surety under article 2.4; and

3. liquidated damages which are or may become due for any reason.

2.7 **UNRELATED OBLIGATIONS OF THE CONTRACTOR**

A. The Surety and the OWNER shall not be liable to others for obligations of the CONTRACTOR that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or changed on account of any such unrelated obligations.

B. No right of action shall accrue on this Bond to any person or entity other than the OWNER or its heirs, executors, administrators, or successors.

2.8 **SURETY WAIVES NOTICE OF ANY CHANGE**

A. Surety hereby waives notice of any change, including changes of Contract Time, Contract Price and scope of Work, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

2.9 **VENUE**

A. Any suit or action commenced by OWNER under this Bond shall be for action in a court of competent jurisdiction in the State of Utah.

PART 3 EXECUTION

3.1 **EFFECTIVE DATE**

A. Surety and CONTRACTOR execute this Bond agreement and declare it to be in effect as of the _____day of _____, ____.

3.2 **CONTRACTOR'S SUBSCRIPTION AND ACKNOWLEDGMENT**

A. Type of organization: _____
(corporation, partnership, individual, etc.)

B. If CONTRACTOR is a corporation, attach a corporate resolution evidencing CONTRACTOR's authority to sign.

C. CONTRACTOR's signature: _____

D. Please print name here: _____

E. Title: _____

F. Notary Acknowledgement: In the County of _____, State of _____, on the _____ day of _____, 20 ___, the foregoing instrument was acknowledged before me.

_____
Notary's signature

3.3 **SURETY'S SUBSCRIPTION AND ACKNOWLEDGMENT**

A. Attach evidence of Surety's corporate authority to sign.

C. Surety's signature: _____

D. Please print name here: _____

E. Title: _____

F. Notary Acknowledgement: In the County of _____, State of _____, on the _____ day of _____, 20 ___, the foregoing instrument was acknowledged before me.

_____
Notary's signature

END OF DOCUMENT

DOCUMENT 00 61 13.16
PAYMENT BOND

PART 1 GENERAL

1.1 **BOND**

A. Number: _____

B. Amount: _____

_____ Dollars ($_____).

1.2 **SURETY**

A. Name: _____

B. Address: _____

_____

C. Telephone number: _____

D. Facsimile number: _____

1.3 **CONTRACTOR**

A. Name: _____

B. Address: _____

_____

C. Telephone number: _____

D. Facsimile number: _____

1.4 **OWNER**

A. ***Nibley City***

1.5 **CONSTRUCTION CONTRACT**

A. The Construction Contract is known as ***Ridgeline Park | Phase 1***

1.6 **DEFINED TERMS**

A. Terms used in this Payment Bond which are defined in article 1.1 of the General Conditions will have the meanings indicated in the General Conditions.

PART 2 COVENANTS

2.1 **SURETY'S AND CONTRACTOR'S RELATIONSHIP**

A. Surety as surety, and CONTRACTOR as principal, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the OWNER as obligee, for the performance of the Construction Contract, whether awarded or about to be awarded.

B. If CONTRACTOR performs the Construction Contract, the Surety and the CONTRACTOR shall have no obligation under this Bond.

2.2 **NOTICE**

A. Notice to the Surety, the OWNER or the CONTRACTOR shall be sent by certified mail, facsimile, or hand delivered to the address shown on this Bond agreement.

B. Notices sent as required by paragraph 2.2A shall be effective on the date on which such notice was sent.

C. Notice may be sent by facsimile. Facsimile notice shall be effective on the date of transmission provided that a confirmation establishing the successful transmission of the notice is sent by first-class mail, postage prepaid, along with a copy of the notice transmitted, no later than twenty-four (24) hours after the facsimile notice is transmitted.

D. If any notice requires a period of less than seven (7) days for response, the notice shall be sent by facsimile.

E. If the time for response to any notice expires on a Saturday, Sunday or a legal holiday in the State of Utah, the time shall be extended to the next working day.

2.3 **CONDITIONS OF SURETY'S LIABILITY**

A. With respect to the OWNER, this Bond agreement shall be null and void if the CONTRACTOR promptly takes the following actions:

1. promptly makes payment, directly or indirectly, for all sums due Claimants, and

2. defends, indemnifies and saves harmless the OWNER from all claims, demands, Liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Work, provided the OWNER has tendered defense of such claims, demands, liens or suits to the CONTRACTOR and the Surety.

2.4 PROCEDURE TO INVOKE SURETY'S OBLIGATION

A. **Concerning Claimants who have a Direct Contract with the CONTRACTOR**: The Surety shall have no obligation to Claimants under this Bond who are employed by or have a direct contract with the CONTRACTOR until Claimants have given notice to the Surety at the address shown on this Bond agreement and sent a copy, or notice thereof, to the OWNER, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

B. **Concerning Claimant who does not have a Direct Contract with the CONTRACTOR**: The Surety shall have no obligation to Claimant under this Bond who does not have a direct contract with the CONTRACTOR until Claimant takes the following actions.

1. The Claimant shall furnish written notice to the CONTRACTOR and send a copy, or notice thereof, to the OWNER, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed.

2. The Claimant shall have either received a rejection in whole or in part from the CONTRACTOR, or not received within 15 days of furnishing the above notice any communication from the CONTRACTOR by which the CONTRACTOR has indicated the claim will be paid directly or indirectly.

3. Not having been paid within the above 15 days, the Claimant shall have sent a written notice to the Surety at the address described on this Bond agreement and sent a copy, or notice thereof, to the OWNER stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the CONTRACTOR.

2.5 SURETY'S OPTION TO SETTLE CLAIMS

A. When the Claimant has satisfied the conditions of article 2.4, the Surety shall promptly and at the Surety's expense take the following actions.

1. Send an answer to the Claimant, with a copy to the OWNER, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

2. Pay or arrange for payment of any undisputed amounts.

2.6 SURETY'S OBLIGATION

A. Surety's total obligations under this bond shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

2.7 USE OF FUNDS

A. Amounts owed by OWNER to CONTRACTOR under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, against the Performance Bond (Document 00 61 13.13). By the CONTRACTOR furnishing and the OWNER accepting this Bond, they agree that all funds earned by the CONTRACTOR in the performance of the Work are dedicated as follows:

1. The OWNER has first priority to use the funds for the completion of the Work.

2. The CONTRACTOR and the Surety have second priority to use the funds to satisfy the obligations of the CONTRACTOR and the Surety under this Bond.

2.8 UNRELATED OBLIGATIONS OF THE CONTRACTOR

A. The Surety and the OWNER shall not be liable to Claimants or others for obligations of the CONTRACTOR that are unrelated to the Construction Contract.

B. The OWNER shall not be liable for payment of any damages, costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

2.9 SURETY WAIVES NOTICE OF ANY CHANGE

A. Surety hereby waives notice of any change to the Construction Contract including changes of Contract Time, Contract Price, and scope of Work, or to related subcontracts, purchase orders or other obligations.

2.10 **VENUE**

A. Any suit or action commenced by a Claimant under this Bond shall be for action in a court of competent jurisdiction in the State of Utah.

2.11 **COPIES OF THIS BOND**

A. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the CONTRACTOR or OWNER shall promptly furnish a copy of this Bond or shall permit a copy to be made.

PART 3 EXECUTION

3.1 **EFFECTIVE DATE**

A. Surety and CONTRACTOR executed this Bond agreement and declared it to be in effect as of the _____day of _____, ____.

3.2 **CONTRACTOR'S SUBSCRIPTION AND ACKNOWLEDGMENT**

A. Type of organization: _____
(corporation, partnership, individual, etc.)

B. If CONTRACTOR is a corporation, attach a corporate resolution evidencing CONTRACTOR's authority to sign.

C. CONTRACTOR's signature: _____

D. Please print name here: _____

E. Title: _____

F. Notary Acknowledgement: In the County of _____, State of _____, on the _____ day of _____, 20 ___, the foregoing instrument was acknowledged before me.

_____
Notary's signature

3.3 **SURETY'S SUBSCRIPTION AND ACKNOWLEDGMENT**

A. Attach evidence of Surety's corporate authority to sign.

B. Surety's signature: _____

C. Please print name here: _____

D. Title: _____

E. Notary Acknowledgement: In the County of _____, State of _____, on the _____ day of _____, 20 ___, the foregoing instrument was acknowledged before me.

_____
Notary's signature

END OF DOCUMENT

DOCUMENT 00 62 16
CERTIFICATE OF INSURANCE

PART 1 GENERAL

1.1 PROCEDURE

A. For filing purposes, add Certificates of Insurance to the Contract Documents following this page.

END OF DOCUMENT

SECTION 00 62 76
APPLICATION FOR PAYMENT

Contractor:		To Owner:	Nibley City
Address:		Pay Request No.:	
		Date:	

CONTRACT FOR: ***Nibley City Ridgeline Park | Phase 1***

For work accomplished through the dates of through

Contract Change Order Summary

No.	Approval Date	Amount Additions	Amount Deductions
Totals		$ -	$ -
Net Change			$ -

Tabulation of Payment

1. Original Contract Price	$ -
2. Change Orders	$ -
3. Revised Contract Price (1+2)	$ -
4. Total Value of Work Completed to Date*	
5. Allowance for Materials Stored on this Date*	$ -
6. Subtotal (4+5)	$ -
7. Previously earned by Contractor (Prev. #6)	$ -
8. Value of Work Completed this Period (6-7)	$ -
9. Retainage Held Prior to this Payment (Prev. #11)	$ -
10. Retainage to be Held from this Payment (% of 8)	$ -
11. Total Retainage to be Held (9+10)	$ -
12. Payment Due Contractor this Period (8-10)	$ -

*Detailed breakdown on attached continuation sheet

Contract Time

Original Contract Time (Days)	On Schedule	Starting Date:
Revisions	Yes No	Completion Date:
Remaining Time (Days)		

ACCEPTED BY CONTRACTOR:

By: _____

Date: _____

ENGINEER'S CERTIFICATION:

The undersigned certifies that work has been inspected and, to the best of their knowledge and belief, the quantities shown on this estimate are correct and the work has been performed in accordance with the contract documents.

APPROVED BY OWNER

By: _____

Date: _____

APPROVED BY ENGINEER

By: _____

Date: _____

DOCUMENT 00 63 13
REQUEST FOR INTERPRETATION

DATED: _____

OWNER: Nibley City **CONTRACTOR:** _____
Address: 455 West 3200 South Address: _____
Nibley, UT 84321 _____

PROJECT: _____

Request for Interpretation of the specs/plans as follows:

Response:

Date Received by City:	Reviewed by:
Date of Response:	

DOCUMENT 00 63 36
FIELD ORDER

DATED:

OWNER: Nibley City
Address: 455 West 3200 South
Nibley, UT 84321

CONTRACTOR:
Address:

PROJECT: ***Nibley City Ridgeline Park | Phase 1***

ENGINEER:

This Field Order provides for:

1. Reason for Change:

2. Description of Change:

3. Corrective Action:

4. Disposition:

The undersigned hereby proposes and agrees to furnish any and all labor, material, equipment, etc. in strict accordance with the requirements of the original contract documents except as specifically above noted or otherwise required in connection with the above proposed change. The original contract documents remain in full force and effect except as specifically modified herein.

The City and the Contractor hereby agree that the compensation set forth in this Change Order shall comprise the total direct and indirect costs due to Contractor for the work or changes defined in the Change Order.

ACCEPTED:_____ Date:_____
Inspector

APPROVED:_____ Date:_____
City Engineer

DOCUMENT 00 63 49
WORK DIRECTIVE CHANGE

NO.:

PROJECT: **DATE OF ISSUANCE:** _____

OWNER: Nibley City

CONTRACTOR: _____

CONTRACT FOR: _____

ENGINEER: _____

You are directed to proceed promptly with the following change(s):

Description:

Purpose of Change Order:

Attachments: (list documents supporting change)

If a claim is made that the above change(s) have affected Contract Price or Contract Time, any claim for a Change Order based thereon will involve one of the following methods of determining the effect of the change(s).

Method of determining change in Contract Price:

☐ Time and materials
☐ Unit prices
☐ Cost plus fixed fee
☐ Other

Estimated increase(decrease) in Contract Price:
$_____
If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

Method of determining change in Contract Time:

☐ Contractor's records
☐ Engineer's records
☐ Other

Estimated increase / decrease in Contract Time:
_____ days. If the change involves an increase, the estimated time is not to be exceeded without further authorization.

RECOMMENDED:

by _____
Engineer

AUTHORIZED:

by _____
Owner

DOCUMENT 00 63 63
CHANGE ORDER

DATED: _____
CONTRACTOR: _____
Address: _____ Change Order No.: _____

PROJECT: ***Nibley City Ridgeline Park | Phase 1*** Original Contract Amount: _____
OWNER: Nibley City

In preparing change orders, show in order as separate numbered paragraphs:
1. Reason for change 2. Description of change 3. Change in contract cost 4. Change in contract time

This Change order provides for:

1 Reason for change:
2 Description of change:
3 Change in contract cost:

Item #	Description of Changes	Quantity	Unit	Unit Price	Decrease in Contract Amount	Increase in Contract Amount
						$ -
						$ -
						$ -
	Subtotals:				$ -	$ -
	Net Change in Contract Price:					**$ -**

The amount of the contract will be increased decreased by the sum of: $ - DOLLARS

The contract total including this and previous change orders will be: $ - DOLLARS

4 Change in Contract time: + Increase - Decrease 0 Days
New Completion Date: _____

The undersigned hereby proposes and agrees to furnish any and all labor, material, equipment, etc. in strict accordance with the requirements of the original contract documents except as specifically above noted or otherwise required in connection with the above proposed change. The original contract documents remain in full force and effect except as specifically modified herein.

The City and the Contractor hereby agree that the compensation set forth in this Change Order shall comprise the total direct and indirect costs due to Contractor for the work or changes defined in the Change Order.

APPROVED BY: _____ Date: _____
Contractor

APPROVED BY: _____ Date: _____
City Engineer

This document shall become a supplement to the Contract and all provisions will apply thereto.

DOCUMENT 00 65 16
CERTIFICATE OF SUBSTANTIAL COMPLETION

DATED:

OWNER: NIBLEY CITY

TO: **CONTRACTOR**
Address:

PROJECT: **Ridgeline Park | Phase 1**

ENGINEER:

The Certificate of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof:

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on [DATE].

A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does not alter the responsibility of Contractor to complete all the Work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by Contractor within _____ days of the above date of Substantial Completion.

The following documents are attached to and made a part of this Certificate:

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of Contractor's obligations to complete the Work in accordance with the Contract Documents.

CITY ENGINEER: _____
(Signature)
Date: _____

WATER DEPARTMENT: _____
(Signature)
Date: _____

CONTRACTOR's Representative: _____
(Signature)
Date: _____

DOCUMENT 00 65 19
NOTICE OF FINAL ACCEPTANCE

CONTRACTOR:
Address:

PROJECT: Ridgeline Park | Phase 1

OWNER: *NIBLEY CITY*

A final acceptance of the WORK completed under the Contract indicated above has been made and all WORK has been found to be completed. All known changes to the WORK have been documented and approved at this time and to the best of our knowledge, information and belief. The WORK required by this Contract has been performed and completed in accordance with the approved DRAWINGS, SPECIFICATIONS and other CONTRACT DOCUMENTS. Final payment for the Contract has therefore been requested and should follow shortly.

Thank you for your effort and cooperation towards the successful completion of this WORK.

ENGINEER: _____
(Signature)

Date: _____

OWNER's Representative: _____
(Signature)

Date: _____

SECTION 00 65 19.16
WAIVER OF LIEN

FOR VALUABLE CONSIDERATION, the sufficiency of receipt of which is acknowledged, the undersigned acknowledges payment in full, including all approved change orders for which _____ _____ of _____ has received payment, but excluding pending change order requests, or otherwise provided below and waives and releases any and all liens or claim or right and other rights afforded by law to protect unpaid subcontractors, laborers and suppliers of machinery tools, equipment, materials, supplies, services and other items used in construction against the project known as _____ located at _____ _____ and against the Owner.

THIS RELEASE is effective for all labor, tools equipment, supplies, services and the like furnished up to and including the _____ day of _____,20____ (excluding retainage withheld, if any) in the amount of $_____.

THIS RELEASE and the representations made above are made with the intent that the Project Owner or any other party who or whose property might be liable for any claims of the undersigned party may rely on the language of this instrument.

EXECUTED THIS _____ day of _____, 20____.

STATE OF UTAH)
§
COUNTY OF SALT LAKE)

_____
COMPANY NAME

_____
BY

_____
PRINTED NAME

_____
TITLE

On this _____ day of _____, 20___, personally appeared before me, a Notary Public, in and for said County and State,_____, known to me to be the person(s) described within. The person(s) described within executed the foregoing instrument, and duly acknowledged to me that s/he (they) executed the same, freely and voluntarily, for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above mentioned.

_____
NOTARY PUBLIC

DOCUMENT 00 73 00
SUPPLEMENTAL GENERAL CONDITIONS

The following supplements modify, change, delete from, and add to the Agreement between Owner and Contractor. Where any portion of the Agreement between Owner and Contractor is modified or any paragraph, subparagraph, or clause is modified or deleted by these supplements or conditions, the unaltered provisions shall remain in effect.

PART 1 GENERAL

Add the following new subparagraph 1.1 A.61 **Knowledge and Associated Terms**: The terms “knowledge,” “known,” “recognize,” and “discovered” their respective directives and similar terms in the Contract Documents as used in reference to the Contractor, shall be interpreted to mean that which the Contractor knew (or should have known), recognized (or should have recognized), and discovered (or should discover) in exercising the care, skill, and diligence required by the Contract Documents. Analogously, the expressions reasonably inferable on similar terms in the Contract Documents shall be interpreted to mean reasonably inferable by the Contractor familiar with the project in exercising the care, skill, and diligence required of the Contractor by the Contract Documents.

PART 2 PRELIMINARY MATTERS

Replace paragraph 2.2 with the following: Owner shall not furnish to Contractor copies of published Contract Documents such as the Manual of Standard Plans and Manual of Standard Specifications. Such documents may be purchased separately by Contractor. Owner may furnish to Contractor up to five (5) copies of the Contract Documents (specifically excluding the published Contract Documents described above). Additional copies may be purchased from Engineer.

Replace subparagraph 2.5 C with the following: **Field Office**. Contractor is not required to establish and maintain a field office in such a location so that Engineer may contact Contractor during reasonable times for transmittal of Plans, instructions, and determinations of project information. Contractor shall designate two (2) representatives who are acceptable to Owner and Engineer, who is available at all times by cellular phone for instructions and determination of project information.

PART 5 BONDS AND INSURANCE

Replace 5.1 A with the following:

A. Prior to or contemporaneously with Owner's executing the Agreement, Contractor shall file with the Owner a good and sufficient performance Bond and a payment Bond that meets all statutory requirements of the State of Utah in the amount of the Contract Price and all subsequent increases.

B. The payment Bond and performance Bond shall be substantively in the form attached hereto (Documents 00 61 00 and 00 62 00) and shall be executed by the Contractor and secured by a company that is acceptable to Owner and Engineer and regularly authorized to do a general surety business in the State of Utah and named in the current list of Companies holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies as published in current Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department, with an underwriting limitation equal to or greater than the Contract Price which the Bond guarantees or with a current "A-" rating or better in A.M. Best Co., Best Insurance Reports, Property and Casualty Edition.

C. The performance Bond and payment Bond shall guarantee the faithful performance of the Work and payment of all labor and materials. They shall inure by their terms to the benefit of the Owner. Neither this nor any other provision requiring the performance Bond and payment Bond shall be construed to create any rights in any third-party Claimant as against the Owner for performance of the Work under the Construction Contract.

Replace 5.2 A with the following:

A. The Contractor shall, for the protection and benefit of the Indemnitees and the Contractor and as part of the Contractor's efforts to satisfy the obligations set forth herein, procure, pay for, and maintain in full force and effect, at all times during the performance of the Work until final acceptance of the Work or for such duration as required, policies of insurance issued by a responsible carrier or carriers acceptable to the Owner, and in form and substance reasonably satisfactory to the Owner, which afford the following coverages:

1. Comprehensive General and Automobile Liability Insurance, including completed operations, blanket contractual and broad form property damage coverage, with the following minimum limits:

Personal Injury Liability	$2,000,000 each occurrence
Property Damage Liability	$1,000,000 each occurrence; $2,000,000 aggregate
Worker's Compensation	as required by Utah statute

2. All such insurance shall be written on an occurrence basis. Information concerning reduction of coverage shall be furnished by the Contractor promptly.

3. All policies and Certificates of Insurance shall expressly provide that no less than thirty (30) days' prior written notice shall be given the Owner in the event of material alteration, cancellation, nonrenewal, or expiration of the coverage contained in such policy or evidenced by such certified copy or Certificate of Insurance.

4. In no event shall any failure of the Owner to receive certified copies or certificates of policies as provided herein be construed as a waiver by the Owner or the Engineer of the Contractor's obligations to obtain insurance pursuant to the provision hereof. The obligation to procure and maintain any insurance required herein is a separate responsibility of the Contractor and independent of the duty to furnish a certified copy or certificate of such insurance policies.

5. When any required insurance, due to the attainment of a normal expiration date or renewal date, shall expire, the Contractor shall supply the Owner with Certificates of Insurance and amendatory riders or endorsements that clearly evidence the continuation of all coverage in the same manner, limits of protection, and scope of coverage as was provided by the previous policy. In the event any renewal or replacement policy, for whatever reason obtained or required, is written by a carrier other than that with whom the coverage was previously placed, or the subsequent policy differs in any way from the previous policy, the Contractor shall also furnish the Owner with a certified copy of the renewal or replacement policy unless the Owner provides the Contractor with prior written consent to submit only a Certificate of Insurance for any such policy. All renewal and replacement policies shall be in form and substance satisfactory to the Owner and written by carriers acceptable to the Owner.

6. The Contractor shall cause each Subcontractor to (i) procure insurance reasonably satisfactory to the Owner and (ii) name the Indemnitees as additional insureds under the Subcontractor's comprehensive general liability policy. The additional insured endorsement included on the Subcontractor's comprehensive general liability policy shall state that coverage is afforded the additional insureds with respect to claims arising out of operations performed by or on behalf of the Contractor. If the additional insureds have other insurance that is applicable to the loss, such other insurance shall be on an excess or contingent basis. The amount of the insurer's liability under this insurance policy shall not be reduced by the existence of such other insurance.

PART 6 CONTRACTOR'S RESPONSIBILITIES

Add the following new subparagraph 6.8 C: Contractor shall insure strict compliance with the requirements of UTAH CODE ANN. § 34-30-1 through 14 and § 34-30-1. Further, if the provisions of UTAH CODE ANN. § 34-30-1 are not complied with, this Agreement shall be void.

Replace the first sentence of paragraph 6.14 B with the following: **Shop Drawings**. Contractor shall submit shop drawings to Engineer for review and approval in accordance with the acceptable schedule of submissions (see paragraph 2.7 A).

Add the following after the word "agents" in the second line of paragraph 6.17 A: elected officials, appointed officials, officers, volunteers.

Add the following after the word "agent" in the second line of paragraph 6.17 B: elected officials, appointed officials, officers, volunteers.

NIBLEY CITY

Ridgeline Park | Phase 1

PROJECT SPECIFICATIONS

SUPPLEMENTAL SPECIFICATIONS

PROJECT SPECIAL PROVISIONS

SUPPLEMENTAL SPECIFICATION

SECTION 01 11 13
SUMMARY OF WORK

PART 1 GENERAL

1.1 WORK COVERED BY CONTRACT DOCUMENTS

A. Work of this Construction Contract ***comprises work under any, all, or any number of the schedules described in the Contract Documents as awarded to the Contractor.***

1.2 CONTRACT METHOD

A. Construct the Work under a single unit price contract.

B. Employ subcontractor[s] assigned by OWNER for: ***Not Applicable***

C. Relations and responsibilities between CONTRACTOR and any Subcontractors assigned by OWNER shall be as defined in the Conditions of the Contract. Assigned Subcontractors shall, in addition:

1. Furnish to CONTRACTOR bonds covering faithful performance of subcontracted work and payment of all obligations there under [when CONTRACTOR is required to furnish such bonds to owner.]
2. Purchase and maintain liability insurance to protect CONTRACTOR from claims for not less than the limits of liability which CONTRACTOR is required to provide to OWNER.

1.3 WORK BY OTHERS

A. Work of the Project [which will be] executed prior to start of Work of this Construction Contract, and which is specifically excluded from this Contract:

Not Applicable

B. Work of the Project which will be executed during or after completion of Work of this Construction Contract, and which is specifically excluded from this Contract:

1) ***Supplying and Installing Playground Equipment.***
2) ***Supplying and Installing Engineered Wood Fiber***

Surfacing for Playground and Bouldering Area.

1.4 **FUTURE WORK**

A. ***Not Applicable***

1.5 **WORK SEQUENCE**

A. Liquidated Damages: Article 2.4 of the Agreement (Document 00 52 43).

1.6 **CONTRACTOR USE OF PREMISES**

A. CONTRACTOR shall limit use of premises [for Work, for storage, and for access,] to allow:

1. Residential Access

B. Coordinate use of premises under direction of OWNER.

C. Assume full responsibility for protection and safekeeping of products under this Construction Contract.

D. Obtain and pay for use of additional storage or work areas needed for operations under this Construction Contract.

1.7 **OWNER OCCUPANCY**

A. ***Not Applicable***

1.8 **PARTIAL OWNER UTILIZATION**

A. ***Not Applicable***

1.9 **PRE-ORDERED PRODUCTS**

A. ***Not Applicable***

1.10 **OWNER-FURNISHED PRODUCTS**

A. ***Not Applicable***

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF DOCUMENT

SUPPLEMENTAL SPECIFICATION

SECTION 01 14 00
WORK RESTRICTIONS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Conditions affecting construction.

1.2 PROJECT COORDINATION

A. CONTRACTOR is responsible for the coordination of all the work, whether performed by his own personnel, subcontractors, or others.

1.3 SAFETY REGULATIONS

A. CONTRACTOR shall be responsible to ensure that all excavation and construction of this project shall be in compliance with OSHA, state, and local safety regulations.

1.4 CLEANUP

A. Upon completion of construction, all scraps of lumber, forms, steel, wire, concrete materials, excess concrete spills, rocks, debris, excavation material, asphalt, etc., shall be removed from the area and disposed of by CONTRACTOR.

1.5 CONTRACT DRAWINGS

A. Where CONTRACTOR bases his bid upon quantities scaled from Contract Drawings, he shall verify true scale with ENGINEER prior to submitting his bid when scale is not shown or unclear.

1.6 INTERFERING STRUCTURES AND UTILITIES

A. CONTRACTOR shall exercise all possible caution to prevent damage to existing structures and utilities, whether above ground or underground. CONTRACTOR shall notify all utility companies concerned at least one week in advance of construction operations in which a utility's facilities may be involved. CONTRACTOR shall be responsible for coordination with utility companies for acceptable relocation methods (permanent or temporary) for the construction of this project. This shall include, but not be limited to, irrigation, water, telephone, cable, electric, and gas.

B. CONTRACTOR shall pothole utilities as necessary to determine potential utility conflicts. “Down time” or waiting for engineering evaluation of utility conflicts or grade issues, as well as modifications to existing utilities, shall be borne by CONTRACTOR without any additional costs to the OWNER or ENGINEER.

C. Any property or utilities damaged by the work shall be repaired or replaced in a condition equal to or better than the condition prior to the damage. Such repair or replacement shall be accomplished at CONTRACTOR’s expense without additional compensation from the OWNER or ENGINEER.

D. All restorations made to utilities shall be inspected and approved by an authorized representative of the utility before being concealed by backfill or other Work

1.7 CONSTRUCTION SURVEYING

A. CONTRACTOR shall be responsible for all construction surveying on the project. CONTRACTOR shall preserve benchmarks and reference points. In the case of the destruction of an established benchmark or reference point, CONTRACTOR will be charged with the resulting relocation expense and shall be responsible for any mistakes that may be caused by their loss or disturbance.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION

SUPPLEMENTAL SPECIFICATION

SECTION 01 43 00
QUALITY ASSURANCE

Add Paragraph 1.6, Inspection and Testing Laboratory Services, and 1.7, Manufacturers' Field Services and Reports, as follows:

1.6 INSPECTION AND TESTING LABORATORY SERVICES

A. CONTRACTOR shall employ and pay for the services of a qualified independent testing consultant, approved by the OWNER, to perform specified services for the testing of:

Soils Compaction Control	Material Aggregate Control
Concrete Control	Paving and Asphalt Surfacing Control

B. Inspections, tests, and other services specified in individual specification Sections will be accomplished under the direction of ENGINEER.

C. Reports will be submitted through ENGINEER in accordance with Section 01 35 10, in duplicate except as noted otherwise in Section 01 33 00, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.

D. Furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.

E. Notify Engineer 48 hours prior to expected time for testing operations. Make arrangements with independent firm to perform quality control services. Provide Firm SOQ to OWNER for acceptance and approval prior to work. OWNER may request alternate testing firm at any time during project work as deemed solely necessary by OWNER at no additional cost to OWNER.

F. Retesting required because of non-conformance to specified requirements shall be performed under the direction of ENGINEER. Payment for retesting will be borne by CONTRACTOR.

1.7 MANUFACTURERS' FIELD SERVICES AND REPORTS

A. When specified in individual specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable, and to initiate instructions when necessary.

B. Individuals to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

C. Submit report in duplicate within 30 days of observation to ENGINEER for review.

END OF SECTION

SUPPLEMENTAL SPECIFICATION
SECTION 01 45 00
QUALITY CONTROL

This specification changes a portion of Section 01 45 00 of the Manual of Standard Specifications, 2017 Edition. All other provisions of the Section remain in full force and effect.

Add the following Article to Part 1.

1.7 QUALITY CONTROL PROGRAM

A. **Quality Control Program**: Provide a quality control program which includes procedures and organization so equipment, workmanship, fabrication, construction, operations, and inspections comply with the Contract Documents.

B. **Quality Control Program Manager Qualifications**:

1. Not CONTRACTOR's work or site superintendent.
2. Quality control experience with projects of similar type and magnitude.
3. Authorized as CONTRACTOR's representative for all quality control and quality assurance matters.

C. **Quality Control Program Manager Responsibilities**:

1. Manage and supervise quality control plan and quality control surveillance personnel.
2. Verify that testing procedures comply with contract requirements.
3. Verify that facilities and testing equipment are available and comply with testing standards.
4. Check test instrument calibration data against certified standards.
5. Verify that recording forms, including all the documentation requirements, have been prepared.
6. Prepare copies of each test result with all necessary data recorded and with documentation and computations compiled.
7. Provide more testing, if, in ENGINEER's opinion, work is not being adequately controlled.
8. Immediately report any non-compliance of materials and mixes to ENGINEER and CONTRACTOR.
9. When an out-of-tolerance condition exists, perform additional control testing until tolerance is attained.
10. Correlate CONTRACTOR's assurance testing program (Section 01 43 00) with ENGINEER's acceptance testing program (Section 01

35 10).

END OF SECTION

SUPPLEMENTAL SPECIFICATION

SECTION 01 76 00
PROTECTION AND RESTORATION OF EXISTING FACILITIES

PART 1 GENERAL

1.1 REQUIREMENTS INCLUDED

A. This section is intended to include requirements associated with protection and restoration of existing facilities such as underground facilities and surface improvements.

1.2 NOTIFICATION OF UTILITIES

A. Utilities are to be contacted by CONTRACTOR prior to any excavation activities requesting locations on underground utilities.

1.3 INTERRUPTION TO UTILITIES

A. Any underground facilities located by utilities or indicated in Contract Documents shall be treated according to paragraph 4.3.A of General Conditions.

B. Any underground facilities not located by utilities and not indicated in Contract Documents shall be treated according to paragraph 4.3.B of General Conditions.

C. Exact locations and depths of all underground utilities shall be verified, by uncovering, prior to commencing any Work activities. When such exploratory excavations show the underground utility locations as indicated in Contract Documents to be in error, the CONTRACTOR shall so notify the ENGINEER in writing.

D. Where utilities are to be relocated, CONTRACTOR shall make proper application and notify ENGINEER of specified time and conditions of necessitated Work.

E. All restorations made to utilities shall be inspected and approved by an authorized representative of the utility before being concealed by backfill or other Work.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

(Not Used)

END OF SECTION

SECTION 32 40 01
SITE FURNISHINGS

APWA STANDARD SPECIFICATIONS ARE HEREBY AMENDED TO INCLUDE THE FOLLOWING:

PART 1 - GENERAL

1.1 SCOPE OF WORK

The work under this Section shall consist of furnishing all labor, materials, and incidentals to install the following site furnishings complete in place and ready for intended use in accordance with the manufacturer's specifications, these specifications and the project plans. All site furnishings listed below are to be "or approved equal". Exact models and suppliers represent the desired quality, look, and character of the individual elements included in this specification.

A. Playground Equipment (N.I.C.)
B. Iconic Feature 1
C. Iconic Feature 2
D. Cortez CXT Restroom
E. 20' Dia. Pavilion
F. 30' Dia. Pavilion
G. Colossus Boulder
H. Kalispell Boulder
I. Corn Hole
J. 9 Square
K. Gaga Pit
L. Picnic Table
M. Bench
N. Trash Receptacle
O. Artificial Turf
P. Engineered Wood Fiber Surfacing (N.I.C.)

1.2 SUBMITTALS

A. Submit full product data and technical information on all furnishings to be installed.

PART 2 - PRODUCTS

2.1 GENERAL

The materials specifications are based on the proprietary products in order to establish a standard of quality and installation procedures. Other manufacturers meeting or exceeding the quality standards of the specified product may be submitted for approval. All shop drawings, material samples, and color samples shall be submitted for review and approval.

A. Playground: Sonntag Recreation playground equipment shown per plan.
   1. Colors and Finishes: As selected by Owner.
   2. Install per manufacturer's specifications and in compliance with national and city standards.
   3. Playground equipment to be provided and installed by Owner (N.I.C.).

B. Iconic Feature 1: Wooden Silo.
   1. Contractor to find existing structure similar in nature and size to representative image shown in plans as approved by Owner.
   2. Colors and Finishes: As selected by Owner.
   3. Contractor to provide structural drawings for footing.

C. Iconic Feature 2: Outdoor Water Solutions – Large Wooden Windmill.
   1. Stain and Finish: As selected by Owner.
   2. Install per manufacturer’s instructions.

D. Cortez CXT Restroom
   1. Install per manufacturer's instructions.
   2. Contractor to acquire full set of construction documents prior to installation.
   3. Colors and Finishes: As selected by Owner.

E. 20’ Dia. Pavilion
   1. Steel posts, powdercoated: color as selected by Owner.
   2. Corrugated galvanized metal circular top with standing seam galvanized metal roof reminiscent of actual grain silo.
   3. Install per manufacturer’s instructions.

F. 30’ Dia. Pavilion

1. Steel posts, powdercoated: color as selected by Owner.
2. Corrugated galvanized metal circular top with standing seam galvanized metal roof reminiscent of actual grain silo.
3. Install per manufacturer’s instructions.

G. Colossus Boulder (N.I.C.)
1. Owner to approve custom color/finish .
2. Install per manufacturer's specifications.

H. Kalispell Boulder (N.I.C.)
1. Owner to approve custom color.
2. Install per manufacturer's specifications.

I. Corn Hole: Doty & Sons Concrete Products Model #BYOB5531.
1. Color as selected by owner.

J. 9 Square: Independence Design Group’s Heavy Duty 9 Square in the Air!: Playground Edition.
1. Color and Finish: To be determined by owner.

K. Gaga Pit: Sports Resource Group’s Prowall Gaga Pit
1. Color: To be determined by owner.
2. Mounting: Surface mount.

L. Picnic Table: Smith Steelworks 6’ Classic Picnic Table
1. Square Frame
2. Material: Steel
3. Color: Corten powder coat.
4. Mounting: Surface mount.

M. Bench: Smith Steelworks 6’ Classic Bench.
1. Bench with back and arms and horizontal slats.
2. Mounting: Surface Mount.
3. Color: Corten powder coat.

N. Trash Receptacle: Smith Steelworks Classic Flare Trash Receptacle.
1. 32 Gallon.
2. Slat with Liner & Flat Top Lid, Color: As Selected by Owner.
3. Mounting: Surface Mount.
4. Color: Corten powder coat.

O. Artificial Turf: Rocky Mountain Go Play Turf.
1. Color: Field Green/Jute.

P. Engineered Wood Fiber Surfacing (N.I.C.)

1. 100% virgin wood fiber manufactured to meet International Play Equipment Manufacturer's Association (IPEMA) and ASTM standards and specifications for playground surfacing.
2. Includes a 10 year limited warranty.
3. Min. 12" depth.

PART 3- EXECUTION

3.1 INSTALLATION

A. Install all components at locations shown on Drawings properly aligned and spaced, plumbed vertically, complete, and ready for use.

B. Install all components in accordance with manufacturer's instructions.

C. If the manufacturer recommends anchoring or footing details, submit copies of the details to the City for review and approval prior to construction.

3.2 SELECTED MANUFACTURERS

A. Sonntag Recreation
4245 Panorama Circle
Holladay, UT 84124
Phone: (801) 278-9797
Contact: Jeremiah Webb, (801) 808-2241

B. As proposed by Contractor and approved by Owner.

C. Outdoor Water Solutions, Inc.
1856 Fed X Drive
Springdale, AR 72764
Phone: (866) 471-1614

D. LB Foster CXT Products
415 Holiday Drive, Suite 100
Pittsburgh, PA 15220
Phone: (412) 928-3400
Contact: Kurt Mee, (303) 552-1843

E. Big T Recreation
11618 S State St #1602
Draper, UT 84020
Contact: Taft Egan, (801) 808-5006

F. Big T Recreation

11618 S State St #1602
Draper, UT 84020
Contact: Taft Egan, (801) 808-5006

G. ID Sculpture
591 S Boulevard St
Gunnison, CO 81230
Phone: (970) 641-1747
Contact: Jason MacMillan, (970) 641-1747

H. ID Sculpture
591 S Boulevard St
Gunnison, CO 81230
Phone (970) 641-1747
Contact: Jason MacMillan, (970) 641-1747

I. Doty & Sons Concrete Products
1275 E State St
Sycamore, IL 30178
Phone: 1 (800) 233-3907

J. 9 Square in the Air!
14248 F Manchester Road, Suite 125
Manchester, MO 63011
Phone: (877) 672-3938

K. Sports Resource Group
6885 Washington Ave. S.
Edina, MN 55439
Phone: (888) 808-7465

L. Smith Steel Works
270 W 500 S
Spanish Fork, UT 84660
Phone: (385) 225-4644
Contact: Russell Smith, (801) 414-1724

M. Smith Steel Works
270 W 500 S
Spanish Fork, UT 84660
(385) 225-4644
Contact: Russell Smith, (801) 414-1724

N. Smith Steel Works
270 W 500 S
Spanish Fork, UT 84660
(385) 225-4644

Contact: Russell Smith, (801) 414-1724

O. Rocky Mountain Turf
226 W 12650 S
Draper, UT 84020
(801) 808-0015

P. Sonntag Recreation
4245 Panorama Circle
Holladay, UT 84124
Phone: (801) 278-9797
Contact: Jeremiah Webb, (801) 808-2241

END OF SECTION

SECTION 32 84 00
UNDERGROUND IRRIGATION SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including Supplemental General Conditions and Special Provisions, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Trenching and stockpiling excavation materials and refilling trenches.
2. Installation of complete irrigation system including but not limited to point of connection, meter, filters, piping, valves, fittings, emitters, controllers, and wiring and final adjustments to insure complete coverage.
3. Water connections.
4. Clean up, inspection, and approval.
5. Testing.

B. Related Sections include the following:

1. Section 32 92 00 Turf and Grasses
2. Section 32 93 01 Exterior Plants

1.3 DEFINITIONS

A. Finish Grade: Elevation of finished surface of planting soil.

B. Subgrade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill immediately beneath planting soil.

C. Mainline: The system of pipes that carry water from the Point of Connection (POC) to the valves.

D. Lateral Lines: The system of pipes that carry the water from the valves to the sprinkler heads or emitters.

E. Point of Connection (POC): The point at which the Contractor will tie into the water supply.

F. Water Supply: Culinary or secondary piping and components furnished and installed

G. by others to provide irrigation water to the Project.

1.4 SUBMITTALS

A. Product Data: Manufacturer's cut sheets for each type of product indicated.

B. As-Built Drawings: Red-lined plan layout and details illustrating mainline and lateral lines location, size, and assembly. Include type and coverage of heads, type of valves, controllers, fittings and accessories.

C. Operation and Maintenance Data:

1. Instructions covering full operation, care, and maintenance of system and controls and manufacturer's printed literature on operation and of system. Include winterizing, controller program worksheet, and annual service and scheduling calendar based on local site specific conditions.

2. Instruct maintenance personnel in proper adjustment of sprinkler heads and use of special tools for adjustments.

3. Provide one controller chart for each automatic controller installed.
   a. Show area covered by each controller on print of "as-built" system.
   b. Identify area of coverage of each remote control valve, using a distinctively different color, drawing over the entire area of coverage.
   c. Hermetically seal charts between two layers of 20 mm thick plastic.
   d. Complete charts and review prior to final review of irrigation system.

D. Keys:
1. Quick Coupler Key: Quick Coupler Key with Swivel Head for operation of quick couplers.
2. Stop and Waste Valve Key: "T" handle, rigid steel, 5 ft long minimum, key end to fit the stop and waste valve nut.
3. Gate Valve Key: "T" handle, rigid steel, 5 ft long minimum, square nut end to fit the gate valve nut.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver, unload, store, and handle materials, packaging, bundling, and products in dry, weatherproof, waterproof condition in manner to prevent damage, breakage, deterioration, intrusion, ignition and vandalism. Deliver in original unopened packaging containers prominently displaying manufacturer name, volume, quantity, contents, instructions, and conformance to local, state and federal law. Remove and replace cracked, broken or contaminated items or elements prematurely exposed to moisture, inclement weather, temperature extremes, fire and/or jobsite damage.

B. Storage:

1. Protect materials from damage and prolonged exposure to sunlight. Materials shall be stored in areas designated by the Owner.

C. Handling:

1. Materials: Except for bulk deliveries, materials shall not be dropped or dumped from vehicles. All material shall be handled by Contractor with care to avoid breakage or damage. Damaged materials attributed to the Contractor shall be replaced with new material at the Contractor’s expense.
2. Handling of PVC Pipe - Exercise care in handling, loading, and storing of PVC pipe. Transport all PVC pipe in a vehicle that allows length of pipe to lie flat so as not to subject it to undue bending or concentrated external loads. Discard all sections of pipe that have been dented or damaged and, if installed, replace with new piping at the Contractor’s expense.

1.6 SCHEDULING

A. The Contractor shall familiarize himself with all hazards and utilities prior to work commencement. Install sleeving prior to installation of concrete, paving or other permanent site elements. Irrigation system Point of Connection components, backflow prevention or filtration, and pressure regulation devices shall be installed and operational prior to all downstream components. All main lines shall be thoroughly flushed of all debris prior to installation of Remote Control Valves. All lateral lines shall be thoroughly flushed of all debris prior to installation of any sprinkler heads. Irrigation Contractor shall be required to submit detailed Construction Schedule to Owner prior to commencement. Schedule shall be updated weekly.

B. Contractor shall schedule and organize work to minimize impact on project usage during public hours. Contractor shall confine work efforts to areas or zones which he can reasonably fence or protect, rather than spreading out trenching or other tasks across large areas of the site. Contractor shall schedule his work to reduce or eliminate open trenches at the end of each work day.

C. Weather Limitations: Proceed with irrigation installation only when existing and forecasted weather conditions permit.

PART 2 - PRODUCTS

2.1 PIPES AND FITTINGS

A. Types of Pipes:

1. Supply Line – from Point of Connection through backflow preventer or filter – galvanized pipe as detailed.
2. Mainline 3” or smaller – downstream of POC – Schedule 40 PVC.
3. Mainline 4” or larger – downstream of POC - Class 200 PVC.
4. Lateral – Schedule 40 PVC.
5. Drip Tubing – Rain Bird SPX-FLEX swing pipe from pvc lateral to drip emitter (see details).

B. Pipe
1. Plastic Pipe Sch. 40 PVC – Identify all pipes with following indelible markings:
   a. Manufacturer’s name.
   b. Nominal pipe size.
   c. Schedule of class.
   d. Pressure rating psi.
   e. National Sanitation Foundation (NSF) seal of approval.
   f. Date of extrusion.

C. Types of Fittings:
1. Mainline Fittings smaller than 3” – Schedule 80 PVC.
2. Mainline Fittings 3” or larger – Harco ductile iron (restrain per manufacturer’s recommendations).
3. Lateral Fittings – Schedule 40 PVC.
4. Drip Fittings – Barbed insert type fittings

2.2 VALVES

A. Stop & Waste Valve – Per Plans.

B. Mainline Isolation Valve – Per Plans.

C. Master Valve – Per Plans.

D. Flow Sensor – Per Plans.

E. Manifold Isolation Valve – Per Plans.

F. Remote Control Valve(s) – Per Plans.

G. Manual Drain Valve – Per Plans.

2.3 BACKFLOW PREVENTER

A. Reduced Pressure Backflow Assembly – Per Plans.

B. Install in Aluminum VIT Strong Box Enclosure.

2.4 AUTOMATIC FILTER

A. Automatic Flushing Filter – Per Plans.

B. Install in Aluminum VIT Strong Box Enclosure.

2.5 PHYSICAL DISCONNECT

A. Alternate Water Source Connection – Per Nibley City.

2.6 AUTOMATIC CONTROLLER

A. Hydro Point WTPRO3-C-H2O48-SWM – Coordinate with Nibley City.

2.7 PUMP

A. Rain Bird Low Profile Pump Station.

2.8 DRIPLINE

A. Per Plans.

2.9 VALVE BOX

A. Install control valves in manifolds/boxes per Nibley City standards.

B. Use round valve box for quick coupler. Boxes and lids in lawn areas shall be **GREEN** in color. Boxes and lids in Bark and Rock Mulch areas shall be **TAN** in color.

2.10 WIRE

A. Wire connecting valves to the automatic controller shall be Rain Master TW-CAB-14 wire. Two-conductor, 14-gauge, solid-core copper wire, double-jacketed insulation manufactured of high-density, sunlight-resistant polyethylene or UF-B UL PVC with a minimum wall thickness of 060” (1.5mm). A protective outer sheath must be manufactured of polyethylene or PVC material conforming to ICEA S-GL-402 or NEMA WC5, with a minimum wall thickness of .045” (1,2mm) and approved for direct burial installation.
   1. Install two-wire in 1” grey electrical conduit.
   2. Make all connections with 3M-DBRY to make a waterproof connection.

B. Wire connecting flow sensor to the automatic controller shall be Paige Electric PE-39-3 Cable.
   1. Install wire in 1” grey electrical conduit. Bury wires in the same trench as the pipe where possible.
   2. Make all connections with 3M-DBRY to make a waterproof connection.

2.11 QUICK COUPLER

A. Rainbird 44-LRC

2.12 WASHED AGGREGATE

A. 1-1/2” maximum with 100 percent retained on a No. 4 sieve.

2.13 JOINT AND SOLVENT CEMENT

A. Primer: Weld-On P-70 Primer.

B. PVC Solvent Cement: Weld-On 711 Low VOC Cement.

2.14 TEFLON TAPE

A. Use quality grade, domestically made 0.004 inch (± 0.001) on threaded joints.

2.15 SLEEVES

A. Class 200 PVC.

B. Install one pipe per sleeve. Sleeve diameter shall be two (2) times larger than pipe installed in sleeve. Minimum 4” for all sleeves.

C. Install wiring in separate sleeve from irrigation pipe.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas to receive irrigation to ensure areas are ready and properly prepared. Complete demolition and grading operations, with the exception of final grading, and receive approval by Owner before staking or installation of any irrigation system begins.

3.2 EXCAVATION

A. Stake pipe and equipment locations as follows:
   1. Mark routing of pressure supply line and flag remote control valves for first few zones. Contact Owner’s Representative a minimum of 48 hours in advance and request review of staking. Owner’s Representative will review staking and direct changes if required.
   2. If Project has significant topography, free-form planting beds, or other amenities that could require alteration of irrigation equipment layout as deemed necessary by Owner, do not install irrigation equipment in these areas until Owner’s Representative has reviewed equipment staking.
   3. Trenching - Dig trenches straight and support pipe continuously on bottom of trench. Clean trench bottom and smooth by removing all rock and organic debris. Remove rocks larger than 1-1/2” in any direction from bottom of trench.
      a. Clearances:
         1) Piping Smaller than 3 Inches - Minimum width of 7 inches for trenches.
         2) Line Clearance - Provide not less than 6 inches of clearance between each line.
      b. Pipe and Wire Depth:
         1) Mainline Piping – 18 inches from top of pipe.
         2) Lateral Piping – 12 inches from top of pipe.
         3) Control Wiring – Side of mainline piping (in conduit).

B. Excavate trenches for sprinkler system pipe to provide 18 inches of cover over mainlines and 12 inches over lateral lines.
   1. Do not damage roots where trenching is required in proximity to trees that are to remain.

C. Appropriately cover, protect, and mark trenches along pedestrian routes that are left open overnight.

3.3 INSTALLATION

A. General: Plans are diagrammatic. Proceed with installation in accordance with the following:
   1. Install stop and waste valve and other equipment required by local authorities according to Utah Laws and Regulations to make system complete.
   2. Install main line, automatic control valves, lateral lines, fittings, and heads/drip line as specified.
   3. Thoroughly flush main lines before installing automatic control valves, and laterals before installing sprinklers. Flush supply lines thoroughly before installing backflow preventers or other regulating devices.

B. Piping: Assemble all mainline and lateral lines in accordance with manufacturer’s recommendations.
   1. Install PVC pipe in dry weather above 40 degrees F as specified by manufacturer's recommendations. Allow joints to cure a minimum of 8 hours before testing.
   2. Snake pipe in trench as much as possible to allow for expansion and contraction. When pipe laying is not in progress, or at end of each day, close pipe ends with tight plug or cap. Perform work in accordance with good practices prevailing in irrigation industry.

C. Sleeving:
   1. Contractor to directionally bore sleeves per as needed.
   2. Coordinate location of all sleeving prior to installation.
   3. For sleeving under roadways install sleeving below the depth of the aggregate sub-base.
   4. Install sleeving under asphalt paving and concrete walks to accommodate piping and wiring. Compact backfill around sleeves to prevent settling.

D. Control Valves:
   1. Install at plan locations and according to detail. Use Schedule 80 PVC pipe for nipples on valve header, length as necessary. Install valves, one maximum per box, plastic valve box and provide 12

inches of expansion loop slack wire at all connections inside valve box.

E. Quick Coupling Valves: Install using 1 inch pre-assembled swing joints as detailed. Locations as indicated on plans.

F. Valve Access Boxes:
1. Install over all automatic control valves, manual control valves, pressure regulators or zone shutoff valves and sized to provide adequate room for maintenance.
2. Install valve boxes 1” above finish grade and place parallel or perpendicular to adjacent curbs, sidewalks, or driveways.
3. Imprint a valve control number on each valve box cover that corresponds to the valve controller clock. Imprint the valve box number a minimum of one inch high in a permanent and legible manner.
4. Place washed aggregate in sump as shown on plans.

G. Automatic Controller:
1. Mount the panel enclosure so the operator can conveniently make adjustments.
2. Properly ground controller in accordance with Utah Laws and Regulations and per manufacturer's requirements. Make all control wire connections to automatic controllers. Coordinate controller installation with electrical work.
3. Provide a laminated copy of the irrigation plan indicating valve station numbers and field locations and attach it inside the controller.
4. Program the controller to provide the appropriate amount of water for each station.
5. Supply the Owner with manufacturer's warranties and operating instructions for the controller.
6. Connect remote control valves to controller in numerical sequence as shown on Drawings.

H. Solvent Weld PVC Pipe - Lay pipe and make all plastic-to-plastic joints in accordance with solvent manufacturer's recommendations.

I. Drip Laterals:
1. Install all drip laterals per the plans before installation of mulch.

J. Control Wiring:
1. Low Voltage Wiring:
   a. Install wiring in 1” conduit.
   b. Bury conduit and control wiring between controller and electric valves in mainline trenches, or in separate trenches.

c. Make control wire connections and splices with 3M direct bury splice connectors, or approved equal.
d. Install all control wire splices not occurring at control valve in a separate splice valve box.
e. See additional wire information in Supplemental 2-Wire Irrigation Notes included on plans.

K. Drip Emitters - Install all surface emitters as detailed.

L. Valves - Install where shown on Drawings as detailed.

3.4 TESTING

A. Notify the Owner a minimum of 48 hours in advance of pressure testing the main line.

B. Hydrostatic pressure test all supply and pressure irrigation lines by maintaining full supply line water pressure for three consecutive hours before backfilling and after air pockets have been vented from the lines.

C. Test connections for leaks prior to backfilling and repair all leaks. Lateral lines may be tested in sections to expedite backfilling work.

3.5 BACKFILL OPERATION

A. Bed all pipe a minimum of 2 inches, surrounding the pipe with native material excavated from the trench and passing through a ½ inch sieve.

B. Prevent soil, rocks, or debris from entering pipes or sleeves.

C. Compact backfilled trenches thoroughly to prevent settling damage to grades or plant materials. Repair irrigation system and plants at no additional cost to Owner.

D. Do not begin backfilling operations until required system tests have been completed. Leave trenches slightly mounded to allow for settlement after backfilling is completed. Finish grade trenches prior to walk-through of system by Owner.
1. Materials - Excavated material is generally considered satisfactory for backfill purposes. Remove from backfill material all rubbish, organic matter, and stone larger than 2 inches in maximum dimension. Do not mix subsoil with topsoil. Haul away all material not suitable for backfill. If excavated material is unacceptable or not sufficient to meet backfill, compaction and final grade requirements Contractor is responsible for providing suitable backfill.

2. Do not leave trenches open for a period of more than 48 hours. Protect open excavations in accordance with OSHA regulations.

3.6 IRRIGATION INSTALLATION INSPECTION

A. Examine areas and conditions under which Work of this Section is to be performed. Do not proceed with inspection walk-through until unsatisfactory conditions have been corrected.

B. Completely install entire system and ensure proper operation prior to scheduling of walk-through.

C. Notify Owner a minimum of 48 hours prior to walk-through.

D. Remotely operate each zone in for Owner's Representative at time of walk-through.

E. Contractor to generate a list of items to be corrected.

F. Furnish materials and perform Work required to correct all inadequacies at no additional cost to Owner.

G. During walk-through, expose all drip emitters outlets for observation by Owner's Representative to demonstrate that they are performing and installed as designed. Schedule separate walk-through if necessary.

H. Adjusting
1. Upon completion of installation, "fine-tune" entire system to provide optimum and efficient coverage. Adjustments to be performed prior at no additional cost to Owner.
2. Immediately correct areas that do not conform to designated operation requirements due to unauthorized changes or poor installation practices at no additional cost to the Owner.

I. Water Audit
1. Contractor shall provide water audit (by independent consultant) of irrigation system at Final Acceptance and after the 1-year warranty and maintenance period.

3.7 CLEANUP

A. Promptly remove soil and debris created by any work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.

3.8 MAINTENANCE

A. Length of Period: Contractor shall maintain irrigation for a period of one year from Final Acceptance.

B. Maintenance shall include operation, maintenance, and repairs of irrigation system to ensure continuous coverage and functionality of system. This shall include winterizing and start up as seasons require.

END OF SECTION

SECTION 32 92 00
TURF AND GRASSES

APWA STANDARD SPECIFICATIONS ARE HEREBY AMENDED TO INCLUDE THE FOLLOWING:

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including Supplemental General Conditions and Special Provisions, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:
   1. Sodding.
   2. Seeding.

B. Related Sections include the following:
   1. Section 32 01 90 Plant Maintenance
   2. Section 32 93 01 Exterior Plants

1.3 DEFINITIONS

A. Finish Grade: Elevation of finished surface of planting soil.

B. Planting Soil: Native soil or surface soil modified to become topsoil; mixed with soil amendments.

C. Subgrade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill immediately beneath planting soil.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Certification of Bluegrass Sod: From sod producer - each grass-seed monostand or mixture stating the botanical and common name and percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.

1. Certification of sod mixture for turfgrass, identifying source, including name and telephone number of supplier.

C. Certification of Seed: From seed vendor - each grass-seed monostand or mixture stating the botanical and common name and percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.

1. Certification of each seed mixture for native grass, identifying source, including name and telephone number of supplier.

D. Product Certificates: For soil amendments and fertilizers, signed by product manufacturer.

E. Material Test Reports: For existing native soil.

F. Planting Schedule: Indicating anticipated planting dates for each type of planting.

1.5 QUALITY ASSURANCE

A. Soil-Testing Laboratory Qualifications: An independent laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.

B. Native Soil Analysis: Furnish soil analysis by a qualified soil-testing laboratory stating percentages of organic matter; gradation of sand, silt, and clay content; cation exchange capacity; sodium absorption ratio; deleterious material; pH; and mineral and plant-nutrient content of topsoil.

C. Report suitability of native soil for lawn growth. State recommended quantities of nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce a satisfactory topsoil.

D. Preinstallation Conference: Conduct conference at Project site as requested by the City.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Storage:
1. Materials shall be stored in areas designated by the Owner.
2. Fertilizers and other soil amendments shall be stored in cool, dry locations away from contaminants.

3. Chemical treatment materials shall not be stored with other landscape materials.

B. Handling:
1. Materials: Except for bulk deliveries, materials shall not be dropped or dumped from vehicles.

1.7 SCHEDULING

A. Planting Restrictions: Coordinate planting periods as follows:
1. No sodding or seeding operations shall take place if ground is muddy, standing water present, frozen, snow covered.
2. Sod installation- March 15th to October 15th or until ground is frozen.
3. Seed installation- March 15th to May 15th or September 15th to October 15th or until ground is frozen.

B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit.

1.8 FINAL ACCEPTANCE

A. Final Acceptance shall be issued to the Contractor for Sod areas per the following procedures:
1. Following substantial completion, the Owner will perform a final walk through to judge the completeness and quality of sod installation. This will include evaluating layout and location, health of grass, finished grading, irrigation, etc.
2. The Owner will provide a Punch List of items for the Contractor to remedy.
3. The Contractor shall notify the Owner when all punch list items are complete.
4. A Verification Walk will be performed by the Owner to verify all punch list items are adequately completed.
5. Based on a successful Verification Walk, the Owner will issue Final Acceptance to the Contractor and will take over all maintenance and care of sod. The one-year warranty will begin upon the date of Final Acceptance.
6. If Substantial Completion is achieved after October 15th, the Verification Walk and Final Acceptance will occur the following spring. The Contractor will be responsible to maintain the sod through the winter as required.

B. Final Acceptance shall be issued to the Contractor for Seed areas per the following procedures:

1. Following substantial completion, the Owner will perform a final walk through to judge the completeness and quality of seed installation. This will include evaluating layout and location, health of seeded areas, finished grading, irrigation, etc.
2. The Owner will provide a Punch List of items for the Contractor to remedy.
3. The Contractor shall notify the Owner when all punch list items are complete.
4. A Verification Walk will be performed by the Owner to verify all punch list items are adequately completed.
5. Based on a successful Verification Walk, the 60 Day Maintenance/Grow-In period shall begin.
6. Following the 60 Day Maintenance/Grow-In period, the Owner will perform a second Verification Walk to judge adequacy of seed growth.
7. Based on a successful second Verification Walk, the Owner will issue Final Acceptance to the Contractor and will take over all maintenance and care of seeded areas. The one-year warranty will begin upon the date of Final Acceptance.
8. If Substantial Completion is achieved after October 15th, the Verification Walk and Final Acceptance will occur the following spring. The Contractor will be responsible to maintain the sod through the winter as required.

1.9 WARRANTY

A. Special Warranty: Warrant the following exterior plants, for the warranty period indicated, against defects including death and unsatisfactory growth, except for defects resulting from lack of adequate maintenance, neglect, or abuse by Owner, or incidents that are beyond Contractor's control.
   1. Warranty Period for Trees and Shrubs: One year from date of Final Acceptance.
   2. Warranty Period for Ground Cover and Perennial Plants: One year from date of Final Acceptance.
   3. Remove dead exterior plants immediately. Replace immediately unless required to plant in the succeeding planting season.
   4. Replace exterior plants that are more than 25 percent dead or in an unhealthy condition at end of warranty period.
   5. A limit of one replacement of each exterior plant will be required, except for losses or replacements due to failure to comply with requirements.

PART 2 - PRODUCTS

2.1 SOD

A. Bluegrass Sod: Sod supplied by the Contractor shall be grown by a sod grower, well established, pest and weed free, one (1) and one quarter (1-1/4") inches thick, and supplied in rolls or sheets of the industry size. Sod shall be the current year's crop, guaranteed by the supplier as follows:
   1. Bio Blue Bluegrass, as provided by BioGrass Sod Farms (801-562-9090) or approved equal.

2.2 SEED

A. Bluegrass Seed: Turf Trade 70-30 as provided by BioGrass Sod Farms, or approved equal.

B. Meadow Grass Seed: Seed supplied by the Contractor shall be pest and weed free as follows:
   1. BioMeadow seed, as provided by BioGrass Sod Farms (801-562-9090) or approved equal.

C. Cabin Seed Mix: Seed mix as provided by Granite Seed, or approved equal.

2.3 ORGANIC SOIL AMENDMENTS

A. Compost: Dairy based organic compost material. Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:
   1. Organic Matter Content: 35%- 50% percent of dry weight.

2.4 TOPSOIL

A. Imported or amended native soil to meet the following:
   1. Topsoil Quality Guidelines:
      a. pH: 5.5-7.5
      b. Soluble Salts dS/m or mmho/cm: <4
      c. Sodium Absorption Ratio (SAR): <10
      d. Organic Matter %: ≥4.0, <20

e. Sand %: >20, <70
f. Silt %: >20, <70
g. Clay %: >10, <30
h. Texture Class: Loam, Sandy Loam, Silt Loam

2. Topsoil free of:
   a. Subsoils
   b. Course sand and gravel
   c. Stiff clay, hard clods, or hard pan soils
   d. Rock larger than 1 inch in any dimension
   e. Roots larger than 1/2 inch in diameter
   f. Trash, litter, or refuse
   g. Noxious weeds and weed seeds
3. Topsoil may contain a maximum of 5 percent rock smaller than 1 inch.
4. Material test reports shall provide amendment recommendations with minimum quality standards and volumes.

2.5 PLANTING ACCESSORIES

A. Selective Herbicides: EPA registered and approved, of type recommended by manufacturer for application.

2.6 FERTILIZER

A. Slow-Release Fertilizer: Sodded Lawns - Granular or pelleted fertilizer Biosol Mix 7-2-3 consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:
   1. Apply at rate of 33 lbs./ 1000 SF for sodded lawn areas.
   2. Composition: 7-2-3 Nitrogen, phosphorous, and potassium or in amounts recommended in soil reports from a qualified soil-testing agency.

B. Slow-Release Fertilizer: Seeded Lawns - Granular or pelleted fertilizer of slow release 16-16-16.

2.7 MULCHES

A. Fiber Mulch: Biodegradable, dyed virgin cellulose wood fiber mulch; nontoxic; free of plant-growth or germination inhibitors; with maximum moisture content of 15 percent and a pH range of 4.5 to 6.5.

B. Nonasphaltic Organic Tackifier: Colloidal tackifier recommended by fiber-mulch manufacturer for slurry application; nontoxic and free of plant-growth or germination inhibitors.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas to receive sod or seed for compliance with requirements and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting operations.

B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 SOD BED PREPARATION AND INSTALLATION

A. Limit subgrade preparation to areas to be planted. Sub-grade shall be scarified to a depth of four (4) inches to ensure proper bonding with applied topsoil if it has been compacted due weather or equipment.

B. Install 4” depth of amended planting soil or imported topsoil that meet the requirements of this section.

C. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus 1/2 inch of finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit fine grading to areas that can be planted in the immediate future.
   1. The Installer shall prepare no more ground than can be sodded in a twenty-four (24) hour period. Sod shall be placed within 24 hours of ground preparation. The ground shall be re-prepared if weather or traffic has compromised the friability of the prepared area.
   2. No sodding shall be done immediately after a rainstorm or if a prepared surface has been compacted without first loosening the surface to a smooth, loose, uniformly fine texture just prior to sodding.

D. Apply Biosol mix fertilizer at a rate of 33lbs. / 1000 SF. Apply fertilizer directly to fine grade. Remove stones larger than 1 inch in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.

1. Delay mixing fertilizer with planting soil if planting will not proceed within a few days.

E. Moisten prepared sod areas before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

F. Areas where sod is to be laid shall be cut, trimmed, or shaped to receive full width sod (minimum 12”). No partial strip or pieces will be accepted.

G. Place sod on prepared surface so that joints between courses are matched against the last line laid.

H. All work shall be done from boards laid on top of the prepared surface or on already laid sod. Care shall be taken to prevent footprints or other disturbances to the prepared bed. Any such disturbances shall be promptly repaired so that the sod will be laid on a proper bed to insure the necessary bonding between it and the sod.

I. Sod shall be tamped lightly as each piece is set to ensure that good contact is made between edges and also with the ground. Sod laid on any sloped areas shall be anchored with wooden dowels or other materials which are accepted by the sodding industry. Roll sod immediately after placing using a hand roller half filled with water.

3.4 SEED BED PREPARATION AND INSTALLATION

A. Limit subgrade preparation to areas to be planted. Sub-grade shall be scarified to a depth of four (4) inches if it has been compacted due weather or equipment.

B. Install 4” depth of amended planting soil or imported topsoil that meet the requirements of this section.

C. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus 1/2 inch of finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit fine grading to areas that can be planted in the immediate future.
   1. The Installer shall prepare no more ground than can be seeded in a twenty-four (24) hour period. Seed shall be placed within 24 hours of ground preparation. The ground shall be re-prepared if weather or traffic has compromised the friability of the prepared area.
   2. No seeding shall be done immediately after a rainstorm or if a prepared surface has been compacted without first loosening the

surface to a smooth, loose, uniformly fine texture just prior to sodding.

D. Apply 220 lbs/acre of slow release fertilizer.

E. Moisten prepared seed areas before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

F. Restore areas if eroded or otherwise disturbed after finish grading and before planting.

G. Apply seed at a rate per supplier's recommendations.

3.5 CLEANUP AND PROTECTION

A. Promptly remove soil and debris created by any work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.

B. Erect barricades and warning signs as required to protect newly planted areas from traffic. Maintain barricades throughout maintenance period and remove after lawn is established.

C. Remove erosion-control measures after grass establishment period.

D. Maintenance During Lawn Establishment:
   1. General: Begin maintenance of the lawn areas immediately after each area is planted and continue until acceptable lawn is established. Maintenance shall include watering, fertilizing, eradicating weeds, mowing, trimming, protecting slopes from erosion, maintaining mulch material, protecting lawn areas from traffic, replanting and other operations. Roll, re-grade, and re-sod/re-seed bare or eroded areas and re-mulch to provide a uniformly smooth lawn.
   2. Repair: Lawn areas shall be re-established as specified herein for eroded, damaged or barren areas.
   3. Mowing Installed Sod: Mow sodded areas as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than 33 percent of grass height. Remove no more than 33 percent of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:
      a. Mow grass 3 inches high.

4. Watering: Provide and maintain permanent irrigation system to convey water from sources and to keep lawn uniformly moist to a depth of 4 inches.
   a. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch.
   b. Water lawn at a minimum rate of 1 inch per week through establishment period.
5. Lawn Post Fertilization: Apply fertilizer immediately after installation initial mowing and when grass is dry. Water after application.
   a. Use a commercial fertilizer 20-20-20+ iron that will provide actual nitrogen of at least 1 lb./1000 sq. ft. to lawn area at a total rate of 5 lbs./1000 sq. ft.. Apply no more than 1 lb./1000 sq. ft. each application.
6. Chemical Treatment:
   a. When a pest or disease becomes apparent during the Lawn Establishment Period, a state-certified applicator shall apply required chemicals in accordance with EPA label restrictions and recommendations. Hydraulic equipment for the liquid application of chemicals shall be provided with a leak-proof tank, positive agitation methods, controlled application pressure and metering gages. Pre-emergent herbicides will not be used.
   b. A Chemical Treatment Plan shall be provided to the Owner as stated in these Specifications.

3.6 SEED ESTABLISHMENT PERIOD

A. Length of Period: On acceptable completion of installation, the Seed Establishment Period will be in effect for a minimum of 60 days or until completion and Final Acceptance of the project by the City's Representative, whichever is longer. The seeded area will not be accepted separately from the remainder of the project. In order to begin the Seed Establishment Period the City's Representative must be satisfied at the initial Verification Walk that all work has been completed in accordance with the plans and specifications and that the irrigation system is fully functional and properly watering all lawn areas.

B. Pre-Maintenance Inspection: An inspection will be performed upon substantial completion of all planting work. Contractor shall notify the City's Representative within 5 days of inspection to arrange schedule. The City's Representative, contractor and such others as the City shall direct, shall be present at the inspection. Subsequent to the inspection, the City's Representative shall issue the effective beginning date for the Seed Establishment Period.

C. Work requiring corrective action in the judgement of the City's Representative shall be performed within 5 days after the Pre-Maintenance Inspection. Corrective work and materials replacement shall be in accordance with the Drawings and these Specifications and shall be made by the Contractor at no cost to the Owner. When inspected work does not comply with requirements, replace rejected work and continue specified maintenance until re-inspected by the City's Representative and found to be acceptable. Remove rejected materials promptly from project site.

D. Establishment Inspection: At the end of the Seed Establishment Period, an inspection of planted areas will be made by the City's Representative in the presence of the Contractor to accept the turf installation. At the time of the Establishment Inspection, the Contractor shall have all planting areas under this contract free of weeds, mowed and neatly cultivated.

E. If, after the Establishment Inspection, the City's Representative is of the opinion that all work has been performed as per the Drawings and these Specifications, he/she will give the Contractor written notice of final acceptance of the lawn installation.

F. Work requiring corrective action or replacement in the judgement of the City's Representative shall be performed as described for the Pre-Maintenance Inspection. Corrective work and materials replacement shall be made by the Contractor at no additional cost to the project. Maintain corrected work until re-inspected by the City's Representative.

G. Seed Acceptance Criteria:
   1. The installed seed will be accepted provided the requirements, including maintenance, have been complied with and a vigorous, healthy, well-rooted lawn is established free of weeds, no bare areas greater than 2" in diameter and there are no surface irregularities. The total bare spots shall not exceed two percent of the total planted area. 100% germination guarantee required.
   2. Should the seeded areas not be accepted by the end of the growing season (October 15th), the Contractor shall be responsible to continue maintenance and mowing activities and take steps necessary to achieve acceptance as quickly as possible.
      a. In the event that seeded areas are not accepted by the end of the growing season, the Contractor will be responsible to overseed with the specified seed mix, repair erosion damage, maintain grade elevations and supply and/or replace plantings as directed by the City's Representative until accepted. The maintenance shall continue into the following growing season until the City's Representative accepts the installation.

H. Maintenance During Seed Establishment Period:
   1. General: Begin maintenance of the lawn areas immediately after each area is planted and continue until acceptable lawn is established. Maintenance shall include watering, fertilizing, eradicating weeds, mowing, trimming, protecting slopes from erosion, maintaining mulch material, protecting lawn areas from traffic, replanting and other operations. Roll, re-grade, and re-sod/re-seed bare or eroded areas and re-mulch to provide a uniformly smooth lawn.
   2. Repair: Seed areas shall be re-established as specified herein for eroded, damaged or barren areas. Hydromulch shall be repaired or replaced as required.
   3. Watering: Provide and maintain permanent irrigation system to convey water from sources and to keep seed uniformly moist to a depth of 4 inches.
      a. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch.
      b. Water lawn at a minimum rate of 1 inch per week through establishment period.
   4. Chemical Treatment:
      a. When a pest or disease becomes apparent during the Seed Establishment Period, a state-certified applicator shall apply required chemicals in accordance with EPA label restrictions and recommendations. Hydraulic equipment for the liquid application of chemicals shall be provided with a leak-proof tank, positive agitation methods, controlled application pressure and metering gages. Pre-emergent herbicides will not be used.
      b. A Chemical Treatment Plan shall be provided to the Owner as stated in these specifications.

3.7 MAINTENANCE PERIOD

A. Length of Period: Contractor shall maintain all landscaping and irrigation for a period of one year from Final Acceptance.

B. Maintenance shall include all mowing, weeding, pruning, fertilization, etc. to keep all plant material in well-kept condition.

C. Maintenance shall include operation, maintenance, and repairs of irrigation system to ensure continuous coverage and functionality of system.

END OF SECTION

SECTION 32 93 01
EXTERIOR PLANTS

APWA STANDARD SPECIFICATIONS ARE HEREBY AMENDED TO INCLUDE THE FOLLOWING:

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including Supplemental General Conditions and Special Provisions, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:
   1. Trees.
   2. Shrubs.
   3. Ground cover.
   4. Plants.
   5. Mulch.

B. Related Sections include the following:
   1. Section 32 84 00 Underground Irrigation Systems
   2. Section 32 92 00 Turf and Grasses

1.3 DEFINITIONS

A. Balled and Burlapped Stock: Exterior plants dug with firm, natural balls of earth in which they are grown, with ball size not less than diameter and depth recommended by ANSI Z60.1 for type and size of tree or shrub required; wrapped, tied, rigidly supported, and drum-laced as recommended by ANSI Z60.1.

B. Container-Grown Stock: Healthy, vigorous, well-rooted exterior plants grown in a container with well-established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for kind, type, and size of exterior plant required.

C. Finish Grade: Elevation of finished surface of planting soil.

D. Planting Soil: Native soil or surface soil modified to become topsoil; mixed with soil amendments.

E. Subgrade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill, before placing planting soil.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Product Certificates: For each type of manufactured product, signed by product manufacturer, and complying with the following:
   1. Manufacturer's certified analysis for standard products.
   2. Analysis of other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.

C. Qualification Data: For landscape Installer.

D. Material Test Reports: For existing surface soil and imported materials.

E. Planting Schedule: Indicating anticipated planting dates for exterior plants.

F. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of exterior plants during a calendar year. Submit before expiration of required maintenance periods upon substantial completion and prior to final acceptance and beginning of maintenance contract.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful establishment of exterior plants.
   1. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when exterior planting is in progress.

B. Soil-Testing Laboratory Qualifications: An independent laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.

C. Organic Compost Material and Native Soil Analysis: Furnish test analysis of each by a qualified soil-testing laboratory or supplier stating percentages of organic matter; gradation of sand, silt, and clay content;

cation exchange capacity; sodium absorption ratio; deleterious material; pH; and mineral and plant-nutrient content of both items above.

1. Report suitability of native soil for plant growth. State recommended quantities of nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce a satisfactory amended soil if different from what is called for in these specifications.

D. Provide quality, size, genus, species, and variety of exterior plants indicated, complying with applicable requirements in ANSI Z60.1, "American Standard for Nursery Stock."

1. Selection of exterior plants purchased may be made by the City who will tag plants at their place of growth before they are prepared for transplanting.

E. Tree and Shrub Measurements: Measure according to ANSI Z60.1 with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements 6 inches above ground for trees up to 4-inch caliper size, and 12 inches above ground for larger sizes. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip-to-tip.

F. Observation: The City's Representative may observe trees and shrubs either at place of growth or at site before planting for compliance with requirements for genus, species, variety, size, and quality. The City retains right to observe trees and shrubs further for size and condition of balls and root systems, insects, injuries, and latent defects and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from Project site.

1. Notify the City's representative of sources of planting materials 30 days in advance of delivery to site.

G. Preinstallation Conference: Conduct conference at Project site as requested by the City.

1.6 COORDINATION

A. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with maintenance periods to provide required maintenance from date of installation through final acceptance and beginning of maintenance contract.

B. No planting shall take place if ground is muddy, standing water is present, frozen or snow covered.

1. Spring Planting: April 15- June 15
2. Fall Planting: August 15- October 15
3.

4. It should be noted that these are considered to be ideal planting periods, however, installer will be permitted to plant year round as long as none of the above conditions exist and that precautions are taken to avoid any negative effects on plantings due to any adverse seasonal weather or climate conditions that may exist.

C. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit.

D. Coordination with Sodded/Seeded Areas: Plant trees and shrubs after finish grades are established and before sodding/seeding areas, unless otherwise acceptable to the City.
1. When planting trees and shrubs after sodded/seeded areas, protect these areas and promptly repair damage caused by planting operations.

1.7 WARRANTY

A. Special Warranty: Warrant the following exterior plants, for the warranty period indicated, against defects including death and unsatisfactory growth, except for defects resulting from lack of adequate maintenance, neglect, or abuse by Owner, or incidents that are beyond Contractor's control.
1. Warranty Period for Trees and Shrubs: One year from date of Final Acceptance.
2. Warranty Period for Ground Cover and Perennial Plants: One year from date of Final Acceptance.
3. Remove dead exterior plants immediately. Replace immediately unless required to plant in the succeeding planting season.
4. Replace exterior plants that are more than 25 percent dead or in an unhealthy condition at end of warranty period.
5. A limit of one replacement of each exterior plant will be required, except for losses or replacements due to failure to comply with requirements.

PART 2 - PRODUCTS

2.1 TREE AND SHRUB MATERIAL

A. General: Furnish nursery-grown trees and shrubs complying with ANSI Z60.1, with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock free of disease, insects, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.

B. Grade: Provide trees and shrubs of sizes and grades complying with ANSI Z60.1 for type of trees and shrubs required. Trees and shrubs of a larger size may be used if acceptable to the City's representative, with a proportionate increase in size of roots or balls.

C. Label each tree and shrub with a securely attached, waterproof tag bearing legible designation of botanical and common name.

D. Label at least one tree and one shrub of each variety and caliper with a securely attached, waterproof tag bearing legible designation of botanical and common name.

E. If formal arrangements or consecutive order of trees or shrubs is shown, select stock for uniform height and spread, and number label to assure symmetry in planting.

2.2 DECIDUOUS AND ORNAMENTAL TREES

A. Deciduous Trees: Single-stem trees with straight trunk, well-balanced crown, and intact leader, of height and caliper indicated, complying with ANSI Z60.1 for type of trees required.
   1. Provide balled and burlapped trees.
   2. Branching Height: One-third to one-half of tree height.

B. Ornamental Trees: Branched or pruned naturally according to species and type, with relationship of caliper, height, and branching according to ANSI Z60.1; stem form as follows:
   1. Stem Form: Single stem and Multistem, clump, with two or more main stems according to the natural form of species and type.
   2. Provide balled and burlapped trees.

2.3 DECIDUOUS SHRUBS

A. Form and Size: Deciduous shrubs with not less than the minimum number of canes required by and measured according to ANSI Z60.1 for type, shape, and height of shrub.
   1. Provide container-grown shrubs.

2.4 CONIFEROUS EVERGREENS

A. Form and Size: Normal-quality, well-balanced, coniferous evergreens, of type, height, spread, and shape required, complying with ANSI Z60.1.

B. Form and Size: Specimen-quality, exceptionally heavy, tightly knit, symmetrically shaped coniferous evergreens and the following grade:

1. Heavy Grade
2. Provide balled and burlapped trees.

2.5 BROADLEAF EVERGREENS

A. Form and Size: Normal-quality, well-balanced, broadleaf evergreens, of type, height, spread, and shape required, complying with ANSI Z60.1.
   1. Provide container-grown shrubs.

2.6 GROUND COVER and 1 GAL. SHRUBS/ GRASSES

A. Ground Cover: Provide ground cover of species indicated on the plans, established and well rooted in pots or similar containers, and complying with ANSI Z60.1.

2.7 SEASONAL PLANTS

A. Perennials: Provide healthy, field-grown plants from a commercial nursery, of size, species and variety shown or listed.

B. Vines: Provide vines of species indicated complying with requirements in ANSI Z60.1 as follows:
   1. Two-year plants with heavy, well-branched tops, with not less than 3 runners 18 inches or more in length, and with a vigorous well-developed root system.
   2. Provide field-grown vines. Vines grown in pots or other containers of adequate size and acclimated to outside conditions will also be acceptable.

2.8 ORGANIC SOIL AMENDMENTS

A. Planting soil backfilll for trees, shrubs, perennials, and grasses to be 30% native soil, 30% imported loamy topsoil, 20% coarse sand, and 20% peat moss or organic mulch.

2.9 FERTILIZER

A. Slow-Release Fertilizer: Trees, Shrubs, Groundcovers- Granular or pelleted fertilizer Biosol Mix 7-2-3 consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:
   1. Apply at rate of 44lbs./ 1000 SF for groundcover and perennial areas, and 12 oz./ tree pit, 4oz./ 5 gal shrub pit: 20 percent

nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.

2. Composition: 7-2-3 Nitrogen, phosphorous, and potassium or in amounts recommended in soil reports from a qualified soil-testing agency.

2.10 MULCHES

A. Bark Mulch: Free from deleterious materials and suitable as a top dressing of trees and shrubs, consisting of the following:

B.

1. Type: Miller Companies' Supreme Shredded Bark Mulch in all bark mulch planting beds ash shown on plan.
   a. Size Range: Thickness of 3/8" to 1", length of 1" to 2"
   b. Color: Brown, not died.

2.11 STAKES AND GUYS

A. Upright and Guy Stakes: 2" dia. Lodgepole pine stakes.

B. Guy and Tie: Chainlock or approved equal tree ties (1" width). Nail or staple to stake to hold vertically. Loop each tie around tree loosely to provide 1" slack on trunk for growth.

2.12 MISCELLANEOUS PRODUCTS

A. Anti-dessicant: Water-insoluble emulsion, permeable moisture retarder, film forming, for trees and shrubs. Deliver in original, sealed, and fully labeled containers and mix according to manufacturer's written instructions.

2.13 PLANTING SOIL MIX- TREE, SHRUB, PERENNIAL, AND GRASS PLANT BACKFILL

A. Planting Soil Mix: Mix installed topsoil and native soil with the following in the specified quantities:

1. 30% native soil, 30% imported topsoil, 20% coarse clean sand, and 20% peat moss or organic mulch.
2. Weight of Slow-Release Biosol Mix 7-2-3 Fertilizer per 1000 Sq. Ft. of groundcover/ perennial areas: 44 lbs.
3. Weight of Slow-Release Biosol Mix 7-2-3 Fertilizer in tree pits: 12 oz.

4. Weight of Slow-Release Biosol Mix 7-2-3 Fertilizer in shrub pits: 4 oz.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas to receive exterior plants for compliance with requirements and conditions affecting installation and performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities, and lawns and existing exterior plants from damage caused by planting operations.

B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

C. Lay out individual tree and shrub locations and areas for multiple exterior plantings. Stake locations, outline areas, adjust locations when requested, and obtain City Representative's acceptance of layout before planting. Make minor adjustments as required.

D. Lay out exterior plants at locations directed by the City's representative. Stake locations of individual trees and shrubs and outline areas for multiple plantings.

E. Grower shall apply anti-desiccant to all trees and shrubs using power spray to provide an adequate film over trunks, branches, stems, twigs, and foliage to protect during digging, handling, and transportation.
   1. If deciduous trees or shrubs are moved in full leaf, spray with antidesiccant at nursery before moving and again two weeks after planting.

3.3 PLANTING BED ESTABLISHMENT

A. Loosen subgrade of planting beds to a minimum depth of 12 inches. Remove stones larger than 1 inch in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
   1. Install 8" of premium topsoil in planting beds.

B. Finish Grading: Grade planting beds to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

C. Restore planting beds if eroded or otherwise disturbed after finish grading and before planting.

3.4 DELIVERY, STORAGE, AND HANDLING

A. Deliver exterior plants freshly dug.

B. Do not prune trees and shrubs before delivery, except as approved by the City's representative. Protect bark, branches, and root systems from sunscald, drying, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of exterior plants during delivery. Do not drop exterior plants during delivery.

C. Handle planting stock by root ball.

D. Deliver exterior plants after preparations for planting have been completed and install immediately. If planting is delayed more than six hours after delivery, set exterior plants trees in shade, protect from weather and mechanical damage, and keep roots moist.

1. Set balled stock on ground and cover ball with soil, peat moss, sawdust, or other acceptable material. Do not set root ball on concrete or lean trunks or canopy against fence or wall.
2. Do not remove container-grown stock from containers before time of planting.
3. Water root systems of exterior plants stored on-site with a fine-mist spray; temporary irrigation system or manually with hose. Water as often as necessary to maintain root systems in a moist condition.

3.5 TREE AND SHRUB EXCAVATION

A. Pits and Trenches: Excavate circular pits with sides sloped inward. Trim base leaving center area raised slightly to support root ball and assist in drainage. Do not further disturb base. Scarify sides of plant pit smeared or smoothed during excavation.
1. Excavate approximately two times as wide as ball diameter for balled and burlapped and container-grown stock.

B. Native soil above 36" depth removed from excavations may be used in planting backfill. Subsoil below 36" depth removed from excavations may not be used in planting backfill.

C. Obstructions: Notify the City's representative if unexpected rock or any other obstructions detrimental to trees or shrubs are encountered in excavations.
   1. Hardpan Layer: Drill 6-inch- diameter holes into free-draining strata or to a depth of 10 feet, whichever is less, and backfill with free-draining material.

D. Drainage: Notify the City's representative if subsoil conditions evidence unexpected water seepage or retention in tree or shrub pits.

E. Fill excavations with water and allow to percolate away before positioning trees and shrubs.

3.6 TREE AND SHRUB PLANTING

A. Set balled and burlapped stock plumb and in center of pit or trench with top of root ball 2" inches above adjacent finish grades. Trees shall be planted such that trunk flare is visible at the top of the rootball. Do not cover the top of the root ball with soil.
   1. Remove all wire, entire wire basket, nylon ties, twine, rope and 2/3 burlap from root ball. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.
   2. Place planting soil around root ball in layers, tamping to settle mix and eliminate voids and air pockets. When pit is approximately one-half backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Water again after placing and tamping final layer of planting soil mix.

B. Set container-grown stock plumb and in center of pit or trench with top of root ball 1 inch above adjacent finish grades.
   1. Carefully remove root ball from container without damaging root ball or plant.
   2. Place planting soil around root ball in layers, tamping to settle mix and eliminate voids and air pockets. When pit is approximately one-half backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Water again after placing and tamping final layer of planting soil mix.

C. Shredded Wood Mulching: Apply 4-inch average thickness of organic mulch after planting. For trees in sod areas, provide min. 18 inch radius collar of mulch. Do not place mulch within 3 inches of trunks or stems.

3.7 GROUND COVER AND PERENNIAL PLANTING

A. Set out and space ground cover and plants as indicated.

B. Dig holes large enough to allow spreading of roots, and backfill with planting soil.

C. Work planting soil around roots to eliminate air pockets.

D. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.

E. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.

3.8 TREE AND SHRUB PRUNING

A. Prune, thin, and shape trees and shrubs as directed by the City's representative.

B. Prune, thin, and shape trees and shrubs according to standard horticultural practice. Prune trees to retain required height and spread. Unless otherwise indicated by the City, do not cut tree leaders; remove only injured or dead branches from flowering trees. Prune shrubs to retain natural character. Shrub sizes indicated are sizes after pruning.

3.9 GUYING AND STAKING

A. GUY ALL TREES ACCORDING TO PLANTING DETAIL ON PLANS.

B. Guy and stake all deciduous and evergreen trees.

C. For deciduous trees; use a minimum of 2 stakes for trees, 2 ½" cal. and smaller, and a minimum of 3 stakes for trees greater than 2 ½" cal. Stakes shall be of a length required to penetrate a min. of 48" above grade; for evergreen, use a minimum of 3 stakes (up to 5 stakes may be required for 14' ht. And larger evergreens). Stakes shall be of a length required to penetrate a minimum of 24" below grade and to extend a maximum of 6" above grade.

D. Set all stakes and space to avoid any penetration of the rootball or any portion thereof.

E. Remove entire wire basket on each rootball along with any other twine around trunk and packaging materials, etc.

F. Support trees @ each guywire with two strands twisted galvanized wire and 2" nylon tree straps at contact points with tree trunks. Allow enough slack to avoid rigid restraint of tree. Continuous treestraps shall be of

appropriate length so that grommets are 4”-6” away from the tree trunk. Treestraps shall not be linked together to achieve the required length.

G. No poly PVC or garden hose and wire shall be accepted as a guying method.

3.10 PLANTING BED MULCHING

A. Mulch backfilled surfaces of planting beds and other areas indicated.
   1. Shredded Wood Mulch: Apply 4-inch average thickness of organic mulch, and finish level with adjacent finish grades. Do not place mulch against plant stems.

3.11 MAINTENANCE

A. Trees and Shrubs: Maintain by pruning, cultivating, watering, weeding, fertilizing, restoring planting saucers, tightening, and repairing stakes and guy supports, and resetting to proper grades or vertical position, as required to establish healthy, viable plantings. Spray as required keeping trees and shrubs free of insects and disease.

B. Ground Cover and Perennial Plants: Maintain by watering, weeding, fertilizing, and other operations as required to establish healthy, viable plantings.

3.12 ANTI-DESSICANT SPRAY

A. Apply 2 applications of anti-dessicant spray for all evergreen trees and shrubs.

3.13 CLEANUP AND PROTECTION

A. During exterior planting, keep adjacent pavings and construction clean and work area in an orderly condition.

B. Protect exterior plants from any damage due to landscape operations, operations by other contractors and trades, and others. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged exterior planting.

3.14 DISPOSAL

A. Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.

3.15 MAINTENANCE PERIOD

A. Length of Period: Contractor shall maintain all landscaping and irrigation for a period of one year from Final Acceptance.

B. Maintenance shall include all mowing, weeding, pruning, fertilization, etc. to keep all plant material in well-kept condition.

C. Maintenance shall include operation, maintenance, and repairs of irrigation system to ensure continuous coverage and functionality of system.

END OF SECTION