

City of Fallon



**55 W. Williams Avenue
Fallon, NV 89406**

Bidding and Contract Documents
& Project Specifications
for the

**Sherman Street and North Broadway Street
Rehabilitation Project
PWP# CH-2022-408
CDBG Grant# 19/PF/04**

July 2022

Prepared by:



**Lumos & Associates, Inc.
178 South Maine Street
Fallon, NV 89406
Phone (775) 423-2188**



7/14/2022

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00100 BID SOLICITATION

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City of Fallon
Sherman Street and North Broadway Street Rehabilitation Project
PWP-CH-2022-408

Fallon, Nevada

ADVERTISEMENT FOR BIDS

Separate sealed Bids for the construction of the **Sherman Street and North Broadway Street Rehabilitation Project** will be received by the **City of Fallon**, the **Owner**, at their administrative office located at **55 W. Williams Ave, Fallon, Nevada 89406** until **3:00 p.m.**, local time, on **Thursday, August 4, 2022**, at which time the Bids received will be publicly opened and read aloud.

The Work consists of performing or providing all labor, services, and documentation necessary to produce such construction and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

The Work generally includes but is not limited to: Reconstruction of approximately 1,350 linear feet of N. Broadway Street and 700 linear feet of Sherman Street. This includes installing sidewalk, curb and gutter, valley gutter and spandrels, residential and commercial driveway apron improvements, ADA compliant pedestrian ramps, new catch basins, storm infiltration chambers, culvert extension and new headwalls, water main improvements, water service reconnections, 8" PVC sewer main and polymer manhole improvements, striping, signage, traffic control, stormwater protection, and other incidentals.

The Contract Documents may be examined at the following locations:

Owner:

City of Fallon
55 W. Williams Ave.
Fallon, Nevada 89406

Issuing Office:

Lumos & Associates, Inc.
178 South Maine Street
Fallon, Nevada 89406

The Contract Documents may be examined and obtained on **Thursday, July 14, 2022 at 10:00 a.m.** at the following location:

ENGINEER: www.lumosinc.com/planroom - Plan Room (Hosted by Quest CDN)

A non-refundable deposit of **\$25.00** will be charged to log into the plan room to obtain each set of Plans and Contract Documents.

A pre-bid conference will be held at **2:00 p.m.** local time on **Friday, July 22, 2022**, at **Fallon City Hall, 55 West Williams Avenue, Fallon, Nevada 89406**. Attendance at the pre-bid conference is highly encouraged but is not mandatory.

This is a Federal-aid contract and the requirements for such shall apply. On a Federal-aid contract, any Contractor otherwise qualified by the State of Nevada to perform such work is not required to be licensed nor to submit application for license in advance of submitting a bid or having such bid considered. This does not constitute a waiver of the State's right under its license laws to require a Contractor, determined to be a successful bidder, to be licensed to do business in the State of Nevada with a Class A prior to award of the contract.

Bid security shall be furnished in accordance with Section 00200, Instructions to Bidders. Each Bid must be submitted on the prescribed form (separate Bid package) and accompanied by a certified check or Bid Bond in accordance with Section 00200. Successful Bidders will be required to furnish both a Payment Bond and Performance Bond in the full amount of the contact price.

The Owner will not award the Contract to a Bidder who, at the time of award, was not properly licensed under the provisions of Chapter 624 of NRS or if the Contract would exceed the limit of the Bidders license.

Owner: **City of Fallon**

By: **Brian Byrd**

Title: **Public Works Director**

Date: **Thursday, July 14, 2022**

+ + END OF ADVERTISEMENT FOR BIDS + +

00200 INSTRUCTIONS TO BIDDERS

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INSTRUCTIONS TO BIDDERS

ARTICLE 1 – DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

A. *Issuing Office* – The office from which the Bidding Documents are to be issued.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office in the number and format stated in the advertisement or invitation to bid. The deposit is nonrefundable.
- 2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

- 3.01 Bidders must be qualified with experience to perform the work. Contractors qualified by the State of Nevada to perform such work are not required to be licensed nor to submit application for license in advance of submitting a bid or having such bid considered. This does not constitute a waiver of the State's right under its license laws to require a Contractor, determined to be a successful bidder, to be licensed to do business in the State of Nevada with a Class A prior to award of the contract.
- 3.02 To demonstrate a Bidder's qualifications to perform the Work, the Owner shall require the bidder to submit information demonstrating their qualifications. A Bidder's failure to submit required qualification information may disqualify Bidder from receiving an award of the Contract.
- 3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- 3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

4.01 *Site and Other Areas*

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor, including additional lands furnished by Owner for temporary construction facilities, construction equipment, or storage of materials and equipment.

4.02 *Existing Site Conditions*

A. Subsurface and Physical Conditions; Hazardous Environmental Conditions

1. The Supplementary Conditions identify:
 - a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
 - b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
 - c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - d. Technical Data contained in such reports and drawings.
2. Owner will make copies of reports and drawings referenced above available to any Bidder on request providing that they are not already included in Section 00300, Information for Bidders. These reports and drawings whether included in Section 00300 or not are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.

B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.

4.03 *Site Visit and Testing by Bidders*

- A. Bidder shall conduct the required Site visit during normal working hours and shall not disturb any ongoing operations at the Site.
- B. Site Visits shall be scheduled through the Owner at a mutually agreeable time.
- C. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- D. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations,

investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.

- E. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
- F. Bidder shall fill all holes and clean up and restore the Site to its former condition and as specified in the 2008 City of Fallon Department of Public Works Design Standards & Review Guidelines upon completion of such explorations, investigations, tests, and studies.

4.04 *Owner's Safety Program*

- A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.

4.05 *Other Work at the Site*

- A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 5 – BIDDER'S REPRESENTATIONS

5.01 It is the responsibility of each Bidder before submitting a Bid to:

- A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
- B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;
- D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;
- E. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and

drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;

- F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
- G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
- H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
- I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
- J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents;
- K. become aware that this is a Federal-aid contract and requirements for such shall apply;
- L. become aware that Project Funding is provided by the Nevada Community Development Block Grant Program and the City of Fallon.

ARTICLE 6 – PRE-BID CONFERENCE

- 6.01 A non-mandatory Pre-bid Conference will be conducted on Friday, July 22nd, 2022 at 2:00 p.m., local time, at the City of Fallon. Bidders, Subcontractors, Suppliers, and other interested parties are encouraged to attend.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.
- 7.03 Addenda will be distributed by the Issuing Office to parties listed on the Official Plan Holders List for the Project, only.
- 7.04 It is the Bidders sole responsibility to ensure that any Addenda issued are received by the Bidder and complete. Any questions shall be directed to the Issuing Office.

ARTICLE 8 – BID SECURITY

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of 5 percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.
- 8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 20 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.
- 8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.
- 8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

ARTICLE 9 – CONTRACT TIMES

- 9.01 The number of days within which, or the dates by which, Milestones are to be achieved and the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

ARTICLE 10 – LIQUIDATED DAMAGES

- 10.01 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 11 – SUBSTITUTE AND "OR-EQUAL" ITEMS

- 11.01 The Contract for the Work, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents. Substitutes and "or-equal" materials and equipment may be proposed by Contractor in accordance with Paragraphs 7.04 and 7.05 of the General Conditions no earlier than 7 days after the Effective Date of the Contract.
- 11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.
- 11.03 If an award is made, Contractor shall be allowed to submit proposed substitutes and "or-equals" in accordance with the General Conditions.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

12.01 Deleted

12.02 Deleted

12.03 The Bidder shall list, on the forms provided, the name and business address of each Subcontractor, Supplier individual or entity who will perform work or render service under this Contract in or about the construction of the improvements, or a Subcontractor who specifically fabricates and installs portions of the Work or improvements according to detailed Drawings contained in the Plans and shall also list the portions of the Work which shall be done by such Subcontractor.

If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

12.04 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.

12.05 Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.

12.06 The Contractor shall not award work to Subcontractor(s) in excess of 50% of the Total Bid Amount.

12.07 Reference is also made to applicable Laws and Regulations with respect to Subcontractors, Suppliers, individuals or entities. In the cases of conflict, specific provisions required by Laws or Regulations will govern.

ARTICLE 13 – PREPARATION OF BID

13.01 The Bid Form is included with the Bidding Documents.

A. All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, bid item, alternate, adjustment unit price item, and unit price item listed therein.

B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words "No Bid" or "Not Applicable."

13.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown.

- 13.03 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 13.04 A Bid by an individual shall show the Bidder's name and official address.
- 13.05 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 13.06 All names shall be printed in ink below the signatures.
- 13.07 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.08 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.09 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state and city where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.
- 13.10 The following signed certification is required of the corporation, limited liability company, individual, or joint venture in order for the bid to be considered responsive:
- A. Subcontractors Bidding on Federal Contracts; Forms are included within 00400 Bid Forms and Supplements.
1. All bidders shall submit information on subcontractors which will be paid an amount exceeding 5% of the total bid on the "Bidder Subcontractor Information" form provided by the City of Fallon, no later than the bid opening time.
 2. Within 2 hours after bid opening time, the 3 apparent lowest bidders shall submit information on subcontractors which will be paid an amount exceeding 1% of the total bid or \$50,000, whichever is greater, on the "Bidder Subcontractor Information" form provided by the City of Fallon.
 3. The 3 apparent lowest bidders shall submit information on all subcontractors and suppliers that submitted a proposal to the bidder on the "List of Subcontractors and Suppliers Bidding" form provided by the City of Fallon, by 5:00 p.m. local time, on the next business day following the bid opening.
 4. A subcontractor named by the bidder who is not properly licensed for that portion of the work prior to award of the Contract will be deemed unacceptable. If the subcontractor is deemed unacceptable, provide an acceptable subcontractor before the award of the contract.
 5. All bidders shall affirm all work, other than that being performed by the subcontractors listed in the subcontractor reports, will be self-performed.
- B. DBE Information; Form is included with 00400 Bid Forms and Supplements
1. All bidders, regardless of their apparent bid ranking, shall submit the "Bidder Disadvantaged Business Enterprise (DBE) Information" form, as required in Subsection 25.13, no later than the bid opening time. Confirmation letters, required by Subsection 25.13, shall be submitted no later than 5:00 p.m. local time on the next business day following the bid opening.

2. A bidder unable to meet the DBE goal shall submit documentation which outlines their Good Faith Efforts (GFE) toward meeting the contract goal, as outlined in Subsection 25.12. This information shall be submitted no later than 5:00 p.m. local time on the next business day following the bid opening.
- C. Anti-Collusion Affidavit; Form is included within 00400 Bid Forms and Supplements.
- D. Restrictions on Lobbying Using Appropriated Federal Funds; Form is included within 00400 Bid Forms and Supplements.

ARTICLE 14 – BASIS OF BID

14.01 Deleted

14.02 Unit and Lump Sum Price

- A. Bidders shall submit a Bid on a unit price and lump sum basis for each item of Work as listed in the Bid Form.
- B. The “Bid Price” (sometimes referred to as the extended price) for each unit price Bid item will be the product of the “Estimated Quantity” (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding “Bid Unit Price” offered by the Bidder. The total of all unit price Bid items will be the sum of these “Bid Prices”; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

ARTICLE 15 – SUBMITTAL OF BID

- 15.01 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 7 of the Bid Form. The plans, specifications, supplemental notices to contractors and other documents designated in the Bid Form will be considered a part of the proposal whether attached or not.
- 15.02 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation “BID ENCLOSED.” A mailed bid shall be addressed to the Owner at the address listed in Article 1.01 of the Bid Form. Bids delivered via facsimile will not be accepted and will be returned to the Bidder. It is the sole responsibility of the Bidder to ensure and verify that its Bid is received by the Owner prior to the public opening of the Bids.
- 15.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

- 16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 16.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 – OPENING OF BIDS

- 17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- 18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

- 19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.
- 19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid.
- 19.03 Evaluation of Bids
 - A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.
 - B. Deleted
- 19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.

- 19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 20 – BONDS AND INSURANCE

- 20.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

ARTICLE 21 – SIGNING OF AGREEMENT

- 21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 20 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within 10 days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 22 – SALES AND USE TAXES

- 22.01 Bidder is required to include all state sales and use taxes on materials and equipment to be incorporated in the Work.

ARTICLE 23 – DELETED

ARTICLE 24 – WAGE REQUIREMENTS

- 24.01 Prevailing wage rates pursuant to Federal Government Requirements (Davis-Bacon) and Churchill County requirements, as established by the Nevada State Labor Commission, whichever is higher shall be paid for all classifications of labor on this Project. Prevailing Wages in effect as of the date of the bid opening, including applicable amendments, shall be utilized. If the contract is not awarded within ninety (90) days of the bid opening, or if construction has not begun within ninety (90) days of contract award, a wage decision shall be requested by the City of Fallon to ensure use of the correct wages and any modifications issued for the wage rate determinations.

ARTICLE 25 – OTHER ITEMS

- 25.01 The Owner will not award the Contract to a Bidder or a listed Subcontractor who, at the time of Contract award, was not properly licensed under the provisions of Chapter 624 of NRS or if the Contract would exceed the limit of the Bidder's license (NRS 338.1475).
- 25.02 The Contractor, each Subcontractor and any other person who provides labor, equipment, materials, supplies or services shall comply with the requirements of all applicable state and local laws, including without limitation, any applicable licensing requirements and requirements for the payment of sales and use taxes on equipment, materials and supplies provided for the public work (NRS 338.153).

- 25.03 Contractor shall purchase and maintain for the period of the Contract full State of Nevada Industrial Insurance coverage for all persons whom it employs or may employ in performing or furnishing any of the Work under the Contract. This insurance shall be in strict accordance with the requirements of the most current and applicable Nevada State Industrial Insurance laws, including any amended laws taking affect during the term of the Contract. Before beginning Work under the Contract, Contractor shall furnish Owner a certificate of compliance with the Nevada State Industrial Insurance Act as required by NRS Chapter 616.
- 25.04 The Contractor shall cause all appropriate provisions of the Contract to be inserted in all subcontracts relative to the Work to bind Subcontractors to the Contractor by the terms of the Contract Documents.
- 25.05 Contractor shall comply with all other provisions of the Nevada Revised Statutes (NRS) Chapter 338 – Public Works Projects not specifically mentioned, if applicable, and all regulations promulgated under the statutes.
- 25.06 A Bidder may file a notice of protest to the ENGINEER and OWNER regarding the awarding of a contract providing that the notice of protest is in writing, is filed within 5 business days of the recommendation of award, the notice sets forth with specificity the reasons for the protest, and is accompanied by a bond in the amount of 25% of the total value of the bid as submitted by the bidder or \$250,000, whichever is less (NRS 338.142).
- 25.07 This is a Federal-aid contract and the requirements for such shall apply. On a Federal-aid contract, any Contractor otherwise qualified by the State of Nevada to perform such work is not required to be licensed nor to submit application for license in advance of submitting a bid or having such bid considered. This does not constitute a waiver of the State's right under its license laws to require a Contractor, determined to be a successful bidder, to be licensed to do business in the State of Nevada with a Class A prior to award of the contract.
- 25.08 This project is located in an attainment area for air quality. The bidder shall contact the Nevada Department of Conservation and Natural Resources (Division of Environmental Protection), phone (775) 687-4670, regarding special considerations concerning air quality requirements of the basin in which this project is located.
- Compliance with all rules, regulations, special stipulations, and laws pertaining to air quality shall be the responsibility of the Contractor and the cost of said compliance will be measured and paid for under the Mobilization and Demobilization bid item as specified in Section 01010, Subsection 2.1 of the Special Provisions. Contractor penalties associated with non-compliance of these rules, regulations, special stipulations and laws shall not be sufficient cause for increases in costs or time to the contract.
- 25.09 **In accordance with Title 23 CFR 635.410, permanently incorporated steel and/or iron materials on Federal-Aid projects shall be domestically produced regardless of the percentage they comprise in a manufactured product or form they take.**
- Minimal use of foreign steel materials will be permitted provided the cost of said materials does not exceed 1/10 of 1% of the total contract cost or \$2,500.00, whichever is greater. The combined cost of foreign steel and/or iron materials will be the value of the materials as they are delivered to the contract, documented by invoice or bill of sale to the contractor. Submit for review a request to use foreign materials prior to their use. Do not incorporate any foreign steel materials into the project without approval.**
- To qualify as domestic steel, all manufacturing processes, including manufacture, fabrication, grinding, drilling, welding, finishing, coating, and assembly of product containing steel and/or iron materials, must have been performed in the United States. To further define the coverage,

a domestic product is a manufactured steel and/or iron materials construction material that was produced in one of the 50 states, the District of Columbia, Puerto Rico, or in the territories or possessions of the United States. **Raw materials used in the steel and/or production may be imported.** Raw materials such as iron ore, limestone, waste products, etc. which are used in the manufacturing process to produce steel and/or iron materials products. Waste products include scrap; i.e., steel no longer useful in its present form from old automobiles, machinery, pipe, railroad rail, steel trimmings from mills or product manufacturing, and the like. Extracting, crushing, and handling the raw materials which are customary to prepare them for transporting are exempt from Buy America. **The use of foreign steel or iron billets is not acceptable under Buy America.**

Provide a Certificate of Materials Origin, using NDOT form 020-095, certifying materials comply with the Buy America requirements as specified above. Submit the certification prior to installation of the material. Unless a Certificate of Materials Origin has been provided, the materials will be considered of foreign origin.

- 25.10 The City of Fallon hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sexual orientation, gender identity, gender expression or national origin in consideration for an award.

The City of Fallon hereby notifies all bidders that it will not discriminate in the award of this contract on the basis of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression or handicap.

The City of Fallon will on its own initiative, take affirmative action, including the imposition of contract sanctions and the initiation of appropriate legal proceedings under any applicable State or Federal law to achieve equal employment opportunity on Federal-Aid Projects and will actively cooperate with federal agencies in all investigations and enforcement actions undertaken. In conjunction with the above statement, the City of Fallon will not issue plans to an irresponsible bidder. Subsection (B) of Section 112 of Title 23 United States Code has been amended by adding at the end thereof, the following: "Contracts for the construction of each project shall be awarded only on the basis of the lowest responsive bid submitted by a bidder meeting established criteria of responsibility."

- 25.11 The following requirements apply to the corporation, limited liability company, individual, or joint venture in order for the bid to be considered.

NOTICE OF REQUIREMENT FOR AFFIRMATIVE
ACTION TO ENSURE EQUAL EMPLOYMENT
OPPORTUNITY (EXECUTIVE ORDER 11246)

- A. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- B. The following goal for female utilization shall be included in all Federal and federally assisted construction contracts and subcontracts in excess of \$10,000. The goal is applicable to the Contractor's aggregate on-site construction work force whether or not part of that work force is performing work on a Federal or Federally assisted construction contract or subcontract.

FEMALE PARTICIPATION STATEWIDE

Time Period	Goal
Until further notice	6.9%

Until further notice, the following goals for minority utilization in each construction craft and trade shall be included in all Federal or Federally assisted construction contracts and subcontracts in excess of \$10,000 to be performed in the respective geographical areas. The goals are applicable to each non-exempt Contractor's total on-site construction work force, regardless of whether or not part of that work force is performing work on a Federal, Federally assisted or non-Federally related project, contract or subcontract.

Construction Contractors which are participating in an approved Hometown Plan (see 41 CFR 60-4.5) are required to comply with the goals of the Hometown Plan with regard to construction work they perform in the area covered by the Hometown Plan. With regard to all their other covered construction work, such Contractors are required to comply with the applicable Standard Metropolitan Statistical Area (SMSA) or Economic Area (EA) goal contained herein.

NEVADA ECONOMIC AREA

SMSA Counties, NV Clark	13.9%
163 Las Vegas, NV	
4120 Las Vegas, NV	
Non-SMSA Counties, NV Esmeralda, NV Lincoln, NV Nye	12.6%
SMSA Counties, NV Washoe	8.2%
164 Reno, NV	
6720 Reno, NV	
Non-SMSA Counties, NV Churchill, NV Douglas,	9.2%
NV Elko, NV Eureka, NV Humboldt, NV Lander,	
NV Lyon, NV Mineral, NV Pershing, NV Storey,	
NV White Pine, NV Carson City	

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or Federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goal for both its Federally involved and non- Federally involved construction.

The Contractor's compliance with the Executive Order and the regulation in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- C. The Contractor shall provide written notification to the City of Fallon and the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the

subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

Employment lists may be obtained from the local office of the Nevada Employment Security Department at Sparks, 2281 Pyramid Way, Sparks, NV 89431 or Fallon, 121 Industrial Way, Fallon NV 89406.

- 25.12 This contract is subject to Title 49, Code of Federal Regulations, Part 26. Portions of those regulations are set forth in these Standard Specifications, and those regulations in their entirety are incorporated herein by this reference. All the DBE requirements of 49 CFR Part 26 apply to this agreement.

The Contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, sex, sexual orientation, gender identity or gender expression in the performance of the contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of the contract. Failure by the Contractor to carry out these requirements is a material breach of the contract which may result in the termination of this contract or such other remedy as the City of Fallon deems appropriate, which may include, but is not limited to:

- A. Withholding progress payments.
- B. Assessing sanctions.
- C. Liquidated damages.
- D. Disqualifying the Contractor from future bidding.

DBEs must be certified by the Nevada Unified Certification Program (NUCP) in accordance with 49 CFR Part 26. The Department of Transportation is an agency member of the NUCP. A list of certified DBEs may be obtained from the Department of Transportation's website at www.nevadadbe.com.

Certification as a DBE or a DBE joint venture shall be predicated on meeting the requirements of 49 CFR Part 26 and the following:

- A. The completion and submission of a Disadvantaged Business Enterprise (DBE) Certification Application and all required documents.
- B. The submission of any additional documentation requested by the processing Agency.
- C. The submission of any additional information which the Department of Transportation may require to determine the firm's eligibility to participate in the DBE program.

Applications for certification by the NUCP are available at the Department of Transportation's Contract Compliance Office, 1263 S. Stewart Street, Carson City, Nevada 89712 and on the Department's website at www.nevadadbe.com.

Applicants submitting a certification application shall agree to permit the Department of Transportation to audit and examine the books, records, and files of their business.

Applications for certification may be filed with the Department of Transportation at any time, however, the firm must be certified at least 5 days prior to bid opening for the project on which the firm seeks to participate to count towards any goals. The Department will process applications in an expeditious manner. The Department will submit applications to the NUCP within 90 days of receiving a completed application and all relevant reference documents.

Bidders shall be responsible for being fully informed about the requirements of the Federal DBE Regulations; particular attention is directed to the following matters:

- A. A DBE may participate as a prime Contractor, subcontractor, joint venture partner with a prime or subcontractor, or vendor of material or supplies.
- B. A DBE joint venture partner must be responsible for a clearly defined portion of the work to be performed in addition to satisfying requirements for ownership and control.
- C. A DBE must perform a commercially useful function.
- D. Credit for a DBE vendor of materials or supplies is limited to 60% of the price unless the vendor manufactures or substantially alters the goods.
- E. Each DBE firm must be certified in a NAICS code applicable to the kind of work the firm would perform on the contract.

When a DBE participates in a contract, expenditures toward DBE goals will only count if the DBE is performing a commercially useful function on the contract. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE shall also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, you shall evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

The value of the work actually performed by the DBE toward DBE goals will count according to the following:

- A. The entire amount of that portion of a construction contract (or other contract not covered by paragraph number 2 below) that is performed by the DBE's own forces will count. The cost of supplies and materials obtained by the DBE for the work of the contract, including supplies purchased or equipment leased by the DBE (except supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate) will count.
- B. The entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, toward DBE goals, will count provided the fee is determined to be reasonable and not excessive as compared with fees customarily allowed for similar services.
- C. When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.
- D. When a DBE performs as a participant in a joint venture, a portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract that the DBE performs with its own forces toward DBE goals will count.

Expenditures for materials or supplies will count toward DBE goals according to the following:

- A. If the materials or supplies are obtained from a DBE manufacturer, 100% of the cost of the materials or supplies will count. A manufacturer is a firm that operates or maintains a

factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.

- B. If the materials or supplies are purchased from a DBE regular dealer, 60% of the cost of the materials or supplies will count. A regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

Determination of whether a DBE trucking company is performing a useful function and the expenditures that count toward DBE goals will be as follows:

- A. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.
- B. The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- C. The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- D. The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
- E. The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE lessees not to exceed the value of transportation services provided by DBE-owned trucks on the contract (one to one rule for trucking).
- F. For trucks leased to the DBE from either a DBE or non-DBE firm, the lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

DBE subcontractors submitted by the prime Contractor as meeting the requirements of this Subsection must have a license, for the type and quantity of work to be performed by said DBE subcontractor, issued by the appropriate agency prior to the bid opening.

Upon bid submittal, by the prime Contractor, the prime Contractor becomes committed to those certified DBE firms listed in the bid proposal on the "Bidder Disadvantaged Business Enterprise (DBE) Information" form.

Verify that all representations made concerning DBE subcontractors are in conformance with the State Contractors' Board Rules and Regulations as well as other Federal and State laws and regulations.

Begin procedures for licensing early enough to ensure that DBE subcontractors are properly licensed prior to the time of the bid opening.

A bidder unable to meet the DBE goal shall submit documentation which outlines in detail good faith efforts to meet the goal. The bidder must show that it took all necessary and reasonable

steps to achieve the goal which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. The City of Fallon will consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. Some efforts which may be shown are as follows:

- A. Whether the Contractor attended any pre-solicitation or pre-bid meetings that were scheduled by the recipient to inform DBEs of contracting and subcontracting opportunities.
- B. Whether the Contractor advertised in general circulation, trade association and minority-focus media concerning the subcontracting opportunities.
- C. Efforts to negotiate with DBEs for specific sub-bids including at a minimum:
 - 1. The names, addresses, telephone numbers, and dates the DBEs were contacted and the DBEs response.
 - 2. A description of the information provided to DBEs regarding the plans and specifications for portions of the work to be performed.
 - 3. A statement of why additional agreements with DBEs were not reached.
- D. Whether the Contractor followed up initial solicitations of interest by contacting DBEs to determine with certainty whether the DBEs were interested.
- E. Whether the Contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goals (including, where appropriate, breaking down contracts into economically feasible units to facilitate DBE participation).
- F. Whether the Contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract.
- G. Whether the Contractor negotiated in good faith with interested DBEs, not rejecting DBEs as unqualified without sound reasons based on a thorough investigation of their qualifications.
- H. Whether the Contractor made efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance required by the recipient or Contractor.
- I. Whether the Contractor effectively used the services of available minority community organizations; minority contractors' groups; local, State, and Federal minority business assistance offices; and other organizations that provide assistance in the recruitment and placement of DBEs.

The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

25.13 A DBE participation goal/percentage of 0.0% has been established for this contract.

The award of the contract, if it be awarded, shall be to the lowest responsible and responsive bidder meeting the DBE goals or who has made a good faith effort to do so as outlined in Subsection 25.13.

The DBE information is subject to verification by the City of Fallon and/or the Nevada Community Development Block Grant Program, which may require additional information or clarification. The DBE information shall be placed on the "Bidder Disadvantaged Business

Enterprise (DBE) Information” form. Complete the form entirely with all the required information.

Provide written confirmation letters and quotes from each DBE firm named on the “Bidder Disadvantaged Business Enterprise (DBE) Information” form to meet the DBE goal, stating that they agree to perform the work committed to, for the price committed to on the form. This written confirmation must be on the DBE firm’s letterhead and must be received by the City of Fallon no later than 5:00 p.m. local time on the next business day following the bid opening.

If it is determined that the bidder has failed to meet the DBE requirements, the bidder will be provided an opportunity for administrative reconsideration prior to the award of the contract to the next apparent low bidder.

As part of this reconsideration, the bidder will have the opportunity to provide written documentation or argument concerning the issue of whether they met the goal or made adequate good faith efforts to do so.

The decision on reconsideration will be made by an official who did not take part in the original determination that the bidder failed to meet the goal or make adequate good faith efforts to do so.

The bidder will have the opportunity to meet in person with the reconsideration official to discuss the issue of whether it met the goal or made adequate good faith efforts to do so.

A written decision on reconsideration will be sent to the bidder explaining the basis for finding that they did or did not meet the goal or make adequate good faith efforts to do so.

The result of the reconsideration process is not administratively appealable to the City of Fallon and/or the Nevada Community Block Grant Program.

Failure by the Contractor to fulfill the DBE contract requirements and to demonstrate good faith efforts constitutes a breach of this contract. In such instance, the City of Fallon may:

- A. Withhold progress payments or portion thereof;
- B. Deduct as damages an amount equal to the unmet portion of the DBE commitment not achieved;
- C. Remove the Contractor from the prequalified bidders list for repeated violations;
- D. Suspend and debar for violations, falsifications, or misrepresentations;
- E. Terminate the contract; or
- F. Refer the matter for criminal prosecution.

- 25.14 Keep fully informed of all Federal and State laws, all local bylaws, ordinances and regulations, and all orders and decrees of bodies or tribunals having jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. Observe and comply with all such laws, bylaws, ordinances, regulations, orders and decrees, and protect and indemnify the State and its representatives against any claim or liability arising from or based on the violation of any such law, bylaws, ordinances, regulations, orders or decrees, whether by yourself or your employees. If the City of Fallon suffers any fines or penalties because of the failure to comply with said laws or regulations, the City of Fallon may deduct the amount of said fine or penalty from any monies due.

Any project related use of areas outside of the highway right of way are subject to all applicable Federal, State, and local laws, regulations, ordinances and clearances (including but not limited

to environmental and archaeological clearances), as well as the requirements and conditions as specified herein.

Use hauling vehicles transporting materials to and from the project either empty or loaded meeting the requirements and complying with laws and regulations as would be required when traveling on a public street or highway for any other purpose.

During the performance of all contracts, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

- A. Compliance with Regulations: The Contractor shall comply with the Regulation relative to nondiscrimination in federally-assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, and the Federal Highway Administration (hereinafter "FHWA") Title 23, Code of Federal Regulations, Part 200 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- B. Nondiscrimination: The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, national origin, sex, age, disability/handicap, sexual orientation, gender identity, gender expression and low income status in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR, section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- C. Solicitations for Subcontractors, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, national origin, sex, age, disability/handicap, sexual orientation, gender identity, gender expression and low income status.
- D. Information and Reports: The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the City of Fallon and/or the Nevada Community Development Block Grant Program to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information the Contractor shall so certify to the City of Fallon, or the Nevada Community Development Block Grant Program as appropriate, and shall set forth what efforts it has made to obtain the information.
- E. Sanctions for Noncompliance: In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, the City of Fallon shall impose such contract sanctions as it or the Nevada Community Development Block Grant Program may determine to be appropriate, including, but not limited to:
 - 1. withholding of payments to the Contractor under the contract until the Contractor complies, and/or
 - 2. cancellation, termination or suspension of the contract, in whole or in part.

- F. Incorporation of Provisions: The Contractor shall include the provisions of paragraphs A through F in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

The Contractor shall take such action with respect to any subcontract or procurement as the City of Fallon or the Nevada Community Development Block Grant Program may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the City of Fallon to enter into such litigation to protect the interests of the City of Fallon, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

- 25.15 In compliance with the multi-employer worksite provisions of the Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard 29 CFR Part 1910.1200 (e) (2) the Contractor is required to provide current Material Safety Data Sheets (MSDS) for all hazardous chemicals [as defined in 29 CFR Part 1910.1200 (c)] to be used by the Contractor in this contract.

It will be the Contractor's responsibility to submit a list of all hazardous chemicals to be used on this contract 7 days in advance of the pre-construction conference. MSDS must be submitted prior to the beginning of any phase of work which requires the use of the hazardous chemical. An MSDS shall be submitted prior to use of the hazardous chemical on the contract, for any additional hazardous material not covered by the original list.

++END OF INSTRUCTIONS TO BIDDERS++

00300 INFORMATION AVAILABLE TO BIDDERS

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Quick Start Guide for Contract Registrations

Helpful Information

What is an Entity?

In SAM, your company/business/organization is referred to as an "Entity." You register your entity to do business with the U.S. Federal government by completing the registration process in SAM.

SAM is the official **free, government-operated website** – there is NO charge to register or maintain your entity registration record in SAM.

What do I need to get started?

1. **DUNS Number:** You need a Data Universal Numbering System (DUNS) Number to register your entity in SAM. DUNS Numbers are unique for each physical location you are registering. If you do not have one, request a DUNS number for **free** to do business with the U.S. Federal government by visiting Dun & Bradstreet (D&B) at <http://fedgov.dnb.com/webform>. It takes no more than 1-2 business days to obtain a DUNS Number.
2. **Taxpayer Identification Number:** You need your entity's Taxpayer ID Number (TIN) and Taxpayer Name (as it appears on your most recent tax return). Foreign entities that do not pay employees within the U.S. do not need to provide a TIN. Your TIN is usually your Employer Identification Number (EIN) assigned by the Internal Revenue Service (IRS). Sole proprietors may use their Social Security Number (SSN) assigned by the Social Security Administration (SSA) as their TIN, but are strongly encouraged to obtain a free EIN from the IRS by visiting: <http://www.irs.gov/Businesses/Small-Businesses-&-Self-Employed/How-to-Apply-for-an-EIN>. Allow approximately two weeks before your new EIN is ready for use when registering in SAM.
3. All non-Federal entities must mail an original, signed notarized letter to the Federal Service Desk within 60 days of activation.

Steps for Registering

1. Type www.sam.gov in your Internet browser address bar.
2. Select Log In to complete authentication and create an account.
3. On the My SAM page select Entity Registrations and then select Register New Entity.
4. Select your type of Entity.
5. If you are registering in SAM.gov so you can conduct business with the government through contracts, select "I want to be able to bid on federal contracts or other procurement opportunities. I also want to be able to apply for grants, loans, and other financial assistance programs."
6. Complete the Core Data section:
 - Validate your DUNS Number information.
 - Enter Business Information (TIN, etc.) This page is also where you create your Marketing Partner Identification Number (MPIN). Remember your MPIN as it will serve as your electronic signature for the IRS Consent to Disclosure of Tax Information on the following page.
 - Enter your CAGE Code if you have one. CAGE codes are tied to DUNS Numbers and cannot be reused. Don't worry if you don't have a CAGE Code for the DUNS Number you are registering: one will be assigned to you after your registration is submitted. Foreign registrants must enter their NCAGE Code before proceeding.
 - Enter General Information (business types, organization structure, etc.) about your entity.
 - Provide your entity's Financial Information, i.e. U.S. bank Electronic Funds Transfer (EFT) Information for Federal government payment purposes. Foreign entities do not need to provide EFT information.
 - Answer the Executive Compensation questions.
 - Answer the Proceedings Details questions.
 - Provide your public search authorization.
7. Complete the "Assertions" section:
 - Enter your entity's goods and services using NAICS Codes and PSCs.
 - Enter your entity's size metrics.
 - Enter optional Electronic Data Interchange (EDI) information.
 - Enter optional Disaster Response Information.
8. Complete the Representations & Certifications section, which is comprised of the Federal Acquisition Regulation (FAR) and Defense Federal Acquisition Regulation Supplement (DFARS) provisions/clauses, Architect-Engineer Responses (SF330 Part II), and the Financial Assistance response page.
9. Complete the Points of Contact section: Your Electronic Business POC is integral to the procurement process. Your Government POC will be used by other government systems, such as the CAGE program, when they contact you. List someone with direct knowledge of this registration for both of those POCs.
10. Make sure to select Submit after your final review. You will get a Registration Submitted - Confirmation message on the screen. If you do not see this message, you have not submitted your registration.

Allow up to 12-15 business days after you submit before your registration is active in SAM.

For FREE help registering in SAM, contact the supporting Federal Service Desk (FSD) at <https://www.fsd.gov/>





Quick Start Guide for Updating an Entity Registration

Helpful Information

Viewing Your Entity Record

- If you chose to make your record public, you can view your entity record by going to www.sam.gov, selecting Search Records, and searching by your DUNS number or Legal Business Name
- If your record is available in the public search, but expired, you can view it by searching for your entity by DUNS Number or Legal Business Name, selecting the "Inactive" checkbox, and clicking the "Apply Filters" button
- If you opted out of public search, you will need to log into SAM with the appropriate user account, select Entity Registrations and then Existing Entity Registrations to view your record

Before You Start

- When you renew or update your registration, you must review the entire record. Take the time to make sure all the information is accurate and complete.
- If your entity's physical address has changed since you last renewed, make sure to update the address Dun and Bradstreet (D&B) has on file prior to updating the registration in SAM.
- All non-Federal entities must mail an original, signed notarized letter to the Federal Service Desk within 60 days of activation.

Steps for Updating an Entity Registration

1. Type www.sam.gov in your Internet browser address bar and then log in.
2. On the My SAM page, select Entity Registrations and then Existing Entity Registrations from the sub-navigation menu.
3. Search for the entity you want to update or select the Legal Business Name of the entity the Entity List.
4. Select Update Entity from the Registration Details panel.
 - You may not update a registration in Submitted status. You may only update registrations that are Active, Expired, or a Work in Progress.
5. You may delete a Work in Progress if necessary. This will not affect your Active or Expired entity registration.
6. Select what you would like to update: Purpose of Registration and remaining entity registration. All sections applicable to the registration besides the Purpose of Registration or Point of Contacts only (skip to step 10).
7. Update the Core Data section.
8. Update the Assertions section (not required if registering for Federal Assistance opportunities only).
9. Update the Representations and Certifications section.
10. Update the Points of Contact section, including optional POCs. You may remove optional POCs if they are no longer relevant.
11. If you qualify as a small business, update your information in SBA's Dynamic Small Business Search (DSBS) or apply for a small business certification via the "SBA Supplemental" page.
12. Select Submit. Your registration will be reviewed. You will receive an email from SAM.gov when your registration is active.

Please note: If your registration update requires IRS or CAGE revalidation, it could take 10-12 business days for it to become active and replace your previous registration.



GEOTECHNICAL INVESTIGATION REPORT

NORTH BROADWAY STREET AND SHERMAN STREET REHABILITATION

JN: 10514.000

FALLON, NEVADA

OCTOBER 2021

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NORTH BROADWAY STREET AND SHERMAN STREET REHABILITATION FALLON, NV

1.0 INTRODUCTION

This report presents the results of Lumos & Associates, Inc.'s Geotechnical Analysis for the proposed roadway rehabilitation improvements on Sherman Street and North Broadway Street in Fallon, Nevada. A vicinity map is included as Plate 1 and a site map is included as Plate 2.

It is our understanding that the proposed project will consist of approximately four-thousand (4,000) lane feet of roadway replacement along Sherman Street and North Broadway Street. We have assumed that final grades at the site will be approximately the same as the existing grades.

The purpose of our investigation was to characterize the site geology and soil conditions, describe the native soils and determine their engineering properties as they relate to the proposed construction. The proposed construction consists of roadway reconstruction, storm infiltrators, and utility trenching/backfill. The investigation was also intended to identify possible adverse geologic, soil, and/or water table conditions. However, this study did not include an environmental assessment or an evaluation for soil and/or groundwater contamination at the site.

2.0 GEOLOGIC SETTING

Fallon is located at the western portion of the Basin and Range geomorphic province. The Basin and Range is characterized by large normal fault-bounded valleys (grabens) that are separated by large mountain ranges (horsts). The Sierra Nevada geomorphic province located approximately 50 miles to the west is characterized by large granite masses that have been uplifted and tilted a few degrees towards the west. Overlying the Sierran granites are older oceanic meta-sedimentary and meta-volcanic rocks.

The geologic evolution of the region involves a long and complex history. The present features are largely the products of late Mesozoic and Tertiary events (150 thousand to 2 million years ago). During this period of time the entire region was uplifted from below sea level to over 10,000 feet. Beginning about 34 million years ago, widespread rhyolitic volcanism began in the northern part of the state and progressed southward. At the end of this period of volcanism, about 17 million years ago, extension (east-west growth) began, which resulted in the large-scale block faulting that created the present day "Basin and Range" physiography. Volcanism continued during extension but was characterized by more basaltic lava flows. Estimates of the amount of extension range from thirty (30%) to fifty (50%) percent of the original width of the region. Vertical offsets between the valleys and adjacent mountains range from about six-thousand (6,000) to fifteen-thousand (15,000) feet. Valley bottoms typically range in elevation between four-thousand (4,000) and sixty-five-hundred (6,500) feet above sea level with the intervening mountains 7,000 and 12,000 feet or more.

During extension, large volumes of sediments were deposited in the subsiding valleys by both streams and, during the past 2 million years, by intermittent large glacial lakes. Valley fill depths typically range from a few hundred feet to over ten-thousand (10,000) feet. During the past eleven thousand years, (Holocene epoch) arid erosional processes have evolved. That, combined with active faulting, continue to shape the present landscape.

Specifically, the project site is located in the central portion of Lahontan Valley, a deep sedimentary basin. The ancestral Truckee River during the Pleistocene Period (last 2 million years) fed a large glacial lake referred to as Lake Lahontan. The Truckee River entered the ancient lake about 24 miles west of the site near Fernley, Nevada. Lake sediments typically

consist of silts, sands and gravels in near shore areas and sands, silts and clays in deeper off shore environments. As the lake receded, alluvial deposits of sands, silts and gravels combined with Aeolian (wind-blown) deposits of silts and sands accumulated, as well as evaporate deposits.

The evaporate deposits found southeast of Fallon are actively being mined for salt. Sediment depths in the center of the Lahontan basin are on the order of several thousand feet deep. Bedrock, where present, in the Fallon area is almost entirely late Tertiary (last 10 million years) volcanic extrusive rocks.

According to the geological map of Churchill County, Nevada by Ronald Willden and Robert C. Speed, the site is underlain by younger alluvium and is mapped as Qya. This unit is described as Lake Lahontan deposits, playa deposits, and young fan gravels (Refer to Plate 3).

3.0 SITE CONDITIONS AND FIELD EXPLORATION

At the time of our investigation the site consisted of two (2) paved roadways that run north and south. North Broadway Street's limits extend from Highway 50 northward to the Churchill County Juvenile Facility. Sherman Street's limits extend from The Banner Hospital access road northward to Augusta Lane.

The current field investigation included a site reconnaissance and subsurface exploration. During the site reconnaissance, surface conditions were noted and the location of the exploratory test pits were determined by using existing features at the site. Therefore, the approximate location of the exploratory test pits should be considered accurate only to the degree implied by the methods used.

Six (6) exploratory test pits were excavated with a Caterpillar Mini Excavator to a maximum depth of nine and a half (9.5) feet below-existing-grade (b.e.g.) in the shoulder of the street. The locations of the exploratory test pits within the site are shown on Plate 2. The subsurface soils were continuously logged and visually classified in the field by our Geotechnician in accordance with the Unified Soil Classification System (USCS). Representative soil samples were collected at each material change within the exploratory test pits and subsequently transported to our Carson City geotechnical laboratories for testing and additional analysis.

The subsurface soils encountered consisted generally of silty sands, poorly graded sands with silt, poorly graded sands, sandy lean clays, sandy fat clays, and non-native poorly graded gravel (roadway base) (SM, SP-SM, SP, CL, CH, and GP). Poor subgrade soils (CL) were encountered in Test Pits 2, 5, and 6 at or near the surface. We anticipate overexcavation in these areas. Suitable subgrade soils (SM and SP-SM) were encountered in test pits 1, 3, and 4. The soils in these areas are anticipated to be suitable to provide direct structural support. Groundwater was encountered in test pits TP-1, TP-2, TP-5, and TP-6 at depths ranging from six and a half to nine (6.5-9) feet at the time of our investigation. Additionally, seasonal fluctuations in the groundwater table should be anticipated.

4.0 FIELD AND LABORATORY TEST DATA

Laboratory tests performed on representative samples included sieve analysis (including fines), Atterberg limits, r-value, moisture density curve, hydraulic conductivity, expansion index, pH, resistivity, and soluble sulfate. Much of this data is displayed on the "logs" of the test pits to facilitate correlation. Field descriptions presented on the logs have been modified, where appropriate, to reflect laboratory test results. The logs of the test pits are included in Appendix A of this report as Plates A-1 through A-6. A key to the logs is included as Plate A-9.

Individual laboratory test results are presented in Appendix B as Plates B-1 through B-6. Laboratory testing was performed per ASTM standards, except when test procedures are briefly described and no ASTM standard is specifically referenced in the report. Atterberg limits were determined using the dry method of preparation.

4.1 Analytical Testing

Silver State Analytical Laboratories, Reno, Nevada, conducted this testing. The testing included pH, resistivity, soluble sulfates. Test results are included (on Silver State letterhead) in Plate B-5.

4.2 Hydraulic Conductivity Testing

Geo Logic Associates, Inc. Reno, Nevada, conducted this testing. The testing was performed on the site poorly graded sands and poorly graded sands with silt. Test results are included (on Geo Logic letterhead) in Plate B-6.

The soil samples obtained during this investigation will be held in our laboratory for 30 days from the date of this report. The samples may be retained longer at an additional cost to the client or obtained from this office upon request.

5.0 DISCUSSION AND RECOMMENDATIONS

5.1 General

The following recommendations are based upon the construction and our understanding and assumptions of the proposed improvements, as outlined in the introduction of this report, and based on our findings during the field exploration phase of this project. If changes in the construction project are proposed, they should be presented to Lumos & Associates, Inc. Geotechnical Department, so that the recommendations provided herein can be reviewed and modified as necessary. At a minimum, final construction drawings should be submitted to the Lumos Geotechnical Department for review prior to actual construction and verification that our geotechnical design recommendations have been implemented.

5.2 General Site Grading

Prior to placement of fill and/or the proposed improvements, the areas to receive fill and/or improvements shall be cleared and grubbed. Clearing and grubbing is not anticipated under the asphalt concrete, however, if improvements will be placed outside of the roadway then it is anticipated to be as much as six (6) inches or more where thicker pavement is present.

Root- or organic-laden soils encountered during excavations, should be stockpiled in a designated area on site for later use in landscaping, or removed off site as directed by the owner. Excavated soils free from any organics, debris or otherwise unsuitable material and with particles no larger than four (4) inches in maximum dimension may be stockpiled and moisture conditioned for later use as compacted fill provided it meets the criteria for structural fill soils.

Exposed excavation surfaces to support any of the proposed improvements should be observed and approved by a Lumos representative. Upon re-compaction and prior to placing any base, the re-compacted surface should be proof-rolled to identify any possible yielding surfaces. Proof-rolling should be conducted with a heavy rubber-tire loader with a fully loaded bucket, or a fully loaded water truck, and observed and approved by a Lumos representative.

Unstable conditions due to yielding and/or pumping soils may be encountered on site. Additionally, the exposed soils may yield or pump under heavy equipment loads or where vibratory equipment draws up water. If yielding or pumping conditions are encountered, the soils should be scarified in place, allowed to dry as necessary and re-compacted, where applicable. Alternatively, unsuitable or saturated soil should be removed, the exposed surface leveled and compacted/tamped as much as practical without causing further pumping, and covered (including the sides) with geotextile stabilizing fabric (Mirafi HP370 or other equivalent). The fabric should then be covered with at least twelve (12) inches of four (4) to eight (8) inch **angular rock fill** with enough fines to fill the inter-rock pore spaces. Placement should be by end dumping. No traffic or other action should be allowed over the fabric, which may cause it to deflect/deform prior to cobble placement. Test sections should be used to determine the minimum thickness and/or number of layers required for stabilization.

Stabilization should be evaluated by proof-rolling standards commensurate with the equipment used, and approved by a Lumos representative. The placement of the stabilizing rock-fill may require additional over-excavation to maintain appropriate grading elevations. A filter fabric (Mirafi 180N or equal) should also be placed over the cobble rock fill to prevent piping of fines from covering soils into the stabilizing rock matrix.

Properly compacted structural fill and trench backfill soils to be used on site should consist of non-expansive materials [LL less than thirty-five (35) and/or a PI less than twelve (12) and/or Expansion Index less than twenty (20)], should be free of contaminants, organics [less than two (2) percent], rubble, or natural rock larger than four (4) inches in largest dimension. All structural fill and trench backfill soils shall also be non-corrosive and have a water soluble sulfate content of less than one-tenth (0.1) percent and a minimum "R"-Value of thirty (30). Structural fill and trench backfill soils shall also meet the following gradation requirements (Table 1 next page):

TABLE 1
STRUCTURAL FILL/TRENCH BACKFILL GRADATION

Sieve Size	% Passing
4"	100
¾"	70-100
#40	15-65
#200	5-25

Structural fill and trench backfill soils that do not meet the above requirements may be approved at the discretion of the Geotechnical Engineer. It is anticipated that the poorly-graded sand with silt (SP-SM) and the silty sands (SM), encountered in all test pits will be suitable for reuse as structural fill and trench backfill. The clays (CL and CH) encountered in test pits 2, 4, 5, and 6 are not suitable for reuse as structural fill and trench backfill. Import structural fill and trench backfill soils should be tested and approved prior to being placed or delivered on-site (**seven day advanced notice**).

Prior to placement of structural fill, the site subgrade shall be scarified to a depth of twelve (12) inches, moisture conditioned to within two percent (2%) of optimum, and recompact to a minimum of ninety percent (90%) as determined by the ASTM D1557 Standard. If clay subgrade soils are encountered, they shall be overexcavated to a depth of at least six (6) inches below subgrade elevation and replaced with structural fill/trench backfill.

Structural fill and trench backfill should be placed only on compacted sub-grade or on compacted fill in loose lifts not exceeding eight (8) inches, moisture conditioned to within two percent (2%) of optimum, and compacted to at least **ninety percent (90%)** relative compaction as determined by the ASTM D1557 Standard. Lift thickness may be increased, at the discretion of the Geotechnical Engineer, provided the contractor can demonstrate that adequate compaction is being achieved.

Fill material should not be placed, spread or compacted while the ground is frozen or during unfavorable weather conditions. When site grading is interrupted by heavy rain or snow,

grading or filling operations should not resume until a Lumos representative approves the moisture content and density conditions of the subgrade or previously placed fill. When fill is placed on existing slopes steeper than 5:1, the existing slope shall be horizontally benched.

Landscape areas should be cleared of all objectionable material. In cut areas, no other work is necessary except grading to proper elevation. In landscape areas, fill should be placed in loose lifts not exceeding eight inches and compacted to at least ninety percent (90%) relative compaction to prevent erosion.

Water should not be allowed to pond on or adjacent to sewer improvements, and measures should be taken to reduce surface water infiltration into the subgrade soils. A representative of Lumos should be present during site grading operations to ensure any unforeseen or concealed conditions within the site are identified and properly mitigated, and to test and observe earthwork construction. This testing and observation is an integral part of our service as acceptance of earthwork construction and is dependent upon compaction and stability of the subgrade soils. The soils engineer may reject any material that does not meet engineering characteristics, compaction, and stability requirements. Further, recommendations of this report are based upon the assumption that earthwork construction will conform to recommendations set forth in this section of the report.

5.3 Infiltration Recommendations

Two (2) hydraulic conductivity tests were performed, one on each street, to determine the size of the rapid infiltration units to be constructed on the site. These tests were performed in the poorly graded sand (SP) and poorly graded sand with silt (SP-SM). The infiltration data is included on plates B-6. We recommend the units to be placed within these sand layers and be backfilled with material meeting the structural fill/trench backfill requirements. These sand layers were encountered in Test Pit 1 at 2.5 feet, Test Pit 2 at 4.5 feet, Test Pit 3 at 5.5 feet, Test Pit 4 at 7 feet, Test Pit 5 at 6.5 feet, and Test Pit 6 at 4.5 feet.

6.0 PAVEMENT DESIGN

6.1 Design Criteria

The pavement structural section for the asphalt concrete utilizing an R-value of 6 (Laboratory Test Results) is provided in Table 2, "Recommended Asphalt Pavement Sections. Traffic loading, based on our knowledge of the area, was assumed to be classified as collector with heavy traffic on North Broadway Street and a collector with light traffic on Sherman Street. The design traffic indices of 6.5 for North Broadway Street and 6.0 for Sherman Street were selected.

6.2 Pulverization and Asphalt Concrete

Lumos recommends pulverizing the existing asphalt concrete and base and reusing this material as base and/or structural fill/trench backfill. The pulverized asphalt concrete and base material shall meet the requirements of Type 1 Recycled Aggregate Base in the standard specifications if to be reused as base material. Pulverized aggregate base material shall be moisture conditioned to within two percent (2%) of optimum and compacted to at least ninety-five percent (95%) of the laboratory maximum density, as determined by the ASTM D1557 standard. Prior to placement of asphalt, we recommend roadway pulverized base be proof rolled utilizing a loader with a full bucket, or a fully loaded 10 wheel water truck. Observed pumping and/or yielding subgrade soils located during the proof rolling, shall be stabilized to the satisfaction of the Geotechnical Engineer.

**TABLE 2
RECOMMENDED ASPHALT PAVEMENT SECTION**

Street	Traffic Index	Minimum Asphalt Pavement	Minimum Pulverized Aggregate Base	Minimum Properly Prepared Suitable Subgrade/Structural Fill
North Broadway	6.5	4"	8"	6"
Sherman	6.0	4"	6"	6"

See Appendix C for Calculations

In the reconstruction areas of the project, the asphalt concrete should consist of PG64-28NV, and Type 2 asphalt aggregate per the "Orange Book" standards. We recommend a 50-blow Marshall mix that targets four percent (4%) air voids. Asphalt concrete, in any case, should be compacted to between ninety-two percent (92%) and ninety-seven percent (97%) of the Rice theoretical maximum density. All mix designs for asphalt concrete should be submitted to the Geotechnical Engineer for review and approval a minimum of seven (7) days prior to paving.

7.0 CORROSION AND CHEMICAL ATTACK

On-site soils have a negligible water-soluble sulfate content of less than 0.10% (<0.01% actual) in both samples tested. No specific type of cement is required for concrete in direct contact with on-site soils, as required by the Standard Specifications. However, Type II cement (meeting ASTM C150) is recommended for concrete in direct contact with on-site soils.

All exterior concrete should have between four and one half to seven and one half percent (4.5-7.5 %) entrained air, a maximum water-cement ratio of 0.45, and comply with all other ACI recommendations for concrete placed in areas subject to freezing. A minimum compression strength of four-thousand (4,000) psi is recommended for all external concrete. All interior concrete should also be placed pursuant to ACI recommendations.

Test results indicate native soils have pH test results of 8.76 and 7.19 and have a resistivity test results of 5,100 and 5,600 ohm-cm under saturated conditions. This indicates the site soils are considered corrosive toward ferrous metals in contact with these soils. Corrosion mitigation measures, such as protective coatings, wrappings, and cathodic protection are therefore recommended. If protective coatings are used, the type and quantity will depend on the kind of steel and specific construction application. Steel and wire concrete reinforcement cover of at least three (3) inches where cast against soil, unformed, is recommended.

8.0 UTILITY EXCAVATIONS

On-site soils are anticipated to be excavatable with conventional construction equipment. Compliance with OSHA regulations should be enforced for Type C soils. Native non-plastic to low plastic sands (SP-SM, SP, SM) ($P.I. \leq 12$) may be suitable for backfill of utility trenches, provided soils meet the requirements of structural fill/trench backfill as mentioned earlier in this report. Trench backfill/structural fill shall be moisture conditioned, placed and compacted as previously discussed in the grading and filling section. On-site soils encountered during our field exploration do not meet the minimum requirements for bedding sand (Class A Backfill) and should be imported, where required. Bedding sand shall be placed in eight (8) inch maximum loose lifts and compacted to a minimum of ninety percent (90%) of the ASTM D1557 Standard. Groundwater was encountered during our field investigation in several of our test pits. If groundwater is encountered, we recommend "burrito wrapped" Class C Drain Rock be utilized as bedding to an elevation of at least one (1) foot above groundwater. Class C material shall meet the requirements in the Standard Specifications. The Class C Drain Rock shall be placed in one (1) foot lifts and compacted with a vibra plate to the satisfaction of the geotechnical engineer.

9.0 MOISTURE PROTECTION, EROSION AND DRAINAGE

The finish surfaces around all structures should slope away from the foundations and toward appropriate drop inlets or other surface drainage devices. It is recommended that within ten feet of any structure a minimum slope of five percent (5%) be used for soil subgrade and a minimum of one percent (1%) be used for pavement. These grades should be maintained for the life of the structures.

10.0 CONSTRUCTION SPECIFICATIONS

All work shall be governed by the Standard Specifications and Standard Details for Public Works Construction (SSPWC), as distributed by City of Fallon, except as modified herein.

11.0 LIMITATIONS

This report has been prepared in accordance with the currently accepted engineering practices in Northern Nevada. The analysis and recommendations in this report are based upon exploration performed at the locations shown on the site plan, the proposed improvements as described in the Introduction section of this report and upon the property in its condition as of the date of this report. Lumos makes no guarantee as to the continuity of conditions as subsurface variations may occur between or beyond exploration points and over time. Any subsurface variations encountered during construction should be immediately reported to Lumos so that, if necessary, Lumos' recommendations may be modified.

This report has been prepared for and provided directly to City of Fallon ("The Client"), and any and all use of this report is expressly limited to the exclusive use of the Client. The Client is responsible for determining who, if anyone, shall be provided this report, including any designers and subcontractors whose work is related to this project. Should the Client decide to provide this report to any other individual or entity, Lumos shall not be held liable for any use by those individuals or entities to whom this report is provided. The Client agrees to indemnify, defend and hold harmless Lumos, its agents and employees from any claims resulting from unauthorized users.

If this report is utilized in the preparation of an Engineer's Estimate of Probable Construction Costs, then the preparer of the estimate acknowledges that the report recommendations are based on the subsurface conditions found at the specific locations investigated on site; that subsurface conditions may vary outside these locations; and that no guaranty or warranty, express or implied, is made that the conditions encountered are representative of the entire site. The preparer of the estimate agrees to indemnify, defend and hold harmless Lumos & Associates, its agents and employees from any and all claims, causes of action or liability arising from any claims resulting from the use of the report in the preparation of an Engineer's Cost Estimate.

This report is not intended for, nor should be utilized for, bidding purposes. If it is utilized for bidding purposes, Client acknowledges that the report recommendations are based on the subsurface conditions found at the specific locations investigated on site; that subsurface

conditions may vary outside these locations; and that no guaranty or warranty, express or implied, is made that the conditions encountered are representative of the entire site. The Client agrees to indemnify, defend and hold harmless Lumos & Associates, its agents and employees from any and all claims, causes or action or liability arising from any claims resulting from the use of the report for bidding purposes.

As explained above, subsurface variations may exist and as such, beyond the express findings located in this report, no warranties express, or implied, are made by this report. No affirmation of fact, including but not limited to statements regarding suitability for use of performance shall be deemed to be a warranty or guaranty for any purpose.

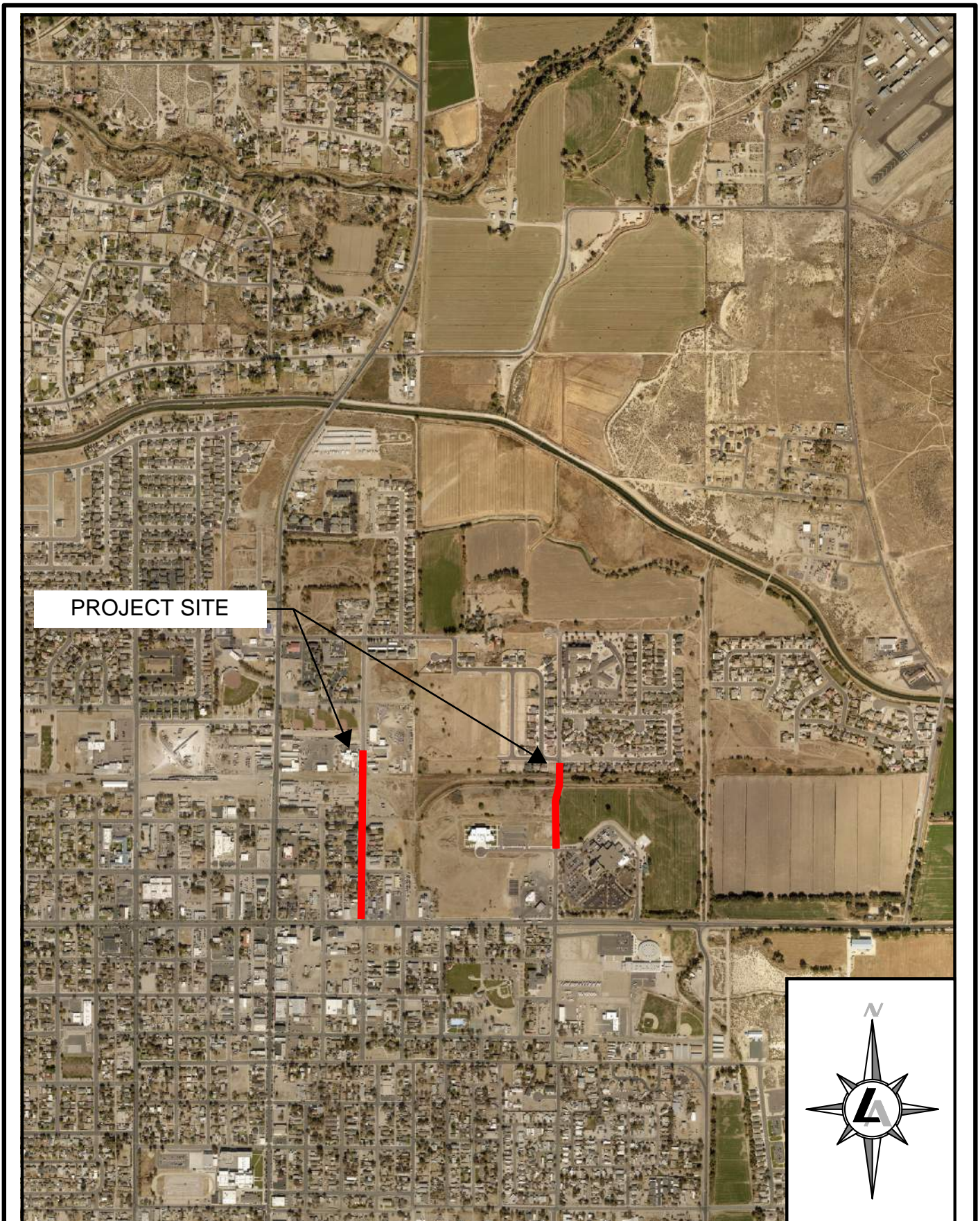


Mitch Burns, P.E.

Materials Engineering Manager

12.0 REFERENCES

- American Association of State Highway Transportation Officials, 1993, AASHTO Guide for Design of Pavement Structures, AASHTO, Washington, District of Columbia
- American Society for Testing and Materials (ASTM), 2020, Annual Book of ASTM Standards, West Conshohocken, PA
- Churchill County, 2016, Standard Specifications for Public Works Construction, "Orange Book", Fallon, NV
- Naval Facilities Engineering Command, 1986, Design Manual 7.01
- Naval Facilities Engineering Command, 1986, Design Manual 7.02
- Occupational Safety and Health Administration (OSHA), 1995, Occupational Safety and Health Standards for the Construction Industry, Commerce Clearing House, Inc.
- USGS 2002 Website, www.usgs.gov
- Willden, Ronald and Speed, Robert C., 1971, Geologic Map of Churchill County, Nevada, Nevada Bureau of Mines and Geology, Reno, Nevada



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N. Broadway and Sherman Rehabilitation

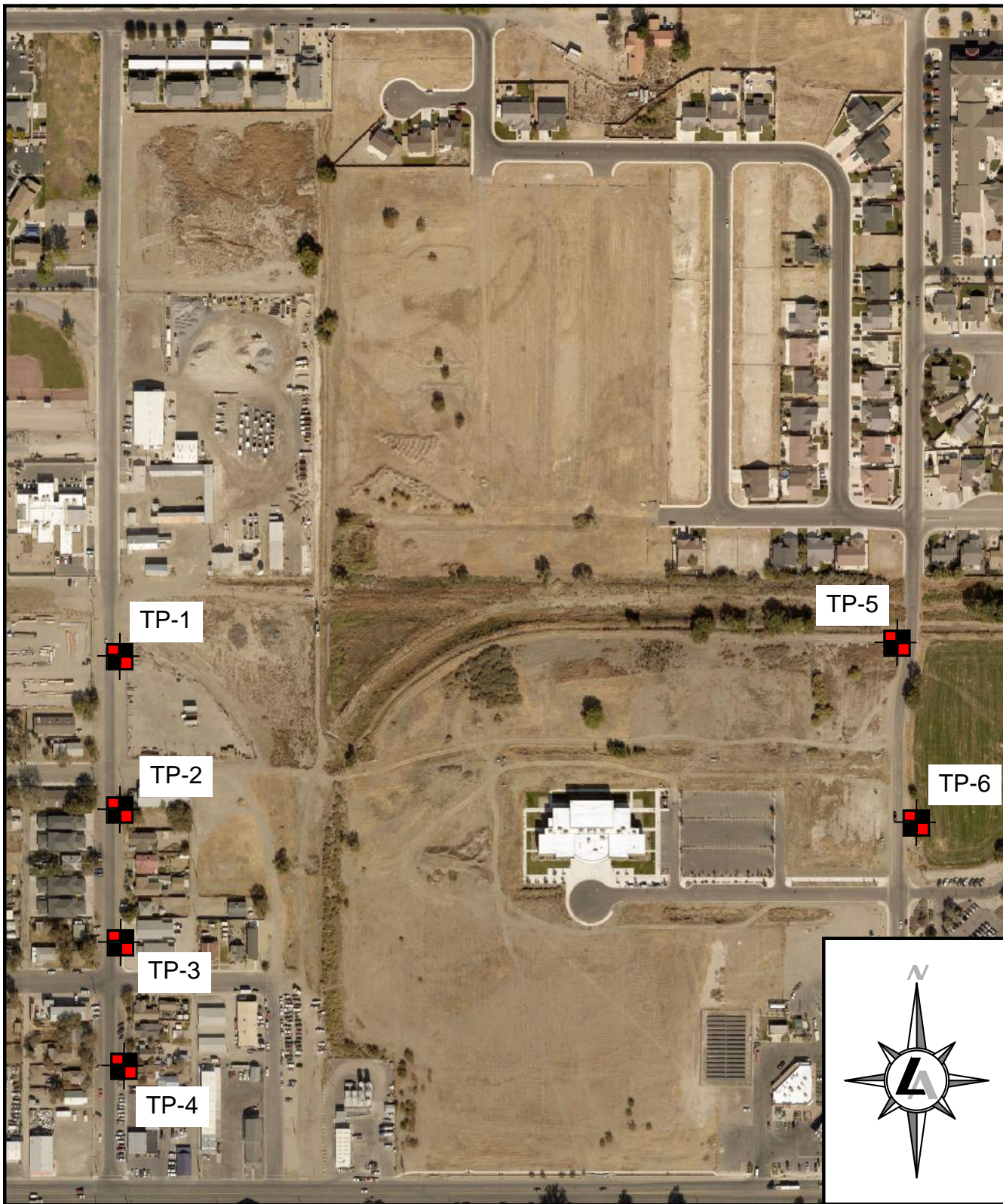
VICINITY MAP


Job Number: 10514.000

Date: October, 2021

PLATE

1



 Approximate Test Pit Location



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N. Broadway and Sherman Rehabilitation

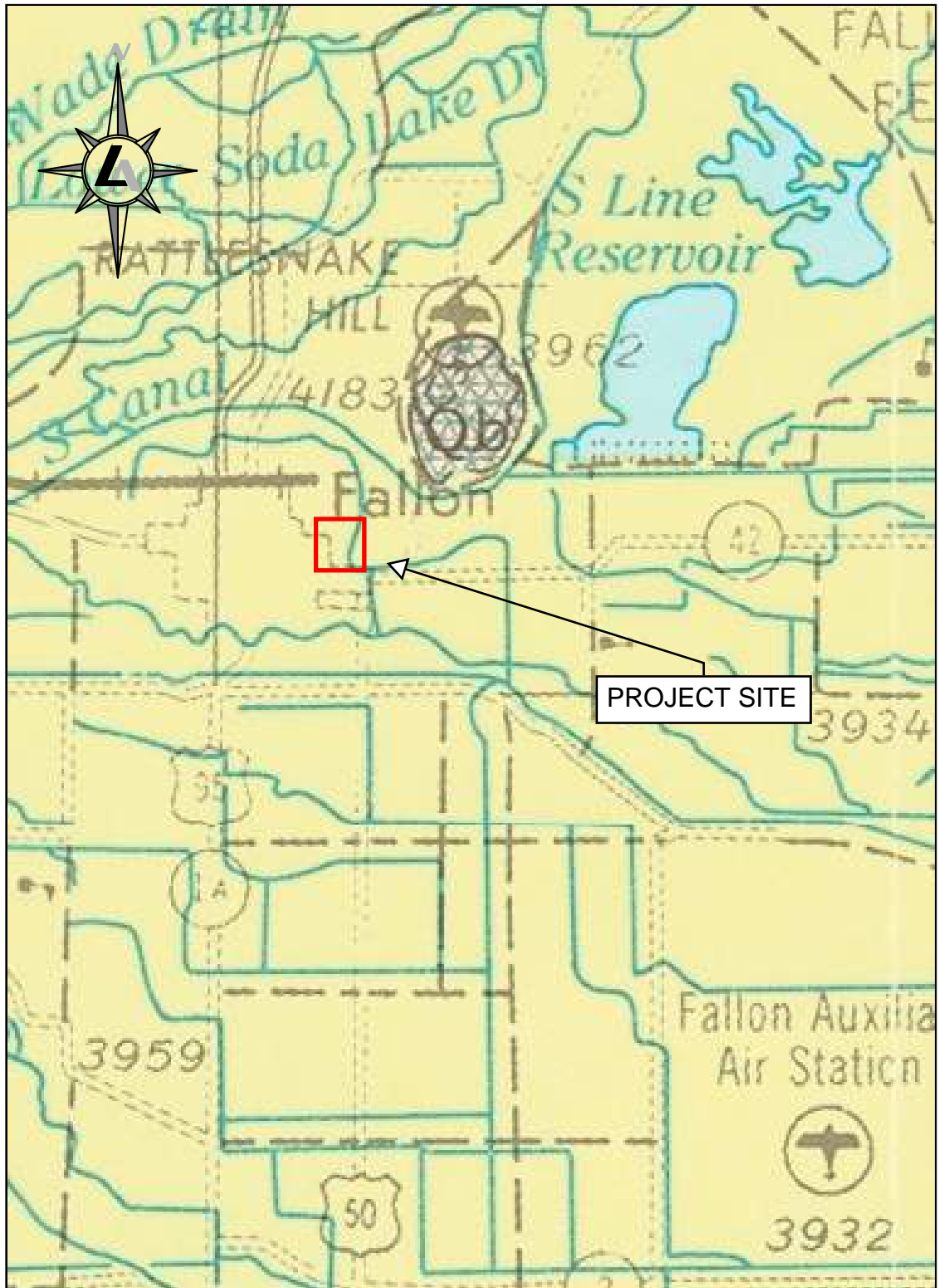
SITE MAP

Job Number: 10514.000

Date: October, 2021

PLATE

2



Lake Lahontan deposits,
playa deposits, and young
fan gravels



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N. Broadway and Sherman Rehabilitation

GEOLOGY MAP

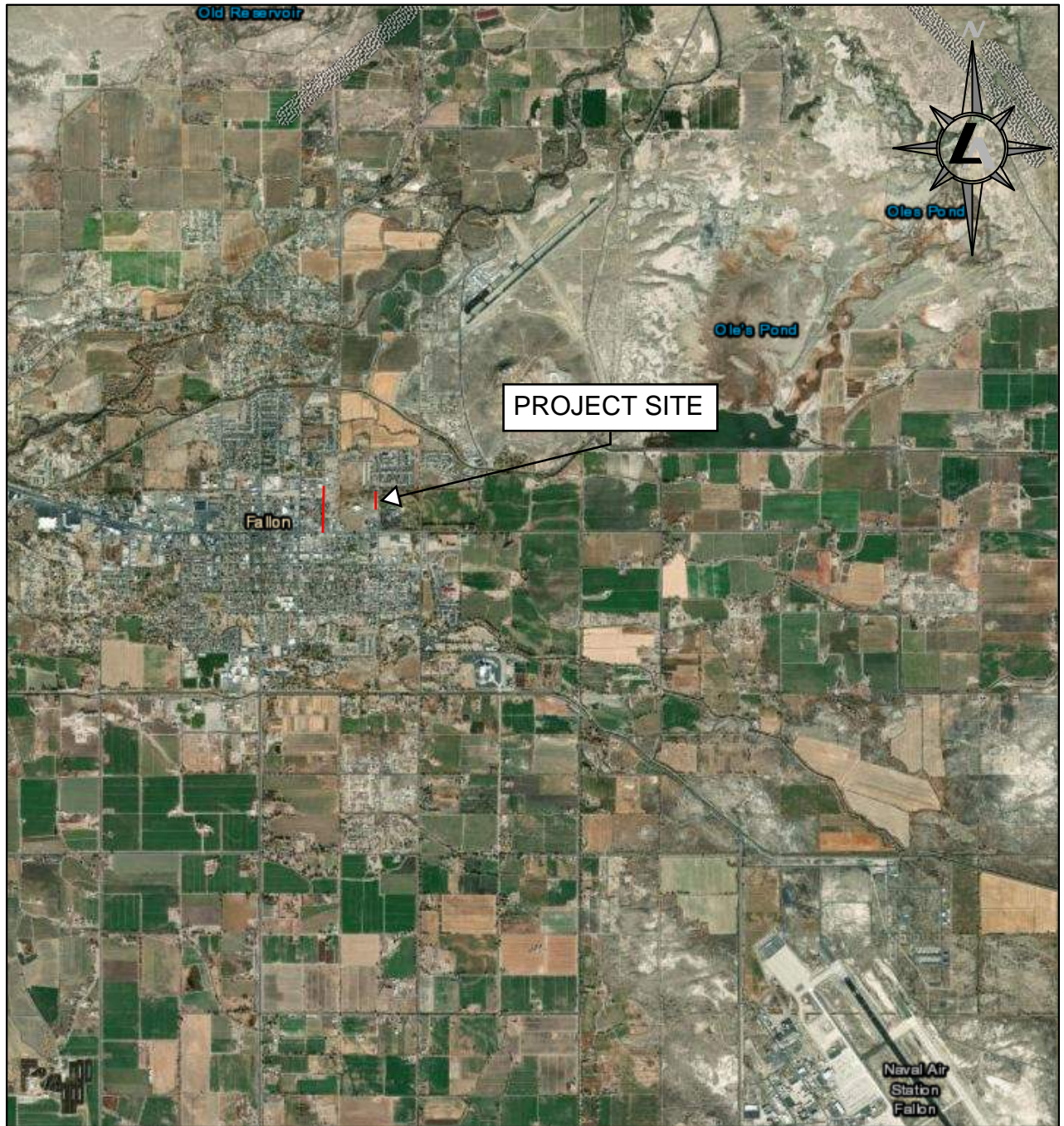
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Date: October, 2021

PLATE

3

Quaternary Faults of Nevada



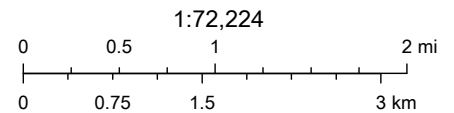
September 29, 2021

Quaternary Faults by Age - 100m Buffer

- less than 15,000
- less than 130,000
- less than 750,000
- less than 1,800,000
- Class B faults
- Unclassified

Quaternary Faults by Age

- less than 15,000 years
- less than 130,000 years
- less than 750,000 years
- less than 1.8 million years
- Class B faults



Esri, HERE, Garmin, Earthstar Geographics, NBMG



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N. Broadway and Sherman Rehabilitation

FAULT MAP

Job Number: 10514.000

Date: October, 2021

PLATE

4

APPENDIX A

Field Exploration Logs

TEST PIT No. TP-1

Logged By: **M. Hartley**

Total Depth: **8 feet**

Date Logged: **9/16/2021**

Water Depth: **6.5 feet ±**

Equipment Type: **CAT Mini Excavator**

Ground Elev.:

Depth in Feet	Graphic Log	Sample Type	<div> <div> <div>Percolation Test</div> <div>California Sampler</div> </div> <div> <div>Split Spoon</div> <div>Bulk Sample</div> </div> <div> <div>Ziplock Sample</div> <div>Static Water Table</div> </div> </div>	Natural Moisture Content, %	Optimum Moisture Content, %	Maximum Dry Density, pcf	Liquid Limit, %	Plastic Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Sieve)	Fines, % (< #200 Sieve)	Expansion Index	R-Value	Direct Shear
1		B	Silty SAND (SM) Brown, Slightly Moist, Medium Dense				NP	NP	0.0	65.8	34.2			
2														
3		B	Poorly Graded SAND (SP) Light Brown, Slightly Moist to Wet, Loose to Medium Dense Estimated: 100% Coarse to Fine Sand	2.5										
4														
5			Caving in Sand											
6														
7			Groundwater at 6.5 Feet											
8														
Test pit terminated at 8 feet. Test pit backfilled without compaction verification.														

LUMOS TP FULL PAGE WITH R-V AND SHEAR BROADWAY AND SHERMAN GPJ US LAB.GDT 11/3/21



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N. Broadway and Sherman Rehabilitation
LOG OF EXPORATORY TEST PIT

Job Number: 10514.000

Date: November 2021

PLATE
A-1

TEST PIT No. TP-2

Logged By: **M. Hartley**





Total Depth: **8 feet**

Date Logged: **9/16/2021**

Water Depth: **7.25 feet ±**

Equipment Type: **CAT Mini Excavator**

Ground Elev.:

Depth in Feet	Graphic Log	Sample Type	<div><div><div>Percolation Test</div><div>California Sampler</div></div><div><div>Split Spoon</div><div>Bulk Sample</div></div><div><div>Ziplock Sample</div><div>Static Water Table</div></div></div>	Natural Moisture Content, %	Optimum Moisture Content, %	Maximum Dry Density, pcf	Liquid Limit, %	Plastic Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Sieve)	Fines, % (< #200 Sieve)	Expansion Index	R-Value	Direct Shear
			SOIL DESCRIPTION											
			Base 8 Inches of Base Like Material	0.7										
1		B	Sandy Lean CLAY (CL) Dark Brown, Moist, Stiff				39	20	1.3	37.3	61.4	35		
2														
3														
4				4.5										
5		B	Poorly Graded SAND (SP) Brown, Moist to Wet, Loose to Medium Dense Estimated: 100% Coarse to Fine Sand											
6														
7			 Groundwater at 7.25 feet Sands Cave Below Water Table											
8				8.0										
Test pit terminated at 8 feet. Test pit backfilled without compaction verification.														

Test pit terminated at 8 feet.
Test pit backfilled without compaction verification.

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LOG OF EXPORATORY TEST PIT

Job Number: 10514.000

Date: November 2021

PLATE

A-2

TEST PIT No. TP-3

Logged By: **M. Hartley**

















Total Depth: **9.5 feet**

Date Logged: **9/16/2021**

Water Depth: **No groundwater encountered**

Equipment Type: **CAT Mini Excavator**

Ground Elev.:

Depth in Feet	Graphic Log	Sample Type	 Percolation Test	 Split Spoon	 Ziplock Sample	Natural Moisture Content, %	Optimum Moisture Content, %	Maximum Dry Density, pcf	Liquid Limit, %	Plastic Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Sieve)	Fines, % (< #200 Sieve)	Expansion Index	R-Value	Direct Shear
			 California Sampler	 Bulk Sample	 Static Water Table											
SOIL DESCRIPTION																
			Base 8 Inches of Base Like Material			0.7										
1		B	Silty SAND (SM) Tan, Slightly Moist, Dense						NP	NP	0.3	82.4	17.3		44	
2																
3																
4																
5						5.5										
6		B	Poorly Graded SAND (SP) Tan, slightly Moist, Loose to Medium Dense Estimated: 100% Coarse to Fine Sand No Ground Water Observed Mottling Observed at 6.25'													
7																
8																
9						9.5										
Test pit terminated at 9.5 feet. Test pit backfilled without compaction verification.																

LUMOS TP FULL PAGE WITH R-V AND SHEAR BROADWAY AND SHERMAN GPJ US LAB.GDT 11/3/21



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LOG OF EXPORATORY TEST PIT

Job Number: 10514.000

Date: November 2021

PLATE

A-3

TEST PIT No. TP-4

Logged By: **M. Hartley**

Total Depth: **9 feet**

Date Logged: **9/16/2021**

Water Depth: **No groundwater encountered**

Equipment Type: **CAT Mini Excavator**

Ground Elev.:

Depth in Feet	Graphic Log	Sample Type	<div><div><div></div></div> Percolation Test</div> <div><div><div></div></div> California Sampler</div>	<div><div><div></div></div> Split Spoon</div> <div><div><div></div></div> Bulk Sample</div>	<div><div><div></div></div> Ziplock Sample</div> <div><div><div></div></div> Static Water Table</div>	Natural Moisture Content, %	Optimum Moisture Content, %	Maximum Dry Density, pcf	Liquid Limit, %	Plastic Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Sieve)	Fines, % (< #200 Sieve)	Expansion Index	R-Value	Direct Shear
			SOIL DESCRIPTION													
	<div><div></div></div>		<div><div><div><div><div><div></div></div></div><div><div><div></div></div></div></div><div><div><div></div></div></div></div><div><div><div></div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> <div><div><div></div></div></div> 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LOG OF EXPORATORY TEST PIT

Job Number: 10514.000











Date: November 2021

PLATE
A-4

TEST PIT No. TP-5

Logged By: **M. Hartley**
 Date Logged: **9/16/2021**
 Equipment Type: **CAT Mini Excavator**

Total Depth: **10 feet**
 Water Depth: **9 feet ±**
 Ground Elev.:

Depth in Feet	Graphic Log	Sample Type	 Percolation Test	 Split Spoon	 Ziplock Sample	Natural Moisture Content, %	Optimum Moisture Content, %	Maximum Dry Density, pcf	Liquid Limit, %	Plastic Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Sieve)	Fines, % (< #200 Sieve)	Expansion Index	R-Value	Direct Shear	
			 California Sampler	 Bulk Sample	 Static Water Table												
SOIL DESCRIPTION																	
1		B	Sandy Lean CLAY (CL) Brown, Slightly Moist, Medium Stiff			4.5				34	17	3.0	43.1	53.9	20	6	
2																	
3																	
4																	
5		B	Sandy Lean CLAY (CL) Dark Brown, Moist, Medium Stiff Estimated: 40% Coarse to Fine Sand 60% Lean Clay			6.5											
6																	
7		B	Poorly Graded SAND (SP) Tan, Moist to Wet, Loose to Medium Dense Estimated: 100% Coarse to Fine Sand Mottling at 6.75 Caving in Sand			10.0											
8																	
9																	
10																	
			 Groundwater at 9 Feet														
			Test pit terminated at 10 feet. Test pit backfilled without compaction verification.														

Groundwater at 9 Feet

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LOG OF EXPORATORY TEST PIT

Job Number: 10514.000












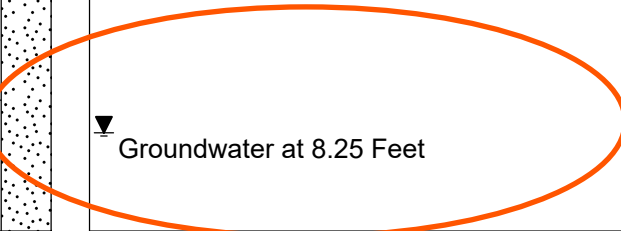

Date: November 2021

PLATE
A-5

TEST PIT No. TP-6

Logged By: **M. Hartley**
 Date Logged: **9/16/2021**
 Equipment Type: **CAT Mini Excavator**

Total Depth: **9 feet**
 Water Depth: **8.25 feet ±**
 Ground Elev.:

Depth in Feet	Graphic Log	Sample Type	 Percolation Test	 Split Spoon	 Ziplock Sample	Natural Moisture Content, %	Optimum Moisture Content, %	Maximum Dry Density, pcf	Liquid Limit, %	Plastic Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Sieve)	Fines, % (< #200 Sieve)	Expansion Index	R-Value	Direct Shear
			 California Sampler	 Bulk Sample	 Static Water Table											
SOIL DESCRIPTION																
			Base 3 Inches of Base Like Material			0.3										
1		B	Lean CLAY with Sand (CL) Dark Brown, Slightly Moist, Stiff						48	28	0.0	27.5	72.5			
2																
3																
4		B	Silty SAND (SM) Tan, Slightly Moist, Medium Dense Estimated: 70% Medium to Fine Sand 30% Silt			3.5										
5			Poorly Graded SAND (SP) Tan, Moist to Wet, Loose Caving in Sand			4.5										
6		B	Mottling at 5.5 Feet						NP	NP	0.1	97.4	2.6			
7																
8			 Groundwater at 8.25 Feet													
9						9.0										
Test pit terminated at 9 feet. Test pit backfilled without compaction verification.																

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LOG OF EXPORATORY TEST PIT

Job Number: 10514.000

Date: November 2021

PLATE
A-6

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

Other Tests	
AN	ANALYTICAL TEST (pH, Soluble Sulfate, and Resistivity)
C	CONSOLIDATION TEST
DS	DIRECT SHEAR TEST
MD	MOISTURE DENSITY CURVE



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LEGEND

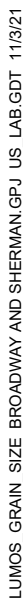
Job Number: 10514.000

Date: November 2021

PLATE
A-7

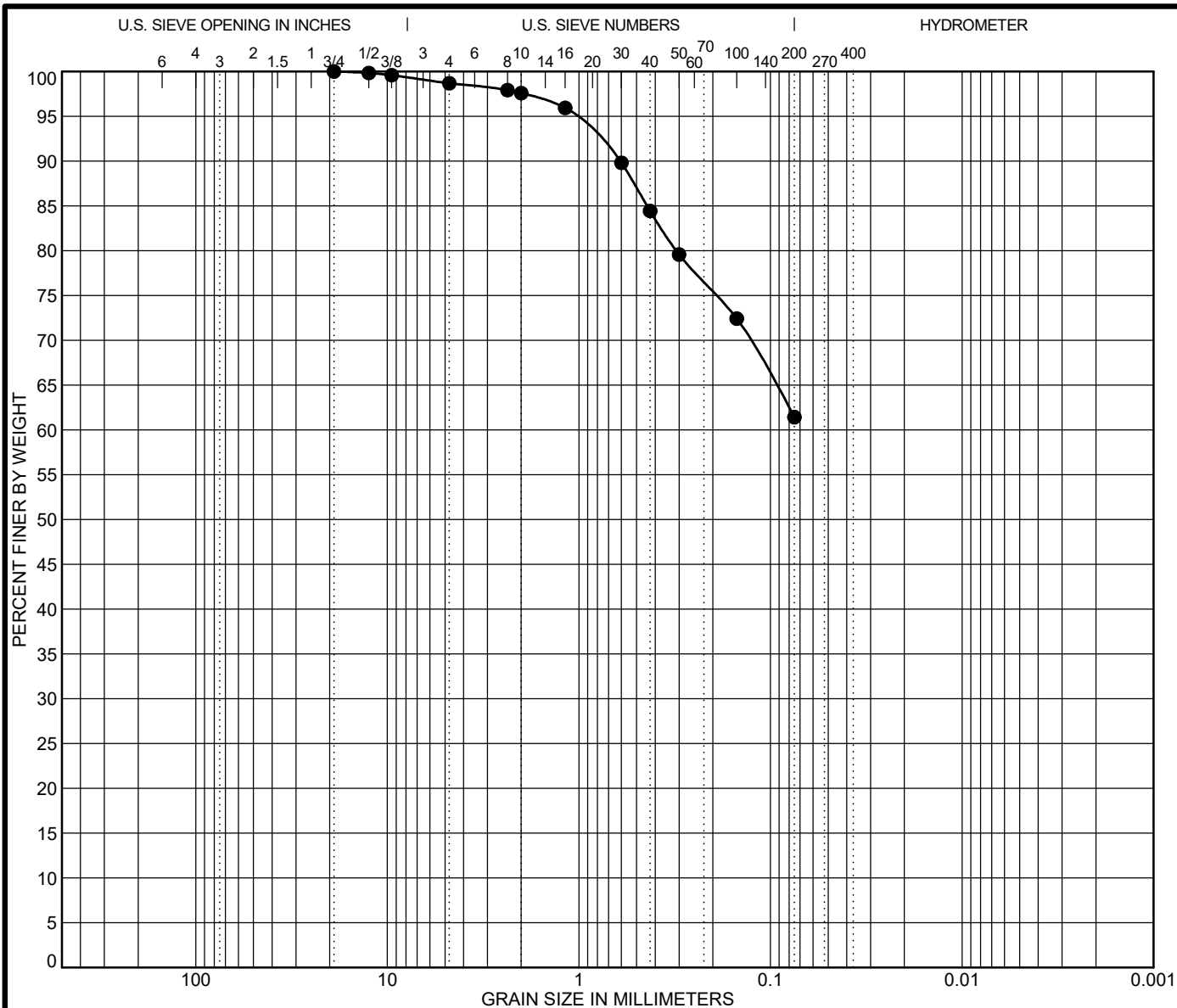
APPENDIX B

Soils Laboratory Test Results



Specimen Identification		Date: 9/18/21									
	TP-1	Classification					LL	PL	PI	Cc	Cu
	Depth: 1	Silty SAND (SM)					NP	NP	NP		
	Sample Location	TP-1 from 1' to 1.5'									
	USCS	SM									
	AASHTO										
Specimen Identification											
	TP-1	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay		
	Depth: 1	4.75	0.121			0.0	65.8	34.2			
	Natural Moisture	%		Direct Shear		Absorption %					
	R-Value			Insitu Density		Soundness					
	Expansion Index			Specific Gravity		S.E.					





COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Date: 9/18/21							
●	TP-2	Classification			LL	PL	PI	Cc	Cu
	Depth: 1	Lean CLAY with Sand (CL)			39	19	20		
	Sample Location	TP-2 from 1' tp 1.5'							
	USCS	CL							
	AASHTO								
Specimen Identification									
●	TP-2	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
	Depth: 1	19				1.3	37.3	61.4	
	Natural Moisture	%		Direct Shear		Absorption %			
	R-Value			Insitu Density		Soundness			
	Expansion Index	35		Specific Gravity		S.E.			



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GRAIN SIZE DISTRIBUTION

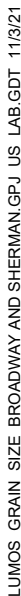
Job Number: 10514.000

Date: November 2021

PLATE

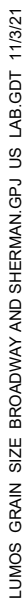
B-1.2

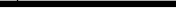
LUMOS GRAIN SIZE BROADWAY AND SHERMAN GPJ US LAB.GDT 11/3/21

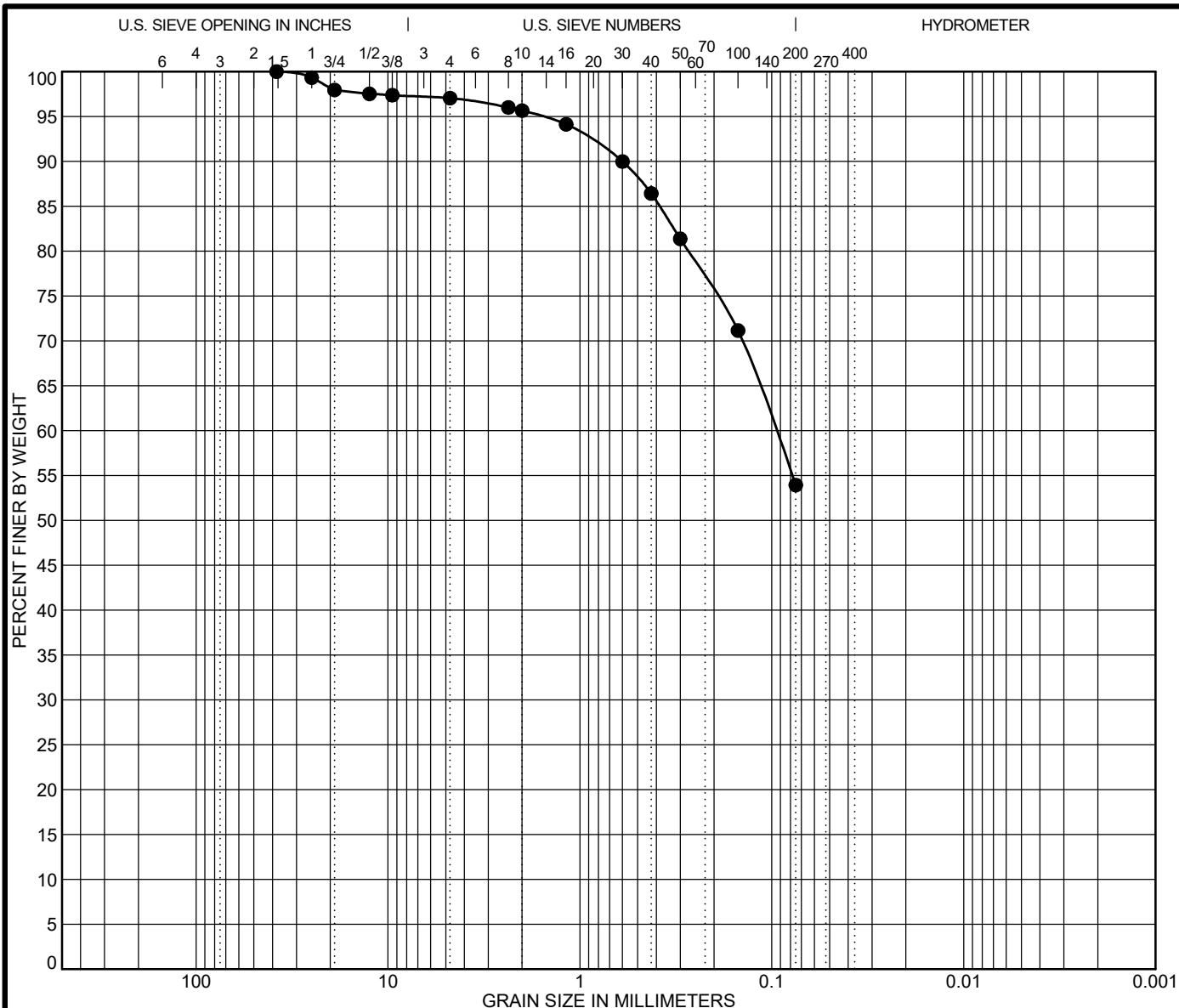


Specimen Identification		Date: 9/18/2021								
●	TP-3	Classification				LL	PL	PI	Cc	Cu
	Depth: 1	Silty SAND (SM)				NP	NP	NP		
	Sample Location	TP-3 from 1' to 1.5'								
	USCS	SM								
	AASHTO									
Specimen Identification										
●	TP-3	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay	
	Depth: 1	9.5	0.217	0.102		0.3	82.4	17.3		
	Natural Moisture	%		Direct Shear		Absorption %				
	R-Value	44		Insitu Density		Soundness				
	Expansion Index			Specific Gravity		S.E.				





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	<p>Date: November 2021</p>	



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Date: 9/18/2021									
●	TP-5	Classification					LL	PL	PI	Cc	Cu
	Depth: 0.5	Sandy Lean CLAY (CL)					34	18	16		
	Sample Location	TP-5 from 0.5' to 1'									
	USCS	CL									
	AASHTO										
Specimen Identification											
●	TP-5	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay		
	Depth: 0.5	38.1	0.096			3.0	43.1	53.9			
	Natural Moisture	%		Direct Shear		Absorption %					
	R-Value	6		Insitu Density		Soundness					
	Expansion Index	20		Specific Gravity		S.E.					



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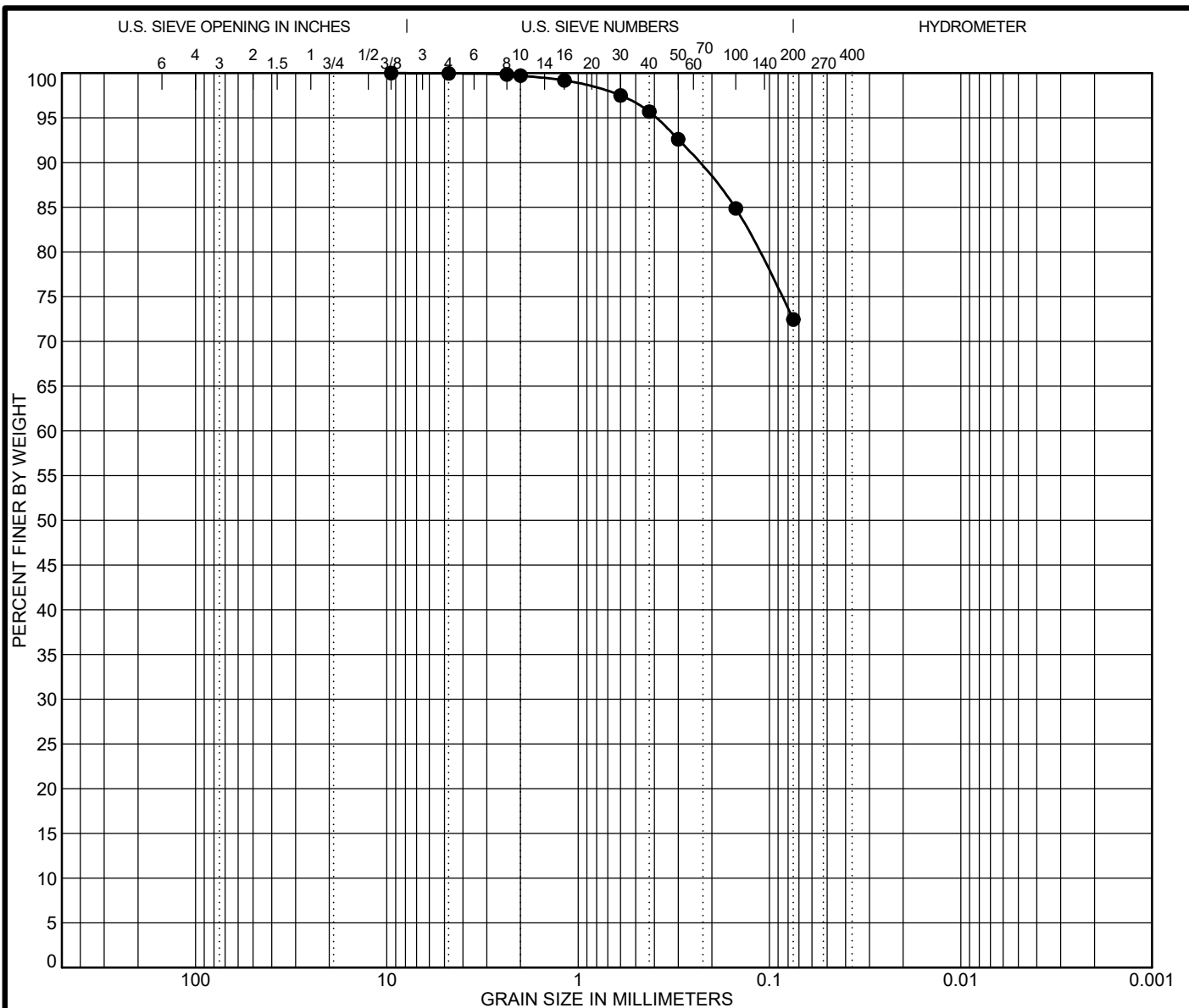
GRAIN SIZE DISTRIBUTION

Job Number: 10514.000

Date: November 2021

PLATE

B-1.5



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Date: 9/18/2021								
●	TP-6	Classification				LL	PL	PI	Cc	Cu
	Depth: 1	Sandy Lean CLAY (CL)				48	19	29		
	Sample Location	TP-6 from 1' to 1.5'								
	USCS	CL								
	AASHTO									
Specimen Identification										
●	TP-6	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay	
	Depth: 1	9.5				0.0	27.5	72.5		
	Natural Moisture	%		Direct Shear		Absorption %				
	R-Value			Insitu Density		Soundness				
	Expansion Index			Specific Gravity		S.E.				

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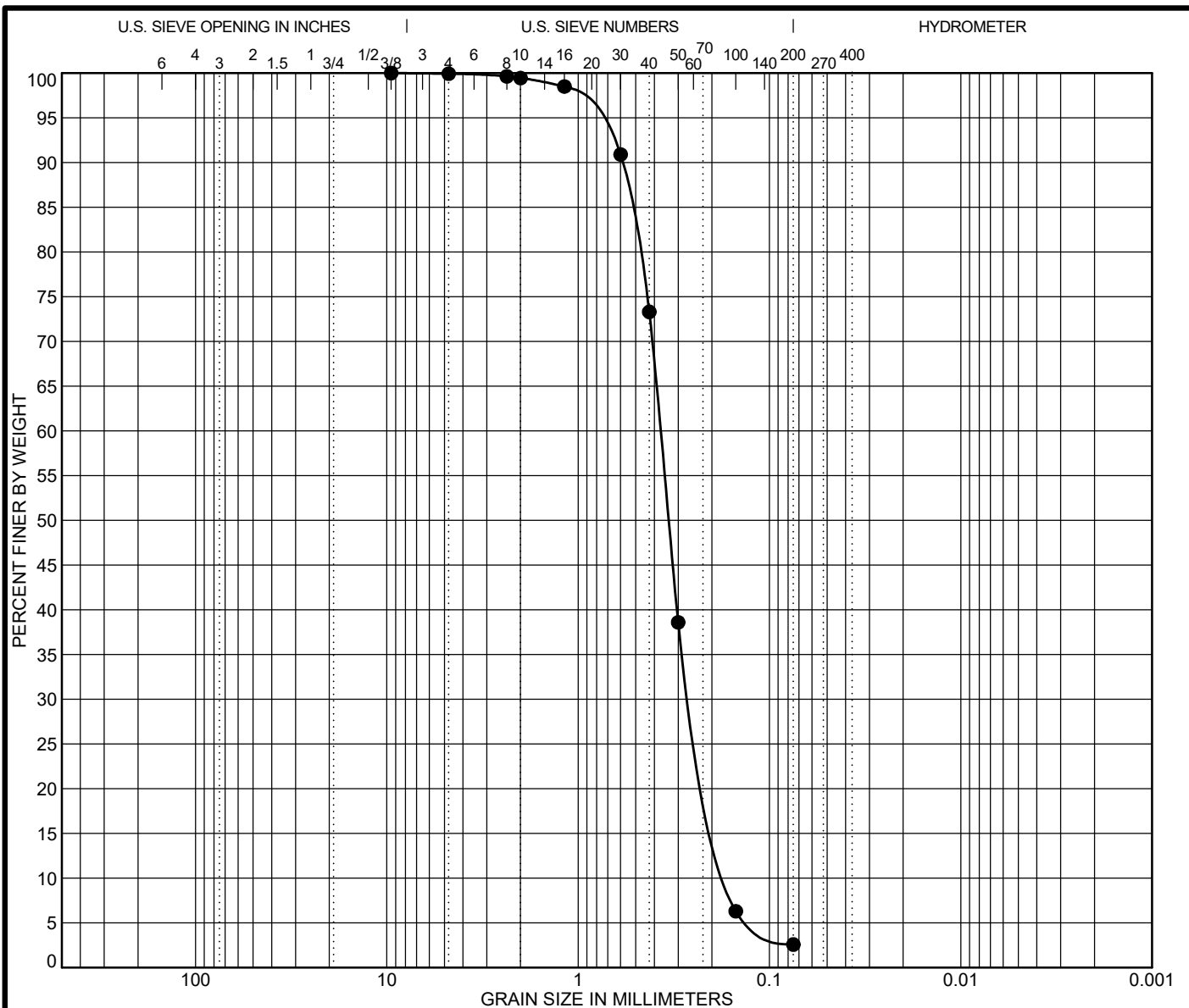
GRAIN SIZE DISTRIBUTION

Job Number: 10514.000 Date: November 2021

PLATE

B-1.6

LUMOS GRAIN SIZE BROADWAY AND SHERMAN GPJ US LAB.GDT 11/3/21



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Date: 9/18/2021								
●	TP-6	Classification				LL	PL	PI	Cc	Cu
	Depth: 5.5	Poorly Graded SAND (SP)				NP	NP	NP	1.0	2.3
	Sample Location	TP-6 from 5.5' to 6'								
	USCS	SP								
	AASHTO									
Specimen Identification										
●	TP-6	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay	
	Depth: 5.5	9.5	0.372	0.249	0.162	0.1	97.4	2.6		
	Natural Moisture	%		Direct Shear		Absorption %				
	R-Value			Insitu Density		Soundness				
	Expansion Index			Specific Gravity		S.E.				

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GRAIN SIZE DISTRIBUTION

Job Number: 10514.000

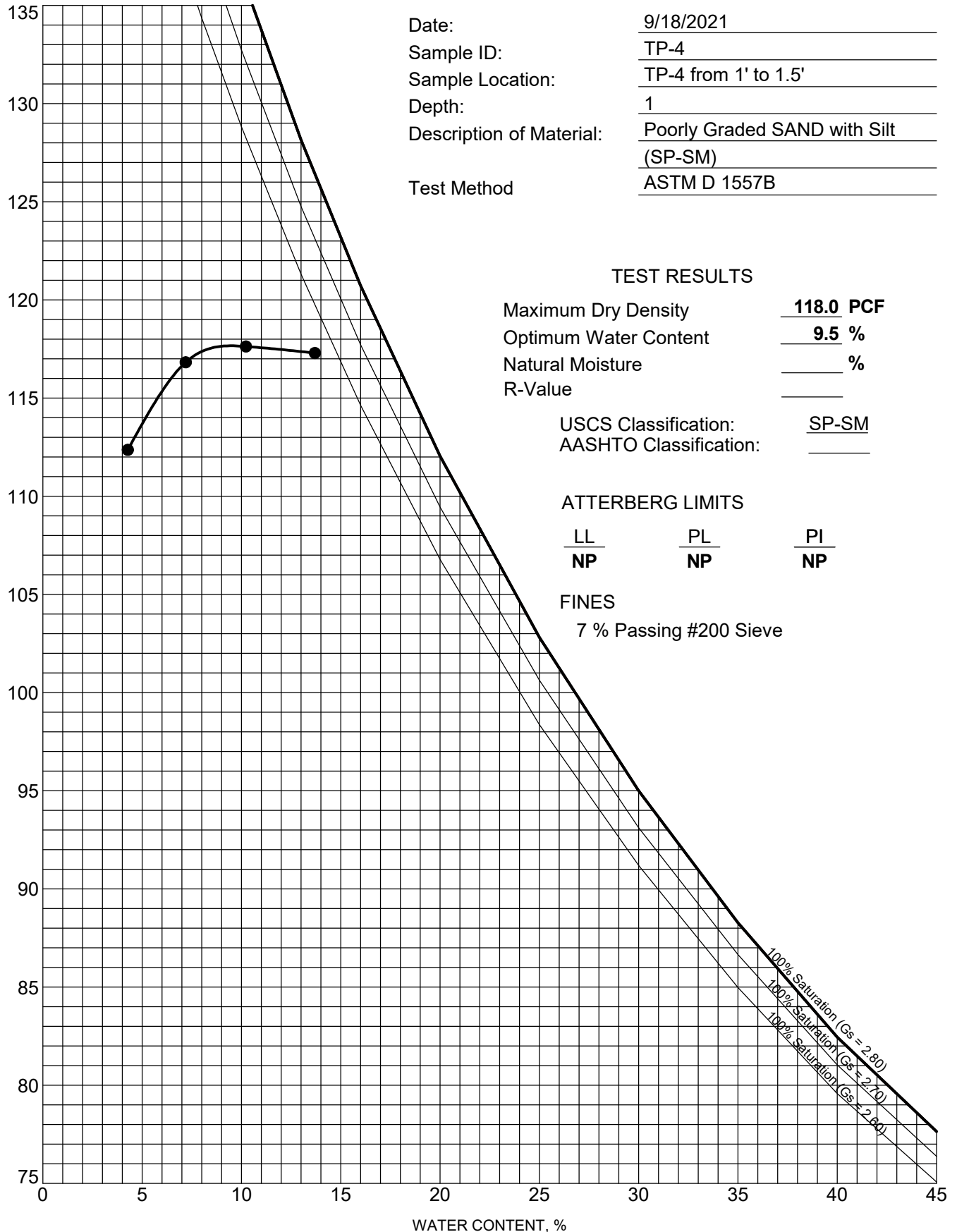
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PLATE

B-1.7

LUMOS GRAIN SIZE BROADWAY AND SHERMAN GPJ US LAB.GDT 11/3/21

DRY DENSITY, pcf



WATER CONTENT, %



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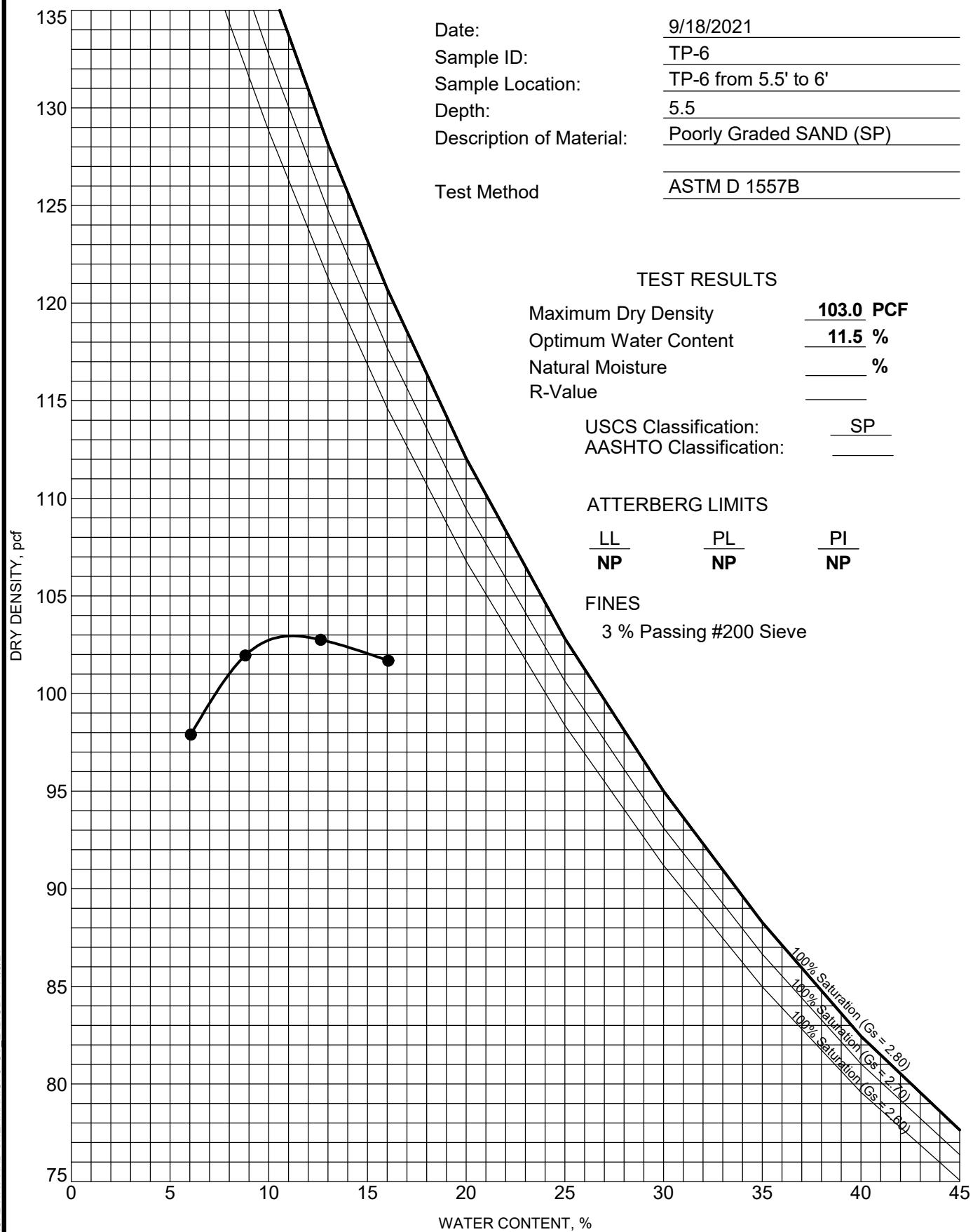
MOISTURE-DENSITY CURVE

Job Number: 10514.000

Date: November 2021

PLATE

B-3.1



LUMOS COMPACTION BROADWAY AND SHERMAN.GPJ US LAB.GDT 11/3/21



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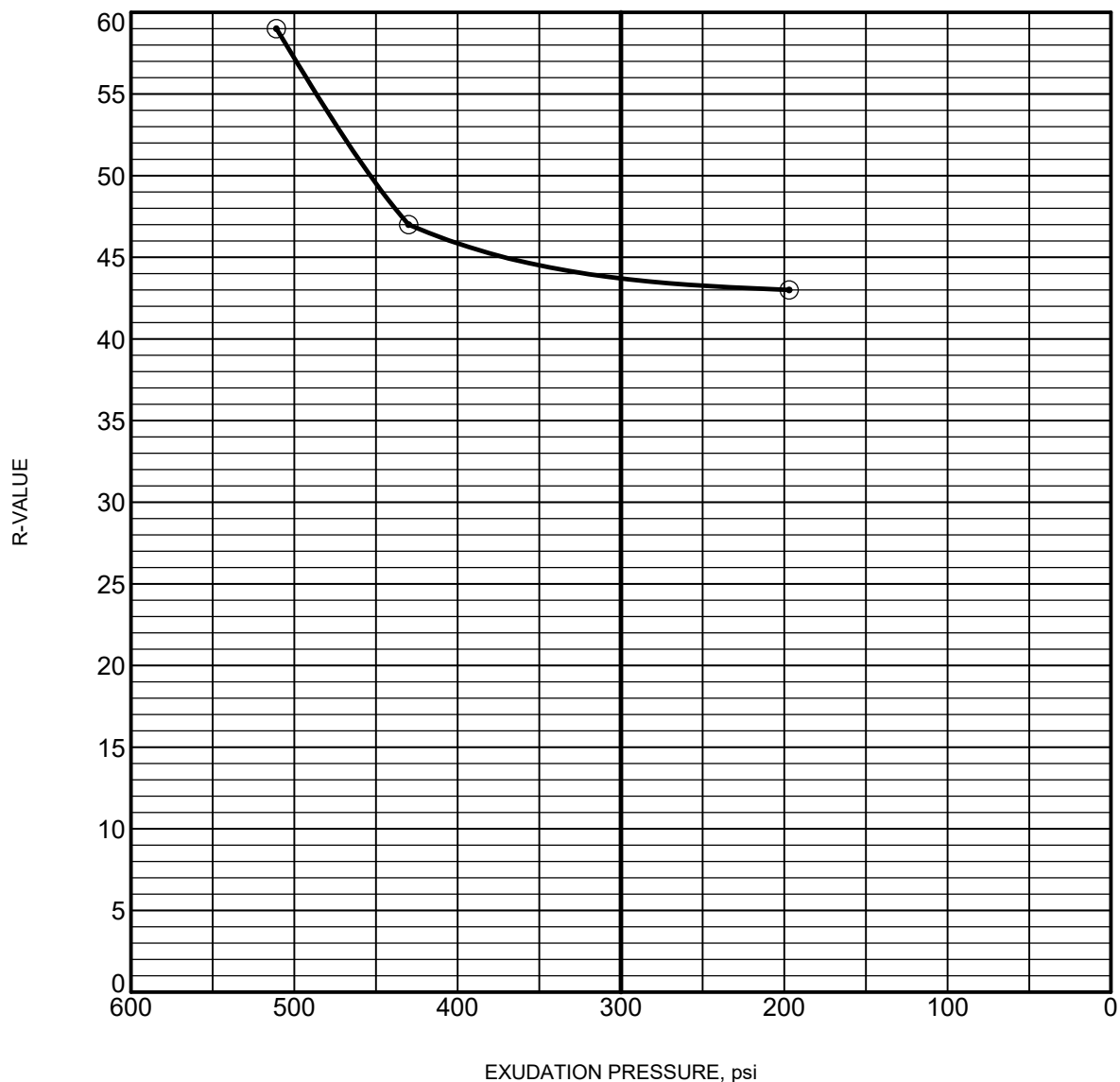
MOISTURE-DENSITY CURVE

Job Number: 10514.000

Date: November 2021

PLATE

B-3.2



Test Data

Specimen No.	Water Content (%)	Dry Density (pcf)	Expansion (psf)	Exudation (psi)	Test R-Value*
1	12.0	117.2	0.0	511.0	59.0
2	12.9	116.8	0.0	430.0	47.0
3	14.8	116.0	0.0	197.0	43.0

* Reported values have been corrected for sample height, where required.

Test Result

Specimen Identification	Classification	R-Value
TP-3 1.0	Silty SAND (SM)	44



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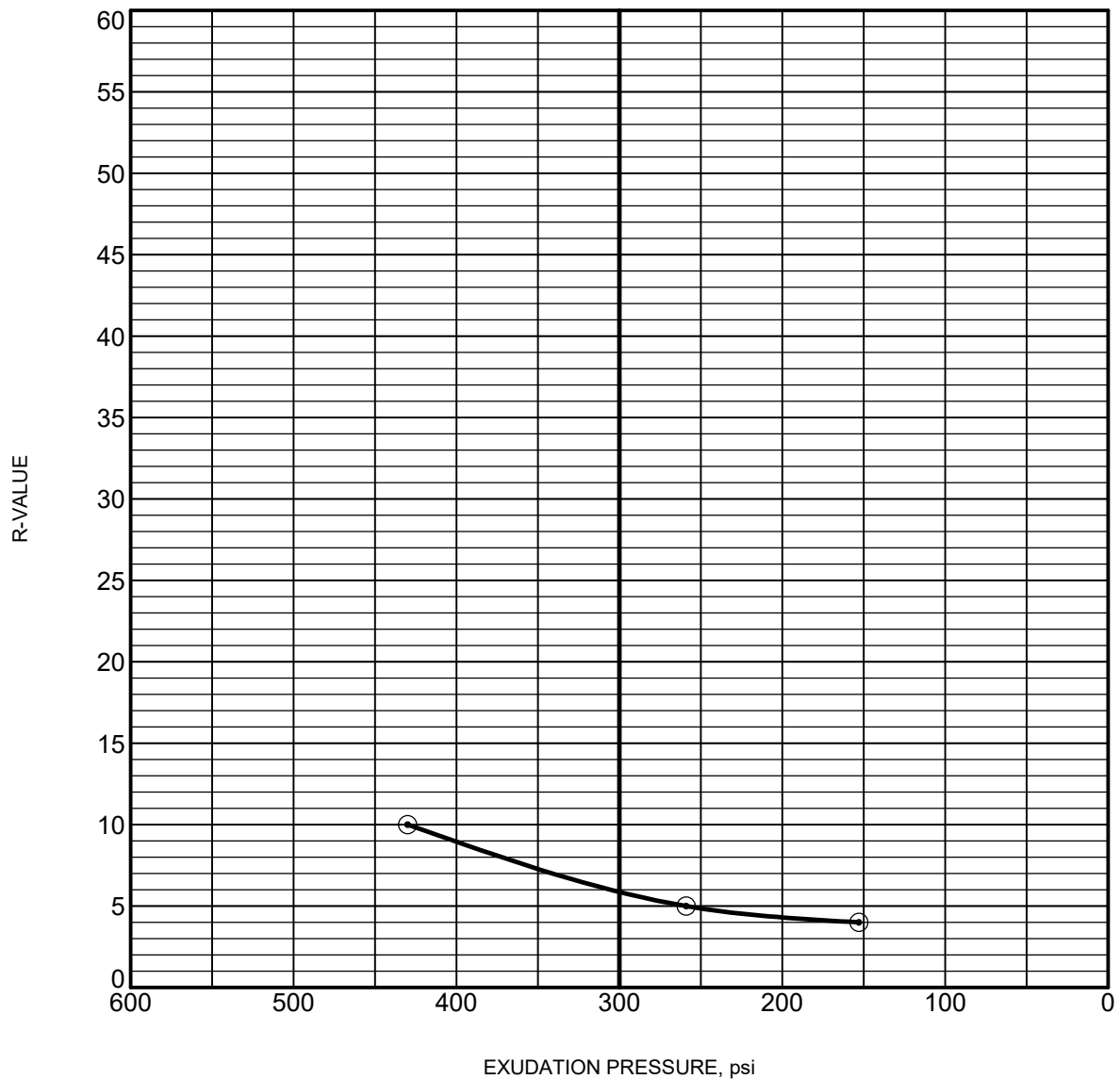
RESISTANCE VALUE TEST

Job Number: 10514.000

Date: November 2021

PLATE

B-4.1



Test Data

Specimen No.	Water Content (%)	Dry Density (pcf)	Expansion (psf)	Exudation (psi)	Test R-Value*
1	18.5	107.9	0.0	153.0	4.0
2	17.8	109.4	30.3	259.0	5.0
3	17.0	113.3	0.0	430.0	10.0

* Reported values have been corrected for sample height, where required.

Test Result

Specimen Identification	Classification	R-Value
TP-5 0.5	Sandy Lean CLAY (CL)	6



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RESISTANCE VALUE TEST

Job Number: 10514.000

Date: November 2021

PLATE
B-4.2



Silver State Labs-Reno
1135 Financial Blvd
Reno, NV 89502
(775) 857-2400 FAX: (888) 398-7002
www.ssalabs.com

Analytical Report

Workorder#: 21090892

Date Reported: 9/24/2021

Client: Lumos and Associates - Reno

Sampled By: Mike H.

Project Name: TP-3 (Broadway) 6' - 6.5'

PO #: 10514.000/MTB

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID	Client Sample ID	Date/Time Sampled	Date Received
21090892-01	TP-3 (Broadway) 6' - 6.5'	09/16/2021 0:00	9/17/2021

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Chloride	EPA 9056	12	mg/Kg	5	MA	09/23/2021 14:54	
pH	SW-846 9045D	8.76	pH Units		AC	09/23/2021 15:59	
pH Temperature	SW-846 9045D	22.0	°C		AC	09/23/2021 15:59	
Resistivity	AASHTO T288	5600	Ohms-cm		AC	09/24/2021 10:04	
Sodium	ASTM D2791	< 0.01	%	0.01	AC	09/24/2021 10:11	
Sodium Sulfate as Na2SO4	Calculation	< 0.01	%	0.01	AC	09/24/2021 10:11	
Sulfate	SM4500 SO4E	< 0.01	%	0.01	AC	09/24/2021 10:11	

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID	Client Sample ID	Date/Time Sampled	Date Received
21090892-02	TP-5 (Sherman) 7' - 7.5'	09/16/2021 0:00	9/17/2021

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Chloride	EPA 9056	17	mg/Kg	5	MA	09/23/2021 15:51	
pH	SW-846 9045D	7.19	pH Units		AC	09/23/2021 15:59	
pH Temperature	SW-846 9045D	22.0	°C		AC	09/23/2021 15:59	
Resistivity	AASHTO T288	5100	Ohms-cm		AC	09/24/2021 10:04	
Sodium	ASTM D2791	< 0.01	%	0.01	AC	09/24/2021 10:11	
Sodium Sulfate as Na2SO4	Calculation	< 0.01	%	0.01	AC	09/24/2021 10:11	
Sulfate	SM4500 SO4E	< 0.01	%	0.01	AC	09/24/2021 10:11	



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N. Broadway and Sherman Rehabilitation

ANALYTICAL TESTING

Job Number: 10514.000

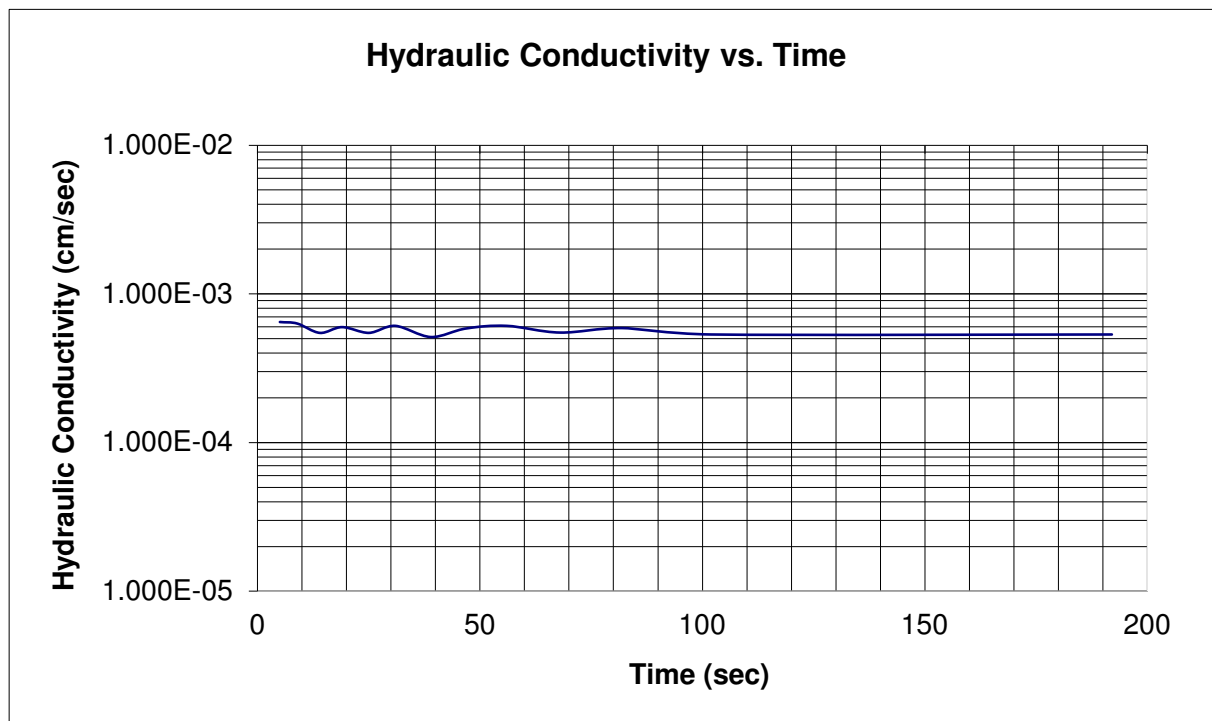
Date: October, 2021

PLATE

B-5

FLEX WALL HYDRAULIC CONDUCTIVITY TEST RESULTS - ASTM D 5084

Client: Lumos and Associates
Project: Lumos Laboratory Testing
Project No.: AS21.1080
Sample No.: Broadway TP-4 1'-1.5'
Date: 10/4/2021



BOUNDARY CONDITIONS		SPECIMEN DATA			
Permeant	water	Specific Gravity ¹	Length, cm	Initial	Final
Back-pressure, psi	70	2.65	Diameter, cm	7.620	7.559
Area of Headwater Tube, cm ²	0.333	1- Assumed	Moisture, %	9.50	18.57
Area of Tailwater Tube, cm ²	0.333	2- Final saturation value is considered approximate	Dry Density, pcf	105.97	106.76
Effective Consolidation Stress, psi	5		Saturation ²	45	N/A

RESULTS		
Initial Hydraulic Gradient	1.96	Notes: Final sample slumped upon removal of effective stress. Final sample dimensions are approximate.
Final Hydraulic Gradient	0.09	
Hydraulic Conductivity, cm/sec		5.76E-04

Lumos and Associates Lumos Lab Testing AS21.1080	FLEX WALL HYDRAULIC CONDUCTIVITY ASTM D 5084	Geo-Logic ASSOCIATES
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N. Broadway and Sherman Rehabilitation
HYDRAULIC CONDUCTIVITY TESTING

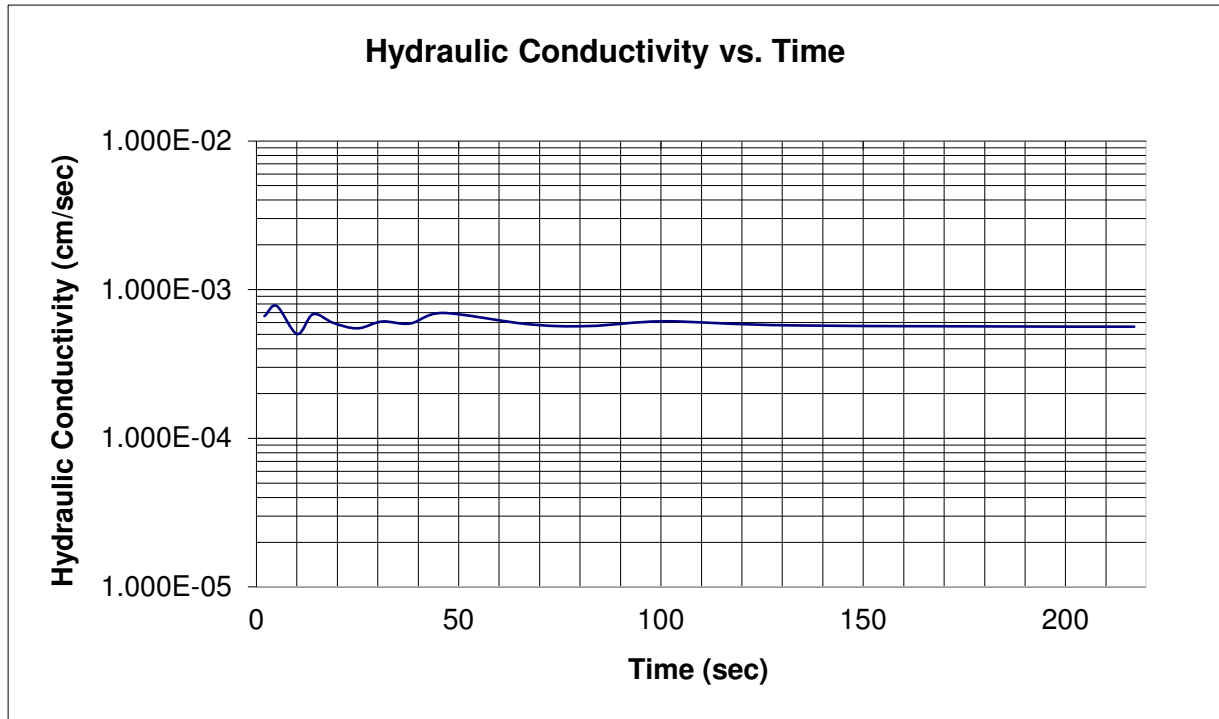
Job Number: 10514.000

Date: October, 2021

PLATE
B-6.1

FLEX WALL HYDRAULIC CONDUCTIVITY TEST RESULTS - ASTM D 5084

Client: Lumos and Associates
Project: Lumos Laboratory Testing
Project No.: AS21.1080
Sample No.: Sherman TP-6 5.5'-6'
Date: 10/4/2021



BOUNDARY CONDITIONS		SPECIMEN DATA			
Permeant	water	Specific Gravity ¹	Length, cm	Initial	Final
Back-pressure, psi	70	2.65	Diameter, cm	7.620	7.559
Area of Headwater Tube, cm ²	0.333333	1- Assumed	Moisture, %	11.50	24.96
Area of Tailwater Tube, cm ²	0.333333	2- Final saturation value is considered approximate	Dry Density, pcf	92.71	91.77
Effective Consolidation Stress, psi	5		Saturation ²	39	N/A

RESULTS	
Initial Hydraulic Gradient	1.96
Final Hydraulic Gradient	0.04
Notes: Final sample slumped upon removal of effective stress. Final sample dimensions are approximate.	
Hydraulic Conductivity, cm/sec	6.02E-04

Lumos and Associates Lumos Lab Testing AS21.1080	FLEX WALL HYDRAULIC CONDUCTIVITY ASTM D 5084	
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APPENDIX C

Pavement Calculations

Job # 10514.000

Project: North Broadway Street and Sherman Street Rehabilitation

Client: City of Fallon

Description: Pavement Calculations - North Broadway Street

R-Value for Subgrade Soils = 6 (Laboratory Results)

R-Value for Structural Fill = 30 (Standard Specification)

R-Value for Type 1 Recycled Aggregate Base = 70 (Standard Specification)

TI (Traffic Index) = 6.5 - Heavy Traffic on a Collector Street

$$GE = 0.0032 * (TI) * (100 - R)$$

$$G_{f(AC)} = 2.14, G_{f(Base)} = 1.1, G_{f(Structural Fill)} = 1.0$$

$$t_{layer} = GE / G_f$$

$$GE_{AC} = 0.0032 * (6.5) * (100 - 70) = 0.62'$$

$$t_{AC} = (0.62' / 2.14) * (12'' / 1') = 3.5'' \quad \text{USE 4'' Asphalt Concrete}$$

$$GE_{AC} = (4'' * 2.14) / (12'') = 0.71'$$

$$GE_{Base} = 0.0032 * (6.5) * (100 - 30) = 1.46'$$

$$t_{Base} = ((1.46' - 0.71') / 1.1) * (12'' / 1') = 8.2'' \quad \text{USE 8'' Recycled Aggregate Base}$$

$$GE_{Base} = (8'' * 1.1) / (12'') = 0.73'$$

$$GE_{SF} = 0.0032 * (6.5) * (100 - 6) = 1.96'$$

$$t_{SF} = ((1.96' - 0.71' - 0.73') / 1.0) * (12'' / 1') = 6.2'' \quad \text{USE 6'' Structural Fill}$$

Therefore, 4" of Asphalt Concrete (AC) underlain by a minimum of 8" of Aggregate Base, underlain by 6" of Structural Fill/Suitable Subgrade used as Sub Base.



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N. Broadway and Sherman Rehabilitation

PAVEMENT DESIGN

Job Number: 10514.000

Date: November, 2021

PLATE

C-1

Job # 10514.000

Project: North Broadway Street and Sherman Street Rehabilitation

Client: City of Fallon

Description: Pavement Calculations - Sherman Street

R-Value for Subgrade Soils = 6 (Laboratory Results)

R-Value for Structural Fill = 30 (Standard Specification)

R-Value for Type 1 Recycled Aggregate Base = 70 (Standard Specification)

TI (Traffic Index) = 6.0 - Normal Traffic on a Collector Street

$$GE = 0.0032 * (TI) * (100 - R)$$

$$G_{f(AC)} = 2.32, G_{f(Base)} = 1.1, G_{f(Structural Fill)} = 1.0$$

$$t_{layer} = GE / G_f$$

$$GE_{AC} = 0.0032 * (6.0) * (100 - 70) = 0.58'$$

$$t_{AC} = (0.58' / 2.32) * (12" / 1') = 3.0" \quad \text{USE 4" Asphalt Concrete}$$

$$GE_{AC} = (4" * 2.32) / (12") = 0.77'$$

$$GE_{Base} = 0.0032 * (6.0) * (100 - 30) = 1.34'$$

$$t_{Base} = ((1.34' - 0.77') / 1.1) * (12" / 1') = 6.2" \quad \text{USE 6" Recycled Aggregate Base}$$

$$GE_{Base} = (6" * 1.1) / (12") = 0.55'$$

$$GE_{SF} = 0.0032 * (6.0) * (100 - 6) = 1.80'$$

$$t_{SF} = ((1.80' - 0.77' - 0.55') / 1.0) * (12" / 1') = 5.8" \quad \text{USE 6" Structural Fill}$$

Therefore, 4" of Asphalt Concrete (AC) underlain by a minimum of 6" of Aggregate Base, underlain by 6" of Structural Fill used as Sub Base/Suitable Subgrade used as Sub Base.



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N. Broadway and Sherman Rehabilitation

PAVEMENT DESIGN

Job Number: 10514.000

Date: November, 2021

PLATE

C-2

00400 BID FORMS AND SUPPLEMENTS

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Certification of Proposed Subcontractor Regarding Equal Employment Opportunity	00421-2
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BID FORM

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

**City of Fallon
55 W. Williams Avenue
Fallon, Nevada 89406**

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 30 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work or, if the Bidder chooses not to visit the Site, accepts full responsibility as if the Bidder had visited the Site.

C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if

any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.
- K. Bidder is aware that this is a Federal-aid contract and requirements for such shall apply.
- L. Bidder is aware that Project funding is being provided by the Nevada Governor's Office of Economic Development (GOED), Community Development Block Grant Program (CDBG) funds and City of Fallon.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;

2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

BID SCHEDULE					
Item No.	Description	Unit	Estimated Quantity	Unit Price	Bid Price
1	Mobilization/Demobilization/Erosion Control/Cleanup	LS	1		
2	Furnish and Provide Traffic Control	LS	1		
3	Tree Removal by ISA Certified Arborist	EA	7		
4	Perform Root Exposure and Mitigation by ISA Certified Arborist (contingent Item)	HR	24		
5	Remove or Abandon Existing Storm Drain Pipe	LF	53		
6	Remove Existing Storm Drain Manhole	EA	1		
7	Install PCC ADA Pedestrian Ramp	EA	25		
8	Install Type I PCC Curb and Gutter	LF	3,659		
9	Install PCC Sidewalk	SF	19,204		
10	Install PCC Residential Driveway Apron	SF	2,003		
11	Install PCC Commercial Driveway Apron	SF	2,333		
12	Install PCC Driveway Transition	SF	4,570		
13	Install PCC Steps	SF	42		
14	Install PCC Post Curb	LF	57		
15	Install PCC Valley Gutter and Spandrels	SF	2,058		
16	Install AC Driveway Transition	SF	893		
17	Install Type II Aggregate Base (Driveway Transition/Fill Station)	CY	42		
18	Reconstruct Composite Roadway Section (North Broadway Street)	SF	78,302		
19	Reconstruct Composite Roadway Section (Sherman Street)	SF	29,973		
20	Over Excavation of Unsuitable Material and Backfill (Contingent Item)	CY	470		
21	Remove and Replace Traffic/Street Sign and Base	EA	8		
22	Remove and Replace Existing Fencing (Wood or Chain-Link)	LF	328		
23	Salvage, Relocate, and Re-Install Existing Mailbox	EA	4		
24	Protect and Adjust Communication/Water/Sewer Manhole to New Finish Grade	EA	5		
25	Protect and Adjust New or Existing Utility Valve	EA	12		
26	Remove and Replace Electrical Standard or Traffic Rated Pull Box	EA	2		

Item No.	Description	Unit	Estimated Quantity	Unit Price	Bid Price
27	Abandon Existing 4" Water Line by Removal or Grout Fill	LF	1,298		
28	Install New 8" AWWA PVC C900 DR-18 Water Line	LF	1,420		
29	Remove and Replace Existing Water Meter and Service	EA	30		
30	Remove Existing 6" Sewer and Replace with 8" SDR-35 PVC Sewer Main	LF	1,367		
31	Install New 8" SDR-35 PVC Sanitary Main	LF	100		
32	Remove Existing and Replace with Type I Polymer Sewer Manhole	EA	5		
33	Install New Type I Polymer Sewer Manhole	EA	1		
34	Remove and Replace Existing SDR-35 PVC Sewer Lateral (Contingent Item)	EA	30		
35	Install Type 4R Catch Basin	EA	12		
36	Remove Existing and Replace with Type 4R Catch Basin	EA	1		
37	Install SC -740 Infiltrators, Nyloplast Weir Structure, Pipe and Observation Ports	EA	98		
38	CCTV Verification	LS	1		
39	Install New 5'x3' Box Culvert	LF	27		
40	Install New PCC Headwall (Including Rip Rap Inlet and Outlet Protection)	EA	2		
41	Relocate Existing Fire Hydrant	EA	2		
42	Install 4" Schedule 40 Electrical Conduit	LF	259		
43	Install 4" Solid White Pavement Striping	LF	1,423		
44	Install 6" Solid White Pavement Striping	LF	139		
45	Install 4" Double Yellow Pavement Striping	LF	50		
46	Install 2'x10' White Thermoplastic Crosswalk Keys	LF	700		
47	Install 24" White Thermoplastic Stop Bar	LF	13		
48	Install 12" White Thermoplastic Stop Bar	LF	71		
49	Install Red or Yellow Curb Paint	LF	30		
50	Contract Allowance	LS	1	300,000	300,000
Total Base Bid Price (Sum of Items 1 thru 50)					

TOTAL SUM FOR BASE BID (in written form) _____
 _____ Dollars and _____ Cents

- 5.02 Bidder acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

Bid item clarifications are located in the Summary of Work, Section 01010 of the Special Provisions.

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
- A. Required Bid security;
 - B. Subcontractors Bidding on Federal Contracts Forms;
 - C. DBE Information Form
 - D. Bidder Equal Employment Opportunity Certification;
 - E. Proposed Subcontractor Equal Employment Opportunity Certification;
 - F. Bidder Restrictions on Lobbying Using Appropriated Federal Funds Form;
 - G. Proposed Subcontractor Restrictions on Lobbying Using Appropriated Federal Funds Form;
 - H. Anti-Collusion Affidavit;
 - I. Section 3 Certifications
 - J. Section 3 Workforce Breakdown
 - K. Agreement Against Boycott of Israel
 - L. Construction Contractor's Qualification Statement

ARTICLE 8 – DEFINED TERMS

- 8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By:

[Signature]

[Printed name]

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

[Signature]

[Printed name]

Title:

Submittal Date:

Address for giving notices:

Telephone Number:

Fax Number:

Contact Name and e-mail address:

Bidder's/Contractors

License No.:

++END OF BID FORM++

LIST OF SUBCONTRACTORS AND SUPPLIERS BIDDING

Project Name: Sherman St. and N. Broadway St. Rehabilitation
 Public Works Project No.: CH-2022-408
 CDBG Grant No.: 19/PF/04

Contractor: _____

List all subcontractors providing bids to your firm for this contract. You may make copies of this form.

This form must be submitted no later than 5:00 pm the next business day after the bid opening time.

SUBCONTRACTOR NAME AND ADDRESS	SUBCONTRACTOR PHONE NO.	NEVADA CONTRACTOR LICENSE # (IF APPLICABLE)	LICENSE LIMIT (IF APPLICABLE)	USED?		DBE CERTIFIED?		SUPPLIER?	
				Yes	No	Yes	No	Yes	No
				Yes	No	Yes	No	Yes	No
				Yes	No	Yes	No	Yes	No
				Yes	No	Yes	No	Yes	No
				Yes	No	Yes	No	Yes	No
				Yes	No	Yes	No	Yes	No
				Yes	No	Yes	No	Yes	No
				Yes	No	Yes	No	Yes	No
				Yes	No	Yes	No	Yes	No
				Yes	No	Yes	No	Yes	No
				Yes	No	Yes	No	Yes	No
				Yes	No	Yes	No	Yes	No

BIDDER SUBCONTRACTOR INFORMATION

(For subcontractors exceeding five percent (5%) of the bid amount)

Project Name: Sherman St. and N. Broadway St. Rehabilitation Contractor: _____

Public Works Project No.: CH-2022-408

CDBG Grant No.: 19/PF/04

Address: _____

Total Bid Amount \$ _____

This information must be submitted with your bid proposal. The bidder shall enter "NONE" under "SUBCONTRACTOR NAME" if not using subcontractors exceeding 5% of the bid amount.

SUBCONTRACTOR NAME AND ADDRESS	PHONE NO.	PROPOSAL ITEM NO(S).* (7 DIGIT #)	NEVADA CONTRACTOR LICENSE # (IF APPLICABLE)	LICENSE LIMIT (IF APPLICABLE)	DESCRIPTION OF WORK OR SERVICES TO BE SUBCONTRACTED

The undersigned affirms all work, other than that being performed by the subcontractors listed in the subcontractor reports submitted for this contract, will be performed by the Prime Contractor listed above.

* Please list all items (attach a separate sheet if necessary). Do not enter "multiple" or "various."

Contractor's Signature

Date

Telephone No. _____

BIDDER SUBCONTRACTOR INFORMATION

(For subcontractors exceeding one percent (1%) of bid amount or \$50,000, whichever is greater)

Project Name: Sherman St. and N. Broadway St. Rehabilitation

Contractor: _____

Public Works Project No.: CH-2022-408

CDBG Grant No.: 19/PF/04

Address: _____

Bid Amount \$ _____

This information must be submitted by the three (3) lowest bidders **no later than 2 hours after the bid opening time.** The bidder shall enter "NONE" under "SUBCONTRACTOR NAME" if not using subcontractors exceeding 1% of the bid amount.

SUBCONTRACTOR NAME AND ADDRESS	SUBCONTRACTOR PHONE NO.	PROPOSAL ITEM NO(S).* (7 DIGIT #)	NEVADA CONTRACTOR LICENSE # (IF APPLICABLE)	LICENSE LIMIT (IF APPLICABLE)	DESCRIPTION OF WORK OR SERVICES TO BE SUBCONTRACTED

* Please list all items (attach a separate sheet if necessary). Do not enter "multiple" or "various."

Contractor's Signature

Date

Telephone No. _____

BIDDER DISADVANTAGED BUSINESS (DBE) INFORMATION

Contract No.:
CDBG Grant No.: 19/PF/04

Contractor: _____

Public Works Project No.: CH-2020-348

Address: _____

Total Bid Amount \$ _____

Contract DBE Goal: 0.0%.

This information must be submitted with the bid proposal. Please list all subcontractors used to fulfill the DBE requirements for this contract. A bidder unable to meet the DBE goal shall submit documentation to outline their Good Faith Efforts (GFE) toward meeting the contract goal. Total DBE participation is subject to verification. Please fill out the form completely. Use additional forms if necessary.

DBE SUBCONTRACTORS:

DBE NAME AND ADDRESS	DBE PHONE NO.	PROPOSAL ITEM NO(S).	100% DBE SUB BID AMOUNT	DBE CERTIFICATION NO.*	DESCRIPTION OF WORK OR SERVICES TO BE CONTRACTED OR SUPPLIES TO BE SUPPLIED

A. TOTAL OF SUBCONTRACTOR DBE BID AMOUNT:

DBE SUPPLIERS:

DBE NAME AND ADDRESS	DBE PHONE NO.	PROPOSAL ITEM NO(S).	100% DBE SUPPLIER BID AMOUNT	60% DBE SUPPLIER BID AMOUNT (PARTICIPATIO N)	DBE CERTIFICATION NO.*	DESCRIPTION OF WORK OR SERVICES TO BE CONTRACTED OR SUPPLIES TO BE SUPPLIED

B. TOTAL OF SUPPLIER DBE PARTICIPATION AMOUNT:

C. Total Dollar Value of DBE Participation** (Add Totals from Lines A & B): \$ _____

D. Total Percent of DBE Participation (Divide Line C by Total Bid Amount): _____%

Contractor's Signature

Date

Telephone No. _____

*DBEs must be certified by the Nevada Unified Certification Program.

**DBE Participation amount is 100% of the subcontractor's bid amount and 60% of the supplier's bid amount .

REV. 9/13

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after the bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION

“The Bidder (Proposer) shall complete the following statement by checking the appropriate boxes.

The Bidder (Proposer) has ☐ has not ☐ participated in a previous contract or subcontract subject to the equal opportunity clause prescribed by Executive Order 10925, or Executive Order 11114, or Executive Order 11246.

The Bidder (Proposer) has ☐ has not ☐ submitted all compliance reports in connection with any such contract due under the applicable filing requirements; and that representations indicating submission of required compliance reports signed by proposed subcontractors will be obtained prior to award of subcontracts.

If the Bidder (Proposer) has participated in a previous contract subject to the equal opportunity clause and has not submitted compliance reports due under applicable filing requirements, the Bidder (Proposer) shall submit a compliance report on Standard Form 100, 'Employee Information Report EEO-1' prior to the award of contract.” See www.eeoc.gov for more information.

Name & Title of Bidder (Please Type)

Signature

Date

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

CERTIFICATION OF PROPOSED SUBCONTRACTOR REGARDING EQUAL EMPLOYMENT OPPORTUNITY

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after the bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION

“The Bidder (Proposer) shall complete the following statement by checking the appropriate boxes.

The Bidder (Proposer) has ☐ has not ☐ participated in a previous contract or subcontract subject to the equal opportunity clause prescribed by Executive Order 10925, or Executive Order 11114, or Executive Order 11246.

The Bidder (Proposer) has ☐ has not ☐ submitted all compliance reports in connection with any such contract due under the applicable filing requirements; and that representations indicating submission of required compliance reports signed by proposed subcontractors will be obtained prior to award of subcontracts.

If the Bidder (Proposer) has participated in a previous contract subject to the equal opportunity clause and has not submitted compliance reports due under applicable filing requirements, the Bidder (Proposer) shall submit a compliance report on Standard Form 100, 'Employee Information Report EEO-1' prior to the award of contract.” See www.eeoc.gov for more details.

Name & Address of Subcontractor (Please Type)

Signature

Date

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

BIDDER LOBBYING ASSURANCES

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at the all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each failure.

Signature _____

Contractor/Subcontractor: Authorized Official

Date

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

PROPOSED SUBCONTRACTOR LOBBYING ASSURANCES

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub awards at the all tiers (including subcontracts, sub grants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each failure.

Signature _____

Contractor/Subcontractor: Authorized Official

_____ Date

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

**CERTIFICATION OF BIDDER OR SUBCONTRACTOR REGARDING
DEBARMENT, SUSPENSION, INELIGIBILITY OR
VOLUNTARY EXCLUSION**

The undersigned bidder or subcontractor certifies, to the best of his or her knowledge and belief, that:

1. Neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this contract by any Federal department, agency, or program.
2. Where either the bidder or subcontractor is unable to certify to any of the above statements, the bidder or subcontractor shall attach an explanation as to why a certification cannot be submitted.

Name of Bidder or Subcontractor

Name and Title of Authorized Representative

Signature

Date

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
CERTIFICATION OF PROPOSED CONTRACTOR REGARDING SECTION 3
AND SEGREGATED FACILITIES

Name of Contractor

Project Name and Number

The undersigned hereby certifies that:

- a) Section 3 provisions are included in the contract:
- b) A written Section 3 Clause was prepared and submitted as part of the bid proceedings (If the bid equals or exceeds \$200,000);
- c) No segregated facilities will be maintained.

Print or type Name & Title of Person Signing

Signature

Date

Directions: This certification is to be completed by the contractor and submitted with the bid document. Subparagraph c) does not preclude contractors from providing separate lavatories or changing facilities for men and women.

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

**CERTIFICATION OF PROPOSED SUBCONTRACTOR REGARDING
SECTION 3 AND SEGREGATED FACILITIES**

Name of Subcontractor

Project Name and Number

The undersigned hereby certifies that:

- a) Section 3 provisions are included in the contract:
- b) A written Section 3 Clause was prepared and submitted as part of the bid proceedings (If the bid equals or exceeds \$200,000);
- c) No segregated facilities will be maintained.

Print or type Name & Title of Person Signing

Signature

Date

Directions: This certification is to be completed by the contractor and submitted with the bid document. Subparagraph c) does not preclude contractors from providing separate lavatories or changing facilities for men and women.

Section 3: Estimated Work Force Breakdown

To be completed by Contractors during the bidding process:

1. Contractor name and Address:	2. Dollar Amount of Contract	3. Project Name		
	4. Construction Manager	5. Phone number:		
Employment & Training				
Job Category	Total Estimated Positions Needed for the Project	No. of Persons Occupied by Permanent Employees	Number of New Hires to be added to this Project	Number of New Hires that are Section 3 Residents or Low Income Persons
Professionals				
Technicians				
Office/Clerical				
Construction by Trade (List)				
Trade				
Trade				
Trade				
Trade				
Trade				
Apprenticeship				
Other (list)				

The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Community Development Act of 1968.

Please estimate the number of positions needed for the project and the estimated work force breakdown necessary to complete the project.

List the number of new hires for each job category that will be employed on this project that are Section 3 residents or low to moderate income persons

The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low-income or very low-income persons, particularly persons who are recipients of HUD assistance for housing. Nothing shall be construed to require the employment of a Section 3 resident who does not meet the qualifications of the position to be filled.

Dec-10

AFFIDAVIT REQUIRED UNDER 23 CFR 635.112(f)
STATEMENT OF NON-COLLUSION

STATE OF _____

COUNTY OF _____

} SS

I, _____ [name of party signing this affidavit and Bid Form],
_____ [title] under penalty of perjury, being duly sworn, depose and
say:

That _____ [name of person, firm, association, or corporation] has
not, either directly or indirectly, entered into any agreement, participated in any collusion, or
otherwise taken any action in restraint of free competitive bidding in connection with this Contract.

Signature

Title

SUBSCRIBED AND SWORN to before me

this _____ day of _____, 2022.

Notary Public

BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER (*Name and Address*):

SURETY (*Name, and Address of Principal Place of Business*):

OWNER (*Name and Address*): **City of Fallon**
55 W. Williams Ave.
Fallon, NV 89406

BID

Bid Due Date: **August 4th, 2022**

Description: **Sherman Street and North Broadway Street Rehabilitation Project**

BOND

Bond Number:

Date:

Penal sum _____ \$ _____
 (Words) (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDER

SURETY

 Bidder's Name and Corporate Seal (Seal) Surety's Name and Corporate Seal (Seal)

By:

Signature

By:

Signature (Attach Power of Attorney)

Print Name

Print Name

Title

Title

Attest:

Signature

Attest:

Signature

Title

Title

Note: Addresses are to be used for giving any required notice.

Provide execution by any additional parties, such as joint venturers, if necessary.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
 - 3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2 All Bids are rejected by Owner, or
 - 3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

AGREEMENT AGAINST BOYCOTT OF ISRAEL

SHERMAN STREET AND NORTH BROADWAY STREET REHABILITATION PROJECT

The undersigned certifies that they and the company that they represent is not currently engaged in, and agrees for the duration of the contract not to engage in, a boycott of Israel. Boycott of Israel means refusing to deal or conduct business with, abstaining from dealing or conducting business with, terminating business or business activities with or performing any other action that is intended to limit commercial relations with a) Israel; or b) A person or entity doing business in Israel or in the territories controlled by Israel, if such an action is taken in a manner that discriminates on the basis of nationality, national origin, or religion.

The CONTRACTOR shall be responsible for fines, penalties, and repayment of any State of Nevada or federal funds that may arise (including those that the CITY pays, becomes liable to pay, or becomes liable to repay) as a direct result of the CONTRACTOR'S non-compliance with this Section. If, at any time during the formation or duration of this Agreement, CONTRACTOR is engaged or engages in a boycott of Israel, it will constitute a material breach of this Agreement.

Name of Bidder

Signature of Duly Authorized Representative

Date

Typed or Printed Name of Duly Authorized Representative

The Associated General Contractors of America Construction Contractor's Qualification Statement for Engineered Construction

This qualification statement was developed by AGC of America in cooperation with the Engineers Joint Contract Documents Committee (EJCDC) which recommends its use as a suggested generic prequalification statement or a contract-specific qualification statement. In the latter case, the owner or engineer may wish to make appropriate supplemental inquiries.

The Engineers Joint Contract Documents Committee consists of representatives of the following organizations:

National Society of Professional Engineers
American Consulting Engineers Council
American Society of Civil Engineers
Construction Specifications Institute

Submitted by:

Name of Organization _____

Name of Individual _____

Title _____

Address _____

Phone/Fax _____

Submitted to:

Name _____

Address _____

Phone/Fax _____

Project Name and Description (if applicable):

Contractor's General Business Information:

Check if:

☐ Corporation ☐ Partnership ☐ Joint Venture ☐ Sole Proprietorship

If Corporation:

a. Date and State of Incorporation

b. List of Executive Officers

Name

Title

If Partnership:

- a. Date and State of Organization

- b. Names of Current General Partners

- c. Type of Partnership

☐ General ☐ Publicly Traded ☐ Limited ☐ Other (*describe*) _____

If Joint Venture:

- a. Date and State of Organization

- b. Name, Address and Form of Organization of Joint Venture Partners (*indicate managing partner by an asterisk**)

If Sole Proprietorship:

- a. Date and State of Organization

- b. Name and Address of Owner or Owners

1. On Schedule A, attached, list major engineered construction projects completed by this organization in the past five years. (If joint venture, list each participant's projects separately.)
2. On Schedule B, attached, list current projects under construction by this organization. (If joint venture, list each participant's projects separately.)
3. Name of Surety Company and name, address, and phone number of agent.

4. Is your organization a member of a controlled group of corporations as defined in IRC Sec. 1563?
☐ Yes ☐ No If yes, show names and addresses of affiliated companies.

5. Furnish on Schedule C, attached, details of the construction experience of the principal individuals of your organization directly involved in construction operations.

6. Has your organization ever failed to complete any construction contract awarded to it?
☐ Yes ☐ No If yes, describe circumstances on attachment.

7. Has any Corporate officer, partner, joint venture participant, or proprietor ever failed to complete a construction contract awarded to him or her in their own name or when acting as a principal of another organization?
☐ Yes ☐ No If yes, describe circumstances on attachment.

8. In the last five years, has your organization ever failed to substantially complete a project in a timely manner?
☐ Yes ☐ No If yes, describe circumstances on attachment.

9. Indicate general types of work performed with your own work force.

10. If required, can your organization provide a bid bond for this project? ☐ Yes ☐ No

11. What is your approximate total bonding capacity?

- ☐ \$500,000 to \$2,000,000
- ☐ \$2,000,000 to \$5,000,000
- ☐ \$5,000,000 to \$10,000,000
- ☐ \$10,000,000 or more

12. Describe the permanent safety program you maintain within your organization. Use attachment if necessary.

13. Furnish the following information with respect to an accredited banking institution familiar with your organization.

Name of Bank

Address

Account Manager

Phone

I hereby certify that the information submitted herewith, including any attachment, is true to the best of my knowledge and belief.

By:

Title:

Dated:

Schedule A

Name, Location and Description of Project	Owner	Design Engineer	Date Completed	Contract Price	Reference/ Contact <i>(include address and phone)</i>

Schedule B

Name, Location and Description of Project	Owner	Design Engineer	Contract Price	Amount Completed	Date of Scheduled Completion	Reference/ Contact <i>(include address and phone)</i>

Schedule C – Personnel

Name	Position	Date Started with this Organization	Date Started in Construction	Prior Positions and Experience in Construction

00500 NOTICE OF AWARD, AGREEMENT AND NOTICE TO PROCEED

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Notice to Proceed	00550-1

NOTICE OF AWARD

Date of Issuance: _____

Owner: **City of Fallon**

Owner's Contract No.:

Engineer: **Lumos & Associates, Inc.**

Engineer's Project No.: **10514.000**

Project: **Sherman St. & N. Broadway St. Rehabilitation**

Contract Name: **PWP-CH-2022-408**

Bidder:

Bidder's Address:

TO BIDDER:

You are notified that Owner has accepted your Bid dated [_____] for the above Contract, and that you are the Successful Bidder and are awarded a Contract for:

{Describe Work, Alternates, or Sections of Work Awarded}

The Contract Price of the awarded Contract is: \$ _____ [note if subject to unit prices, or cost-plus]

[2] unexecuted counterparts of the Agreement accompany this Notice of Award, and one copy of the Contract Documents accompanies this Notice of Award, or has been transmitted or made available to Bidder electronically.

[1] set of the Drawings will be delivered electronically, separately from the other Contract Documents upon request.

You must comply with the following conditions precedent within **20** days of the date of receipt of this Notice of Award:

1. Deliver to Owner [2] counterpart of the Agreement, fully executed by Bidder.
2. Deliver with the executed Agreement(s) the Contract security [e.g., performance and payment bonds] and insurance documentation as specified in the Instructions to Bidders and General Conditions, Articles 2 and 6.
3. Other conditions precedent (if any):

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner: _____
(Authorized Signature)

By: _____
(Printed Name)

Title: _____

Copy: Engineer

++END OF NOTICE OF AWARD++

**AGREEMENT
BETWEEN OWNER AND CONTRACTOR
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)**

THIS AGREEMENT is by and between City of Fallon ("Owner") and
____ ("Contractor").

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

- 1.01 *Contractor shall complete all Work as specified or indicated in the Contract Documents.* Reconstruction of approximately 1,350 linear feet of N. Broadway Street and 700 linear feet of Sherman Street. This includes installing sidewalk, curb and gutter, valley gutter and spandrels, residential and commercial driveway apron improvements, ADA compliant pedestrian ramps, new catch basins, storm infiltration chambers, culvert extension and new headwalls, water main improvements, water service reconnections, 8" PVC sewer main and polymer manhole improvements, striping, signage, traffic control, stormwater protection, and other incidentals.

ARTICLE 2 – THE PROJECT

- 2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: **Sherman Street and North Broadway Street Rehabilitation Project.**

ARTICLE 3 – ENGINEER

- 3.01 The Project has been designed by **Lumos & Associates, Inc.**
- 3.02 The Owner has retained **Lumos & Associates, Inc.** ("Engineer") to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

- 4.01 *Time of the Essence*
- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.
- 4.02 *Contract Times: Days*
- A. **The Work will be substantially completed within 90 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 100 calendar days after the date when the Contract Times commence to run.**
- B. **It is expected that contract work is scheduled for completion in the 2022 construction season. If due to unforeseen circumstances the project cannot be completed in the 2022 construction season, the contract shall be suspended by the City of Fallon and calendar days**

will not be charged to the contractor during the suspension period. There shall be no escalation clause in effect for this contract.

4.03 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
- 1.) **Substantial Completion:** Contractor shall pay Owner **\$2,500** for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.
 2. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner **\$1,500** for each day that expires after such time until the Work is completed and ready for final payment.
 3. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.

ARTICLE 5 – CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:
- A. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6 – PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the first day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments

previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract

- a. 95 percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and
 - b. 95 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 100 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 *Final Payment*

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – NOT USED

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:
- A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
 - B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
 - E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.

- F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 *Contents*

- A. The Contract Documents consist of the following:
 - 1. This Agreement (pages 1 to 9, inclusive).
 - 2. Performance bond (pages 1 to 3, inclusive).
 - 3. Payment bond (pages 1 to 3, inclusive).
 - 4. Other bonds. None
 - 5. General Conditions (pages 1 to 70, inclusive).
 - 6. Supplementary Conditions (pages 1 to 20, inclusive).
 - 7. Federal Requirements (00FED)
 - 8. Prevailing Wage Rates (Included in 00FED)
 - 9. Provisions of Nevada Revised Statute Chapter 338 (00521)
 - 10. Special Provisions as listed in the table of contents of the Project Manual.
 - 11. Technical Specifications as listed in the table of contents of the Project Manual.
 - 12. Drawings (not attached but incorporated by reference).
 - 13. Addenda (numbers ____ to ____, inclusive).
 - 14. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (00410-1 thru 7, 00420-1 thru 4, 00421-1 thru 9, 00430-1 thru 2, 00440-1, and 00450-1 thru 8)
 - 15. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.

- c. Change Orders.
 - d. Field Orders.
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 10 – MISCELLANEOUS

10.01 Terms

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 Assignment of Contract

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 Successors and Assigns

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.06 Other Provisions

- A. Owner stipulates that the General Conditions that are made a part of this Contract are based on EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee® and Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through the Supplementary Conditions.
- B. Contractor and its subcontractors shall comply with the requirements of the Civil Rights Act of 1964, as amended, Title IX of the Education Amendments of 1972, the Rehabilitation Act of 1973, P.L. 93-112, as amended, the age discrimination Act of 1975 and any relevant program-specific regulations (including those with anti-discrimination requirements), and shall not discriminate against any employee or offeror for employment because of race, national origin, creed, color, sex, sexual orientation, gender identity or expression, religion, age, disability or handicap condition (including AIDS and AIDS-related conditions). Such agreement shall include, but not be limited to the following: Employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including, without limitation, apprenticeship.
- C. Non-Discrimination & CDBG
 1. In connection with the performance of work under this contract, the contractor agrees not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation, gender identity or expression, or age, including, without limitation, with regard to employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including, without limitation, apprenticeship. The contractor further agrees to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.
 2. The Contractor will abide by the provisions of the Civil Rights Act of 1964 which states that under Title VII, no person may, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.
 3. The Contractor will comply with the following provision: SECTION 109 OF THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974: No person in the United States may on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with the funds made available under this title. Any prohibition against discrimination on the basis of age under the Age of Discrimination Act of 1975 or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973 will also apply to any such program or activity.

4. SECTION 3 OF THE HOUSING AND URBAN DEVELOPMENT ACT OF 1968. The Contractor will ensure that to the greatest extent feasible, opportunities for training and employment arising in connection with this CDBG-assisted project will be extended to lower income project area residents. Further, the Contractor will, to the greatest extent feasible, utilize business concerns located in or substantially owned by residents of the project area, in the award of contracts and purchase of services and supplies.
5. MINORITY BUSINESS ENTERPRISE. Consistent with the provisions of Executive Order 11246, the Contractor will take affirmative steps to assure that minority businesses are used when possible as sources of supplies, equipment, construction and services. Additionally, the Contractor will document all affirmative steps taken to solicit minority businesses and will forward this documentation along with the names of the minority subcontractors and suppliers to the local government CDBG recipient upon request.

10.07 *Contract Interpretation*

- A. The parties hereto agree that in the event it becomes necessary to determine the meaning, scope or interrelationship of any of the provisions of this contract, the doctrine of contra proferentum, that is that the contract documents shall be construed against the Owner, shall not be used. On the contrary, the standard for interpretation dictates that the meaning of a questionable contract passage is that which a reasonably intelligent person acquainted with all operative usages and knowing all the facts and circumstances of the contract prior to and contemporaneously with the making of the contract would assign to it.

10.08 *Alternative Dispute Resolution*

- A. If a dispute arises out of or relates to this contract or the breach thereof, and if the dispute cannot be settled through negotiation, the parties agree first to try to settle the dispute by mediation administered by the American Arbitration Association under its Construction Industry Mediation Procedures. If a party fails to respond to a written request for mediation within thirty (30) days after service or fails to participate in any scheduled mediation conference, that party shall be deemed to have waived its right to mediate the issue in dispute.
- B. Any mediation, as may be required by the Contract Documents, shall be conducted in the County of Churchill, State of Nevada, unless otherwise agreed to, in writing, by the parties.

10.09 *Controlling Law and Venue*

- A. This contract and any dispute arising therefrom or relating thereto or relating to any breach thereof shall be governed by the laws of the State of Nevada. Any dispute that cannot be settled through negotiation and mediation shall be subject to the sole and exclusive jurisdiction of a Nevada State Court of competent jurisdiction in the County of Churchill, State of Nevada.

10.10 *Entire Agreement*

- A. No verbal agreement or conversation with an officer, agent or employee of Owner, either before, during or after the execution of this Agreement, shall affect or modify any of the terms or obligations contained in the Contract Documents, nor shall such verbal agreement or conversation entitle Contractor to any additional payment whatsoever under the terms of this Agreement.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on _____ (which is the Effective Date of the Contract).

OWNER:

CONTRACTOR:

(Authorized Signature)

(Authorized Signature)

By: _____
(Printed Name)

By: _____
(Printed Name)

Title: Mayor

Title: _____

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____

Attest: _____

Title: City Clerk

Title: _____

Address for giving notices:

Address for giving notices:

City of Fallon

55 West Williams Street

Fallon, NV 89406

License No.: _____
(where applicable)

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

NOTE TO USER: Use in those states or other jurisdictions where applicable or required.

++END OF AGREEMENT BETWEEN OWNER AND CONTRACTOR ++

PROVISIONS OF NEVADA REVISED STATUTE CHAPTER 338

I. WAGE SCALE

In accordance with the provisions of NRS 338.020 and NRS 338.030, the OWNER has ascertained from the Labor Commissioner the hourly and daily rate of currently prevailing wages at the location of the work. CONTRACTOR shall pay to the OWNER ten dollars (\$10.00) for each workman employed for each calendar day or portion thereof that such workman is paid less than the designated rate for any work done under the Contract by him or by any subcontractor under him. And such payment to the OWNER may be withheld and retained from sums due pursuant to this Contract, all as more particularly provided in NRS 338.

II RECORDS

CONTRACTOR and each subcontractor shall keep or cause to be kept an accurate record showing (a) the names and occupations of all workmen employed by him in connection with the work, and (b) the actual per diem wages and benefits paid each of such workmen. The Records shall be open all reasonable hours to the inspection of representatives of the OWNER.

III FAIR EMPLOYMENT OPPORTUNITIES

- a) In connection with the performance of work under this Contract, CONTRACTOR agrees not to discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, sexual orientation, religion, age, disability or handicap condition (including AIDS and AIDS-related conditions). Such agreement shall include, but not be limited to the following: Employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
- b) CONTRACTOR further agrees to insert provisions (a) above in all subcontractors hereunder, except subcontracts for standard commercial supplies or raw materials.
- c) Any breach of the foregoing provision by a CONTRACTOR shall constitute a material breach of Contract.

IV LABOR COMMISSIONER'S REPORT

CONTRACTOR shall report to the Labor Commissioner of the State of Nevada the name and address of each subcontractor whom he engages for work on the project within ten (10) days after subcontractor commences work on the Contract.

Acknowledged: _____
Contractor

Date: _____

NOTICE TO PROCEED

Owner:	City of Fallon	Owner's Contract No.:	
Contractor:		Contractor's Project No.:	
Engineer:	Lumos & Associates, Inc.	Engineer's Project No.:	10514.000
Project:	Sherman St. & N. Broadway St. Rehabilitation	Contract Name:	PWP-CH-2022-408
	Project	Effective Date of Contract:	

TO CONTRACTOR:

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on _____, 20___. [see Paragraph 4.01 of the General Conditions]

On that date, Contractor shall start performing its obligations under the Contract Documents. In accordance with the Agreement, the number of days to achieve Substantial Completion is _____, and the number of days to achieve readiness for final payment is _____.

Before starting any Work at the Site, Contractor must comply with the following:

Owner: _____
(Authorized Signature)

By: _____
(Printed Name)

Title: _____

Date Issued: _____

Copy: Engineer

++END OF NOTICE TO PROCEED++

00600 BONDS, APPLICATION FOR PAYMENT & CERTIFICATE OF SUBSTANTIAL COMPLETION

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Grantees Notification of Contracts & Subcontracts	00643-1
Federal Payroll Form and Instruction	Federal Form WH-347

PERFORMANCE BOND

CONTRACTOR *(name and address)*:

SURETY *(name and address of principal place of business)*:

OWNER: **City of Fallon
55 West Williams Ave.
Fallon, NV 89408**

CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description *(name and location)*: **Sherman Street and North Broadway Street Rehabilitation Project**

BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:

Amount:

Modifications to this Bond Form: ☐ None ☐ See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

Contractor's Name and Corporate Seal *(seal)*

Surety's Name and Corporate Seal *(seal)*

By: _____
Signature

By: _____
Signature *(attach power of attorney)*

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed

by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment 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.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, 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. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or 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 set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to

be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

++END OF PERFORMANCE BOND++

PAYMENT BOND

CONTRACTOR *(name and address)*:

SURETY *(name and address of principal place of business)*:

OWNER: **City of Fallon**
55 West Williams Ave.
Fallon, NV 89406

CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description *(name and location)*: **Sherman Street and North Broadway Street Rehabilitation Project**

BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:

Amount:

Modifications to this Bond Form: ☐ None ☐ See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

Contractor's Name and Corporate Seal

Surety's Name and Corporate Seal

By: _____
Signature

By: _____
Signature *(attach power of attorney)*

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint ventures. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond shall arise after the following:
 - 5.1 Claimants who do not have a direct contract with the Contractor,
 - 5.1.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2 Pay or arrange for payment of any undisputed amounts.
 - 7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. Definitions

16.1 **Claim:** A written statement by the Claimant including at a minimum:

1. The name of the Claimant;
2. The name of the person for whom the labor was done, or materials or equipment furnished;
3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
4. A brief description of the labor, materials, or equipment furnished;
5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
7. The total amount of previous payments received by the Claimant; and

8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2 **Claimant:** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

16.4 **Owner Default:** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.

17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

18. Modifications to this Bond are as follows:

++END OF PAYMENT BOND++

Contractor's Application for Payment No.

	Application Period:	Application Date:
To (Owner):	From (Contractor):	Via (Engineer):
Project:	Contract:	
Owner's Contract No.:	Contractor's Project No.:	Engineer's Project No.:

Application For Payment Change Order Summary

Approved Change Orders			
Number	Additions	Deductions	
			1. ORIGINAL CONTRACT PRICE..... \$ _____
			2. Net change by Change Orders..... \$ _____
			3. Current Contract Price (Line 1 ± 2)..... \$ _____
			4. TOTAL COMPLETED AND STORED TO DATE (Column F on Progress Estimate)..... \$ _____
			5. RETAINAGE:
			a. X _____ Work Completed..... \$ _____
			b. X _____ Stored Material..... \$ _____
			c. Total Retainage (Line 5a + Line 5b)..... \$ _____
			6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5c)..... \$ _____
			7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application)..... \$ _____
			8. AMOUNT DUE THIS APPLICATION..... \$ _____
			9. BALANCE TO FINISH, PLUS RETAINAGE (Column G on Progress Estimate + Line 5 above)..... \$ _____
TOTALS			
NET CHANGE BY CHANGE ORDERS			

Contractor's Certification

The undersigned Contractor certifies that to the best of its knowledge: (1) all previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Applications for Payment; (2) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to Owner indemnifying Owner against any such Liens, security interest or encumbrances); and (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

By:

Date:

Payment of: \$ _____
(Line 8 or other - attach explanation of the other amount)

is recommended by: _____ (Date)
(Engineer)

Payment of: \$ _____
(Line 8 or other - attach explanation of the other amount)

is approved by: _____ (Date)
(Owner)

Approved by: _____ (Date)
Funding Agency (if applicable)

Progress Estimate - Lump Sum Work

Contractor's Application

[illegible]

Progress Estimate - Unit Price Work

Contractor's Application

[illegible]

Stored Material Summary

Contractor's Application

[illegible]

CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner:	City of Fallon	Owner's Contract No.:	
Contractor:		Contractor's Project No.:	
Engineer:	Lumos & Associates, Inc.	Engineer's Project No.:	10514.000
Project:	Sherman St. & N. Broadway St. Rehabilitation	Contract Name:	PWP-CH-2022-408

This [preliminary] [final] Certificate of Substantial Completion applies to:

☐ All Work ☐ The following specified portions of the Work:

Date of Substantial Completion

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work shall be as provided in the Contract, except as amended as follows: *[Note: Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.]*

Amendments to Owner's responsibilities: ☐ None
☐ As follows

Amendments to Contractor's responsibilities: ☐ None
☐ As follows:

The following documents are attached to and made a part of this Certificate: *[punch list; others]*

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

EXECUTED BY ENGINEER:	RECEIVED:	RECEIVED:
By: _____ <i>(Authorized signature)</i>	By: _____ <i>Owner (Authorized Signature)</i>	By: _____ <i>Contractor (Authorized Signature)</i>
Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____

++END OF CERTIFICATE OF SUBSTANTIAL COMPLETION++

CONDITIONAL WAIVER AND RELEASE UPON PROGRESS PAYMENT

Property Name:

Property Location:

Undersigned's Customer:

Invoice/Payment Application: Contractor Application for Payment No.

Payment Amount:

Payment Period:

Upon receipt by the undersigned of a check in the above referenced Payment Amount payable to the undersigned, and when the check has been properly endorsed and has been paid by the bank on which it is drawn, this document becomes effective to release and the undersigned shall be deemed to waive any notice of lien, any private bond right, any claim for payment and any rights under any similar ordinance, rule or statute related to payment rights that the undersigned has on the above described Property to the following extent:

This release covers a progress payment for the work, materials, and equipment furnished by the undersigned to the Property or to the undersigned's customer which is the subject of the Invoice or Payment Application, but only to the extent of the Payment Amount or such portion of the Payment Amount as the undersigned is actually paid, and does not cover any retention withheld, any items, modifications or changes pending approval, disputed items and claims, or items furnished or invoiced after the Payment Period. Before any recipient of this document relies on it, the customer should verify evidence of payment to the undersigned. The undersigned warrants that he or she either has already paid or will use the money he receives from this progress payment promptly to pay in full all laborers, subcontractors, materialmen and suppliers for all work, materials or equipment that are the subject of this waiver and release.

Dated: _____

By: _____

Printed Name: _____

Title: _____

Address _____

City/State/Zip _____

++END OF CONDITIONAL WAIVER AND RELEASE UPON PROGRESS PAYMENT++

Certification of Materials Origin
(Required for Acceptance of Steel and Iron Materials)

Contract	SR
Section	
Contractor	
Subcontractor / Supplier	
Materials: Bid Item	Quantity
Description	

The following Certification of Materials Origin is made for the purpose of establishing materials acceptance under Contract Provisions entitled "Buy America." Materials as described above are furnished for use in compliance with the certification as noted in 1 or 2 below. Buy America regulation may be found in the 23 CFR 635.410. Unless a Certificate of Materials Origin has been provided to the Engineer, the materials shall be considered of foreign origin.

- ☐ 1. The materials covered by this certification are American-Made with all manufacturing processes entirely within the United States of America.
- ☐ 2. The materials furnished for this project under this certification contain steel or iron manufactured, all or in part, outside the United States of America, or its trail of manufacture cannot be certified.

The Description and Country of Origin of these materials is as follows:
The Invoice Cost for the above described foreign-made materials is:

I declare under penalty of perjury under the laws of the State of Nevada that the foregoing is true and correct.

_____ Contractor / Subcontractor / Supplier Name	_____ Phone #	
_____ Authorized Corporate Official Signature	_____ Date	_____ Location

ATTACHMENT: MILL TEST REPORTS

NDOT form 020-095

Contractor:

Federal Wage Rates (Date & Modification #): 02/25/2022 NV20220014

Preparation Date:

State Prevailing Wage Rates (Date): 10/01/2021

Notes:

If the total project cost exceeds \$100,000, both Federal and State Rates apply. In this case, the contractor must pay the higher of the two rates.

CDBG Wage Comparison WorkSheet December 2006

Public reporting burden for this collection of information is estimated to average 1 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This agency may not conduct or sponsor, and a person is not required to respond to, a collection information unless that collection displays a valid OMB control number.

Executive Orders 12432 and 11624 requires Federal agencies to promote Minority Business Enterprise (MBE) participation in their programs and prescives additional arrangements for developing and coordinating a National program for MBE. Pursuant to Executive Order 12432, the Department of Commerce requires an annual report on MBE achievements. The information provided on Public and Indian housing Programs will be used to monitor and evaluate HA performance and to develop and submit the Annual Report to the President. Responses to the collection of information are voluntary. The information requested does not lend itself to confidentiality.

1. Grantee/Project Owner/Developer/Sponsor/Builder/Agency						Check if: PHA _____ IHA _____		2. Location (City, State, ZIP Code)					
3a. Name of Contact Person		3b. Phone Number (including Area Code)			4. Reporting Period (Annual – FY) Oct. 1 - Sept 30, _____		5. Program Code (Not applicable for PD programs.) See explanation of codes at bottom of page. Use a separate sheet for each program code. _____			6. Date Submitted to Field Office			
Grant/Project Number or HUD Case Number or other identification of property, subdivision, dwelling unit, etc. 7a.	Amount of contract or subcontract 7b.	Type of Trade Code (See below) 7c.	Contractor or Subcontractor Business Racial/Ethnic Code (See below) 7d.	Woman Owned Business (Yes or No) 7e.	Prime Contractor Identification (ID) Number 7f.	Sec. 3 7g.	Subcontractor Identification (ID) Number 7h.	Sec. 3 7i.	Contractor/Subcontractor Name and Address 7j.				
									Name	Street	City	State	Zip Code

CPD:
1 = New Construction
2 = Education/Training
3 = Other

7c: Type of Trade Codes
Housing/Public Housing
1 = New Construction
2 = Substantial Rehab.
3 = Repair
4 = Service
5 = Project Mangt

7d: Racial/Ethnic Codes
1= White Americans
2= Black Americans
3= Native Americans
4= Hispanic Americans
5= Asian/Pacific Americans
6= Hasidic Jews

5: Program Codes(Complete for Housing and Public and Indian Housing programs only):

1 = All insured, including Section 8
2 = Flexible Subsidy
3 = Section 8 Noninsured. Non-HFDA
4 = Insured (Management)
5 = Section 202

6 = HUD - Held (Management)
7 = Public/Indian Housing Development
8 = Public/Indian Housing Management
9 = Public/Indian Modernization
0= Other (specify which programs)

This report is to be completed by grantees, developers, sponsors, builder, agencies, and/or project owners for reporting contract and subcontract activities of \$10,000 or more under the following programs: Community Development Block Grants (entitlement and small cities); Urban Development Action Grants; Housing Development Grants; Multi-family Insured and Noninsured; Public and Indian Housing Authorities; and contracts entered into by recipients of CDBG rehabilitation assistance.

Contracts/subcontract of less than \$10,000 need be reported only if such contracts represent a significant portion of your total contracting activity. Include only contracts executed during this reporting period.

This form has been modified to capture Section 3 contract data in columns 7g and 7i. Section 3 requires that the employment and other economic opportunities generated by HUD financial assistance for housing and community development programs shall, to the greatest extent feasible, be directed toward low-and very low-income persons, particularly those who are recipients of government assistance for housing. Recipients using this form to report Section 3 contract data must also use Part 1 of form HUD-60002 to report employment and training opportunities data. Form HUD-2516 is to be completed

Community Development Programs

1. **Grantee** - Enter the name of the unit of government submitting this report.
3. **Contact Person** - Enter name and phone of person responsible for maintaining and submitting contract/subcontract data.
- 7a. **Grant Number** - Enter the HUD Community Development Block Grant Identification Number (with dashes). For example: B-32-MC-25-0034. For Entitlement Programs and Small City multi-year comprehensive programs, enter the latest approved grant number.
- 7b. **Amount of Contract/Subcontract** - Enter the dollar amount rounded to the nearest dollar. If subcontractor=s ID number is provided in 7f., the dollar figure would be for the subcontract only and not for the prime contract.
- 7c. **Type of Trade** - Enter the numeric codes which best indicates the contractor=s/subcontractor=s service. If subcontractor ID number is provided in 7f., the type of trade code would be for the subcontractor only and not for the prime contractor. The Aother= category includes supply, professional services and all other activities except construction and education/training activities.
- 7d. **Business Racial/Ethnic Code** - Enter the numeric code which indicates the racial/ethnic/gender character of the owner(s) and controller(s) of 51% of the business. When 51% or more is not owned and controlled by any single racial/ethnic/gender category, enter the code which seems most appropriate. If the subcontractor ID number is provided, the code would apply to the subcontractor and not the prime contractor.
- 7e. **Woman Owned Businesses:** Enter Yes or No.
- 7f. **Contractor Identification (ID) Number** - Enter the Employer (IRS) Number of the Prime Contractor as the unique identifier for prime recipient of HUD funds. Note that the Employer (IRS) Number must be provided for each contract/subcontract awarded.
- 7g. **Section 3 Contractor** – Enter Yes or No.
- 7h. **Subcontractor Identification (ID) Number** - Enter the Employer (IRS) Number of the subcontractor as the unique identifier for each subcontractor awarded from HUD funds. When subcontractor ID Number is provided, the respective Prime Contractor ID Number must also be provided.
- 7i. **Section 3 Contractor** – Enter Yes or No.
- 7j. **Contractor/Subcontractor Name and Address** - Enter this information for each firm receiving contract/subcontract activity only one time on each report for each firm.

for public and Indian housing and most community development programs. Form HUD-60002 is to be completed by all other HUD programs including Sate administered community development programs covered under Section 3.

A Section 3 contractor/subcontractor is a business concern that provides economic opportunities to low-and very low-income residents of the metropolitan area (or nonmetropolitan county), including a business concern that is 51 percent or more owned by low-or very low-income residents; employs a substantial number of low- or very low-income residents; or provides subcontracting or business development opportunities to businesses owned by low- or very low-income residents. Low- and very low-income residents include participants in Youth build programs established under Subtitle D of Title IV of the Cranston-Gonzalez National Affordable Housing Act.

The terms “low-income persons” and very low-income persons” have the same meanings given the terms in section 3(b)(2) of the United States Housing Act of 1937. Low-income persons mean families (including single persons) whose incomes do not exceed 80 per centum of the median income for the area, as determined by the Secretary, with adjustments for smaller and larger families, except that the Secretary may establish income ceilings higher or

Multifamily Housing Programs

1. **Grantee/Project Owner** - Enter the name of the unit of government, agency or morgagor entity submitting this report. Check box to indicate Public Housing Agency (PHA) or I Indian Housing Authority (IHA) where appropriate.
3. **Contact Person** – Same as item 3 under CPD Programs.
4. **Reporting Period** – Check only one period.
5. **Program Code:** Enter the appropriate program code.
- 7a. **Grant/Project Number:** Enter the HUD Project Number or Housing Development Grant or number assigned.
- 7b. **Amount of Contract/Subcontract:** – Same as item 7b. under CPD Programs.
- 7c. **Type of Trade** – Same as item 7c. under CPD Programs.
- 7d. **Business Racial/Ethnic Code:** – Same as item 7d. under CPD Programs.
- 7e. **Women Owned Business:** Enter Yes or No.
- 7f. **Contractor Identification (ID) Number** – Same as item 7f. under CPD Programs.
- 7g. **Section 3 Contractor:** Enter Yes or No.
- 7h. **Subcontractor Identification (ID) Number** – Same as item 7h. under CPD Programs.
- 7i. **Section 3 Contractor:** Enter Yes or No.
- 7g. **Contractor/Subcontractor Name and Address** – Same as item 7j, under CPD Programs.

lower than 80 per centum of the median for the area on the basis of the Secretary’s findings that such variations are necessary because of prevailing levels of construction costs or unusually high or low-income families. Very low-income persons means low-income families (including single persons) whose incomes do not exceed 50 per centum of the median family income for the area, as determined by the Secretary with adjustments for smaller and larger families, except that the Secretary may establish income ceilings higher or lower than 50 per centum of the median for the area on the basis of the Secretary’s finding that such variations are necessary because of unusually high or low family incomes.

Submit two (2) copies of this report to your local HUD office within ten (10) days after the end of the reporting period you checked in item 4 on the front.

Complete item 7h. only once for each contractor/subcontrator on each semi-annual report.

Enter the prime contractor’s ID in item 7f. for all contracts and subcontracts. Include only contracts executed during this reporting period. PHAs/IHAs are to report all contracts/subcontracts.

Public Housing and Indian Housing Programs

PHAs/IHAs are to report all contracts/subcontracts. Include only contracts executed during this reporting period.

1. **Project Owner** - Enter the name of the unit of government, agency or morgag or entity submitting this report. Check box as appropriate.
3. **Contact Person** – Same as item 3 under CPD Programs.
4. **Reporting Period** – Check only one period.
5. **Program Code:** Enter the appropriate program code.
- 7a. **Grant/Project Number:** Enter the HUD Project Number or Housing Development Grant or number assigned.
- 7b. **Amount of Contract/Subcontract:** – Same as item 7b. under CPD Programs.
- 7c. **Type of Trade** – Same as item 7c. under CPD Programs.
- 7d. **Business Racial/Ethnic Code:** – Same as item 7d. under CPD Programs.
- 7e. **Women Owned Business:** Enter Yes or No.
- 7f. **Contractor Identification (ID) Number** – Same as item 7f. under CPD Programs.
- 7g. **Section 3 Contractor:** Enter Yes or No.
- 7h. **Subcontractor Identification (ID) Number** – Same as item 7h. under CPD Programs.
- 7i. **Section 3 Contractor:** Enter Yes or No.
- 7g. **Contractor/Subcontractor Name and Address** – Same as item 7j, under CPD Programs.

GRANTEE'S NOTIFICATION OF CONTRACTS AND SUBCONTRACTS AWARDED

Mail to:

**Governor's Office of Economic Development
Community Development Block Grant
808 West Nye Lane
Carson City, Nevada 89703
(775) 687-9900**

**City or County Name:
Grant Name:
Grant Number: 19/PF/04
Submitted By:
Date:**

Contractor’s and Subcontractor’s Name and Address	Contractor ID Number	Contractor Fed. Tax ID Number	Contract Amount	Wage Decision Number	Wage Modification Number	Estimated		Crafts to be used
					Modification Date	Start Date	Completion Date	
(1)								
(2)								
(3)								
(4)								
(5)								



NAME OF CONTRACTOR <input type="checkbox"/>	OR SUBCONTRACTOR <input type="checkbox"/>	ADDRESS	OMB No.: 1215-0149 Expires: 12/31/2011
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PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION	PROJECT OR CONTRACT NO.
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(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT OR ST.	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS						(9) NET WAGES PAID FOR WEEK
														FICA	WITH- HOLDING TAX			OTHER	TOTAL DEDUCTIONS	
				HOURS WORKED EACH DAY																
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While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that it will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, ESA, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

Date _____

I, _____
(Name of Signatory Party) (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by _____ on the _____
(Contractor or Subcontractor)
_____ ; that during the payroll period commencing on the _____
(Building or Work)
_____ day of _____, _____, and ending the _____ day of _____, _____,
all persons employed on said project have been paid the full weekly wages earned, that no rebates have
been or will be made either directly or indirectly to or on behalf of said _____
_____ from the full
(Contractor or Subcontractor)
weekly wages earned by any person and that no deductions have been made either directly or indirectly
from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part
3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948,
63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are
correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the
applicable wage rates contained in any wage determination incorporated into the contract; that the
classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide
apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of
Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a
State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:
(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS
☐ — in addition to the basic hourly wage rates paid to each laborer or mechanic listed in
the above referenced payroll, payments of fringe benefits as listed in the contract
have been or will be made to appropriate programs for the benefit of such
employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ — Each laborer or mechanic listed in the above referenced payroll has been paid,
as indicated on the payroll, an amount not less than the sum of the applicable
basic hourly wage rate plus the amount of the required fringe benefits as listed
in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR
SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE
31 OF THE UNITED STATES CODE.

INSTRUCTIONS TO CONTRACTORS FOR PREPARATION OF PAYROLL FORM WH-347

1. Make certain all items in the heading are completed, including payroll number and project number. Also review reverse side of form to make certain proper block is checked and signature is affixed.
 2. Include each employee's full name, address, and social security number the first time such employee is listed on a payroll report. On subsequent reports, you may put the employee's name and social security number only. In the same box annotate one of the following codes for each employee:
 - MF (*minority female*)
 - WM (*white male*)
 - MM (*minority male*)
 3. For equipment operators and truck drivers, include a brief but clear description of the equipment the employee is operating. (This is to be shown on each payroll report.)
 4. Show the hours and wages actually worked on the project separate from the employee's total wages for the week. To illustrate: "John Doe" on this example worked on the project 18 hours and on other projects for the same contractor 22 hours. (18 x 6.45 = \$116.10 earned this project, \$239.30 gross amount earned all projects.)
 5. If voluntary deductions are being taken from an employee's wages, there must be a description/letter signed for the deduction. The letter must include the period of time the deduction will be made.
 6. When fringe benefits are sent to an approved program, they need not be included in the rate of pay. (See Example.) Cement Mason, John Johnson receives \$5.90 per hour, an additional \$0.66 is being sent to approved plan which is indicated by marking box (a) of paragraph (4) on the Statement of compliance. Cement Mason, Bill Thomas receives the required fringe benefits in cash. The total rate of pay shown must be equal to the wage rate for that classification plus fringe benefits.. \$5.90 (wage rate) plus \$0.66 (fringe) = \$6.56 and is indicated by marking box (b) of paragraph (4).
 7. When an individual performs work on the project in more than one classification within the same workweek, have that individual sign the payroll report or submit a copy of his time card with the payroll report, if a lower rate of pay per hour is applicable.
 8. When a valid subcontractor works with his employees on the job, he will be listed with
-

his employees on each payroll. However, he need only show his name as owner. (See Example: Harry Jamison (Owner).) If the subcontractor has no employees and performs alone on the project, he will submit weekly payrolls showing daily and total hours worked. When two or more working owners/operators (partners, co-owners, corporation officers, etc.) perform work on the project they must show daily and total hours worked. (Always show exact work classification.)

9. Submit an apprenticeship certification with the payroll report on which the apprentice is first reported. Indicate what step of apprenticeship and percentage of the journeyman wage he is receiving. (See Example.)
 10. It is the General Contractor's responsibility to submit correct payrolls. The General Contractor should therefore compare the wage rate shown on each Subcontractor's payroll with the required rate shown on the wage determination for this project. If there are underpayments, restitution should be required and the payroll report corrected prior to submitting it to the Contracting Agency.
 11. Payroll Form: Contractors are urged to use the Department of Labor (DOL) Form WH-347, Payroll. The text of the Weekly Statement with Respect to the Payment of Wages, which is required by regulations of the Secretary of Labor, appears on the reverse side of this optional payroll form. A contractor may use an appropriate payroll form of his own choice, but he must report all required items of information and he must attach a copy of the "weekly statement", using either DOL Form WH-348, Statement of Compliance, which contains the "weekly statement" and related instructions, or any form containing the "weekly statement" in the identical wording as contained in Forms WH-347 and WH-348.
 12. In the event any contractor sees he will be employing a trade for which a wage is not listed on the wage determination, it should be brought immediately to the attention of the Contracting Agency so that a wage rate determination for that trade can be made at the earliest possible date. A HUD Form 4230A should be completed, so that a rate can be established. (See Example.)
 13. Submission of Payrolls: Each contractor or subcontractor shall submit to the Contracting Agency a completed payroll for each workweek that work is done on the project. All payrolls are to be sequentially numbered, and final payrolls shall be identified accordingly. If no work is performed on the project during a given period, on the next performance payroll, state: "No work performed from pay period ending _____ through _____."
(date) (date)
-

**00FED
FEDERAL REQUIREMENTS**

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NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

EQUAL OPPORTUNITY CLAUSE FOR CONTRACTS UNDER \$10,000

Note: This clause must be included in all contracts and subcontracts \$10,000 and under.

During the performance of this contract, the Contractor agrees as follows:

- (1) The Contractor shall not discriminate against any employee or applicant for employment because of the race, color, religion, sex, or national origin. The Contractor shall take affirmative action to ensure that applicants for employment are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

- (2) The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by Contracting Officer setting forth the provisions of this nondiscrimination clause. The Contractor shall state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (3) Contractors shall incorporate foregoing requirements in all subcontracts.

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

EQUAL OPPORTUNITY CLAUSE FOR CONSTRUCTION OVER \$10,000

Note: This clause must be included in all construction contracts and subcontracts \$10,000 and over.

During the performance of this contract, the Contractor agrees as follows:

- (1) The Contractor shall not discriminate against any employee or applicant for employment because of the race, color, religion, sex, or national origin. The Contractor shall take affirmative action to ensure that applicants for employment are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

- (2) The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by Contracting Officer setting forth the provisions of this nondiscrimination clause. The Contractor shall state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which they have a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his or her books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- (6) In the event of the contractor's noncompliance with the discrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 504 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, that if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality, or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not

demonstrated eligibility for, government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

(33F.R. 7804, May 28, 1968, as amended at 34 FR 744, Jan. 17, 1969; 40 FR 14083, Mar. 28, 1975)

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (CONSTRUCTION OVER \$10,000)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted.
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin.
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race.
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent or the Pacific Islands).
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be

able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in geographical areas where they do not have a Federal or federally-assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the non working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the contractor during the training period, and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's

employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or woman sent by the contractor or when the contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligation.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions, including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and where reasonable, provide after school summer and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60.3.
- l. Conduct at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the EEO policy and the contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

- o. Document and maintain a record of all solicitations of offers for subcontractors from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- 8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more, or their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.
- 9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally, the contractor may be in violation of the Executive Order if a specific minority group of women is under utilized).
- 10. The contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex or national origin.
- 11. The contractor shall not enter into any subcontract with any person or firm debarred from government contracts pursuant to Executive Order 11246.
- 12. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The contractor, in fulfilling its obligations under these specifications shall implement affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws, which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
FEDERAL LABOR STANDARDS PROVISIONS

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been

communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who

is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

CERTIFICATION OF COMPLIANCE WITH AIR AND WATER ACTS

(Applicable to Federally assisted construction contracts and related subcontracts exceeding \$100,000)

Compliance with Air and Water Acts

During the performance of this Contract, the Contractor and all subcontractors shall comply with the requirements of the Clean Air Act, as amended, 42 USC 1857 et seq., the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq., and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended. In addition to the foregoing requirements, all nonexempt contractors and subcontractors shall furnish to the owner, the following:

- (1) A stipulation by the Contractor or subcontractors, that any facility to be utilized in the performance of any nonexempt contract or subcontract, is not listed on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 CFR 15.20.
- (2) Agreement by the Contractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 USC 1857c-8) and Section 308 of the Federal Water Pollution Control Act, as amended, (33 USC 1318) relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.
- (3) A stipulation that as a condition for the award of the contract, prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized, or to be utilized for the contract is under consideration to be listed under the EPA List of Violating Facilities.
- (4) Agreement by the Contractor that he will include, or cause to be included, the criteria and requirements in paragraph (1) through (4) of this section in every nonexempt subcontract and requiring that the Contractor will take such action as the Government may direct as a means of enforcing such provisions.

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

SPECIAL CONDITIONS PERTAINING TO HAZARDS SAFETY STANDARDS AND ACCIDENT PREVENTION

A. Lead-Based Paint Hazards

(Applicable to contracts or rehabilitation of residential structures)

The construction or rehabilitation of residential structures is subject to the HUD Lead-Based paint regulations, 24 CFR Part 35. The Contractor and Subcontractors shall comply with the provisions for the elimination of lead base paint hazards under sub-part B of said regulations. The Owner will be responsible for the inspections and certifications required under Section 35.14 (f) thereof.

B. Use of Explosives

When the use of explosives is necessary for the prosecution of the work, the Contractor shall observe all local, state and Federal laws in purchasing and handling explosives. The Contractor shall take all necessary precautions to protect completed work neighboring property, water lines, or other underground structures. Where there is danger to structures or property from blasting, the charges shall be reduced and the material shall be covered with suitable timber, steel or rope mats.

The Contractor shall notify all owners of public utility property of intention to use explosives close to such property, at least 8 hours before blasting is done. Any supervision or direction of use of explosives by the engineer, does not in any way reduce the responsibility of the Contractor or his Surety for damages that may be caused by such use.

C. Danger Signals and Safety Devices

The Contractor shall make all necessary precautions to guard against damages to property and injury to persons. He shall put up and maintain in good condition, sufficient red or warning lights at night suitable barricades and other devices necessary to protect the public. In case the Contractor fails or neglects to take such precautions, the Owner may have such lights and barricades installed and charge the cost of this work to the Contractor. Such action by the Owner does not relieve the Contractor of any liability incurred under these specifications or contract.

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

UNFAIR TRADE PRACTICES

Grantees or sub grantee recipients entering into contracts public construction, alteration, or repair of any public building or public works project subject to the prohibitions described in this Notice shall include the following provisions in all such contracts:

Restrictions on Public Buildings and Public Works Projects

(a) Definitions. “Component,” as used in this clause, means those articles, materials, and supplies incorporated directly into the product.

“Contractor or subcontractor of a foreign country,” as used in this clause, means any Contractor or subcontractor that is a citizen or national of a foreign country or is controlled directly or indirectly by citizens of nationals of a foreign country. A contractor or subcontractor shall be considered to be a citizen or national of a foreign country, or controlled directly or indirectly by citizens or nationals of a foreign country –

(1) If 50 percent or more of the Contractor or subcontractor is owned by a citizen or a national of the foreign country;

(2) If the title to 50 percent or more of the stock of the Contractor or subcontractor is held subject to trust or fiduciary obligation in favor of citizens or nationals of the foreign country;

(3) If 50 percent or more of the voting power in the Contractor or subcontractor is vested in or exercisable on behalf of a citizen or national of the foreign country;

(4) In the case of a partnership, if any general partner is a citizen of the foreign country;

(5) In the case of a corporation, if its president or other chief executive officer or the chairman of its board of directors is a citizen of the foreign country or the majority of any number of its directors necessary to constitute a quorum are citizens of the foreign country or the corporation is organized under the laws of the foreign country or any subdivision, territory, or possession thereof; or

(6) In the case of a contractor or subcontractor who is a joint venture, if any participant firm is a citizen or national of a foreign country or meets any of the criteria in subparagraphs (a) (1) through (5) of this clause.

“Product”, as used in this clause, means construction materials – i.e., articles, materials, and supplies brought to the construction site for incorporation into the public works project, including permanently affixed equipment, instruments, utilities, electronic or other devices, but not including vehicles or construction equipment. In determining the origin of a product, the grantee or subgrantee will consider a product as produced in a foreign country if it has been assembled or manufactured in the foreign country, or if the cost of the

components mined, produced, or manufactured in the foreign country exceed 50 percent of the cost of all its components.

(b) Restrictions. The Contractor shall not (1) knowingly enter into any subcontract under this contract with a subcontractor of a foreign country included on the list of countries that discriminate against U.S. firms published by the United States Trade Register (USTR) (see paragraph (c) of this clause), or (2) supply any product under this contract of a country included on the list of foreign countries that discriminate against U.S. firms published by the USTR.

(c) USTR List. The USTR published an initial list in the Federal Register on December 30, 1987 (53 FR 49244), which identified one country – Japan. The USTR can add other countries to the list, or remove countries from it, in accordance with section 109 (c) of Pub. L. 100-202.

(d) Certification. The Contractor may rely upon the certification of a prospective subcontractor that it is not a subcontractor of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR and that products supplied by such subcontractor for use on the Federal public works project under this contract are not products of a foreign country included on the list of foreign countries that discriminate against U.S. firms published by the USTR, unless such Contractor has knowledge that the certification is erroneous.

(e) Subcontracts. The Contractor shall incorporate this clause, modified only for the purpose of properly identifying the parties, in all subcontracts. This paragraph (e) shall also be incorporated in all subcontracts.

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

SAM.gov REGISTRATION

Contractors and sub-contractors need to have a DUNS number (obtained from Dun & Bradstreet: <http://www.sba.gov/content/getting-d-u-n-s-number>) and be registered in the US Government System for Award Management (SAM: <https://www.sam.gov>) for ease of verification they are not debarred from working on projects with federal funding. This is in addition to assuring they are properly licensed by the Nevada State Contractor's Board. Instructions regarding SAM.gov registration can be found in Section 00300 (Information Available to Bidders).

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

SECTION 3 CLAUSE

All Section 3 contracts exceeding \$200,000 shall include the following clause (referred to as the Section 3 Clause):

- A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Community Development Act of 1968, as amended, 12 U.S.C. 1701u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD- assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low-income or very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD regulations in 24 CFR part 135, which implement Section 3. As evidence by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the Part 135 Regulation.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this Section 3 Clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall being.
- D. The contractor agrees to include this Section 3 Clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 Clause upon finding that the subcontractor is in violation of the regulations in CFR Part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 135.
- E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulation of 24 CFR Part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR Part 135.

Noncompliance with HUD's regulations in 24 CFR Part 135 may result in sanctions, termination of this contract for the default, and debarment or suspension from future HUD assisted contracts.

NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

SECTION 3 PROVISIONS FOR CONTRACTS

I. PURPOSE

To ensure that employment and other economic opportunities generated by the Community Development Block Grant (CDBG) funds shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly those who reside in government-assisted housing, and to business concerns which provide economic opportunities to low- and very low-income persons.

II. APPLICABILITY

The requirements apply to contractors and subcontractors performing work on Section 3 covered project(s) for which the amount exceeds \$200,000.

III. DEFINITIONS

Applicant means any entity which makes an application for CDBG funds, and includes but is not limited to, any State, unit of local government, public housing agency, Indian housing authority, Indian tribe, or other public body, public or private nonprofit organization, private agency or institution, mortgagor, developer, limited dividend sponsor, builder, property manager, community housing development organization (CHDO), resident management corporation, resident council, or cooperative association.

Business concerns means a business entity formed in accordance with State law, and which is licensed under State, county, or municipal law to engage in the type of Business activity for which it was formed.

Contractor means any entity which contracts to perform work generated by the expenditure of Section 3 covered assistance or for work in connection with Section 3 covered project.

Employment opportunities generated by Section 3 covered assistance means all employment opportunities generated by the expenditure of Section 3 covered projects, including architectural, engineering, or related professional services required to prepare plans, drawings, specifications, or work write-ups; and jobs directly related to administrative support of these activities, e.g., construction manager, relocation specialist, payroll clerks, etc.

Housing and Community Development Assistance means any financial assistance made available through any grant, loan, loan guarantee, cooperative agreement, or contract.

New hires mean full-time employees for permanent, temporary or seasonal employment opportunities.

Section 3 business concern means a business concern, as defined in this section—

- (1) that is 51 percent or more owned by Section 3 residents; or
- (2) Whose permanent, full-time employees include persons, at least 30 percent of whom are currently Section 3 residents, or within three years of the date of first employment with the business concern were Section 3 residents; or
- (3) That provides evidence of a commitment to subcontract in excess of 25 percent of the dollar award of all subcontracts to be awarded to business concerns that meet the qualifications set forth in paragraphs (1) or (2) in this definition of “Section 3 Business Concern.”

Section 3 Clause means the contract provisions set forth in 135.38.

Section 3 covered activity means any activity, which is funded by CDBG.

Section 3 covered contract means a contract or subcontract involving work generated by a recipient or contractor. Section 3 covered contracts do not include procurements activities which involve contracts only for the purchase of materials.

Section 3 resident is an individual who resides in the county, which the Section 3 covered assistance is expended, and who is:

- (1) a public housing resident; or
- (2) *a low-income person*, as defined in Section 3(b)(2) of the 1937 Act (42 U.S.C. 1437a(b)(2)), means families (including single person) whose income do not exceed 80 per centum of the median income for the area; or
- (3) *a very low-income person*, as defined in Section 3(b)(2) of the 1937 Act (42 U.S.C. 1437a(b)(2)), means families (including single person) whose income do not exceed 50 per centum of the median income for the area.

A person seeking preference for providing Section 3 training and employment bears the responsibility of providing evidence (if requested) that the person is eligible for the preference.

Service area means the geographical area in which the persons benefiting from the Section 3 covered project reside. The service area shall not extend beyond the unit of general local government in which Section 3 covered assistance is expected.

Subcontractor means any entity (other than a person who is an employee of the contractor) which has a contract to undertake a portion of the contractor's obligation for the performance of the work generated by expenditure of Section 3 covered assistance, or arising in connection with Section 3 covered projects.

IV. NUMERICAL GOALS FOR MEETING THE GREATEST EXTENT FEASIBLE REQUIREMENTS:

- A. *General:* Contractors may demonstrate compliance with the "greatest extent feasible" requirement of Section 3 by meeting the numerical goals set forth in the section for providing training, employment, and contracting opportunities to Section 3 residents and Section 3 business concerns.
- B. The numerical goals established in this section represent minimum numerical targets.
- C. *Training and employment:* The numerical goals set forth in this section apply to the aggregate of new hires. Efforts to employ Section 3 residents, to the greatest extent feasible, should be made at all levels.
- D. *Contracts:* Each contractor and subcontractor may demonstrate compliance with the requirements of this part by committing to award to Section 3 business concerns:
 - (1) At least 10 percent of the total dollar amount of all Section 3 covered contracts for building trades work for maintenance, repair, modernization or development of public construction; and
 - (2) At least three percent of the total dollar amount of all Section 3 covered contracts.
- E. *Safe harbor and compliance determinations:* (1) In absence of evidence to the contrary, a contractor that meets the minimum numerical goals set forth in this section will be considered to have complied with the Section 3 preference requirements. (2) A contractor also can indicate other economic opportunities, such as those listed in Section V.

IV. PROVIDING OTHER ECONOMIC OPPORTUNITIES

- A. *General:* In Accordance with the finding of Congress, as stated in Section 3, that other economic opportunities offer an effective means of empowering low-income persons, a recipient is encouraged to undertake efforts to provide to low-income persons economic opportunities other

than training, employment, and contract awards, in connection with Section 3 covered assistance.

B. *Other training and employment related opportunities* include but need not to be limited to:

- (1) use of “upward mobility”, “bridge” and trainee positions to fill vacancies;
- (2) hiring Section 3 residents in management and maintenance positions within other developments; and
- (3) hiring Section 3 residents in part-time positions.

C. *Other business related economic opportunities:* (1) A recipient or contractor may provide economic opportunities to establish, stabilize, or expand Section 3 business concerns, including microenterprises. Such opportunities include but are not limited to:

- (a) the formation of Section 3 joint ventures;
- (b) financial support for affiliating with franchise development;
- (c) Use of labor only contracts for building trades;
- (d) Purchase of supplies and materials from housing authority resident-owned businesses;
- (e) Purchase of materials and supplies from public housing authority resident-owned businesses and use the procedures under 24 Part 963 regarding Housing Authority contracts.

A contractor may employ these methods directly or may provide incentives to non Section 3 businesses to utilize such methods to provide other economic opportunities to low-income persons.

D. *A Section 3 joint venture* means an association of business concerns, one of which qualifies as a Section 3 business concern, formed by written joint venture agreement to engage in and carry out a specified business venture for which purpose the business concerns combine their efforts, resources, and skills for joint profit, but not necessarily on a continuing or permanent basis for conducting business generally, and for which the Section 3 business concern.

- (1) Is responsible for a clearly defined portion of the work to be performed and holds management responsibilities in the joint venture; and
- (2) performs at least 25 percent of the work and is contractually entitled to compensation proportionate to its work.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

A. Defined Terms

- B. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer

has declined to address. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative.
33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals and the performance of related construction activities.
35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
40. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
45. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
47. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and

equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 *Terminology*

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:*
1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:*
1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:*
1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).
- E. *Furnish, Install, Perform, Provide:*
1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

- A. *Bonds*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
- C. *Evidence of Owner’s Insurance*: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Initial Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items

resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

3.02 *Reference Standards*

- A. Standards Specifications, Codes, Laws and Regulations
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

- A. *Reporting Discrepancies:*
 - 1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual

knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.

2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or

interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 2. abnormal weather conditions;
 3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
 4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.
- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.
- G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas:*

- 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
- 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects,

attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 - 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
 - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
 - 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 - 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
 2. is of such a nature as to require a change in the Drawings or Specifications; or
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Possible Price and Times Adjustments:*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,

- c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
- 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
- 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 - 1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
 - 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
 - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after

becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.

- C. *Engineer's Review:* Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments:*
 - 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and
 - d. Contractor gave the notice required in Paragraph 5.05.B.
 - 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
 - 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

5.06 *Hazardous Environmental Conditions at Site*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
 2. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in

question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- H. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.H shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the

Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 *Contractor's Insurance*

- A. *Workers' Compensation:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
 - 2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).

3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).
 4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
 2. claims for damages insured by reasonably available personal injury liability coverage.
 3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- C. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage:
 - a. Such insurance shall be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 3. Broad form property damage coverage.
 4. Severability of interest.
 5. Underground, explosion, and collapse coverage.
 6. Personal injury coverage.
 7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
 8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- D. *Automobile liability:* Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- E. *Umbrella or excess liability:* Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to

industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.

- F. *Contractor's pollution liability insurance*: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.
- G. *Additional insureds*: The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
- H. *Contractor's professional liability insurance*: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
- I. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:
 - 1. include at least the specific coverages provided in this Article.
 - 2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
 - 3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
 - 4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
 - 5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.

- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

6.04 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

- A. *Builder's Risk:* Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 - 1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
 - 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
 - 3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.

4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).
 5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
 6. extend to cover damage or loss to insured property while in transit.
 7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
 8. allow for the waiver of the insurer's subrogation rights, as set forth below.
 9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
 10. not include a co-insurance clause.
 11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
 12. include performance/hot testing and start-up.
 13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. *Notice of Cancellation or Change:* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles:* The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- E. *Additional Insurance:* If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. *Insurance of Other Property:* If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such

property item will be responsible for deciding whether to insure it, and if so in what amount.

6.06 *Waiver of Rights*

- A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
 - 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

6.07 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

7.01 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.02 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and

incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.

- B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.04 "Or Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) it has a proven record of performance and availability of responsive service; and
 - 4) it is not objectionable to Owner.
 - b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional

data about the proposed “or-equal” item. Engineer will be the sole judge of acceptability. No “or-equal” item will be ordered, furnished, installed, or utilized until Engineer’s review is complete and Engineer determines that the proposed item is an “or-equal”, which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.

- D. *Effect of Engineer’s Determination:* Neither approval nor denial of an “or-equal” request shall result in any change in Contract Price. The Engineer’s denial of an “or-equal” request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an “or-equal” item, Contractor may request that Engineer consider the proposed item as a substitute pursuant to Paragraph 7.05.

7.05 Substitutes

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
 - 1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
 - 2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
 - 3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - a. shall certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design,
 - 2) be similar in substance to that specified, and
 - 3) be suited to the same use as that specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and

- 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from that specified, and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.

- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.

- N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
- O. Nothing in the Contract Documents:
 - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
 - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.08 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

7.09 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.10 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.11 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.12 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
 - C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
 - D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
 - E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
 - F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
 - G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.13 *Safety Representative*

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or

exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

7.16 *Shop Drawings, Samples, and Other Submittals*

A. *Shop Drawing and Sample Submittal Requirements:*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
- 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
- 3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.

- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.

1. *Shop Drawings:*

- a. Contractor shall submit the number of copies required in the Specifications.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to

provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.

2. *Samples:*

- a. Contractor shall submit the number of Samples required in the Specifications.
- b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.

3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Other Submittals:* Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.

D. *Engineer's Review:*

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.

8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.

E. *Resubmittal Procedures:*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 1. observations by Engineer;
 2. recommendation by Engineer or payment by Owner of any progress or final payment;
 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. use or occupancy of the Work or any part thereof by Owner;
 5. any review and approval of a Shop Drawing or Sample submittal;
 6. the issuance of a notice of acceptability by Engineer;
 7. any inspection, test, or approval by others; or
 8. any correction of defective Work by Owner.

- D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
 - 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
 - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

7.19 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop

Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. an itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.

- D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during

or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.07 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

10.09 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
 - 1. *Change Orders:*
 - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
 - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
 - 2. *Work Change Directives:* A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an

adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

3. *Field Orders*: Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

11.04 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on

the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).

- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
1. a mutually acceptable fixed fee; or
 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.01.C.2.a and 11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
 - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under

the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.

1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
 2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
 3. *Binding Decision:* Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12 – CLAIMS

12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
 - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation:*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim

submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 Cost of the Work

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable

thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with

Paragraph 6.05), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee:* When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.

E. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

- B. *Cash Allowances*: Contractor agrees that:
 - 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance*: Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

13.03 *Unit Price Work*

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
 - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
 - 2. there is no corresponding adjustment with respect to any other item of Work; and
 - 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - 3. by manufacturers of equipment furnished under the Contract Documents;
 - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to

cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will

include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments:*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
 - 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
 - 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.
- C. *Review of Applications:*
 - 1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
 - 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

- a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
- a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
- a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
- a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or

- e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due:*

- 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner:*

- 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. the Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. the Contract Price has been reduced by Change Orders;
 - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - l. there are other items entitling Owner to a set off against the amount recommended.
- 2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount

remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
 - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

- A. *Application for Payment:*
 - 1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules,

guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all disputes that Contractor believes are unsettled; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

B. *Engineer's Review of Application and Acceptance:*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.

D. *Payment Becomes Due:* Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer

(less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such other adjacent areas;
 - 2. correct such defective Work;
 - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with

respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers,

architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a

Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this Article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
 - 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this Article, Owner or Contractor may:
 - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
 - 2. agree with the other party to submit the dispute to another dispute resolution process; or
 - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18 – MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 - 1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
 - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will

be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

++END OF GENERAL CONDITIONS++

00800 SUPPLEMENTAL CONDITIONS

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SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC® C-700 (2013 Edition) included herein. All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

SC-1.01 Defined Terms

SC-1.01.A.8. Add the following language at the end of the last sentence of paragraph 1.01.A.8:

The Change Order Form to be used on this Project is EJCDC C-941.

SC-1.01.A.48. Add the following language at the end of the last sentence of paragraph 1.01.A.48:

- A Work Change Directive cannot change Contract Price or Contract Times without a properly approved Change Order.

SC-1.01.A.49. Add the following new paragraph after paragraph 1.01.A.48:

- 49. Abnormal Weather Conditions-Condition of extreme or unusual weather for a given region, elevation, or season as determined by the Engineer. Extreme or unusual weather that is typical for a given region, elevation, or season should not be considered Abnormal Weather Conditions.

ARTICLE 2 – PRELIMINARY MATTERS

SC-2.02 Copies of Documents

SC-2.02.A. Modify first paragraph to replace "Owner shall furnish to Contractor four printed copies....." with "Owner shall furnish to Contractor one printed copy of the fully executed counterpart of the Agreement..." .

SC-2.03 Before Starting Construction

SC-2.03.A. Modify first paragraph to replace "Within 10 days after the Effective Date of the Contract....." with "At least 3 days prior to the Pre-Construction Conference..."

SC-2.05 Initial Acceptance of Schedules

SC-2.05.A. Delete paragraph in its entirety and replace with the following:

- A. Within 3 days following the Preconstruction Conference, Contractor shall make corrections and adjustments and resubmit the schedule to the Engineer.
 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on ENGINEER responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefore.
 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

SC-3.03 Reporting and Resolving Discrepancies

SC-3.03.B. Resolving Discrepancies

Add the following new paragraph immediately after 3.03.B.1.b:

- c. In case of conflict between codes, reference standards, drawings and conflicts that may arise with the Contract Documents themselves, the most stringent requirements shall govern.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

SC-4.01 Commencement of Contract Times; Notice to Proceed

SC-4.01.A. Delete the last sentence "In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the effective date of the Agreement".

SC-4.03 Reference Points

Add the following new paragraph immediately after 4.03.A.

- B. The Engineer will only provide the reference points (control points) shown on the Drawings, if any. All other surveying required, including construction staking, shall be the responsibility of the Contractor.

SC-4.05 Delays in Contractor's Progress

SC-4.05.C.2. Amend paragraph by replacing "abnormal weather conditions" with "Abnormal Weather Conditions".

SC-4.05.G. Modify paragraph to replace "...within 30 days of the commencement..." with "...within 7 days of the commencement...".

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

SC-5.01 Availability of Lands

SC-5.01.D. Add the following new paragraph immediately after paragraph 5.01.C

- D. The work for this project lies entirely within City of Fallon owned property or established easements or leases.

SC-5.02 Use of Site and Other Areas

SC-5.02.A.1. Add the following language to paragraph 5.02.A.1, immediately after (a) damage to the Site:

Including damage to any existing improvements;

SC-5.04 Possible Price and Times Adjustments

SC-5.04.D. Modify paragraph 4 to replace “...no later than 30 days after...” with “...no later than 7 days after...”.

SC-5.05 Underground Facilities

SC-5.05.A. Add the following new paragraph immediately after paragraph 5.05.A.2.d.

- e. Potholing sufficiently in advance of the Work to positively identify Underground Facilities so as to identify potential conflicts in advance so that they may be addressed in a timely fashion to avoid unnecessary construction delays.

SC-5.05.E. Modify paragraph 3 to replace “...no later than 30 days after...” with “...no later than 7 days after...”.

SC-5.06 Hazardous Environmental Conditions

SC 5.06. Delete Paragraphs 5.06.A and 5.06.B in their entirety and insert the following:

- A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to the Engineer or Owner.
- B. Contractor shall be responsible for controlling, containing, and duly removing all materials and appurtenances identified to be demolished and/or removed in the Contract Documents in conformance with all Local, State and Federally mandated disposal requirements at no additional cost to Owner.

SC 5.06.G Modify paragraph 5.06.G to replace “...within 30 days of...” with “...within 7 days of...”

SC-5.07 Migratory Bird Considerations

SC-5.07 Add section 5.07 Migratory Bird Considerations as follows:

- A. All vegetation/structure removal shall be conducted to avoid impacts to listed migratory birds (50 CFR 10.13), which are protected in Nevada by NAC 503.050, that may be actively utilizing vegetation/structures for nesting. When possible, vegetation/structure removal should not occur during avian breeding season (generally March 1 through July 31 for Northern Nevada; February 15 through August 31 for Southern Nevada). Raptors and owls may begin nesting as early as

January. If vegetation/structure removal shall occur during avian breeding season, nesting surveys shall be conducted by a biologist with experience in bird identification, general nesting behavior, nest and egg identification, and knowledge of habitat requirements for migratory birds. The survey shall be conducted a maximum of 7 days prior to land disturbance. Submit a copy of the biologist's survey report and the biologist's curriculum vitae to the NDOT Engineer, who will provide to the NDOT Environmental Services Division for review.

- B. If nesting sites are found within the project limits, NDOT Environmental Services Division must be contacted through the NDOT Engineer to determine a suitable buffer area around the nest site. The buffer area around the nest site will be flagged as an avoidance area. Disturbance shall not occur within the flagged avoidance area while the nest is occupied.
- C. Bird nests containing eggs and/or young shall not be disturbed until after the young have left the nest, including swallows nesting on structures, and bats using structures for roosting. The Contractor may take preventative measures prior to avian breeding season to ensure that birds do not create nests on structures.
- D. Be responsible for project delays ensuing from a failure to take into account bird nesting season and/or safeguard structures from bird nest construction. Approval shall be obtained prior to commencement of any contract-related activity resulting in the disturbance or removal of unoccupied nests. Do not commence vegetation/structure removal until written approval is obtained.

SC-5.08 Archeological Considerations

SC-5.08 Add section 5.08 Archeological Considerations as follows:

- A. Contractor is responsible for the preservation of archeological and paleontological objects, including all ruins, sites, buildings, artifacts, fossils, or other objects of antiquity encountered during construction. When such objects are encountered, immediately cease operations within 100 feet of the discovery and give notification to the NDOT Engineer that such objects exist. The NDOT Engineer will notify the Manager of NDOT's Cultural Resource Section. Reschedule construction operations to avoid the section until given written notification from the NDOT Engineer to proceed with operations.

SC-5.09 Bats

SC-5.09 Add section 5.09 Bats as follows:

- A. If bats are identified roosting within the construction area, contact the Nevada Department of Wildlife (NDOW) for proper guidance. An avoidance area with a 100' radius must be maintained until formal guidance is received. For information on how to contact NDOW go to: http://www.ndow.org/Our_Agency/Contact_Us/

SC-5.10 Noxious Weed Management

SC-5.10 Add section 5.09 Noxious Weed Management as follows:

- A. Contractor shall develop and follow a Noxious Weed Management Plan to prevent the establishment and spread of Nevada State listed noxious weeds per NRS 555 (available at http://agri.nv.gov/Plant/Noxious_Weeds/Noxious_Weeds_Home/).

Submit a copy of the Noxious Weed Management Plan to the NDOT Environmental Services Division, through the NDOT Engineer, for review and subsequent approval at the pre-construction conference.

The management plan shall include a physical survey of noxious weeds, mapping of existing noxious weed populations, appropriate eradication/control methods based on weed type, location, applicator certification, monitoring, and retreatment as necessary. Include methods for keeping equipment, personnel, staging areas, construction and excavation sites, and roadways clear of noxious weed plants and seeds. The plan shall also address the treatment of weeds in topsoil salvage material.

Equipment leaving noxious weed infested areas shall be cleaned prior to moving to areas free from noxious weeds. Equipment coming into or leaving the project area shall be cleaned and the cleaning area kept clear of plant material and contaminated dirt to prevent weed spread. The cleaning method shall be as approved.

SC-5.11 Fencing

SC-5.11 Add section 5.11 Fencing as follows:

- A. Any fencing administered by NDOT which is used to control access to the highway or interstate must be perpetuated. If livestock or 8' wildlife fencing is to be breached, maintain the functionality of the fence to prevent livestock or wildlife from entering NDOT's right-of-way and becoming a safety hazard. All staging areas must be at least 100' away from the terminus of a livestock or 8' wildlife fence as well as any escape features such as 1-way gates or escape ramps.

ARTICLE 6 – BONDS AND INSURANCE

SC-6.02 Insurance—General Provisions

SC-6.02. Add the following paragraph immediately after Paragraph 6.02.B:

Contractor may obtain worker's compensation insurance from an insurance company that has not been rated by A.M. Best, provided that such company (a) is domiciled in the state in which the project is located, (b) is certified or authorized as a worker's compensation insurance provider by the appropriate state agency, and (c) has been accepted to provide worker's compensation insurance for similar projects by the state within the last 12 months.

SC-6.03 Contractor's Liability Insurance

SC 6.03. Add the following new paragraph immediately after Paragraph 6.03.J:

K. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

1. Workers' Compensation, and related coverages under paragraphs 6.03.A.1 A.1 and A.2 of the General Conditions:
 - a. State: Statutory
 - b. Applicable Federal (e.g., Longshoreman's): Statutory
 - c. Employer's Liability \$1,000,000
2. Contractor's Commercial General Liability under paragraphs 6.03.B and 6.03.C of the General Conditions:
 - a. General Aggregate \$2,000,000
 - b. Products-Completed Operations Aggregate \$1,000,000
 - c. Personal and Advertising Injury \$1,000,000
 - d. Each Occurrence (Bodily Injury and Property Damage) \$1,000,000
 - e. Property Damage liability insurance will provide Explosion, Collapse, and Underground coverages where applicable.
3. The Contractual Liability coverage required by paragraph 6.03.C.2 of the General Conditions shall provide coverage for not less than the following amounts: :
 - a. Bodily Injury
 - Each Incident \$2,000,000
 - Annual Aggregate: \$2,000,000
 - a. Property Damage
 - Each Incident \$2,000,000
 - Annual Aggregate: \$2,000,000
4. Automobile Liability under paragraph 5.04.A.6 of the General Conditions:
 - a. Bodily Injury:
 - Each person \$1,000,000
 - Each Accident \$1,000,000
 - b. Property Damage:
 - Each Accident \$1,000,000
 - c. Combined Single Limit of \$1,000,000

- | | | |
|----|------------------------------|--------------------|
| 5. | Excess or Umbrella Liability | |
| a. | General Aggregate | <u>\$5,000,000</u> |
| b. | Each Occurrence | <u>\$5,000,000</u> |

ARTICLE 7 – CONTRACTOR’S RESPONSIBILITIES

SC-7.01 Supervision and Superintendence

SC-7.01.C. Add the following new subparagraphs immediately after Paragraph 7.01.B:

- C. The resident superintendent shall have at least 10 years of documented experience on similar Projects acting in a similar role. A college degree in engineering or related field will be considered as 5 years’ worth of experience.

SC-7.02 Labor; Working Hours

SC-7.02.B. Add the following new subparagraphs immediately after Paragraph 7.02.B:

1. Regular working hours are defined as occurring during the daylight hours five days per week (Mon-Fri) for 8 hrs. per day (40 hrs./week) or four days per week (Mon-Thurs) for 10 hours per day (40 hrs./week). The regular working hours established for CONTRACTOR shall be the same for all subcontractors.
2. At the CONTRACTOR option, the CONTRACTOR may work outside of the regular working hours (i.e. overtime work), the CONTRACTOR shall account for this in the total bid amount submitted to the CITY and shall not be allowed additional compensation for choosing the option of working outside the regular working hours.
3. No work shall be allowed in the NDOT right-of-way from 5:00 a.m. the working day before a holiday to 7:00 p.m. the working day after a holiday.
4. Work hours established per SC-7.02.B shall be applicable for the Contractor and all Subcontractors.
5. If State Prevailing is the wage decision, four 10-hour days must be agreed on by the laborer/mechanic prior to any work on the project. A simple agreement must be signed by the worker(s) that they understand they are working four 10-hour days. If Federal wages apply, worker(s) must be paid overtime if they work more than 40 hours in one week.

SC-7.02.C. Add the following new paragraph immediately after Paragraph 7.02.B:

- C. Contractor shall be responsible for the cost of any overtime pay or other expense incurred by the Owner for Engineer’s services (including those of the Resident Project Representative, if any), Owner's representative, and construction observation services, occasioned by the performance of Work on Saturday, Sunday, any legal holiday, or as overtime on any regular work day. If Contractor is responsible but does not pay, or if the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under Article 15.

SC-7.04 “Or Equals”

SC-7.04.A.1. Amend the last sentence of paragraph a.3 by striking out “and;” and adding a period at the end of Paragraph a.3.

SC-7.04.A.1. Delete Paragraph a.4 in its entirety and insert the following in its place:

{Deleted}

SC-7.06 Concerning Subcontractors, Suppliers and Others.

SC-7.06.A. Amend the paragraph 7.06.A by adding the following text to the end of the paragraph:

The Contractor may subcontract no more than 50% of the total cost of the Project without prior written approval of the Owner.

SC-7.06.B. Delete Paragraph 7.06.B in its entirety.

SC-7.06.E. Amend the second sentence of Paragraph 7.06.E by striking out “Owner may also require Contractor to retain specific replacements; provided, however, that”.

SC-7.06.F. Modify paragraph to replace “...within 30 days of...” with “...within 7 days of...”.

SC-7.12 Safety and Protection

SC-7.12.H. Add the following paragraph immediately following 7.12.G:

- H. Contractor shall take all reasonable means to minimize inconvenience to the public caused by dust, noise, diversion of storm water, or other nuisances under the Contractor’s control.
- I. The Contractor shall prepare a project specific Health and Safety Plan. The Health and Safety Plan shall contain as a minimum: identification of key personnel for the Project, job hazard analysis for specific work assignments, hazard/risk assessment, air monitoring procedures, general safe work practices, security measures, emergency response plans and worker training requirements.
- J. Contractor’s duties and responsibilities for safety and protection, including any necessary stabilization and shoring, shall be included in total price as presented in Bid Schedule at no additional cost to Owner.

ARTICLE 10 – ENGINEER’S STATUS DURING CONSTRUCTION

SC-10.03 Project Representative

SC-10.03.B. Add the following new subparagraphs immediately after Paragraph 10.03.A:

- B. The Resident Project Representative (RPR) may be the Engineer’s employee and will act as directed by and under the supervision of the Engineer and will confer with the Engineer regarding its actions. The Resident Project Representative dealings in matters pertaining to the on-site Work shall, in general, be only with the Engineer and the Contractor, and dealings with Subcontractors shall only be through or with the full knowledge of the Contractor. Written communication with the Engineer will be only through the RPR.

The Duties and Responsibilities of the RPR include the following:

1. Review the progress schedule of Shop Drawing submittals and schedule of values prepared by the Contractor and consult with the Engineer concerning their acceptability.
2. Attend preconstruction conference. Arrange a schedule of progress meetings and other job conference as required in consultation with the Engineer and notify those expected to attend in advance. Attend meetings and maintain and circulate copies of minutes thereof.
3. Serve as the Engineer's liaison with the Contractor, working principally through the Contractor's superintendent and assist said superintendent in understanding the intent of the Contract Document.
4. Receive Shop Drawings which are furnished at the Site by the Contractor.
5. Conduct on-site observations of the Work in progress to assist the Engineer in determining if the Work is proceeding in accordance with the Contract Documents.
6. Verify that the tests and maintenance instruction are conducted as required by the Contract Documents and in presence of the required personnel, and that the Contractor maintains adequate records thereof.
7. Transmit to the Contractor the Engineer's clarifications and interpretations of the Contract Documents.
8. Consider and evaluate the Contractor's suggestions for modifications in the Contract Documents and report them with recommendations to the Engineer.
9. Review applications for payments with the Contractor for compliance with the established procedure for their submittal and forward them with recommendations to the Engineer, noting particularly their relation to the work completed, and materials delivered at the site but not incorporated in the Work. During the course of the Work, verify that certificates and other data required to be assembled and furnished by the Contractor are applicable to the items actually installed.
10. Before the Engineer prepares a Notice of Completion, as applicable, submit to the Contractor a list of observed items requiring completion or correction.

11. Conduct final inspection in the company of the Engineer, the Owner, Funding Agencies and the Contractor, and prepare a punch list of items to be completed or corrected.
12. Verify that all items on the punch list have been completed or corrected and make recommendations to the Engineer concerning acceptance.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

SC-11.01 Amending or Supplementing Contract Documents

SC 11.01.A. Modify paragraph 2 to replace “...no later than 30 days after...” with “...no later than 7 days after...” and to replace “...no later than 60 days after...” with “...no later than 14 days after...”

SC-11.06 Change Proposals

SC-11.06.A. Modify paragraph 1 to replace “(but in no event later than 30 days)” with “(but in no event later than 7 days)”.

SC-11.09 Add the following new Section SC-11.09 following SC-11.08

SC-11.09 Changed Conditions

A. Differing site conditions.

1. During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.
2. Upon written notification, the Engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The Engineer will notify the Contractor of the determination whether or not an adjustment of the contract is warranted.
3. No contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.
4. No contract adjustment will be allowed under this clause for any effects caused on unchanged work.

B. Suspensions of work ordered by the Engineer.

1. If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry)

and the Contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the Contractor shall submit to the Engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.

2. Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the Engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The Contractor will be notified of the Engineer's determination whether or not an adjustment of the contract is warranted.
3. No contract adjustment will be allowed unless the Contractor has submitted the request for adjustment with the time prescribed.
4. No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

C. Significant changes in the character of work

1. The Engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the Contractor agrees to perform the work as altered.
2. If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the Contractor in such amount as the Engineer may determine to be fair and equitable.
3. If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.
4. The term "significant change" shall be construed to apply only to the following circumstances:
 - a. When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or
 - b. When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75

percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

ARTICLE 12 – CLAIMS

SC-12.01 Claims

SC-12.01.B. Modify paragraph to replace “(but in no event later than 30 days)...” with “...(but in no event later than 7 days)...” and replace “...within 30 days of the decision...” with “...within 7 days of the decision...”

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

SC-13.01 Cost of the Work

SC-13.01.B. Delete Paragraph 5.c in its entirety and insert the following in its place:

- c. Construction Equipment and Machinery:
 - 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - 2) Costs for equipment and machinery owned by Contractor will be paid at a rate shown for such equipment that is mutually acceptable to the Owner and the Contractor utilizing a rate book appropriate for the Project. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs. Costs will include the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, shall cease to accrue when the use thereof is no longer necessary for the changed Work. Equipment or machinery with a value of less than \$1,000 will be considered small tools.

SC-13.02 Allowances

SC-13.02. Delete paragraphs A, B, C, and D in their entirety.

SC-13.03 Unit Price Work

SC-13.03.E. Delete Paragraph 13.03.E in its entirety and insert the following in its place:

- E. Within 7 days of Engineers decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price:

1. if the extended price of a particular item of Unit Price Work amounts to 5 percent or more of the Contract Price (based on estimated quantities at the time of Contract formation) and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by Contractor differs by more than 25 percent from the estimated quantity of such item indicated in the Agreement; and
2. if there is no corresponding adjustment with respect to any other item of Work; and
3. if Contractor believes that Contractor has incurred additional expense as a result thereof, Contractor may submit a Change Proposal, or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, Owner may make a Claim, seeking an adjustment in the Contract Price.

Add the following new sections after paragraph 13.03

SC-13.04 Asphalt Escalation

- A. It is expected that contract work is scheduled for completion in the 2022 construction season. If due to unforeseen circumstances the project cannot be completed in the 2022 construction season, the contract shall be suspended by the City of Fallon and calendar days will not be charged to the contractor during the suspension period. There shall be no escalation clause in effect for this contract

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

SC-15.01 Progress Payments

SC-15.01.B. Amend the second sentence of paragraph 15.01.B.1 by striking out the following text;

“a bill of sale, invoice, or other.”

SC-15.01.B.3. Add the following language at the end of paragraph 15.01.B.3:

No Payments will be made that would deplete the retainage, place in escrow any funds that are required for retainage, or invest the retainage for the benefit of the Contractor.

SC-15.01.D.1. Delete paragraph in its entirety and replace with the following paragraph:

After presentation of the Application for Payment to Owner with Engineer’s recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor in accordance with NRS 338.515.

SC-15.02 Contractors Warranty of Title

SC-15.02.A. Amend paragraph 15.02.A by striking out the following text:

“no later than seven days after the time of payment by Owner” and insert “no later than the time of payment by Owner”.

SC-15.03 Substantial Completion

SC 15.03.B. Add the following new subparagraph to Paragraph 15.03.B:

1. If some or all of the Work has been determined not to be at a point of Substantial Completion and will require re-inspection or re-testing by Engineer, the cost of such re-inspection or re-testing, including the cost of time, travel and living expenses, shall be paid by Contractor to Owner. If Contractor does not pay, or the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under Article 15.

SC-15.06 Final Payment

SC-15.06.D. Delete paragraph in its entirety and replace with the following paragraph.

- D. Payment Becomes Due: Thirty five days after the Owner's filing of a Notice of Completion with the County Recorder and after presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineers recommendation, including but not limited to set offs for liquidated damages and set off allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

SC-16.02 Owner May Terminate for Cause

SC-16.02. Delete Section 16.02 entirely and replace with the following

SC-16.02 Termination for Breach

If the Contractor refuses or fails to prosecute the work or any separable part thereof with such diligence as will ensure its completion within the time specified herein, or any extensions thereof, or fails to complete such work within such time, or if the Contractor should be adjudged a bankrupt, or if he or she should make a general assignment for the benefit of his or her creditors, or if a receiver should be appointed on account of his or her insolvency, or if the Contractor files a petition to take advantage of any debtor's act, or if the Contractor or any of his or her subcontractors should violate any of the provisions of the contract, or if he or she should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials to complete the work in the time specified, or if he should persistently disregard laws, ordinance, or instruction given by the Owner or Engineer, the Owner may, without prejudice to any other right or remedy, serve written notice upon the Contractor and his or her surety of its intention to terminate the contract, and unless within ten days after the service of such notice such violations shall cease and satisfactory arrangements for the corrections thereof be made, the contract shall upon the expiration of said ten days cease and terminate. In such cases, the Contractor shall not be entitled to receive any further payment until the work is finished.

In the event of any such termination, the Owner shall immediately serve written notice thereof upon the surety and the Contractor, and the surety shall have the right to take over and perform the contract; provided, however, that if the surety within 15 days after the serving upon it of a notice of termination does not give the Owner written notice of its intention to take over and perform the contract or does not commence performance thereof within 30 days from the date of serving said notice, the Owner may take over the work and prosecute the same to completion by contract or by any

other method it may deem advisable for the account and at the expense of the Contractor, and his or her surety shall be liable to the Owner for any excess cost or other damage occasioned the Owner thereby, and in such event the Owner may, without liability for so doing, take possession of and utilize in completing the work such materials, appliances, plans, and other property belonging to the Contractor that may be on the site of the work and be necessary therefore. For any portion of such work that the Owner elects to complete by furnishing its own employees, materials, tools, and equipment, the Owner shall be compensated for such in accordance with the General Conditions.

If the unpaid balance of the contract price exceeds the direct and indirect costs of completing the work, including, but not limited to, all costs to Owner arising from professional services and attorney's fees and all costs generated to ensure or bond the work of substituted Contractors or subcontractors utilized to complete the work, such excess shall be paid by Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner promptly upon demand by Owner. Any portion of such difference not paid by Contractor or surety within 30 days following the mailing of a demand for such costs by Owner shall earn interest at the rate of 10% per annum or the maximum rate authorized by state law, whichever is lower.

The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the Owner.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

SC-17.01 Methods and Procedures

SC-17.01. Delete Section 17.01 entirely and replace with the following

SC-17.01 Formal Protest

- A. If the Contractor considers any work demanded is outside the requirements of the Contract, or if any instructions, ruling, or decision of the Engineer are considered to be unfair, the Contractor shall within ten (10) days after any such demand is made, or instruction, ruling or decision is given, file a written protest with the Engineer (with a copy to Owner), stating clearly and in detail the objections and the reasons therefore. Except for such protests as are made of record in the manner and within the time above stated, the Contractor shall be deemed to have waived and does hereby waive all claims for Extra Work, damages and extensions of time resulting from demands, instructions, ruling and decisions of the Engineer.

Upon receipt of any such protest from the Contractor, the Engineer shall review the demand, instructions, rulings, or decisions objected to and shall promptly advise the Contractor in writing of the final decision, which shall be binding, unless within ten (10) days thereafter the Contractor shall file with the Owner a formal protest against said final decision of the Engineer. The Owner shall consider and render a final decision of any such protest within thirty (30) days of receipt of same.

- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this Article, Owner or Contractor may:

1. elect in writing to invoke the alternate dispute resolution process provided for on the Agreement; or

2. agree with the other party to submit the dispute to another alternate dispute resolution process; or
3. if the dispute cannot be settled through negotiation and mediation, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction as described in the Agreement.

SC-17.02 Suits at Law

SC-17.02. Add the following new Section SC-17.02 following SC-17.01

SC-17.02 Suits at Law

In case any action at law or suit in equity may or shall be brought against the Owner or any of its officers, agents, or employees for or an account of the failure, omission, or neglect of the Contractor or subcontractors, employees, or agents, to do or perform any of the covenants, acts, matters, or things by this Contract undertaken to be done or performed by the Contractor or subcontractors, employees, or agents, or from any injuries done to property or persons and caused by the negligence or alleged negligence of the Contractor or his subcontractors, employees, or agents, or in any other manner arising out of the performance of this Contract, then the Contractor shall immediately assume and take charge of the defense of such actions or suits in like manner and to all intents and purposes as if said actions or suits have been brought directly against the Contractor, and the Contractor shall also indemnify and save harmless the Owner, its officers, agents and employees from any and all loss, costs or damage whatever arising out of such actions or suits, in like manner and to all intents and purposes, as if said actions or suits had been brought directly against the Contractor and the Contractor shall also indemnify and save harmless the Owner, its officers, agents and employees from any and all loss, cost or damage whatever brought as aforesaid.

The Contractor shall and does hereby assume all liability for and agrees to indemnify the Owner or its Engineers against any or all loss, costs, damages, and liability for any or by reason of any lien, claims or demands, either for materials purchased or for work performed by laborers, mechanics, and others, and from any damages, costs, actions, or causes of action and judgement arising from injuries sustained by mechanics, laborers, or other persons by reason of accidents or otherwise, whether caused by the carelessness or inefficiency or neglect of said Contractor, subcontractors, agents, employees, workers or otherwise.

ARTICLE 18 – MISCELLANEOUS

SC-18.08 Miscellaneous

Add the following new sections after paragraph 18.08:

SC-18.09 Certified Payrolls

- A. The Contractor shall prepare and submit Certified Payroll Reports weekly and provide all information as requested by Owner. The Contractor may utilize US Department of Labor Payroll Form WH-37, or a similar form that at a minimum contains all of the same information.

SC-18.10 Disruption of Service

- A. Contractor shall coordinate any utility shut downs with the utility company involved and the Owner and obtain their approval. The Contractor shall notify the utility and the Owner, in writing, at last 5 days in advance of any desired utility shut down.

SC-18.11 Interruption of Water Service

- A. Contractor shall interrupt service for no more than 8-hours during the interconnection of the new piping and the existing system, at each interconnection. Service shutdowns and boil water notices shall not extend over a weekend. Service disruptions shall be scheduled earlier in the week to avoid disruption of service over the weekend, service shutdowns shall only be scheduled Monday-Wednesday before 3:00 p.m.

Prior to waterline shutdowns, the Contractor shall notify the Owner and Inspector forty-eight hours in advance by written notice and provide twenty-four (24) hours written notice to each affected customer. Customer notices shall be approved in advance by Owner before distribution to customers. Contractor is required to keep a log of notices distributed, to be verified by Inspector.

The notice shall include the date and time the water services will be interrupted, the anticipated duration of the interruption, and the approximate time that the water service will be restored. The notice shall also include the name and phone number of the Contractor for any customer questions or concerns. The notice shall provide a brief description of the work to be performed and shall be personally delivered to each affected customer. If personal service of the notice cannot be provided to the affected customer, a notice shall be left at the front door and adjacent to the garage. The notice shall be placed in a manner where it cannot be affected by natural elements, e.g., the notice shall be affixed in such a way as to prevent its destruction by rain, wind or other elements. No shutdown shall begin prior to 8:00 a.m. or extend beyond 4:00 p.m., with the exception of required nighttime shutdowns for business customers.

Service shutdowns resulting from an unscheduled emergency due to actions of Contractor shall be addressed immediately regardless of weekday. Contractor shall reimburse City additional charges incurred due to such an emergency shutdown, including but not limited to: after hours lab analysis of sample (if available), labor charges for assistance from City personnel, use of City material and equipment.

Service exposed to freezing shall be adequately protected from freezing by the Contractor until the service is sufficiently backfilled to preclude freezing.

SC-18.12 Water for Construction

The Owner will supply non-potable construction water at no cost to the Contractor for use on this project from a location adjacent to the project site. Contractor shall ensure that all water obtained is for Construction of the City of Fallon Capital Improvement Project as presented in these Project Construction Documents.

The Owner will not be required to construct facilities for the Contractor's use.

SC-18.13 Abandonment of Existing Water and Sewer Mains

- A. The process of abandoning existing mains will require the existing lines to be fully drained. Removal and disposal of the drained water will be the Contractor's responsibility. The draining of the lines shall be conducted in such a manner as to preserve the surrounding improvements. Any damage to the surrounding improvements, including landscaping, shall be replaced in a like manner at the Contractor's expense. The waterlines to be abandoned shall be removed a distance from the new improvements so as not to interfere with the new construction or future maintenance by the Owner.
- B. The ends of the existing lines to be abandoned shall be cleaned and filled with a non-shrink grout for at least five feet into the main. The ends shall be fully closed by the application of the non-shrink grout for the purpose of keeping water and debris from entering the abandoned main in the future. Where applicable, a PVC cap, securely fastened to the end of the pipe may serve the same purpose, provided that the Engineer approves this process. All newly formed dead-end lines shall be end capped or flanged. Existing valves shall not be closed for the purpose of creating a dead end. Removal of existing valves to dead end lines taken out of service shall be required.
- C. The appropriate valves, fittings, pipe segments, etc., noted to be removed or required to be removed for the purpose of abandoning the existing line as intended with the Plans, shall become the Contractor's property and should be disposed of accordingly.

SC-18.14 Payments to Subcontractors

- A. Contractor shall maintain records and documents of payments to subcontractors for 3 years following the final inspection and acceptance of the contract. These records must be available for inspection upon request by any authorized representative of the City of Fallon and CDBG. This requirement also extends to any subcontractor.
- B. The Contractor shall pay each subcontractor for satisfactory performance of the subcontractor's contract no later than 30 days from the receipt of each payment the Contractor receives from the City of Fallon. The Contractor agrees further to return retainage payments to each subcontractor within 30 days after the subcontractor's work is satisfactorily completed in accordance with 49 CFR 26.29(b)(2). For the purposes of this Subsection, satisfactory completion is defined as the following conditions: (a) Satisfactory completion of the subcontractor's scope of work as described in the contract documents; (b) Receipt of payment for subcontractor's scope of work; (c) Release of claims from subcontractor's laborers, material and equipment suppliers, and lower tier subcontractors; (d) Payment, if applicable, of all union benefits or to employee trust accounts.
- C. The City of Fallon will also review payments to DBE subcontractors to ensure that the actual amount paid to subcontractors is consistent with the dollar amounts stated in the schedule of DBE participation.
- D. The City of Fallon will bring to the attention of the Community Development Block Grant (CDBG) and the U.S. Department of Transportation (USDOT) any false, fraudulent, or dishonest conduct by the Contractor in connection with the Federal Aid requirements and the DBE program, so that the USDOT can take the steps (e.g. referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General,

action under suspension and debarment or Program Fraud and Civil Penalties rules) provided in Subpart F of 49 CFR, Part 26.

- E. The City of Fallon will consider action under their legal authorities, including responsibility determinations in future contracts, for any false, fraudulent, or dishonest conduct by the Contractor in connection with the subcontractor information or payments.

SC-18.15 Wages and Conditions of Employment

- A. The provisions pertaining to wages and conditions of employment shall apply to all work performed (on the contract) by the Contractor with its own organization and with the assistance of workers under his or her immediate superintendence, and to all work performed on the contract by subcontractors.
- B. Minimum wage rates determined by the Labor Commissioner of the State of Nevada and by the Secretary of Labor, if applicable, are set forth in the contract documents. Contractor shall not pay wage rates less than the minimum wage rates.
- C. Forfeit, as a penalty to the City of Fallon, the amount stipulated in NRS Chapter 338 when workers are paid less than the minimum wage rate.
- D. The laborers shall have access to the pertinent minimum wage schedules at all times. Contractor shall provide and erect a weatherproof bulletin board at the job site and post all minimum wage schedules and other required information thereon. Construct the weatherproof bulletin board so that the material thereon is adequately protected from the elements.
- E. It is a condition of the contract, and shall be made a condition of each subcontract entered into pursuant to the contract, that the Contractor and any subcontractor shall not require any laborer or mechanic employed in performance of the contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to health or safety as determined under construction safety and health standards (Title 29, Code of Federal Regulations, Part 1926—published in the Federal Register on December 16, 1972, and subsequent revisions) promulgated by the United States Secretary of Labor, according to Section 107 of the Contract Work Hours and Safety Standards Act, (83 Stat. 96).
- F. The minimum wage rates apply to workers working upon the “site of the work.” The term “site of the work” is defined as follows:
- G. The “site of the work” is defined as the physical place or places where work called for in the contract is performed by either the Contractor or the Contractor’s agents. Material sources controlled by the City of Fallon and staging areas set up to construct portions of the work are considered to be the “site of the work.” Not included in the “site of the work” are permanent home offices, batch plant establishments, fabrication plants, and tool yards of an employer whose locations and continuance in operation are determined without regard to the work. In addition, fabrication plants, batch plants, borrow pits, job headquarters, tool yards, or other like locations of a commercial supplier or materialman which are established by a supplier of materials for the project before opening of bids are not included in the “site of the work.”
- H. The Contractor and subcontractors compliance with Title 29, subtitle A, 3.3, Code of Federal Regulations and NRS 338 will be required on this contract. These regulations require submittal of a tally of weekly payroll and statement of compliance with respect

to each employee engaged in work on the project. Submit these payrolls and statement of compliance to the City of Fallon.

- I. Contractor shall submit payrolls electronically to the City of Fallon. This requirement will apply to every lower-tier subcontractor and vendor required to provide certified payroll reports by NRS 338.010 to 338.090 inclusive.
- J. See the provisions and requirements of the following:
 - 1. Wages, Hours and Employment on Public Works—NRS Chapter 338.
 - 2. Nevada Industrial Insurance Act—NRS Chapter 616A. Furnish a certificate from the insurer as evidence of payment of all the premiums and percentages as required by the act, and furnish said certificate before any work is commenced.
 - 3. Unemployment Compensation Law—NRS Chapter 612.
 - 4. Highway Camp Sanitation—NRS 444.130, 444.200 and 444.210.
 - 5. Fair Labor Standards Act of 1938 (52 Stat. 1060).
 - 6. Work Hours Act of 1962.
 - 7. Any and all legislation, rules or regulations promulgated by the State of Nevada, or its agencies, covering any work performed by the Contractor.
 - 8. Fraudulent and Discriminatory Employment Practices—NRS Chapter 613.

++END OF SUPPLEMENTARY CONDITIONS++

PREVAILING WAGE RATES

TABLE OF CONTENTS

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NEVADA COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

FEDERAL MINIMUM HOURLY WAGE RATES (DAVIS-BACON)

Minimum wage rates for this project have been established by both the State of Nevada and the Federal Government. The higher wage rate for each job classification shall apply.

"General Decision Number: NV20220014 02/25/2022

Superseded General Decision Number: NV20210014

State: Nevada

Construction Type: Heavy
HEAVY CONSTRUCTION PROJECTS (including sewer / water
construction).

County: Churchill County in Nevada.

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	02/18/2022
2	02/25/2022

CARP1977-001 07/01/2021

	Rates	Fringes
CARPENTER (Including Form Work).....	\$ 42.28	23.23

ELEC0396-002 06/01/2016

	Rates	Fringes
LINE CONSTRUCTION (Groundman)....	\$ 22.71	13.31

ELEC1245-003 06/01/2020

	Rates	Fringes
LINE CONSTRUCTION (Lineman) Lineman.....	\$ 59.14	19.78

ENGI0003-016 07/01/2021

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 07.....	\$ 43.44	25.02
GROUP 08.....	\$ 44.03	25.02
GROUP 10.....	\$ 44.70	25.02
GROUP 10A.....	\$ 42.72	24.50
GROUP 11.....	\$ 45.13	25.02
GROUP 11A.....	\$ 46.77	25.02

GROUP 7: Screed/Screedman (except asphaltic or concrete paving); (Barber-Greene and similar) (asphaltic or concrete paving).

GROUP 8: Loader

GROUP 10: Gradesetter, Grade Checker

GROUP 10A: Power Shovels, Clamshells, Draglines, Cranes (up to and including one [1] cu. yd.); Grader/Blade (Finish Blade).

GROUP 11: Power Shovels, Clamshells, Draglines, Backhoes, Gradalls (over one [1] cu. yd. and up to and including seven [7] cu. yds. m.r.c.) (Assistant to Engineer required) (Two [2] Assistants to Engineer required on 120B, similar or larger).

GROUP 11A: Power Shovels, Clamshells, Draglines, Backhoes and Gradalls {over seven (7) cu. yds. m.r.c.) {Assistant to Engineer required; an additional Assistant to Engineer is required if the shovel or dragline is electrically powered).

ENGI0003-024 07/01/2021

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
(09) Mechanic and Backhoe		
Loader Combo.....	\$ 44.35	25.02

ENGI0012-014 10/01/2020

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
(Crane)		
GROUP 12.....	\$ 52.94	26.65
GROUP 16.....	\$ 54.36	26.65
GROUP 17.....	\$ 54.86	26.65
GROUP 19.....	\$ 56.89	26.65
GROUP 20.....	\$ 57.50	26.65
GROUP 21.....	\$ 58.11	26.65
GROUP 22.....	\$ 58.87	26.65
GROUP 23.....	\$ 59.33	26.65

GROUP 12: Crane Operator (up to including 40 ton capacity)

GROUP 16: Crane Operator (over 40 tons up to and including 79 tons)

GROUP 17: Crane Operator (Including 80 tons up to and including 150 tons)

GROUP 19: Crane Operator (over 150 tons up to and including 200 tons)

GROUP 20: Crane Operator (over 200 tons up to and including 250 tons)

GROUP 21: Crane Operator (over 250 tons up to and including 300 tons)

GROUP 22: Crane Operator (over 300 tons up to and including 350 tons)

GROUP 23: Crane Operator (over 350 tons)

IRON0416-002 10/01/2021

	Rates	Fringes
IRONWORKER, REINFORCING.....	\$ 43.30	34.30

IRON0433-002 10/01/2021

	Rates	Fringes
IRONWORKER, STRUCTURAL.....	\$ 43.30	34.30

LAB00169-027 10/01/2021

	Rates	Fringes
LABORER		
(1) Common or General.....	\$ 28.55	14.77
(3) Concrete Saw (Hand Held/Walk Behind); Mason Tender - Cement/Concrete;...	\$ 28.80	14.77
(4) Pipelayer.....	\$ 29.05	14.77

LAB00872-013 07/01/2021

	Rates	Fringes
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LABORER		
(1) Landscape.....	\$ 31.00	29.89
(2) Asphalt Raker, Shoveler, Spreader and Distributor.....	\$ 31.21	29.89

SUNV2014-013 09/08/2016

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 40.26	0.00
ELECTRICIAN.....	\$ 39.09	14.29
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 39.25	21.12
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 49.59	7.48
OPERATOR: Mechanic.....	\$ 32.97	17.65
OPERATOR: Roller.....	\$ 41.60	12.77
TRUCK DRIVER: Dump Truck.....	\$ 31.77	4.16
TRUCK DRIVER: Water Truck.....	\$ 16.64	4.16

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information

on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all

rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this

initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"

"General Decision Number: NV20220009 02/25/2022

Superseded General Decision Number: NV20210009

State: Nevada

Construction Type: Highway

EXCLUDES NEVADA TEST SITE (NTS), NATIONAL TEST AND TRAINING RANGE (NTTR) & TONOPAH TEST RANGE (TTR) HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Counties: Churchill, Lander, Lincoln and Mineral Counties in Nevada.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.
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If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract.
	. The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	02/18/2022
2	02/25/2022

ELEC0401-001 01/01/2022

	Rates	Fringes
ELECTRICIAN.....	\$ 42.50	20.95

ENGI0003-025 07/01/2018		

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Bobcat/Skid Steer/Skid		
Loader.....	\$ 35.46	24.80
Bulldozer.....	\$ 37.51	24.80
Grader/Blade.....	\$ 38.37	24.80
Paver (Asphalt, Aggregate and Concrete).....	\$ 36.92	24.80
Screed.....	\$ 36.92	24.80

ENGI0012-012 10/01/2020

	Rates	Fringes
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POWER EQUIPMENT OPERATOR

(12)

Backhoe/Excavator/Trackhoe...	\$ 51.14	26.65
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(6) Drill Operator.....	\$ 50.74	26.65
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IRON0416-001 10/01/2021

	Rates	Fringes
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IRONWORKER, REINFORCING.....	\$ 43.30	34.30
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LAB00169-006 10/01/2021

	Rates	Fringes
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LABORER

(1) Common or General;

Cones/ Barricades/ Barrels-

Setter/Mover/Sweeper.....	\$ 28.55	14.77
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(1A) Flagger.....	\$ 25.68	14.77
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(3) Asphalt Shoveler,

Spreader and Distributor;

Concrete Saw; Mason Tender-

Cement/Concrete.....	\$ 28.80	14.77
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(4) Asphalt Raker.....	\$ 29.05	14.77
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(5A) Highway/Parking Lot

Striping.....	\$ 31.30	14.77
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LAB00872-005 07/01/2021

	Rates	Fringes
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LABORER

(2) Jackhammer; Pipelayer...	\$ 31.31	29.89
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PLAS0797-001 10/01/2021

	Rates	Fringes
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CEMENT MASON/CONCRETE FINISHER...	\$ 34.50	12.45
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SUNV2017-008 10/01/2018

	Rates	Fringes
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FENCE ERECTOR (Cyclone Chain Fence).....	\$ 25.18	1.61
OPERATOR: Broom/Sweeper.....	\$ 44.14	6.86
OPERATOR: Loader.....	\$ 40.07	21.32
OPERATOR: Mechanic.....	\$ 44.75	6.86
OPERATOR: Roller.....	\$ 43.41	16.85
TRUCK DRIVER: Dump Truck.....	\$ 40.52	0.00
TRUCK DRIVER: Water Truck.....	\$ 45.05	0.00

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"

STATE OF NEVADA

STEVE SISOLAK
GOVERNOR

TERRY REYNOLDS
DIRECTOR

SHANNON M. CHAMBERS
LABOR COMMISSIONER



OFFICE OF THE LABOR COMMISSIONER
3300 WEST SAHARA AVENUE, SUITE 225
LAS VEGAS, NEVADA 89102
PHONE: (702) 486-2650
FAX (702) 486-2660

OFFICE OF THE LABOR COMMISSIONER
1818 COLLEGE PARKWAY, SUITE 102
CARSON CITY, NV 89706
PHONE: (775) 684-1890
FAX (775) 687-6409

2022 PREVAILING WAGE RATES NORTHERN NEVADA RURAL COUNTIES

(Carson City, Churchill, Douglas, Elko, Eureka, Humboldt, Lander, Lyon, Mineral, Pershing, Storey and White Pine)

DATE OF DETERMINATION: October 1, 2021

**APPLICABLE FOR PUBLIC WORKS PROJECTS OVER \$100,000 BID/AWARDED
OCTOBER 1, 2021 THROUGH SEPTEMBER 30, 2022**

Pursuant to Nevada Revised Statutes (NRS) section 338.030(9)(a), "If the contract for a public work: (a) Is to be awarded pursuant to a competitive bidding process, the prevailing wages in effect at the time of the opening of the bids for a contract for a public work must be paid until the completion or termination of the contract or for the 36 months immediately following the date on which the bids were opened, whichever is earlier." For contracts not awarded pursuant to competitive bidding, please see NRS section 338.030(9)(b). However, if a project exceeds 36 months new wage rates may apply pursuant to NRS section 338.030(9)(10). Prevailing Wage Rates may be adjusted based on Collective Bargaining Agreements (CBA's) and adjustments to those agreements. (See NRS 338.030)

PREVAILING WAGE DETERMINATIONS - NRS 338.030 subsection 7, the wages so determined must be:

- (a) Issued by the Labor Commissioner on October 1 of the odd-numbered year in which the survey was conducted and, except as otherwise provided in subsection 8, remain effective for 2 years after that date; and
- (b) Made available by the Labor Commissioner to any public body which awards a contract for any public work.

Senate Bill 243 passed during the 80th Nevada Legislative Session (2019) and set forth in NRS section 338.025, now requires the Labor Commissioner to calculate the Prevailing Wage Rates by region. NRS section 338.025 Prevailing wage regions. For the purpose of determining the prevailing rate of wages pursuant to NRS section 338.030, four prevailing wage regions are hereby established in this State as follows:

1. The Washoe Prevailing Wage Region consisting of Washoe County;
2. The Northern Rural Prevailing Wage Region consisting of Carson City and the counties of Churchill, Douglas, Elko, Eureka, Humboldt, Lander, Lyon, Mineral, Storey, Pershing and White Pine;
3. The Clark Prevailing Wage Region consisting of Clark County; and
4. The Southern Rural Prevailing Wage Region consisting of the counties of Esmeralda, Lincoln and Nye.

OBJECTIONS TO PREVAILING WAGE DETERMINATIONS – NRS section 338.030 subsection 2. Objections to the Prevailing Wage Determinations must be submitted within 30 days after the Prevailing Wage Determinations are issued.

Pursuant to NRS section 338.030 subsection 8, the Labor Commissioner will review the prevailing wage rates in each even-numbered year to determine if adjustments should be made.

As Amendments/Revisions are made to the wage rates, they will be posted on the website for each respective Region. Please review regularly for any Amendments/Revisions that are posted or contact our offices directly for further assistance.

Air Balance Technician	4
Alarm Installer	5
Boilermaker	6
Bricklayer	7
Carpenter	9
Cement Mason	10
Electrician – Communication Technician	11
Electrician - Lineman	13
Electrician – Neon Sign	15
Electrician - Wireman	16
Elevator Constructor	17
Fence Erector	19
Flagperson	20
Floorcoverer	21
Glazier	22
Highway Striper	23
Hod Carrier-Brick Mason	24
Hod Carrier – Plasterer Tender	25
Ironworker	27
Laborer	30
Lubrication And Service Engineer (Mobile And Grease Rack)	30
Mechanical Insulator	32
Millwright	33
Operating Engineer	35
Operating Engineer – Steel Fabricator & Erector	35
Operating Engineer – Piledriver	36
Painter	38
Piledriver (Non-Equipment)	40
Plasterer	42
Plumber/Pipefitter	43
Refrigeration	44
Roofer	45
Sheet Metal Worker	46
Soils and Material Tester	47
Sprinkler Fitter	47
Surveyor	47
Taper	48
Tile/Terrazzo Worker/Marble Mason Finisher	49
Tile/Terrazzo Worker/Marble Mason	50
Traffic Barrier Erector	52
Truck Driver	53
Well Driller	55
Group Classifications	
Labor Group Classifications	56
Operating Engineers	60

NRS section 338.010 subsection (25) “Wages” means:

- a) The basic hourly rate of pay; and
- b) The amount of pension, health and welfare, vacation and holiday pay, the cost of apprenticeship training or other similar programs or other bona fide fringe benefits which are a benefit to the worker.

NRS section 338.035 Bona Fide Fringe Benefits - Discharge of part of obligation of contractor or subcontractor engaged on public work to pay wages by making certain contributions in name of workman. “Bona fide fringe benefit” means a benefit in the form of a contribution that is made not less frequently than monthly to an independent third party pursuant to a fund, plan or program: (a) Which is established for the sole and exclusive benefit of a worker and his or her family and dependents; and (b) For which none of the assets will revert to, or otherwise be credited to, any contributing employer or sponsor of the fund, plan or program. The term includes, without limitation, benefits for a worker that are determined pursuant to a collective bargaining agreement and included in the determination of the prevailing wage by the Labor Commissioner pursuant to NRS section 338.030.

Please see NRS sections 338.010, 338.020, and 338.035 and Nevada Administrative Code (NAC) sections 338.0097 and 338.092 through 338.100 for further details on “Bona fide fringe benefits” and reporting requirements and exceptions.

Job Descriptions for Recognized Classes of Workers

Regarding job descriptions for public works projects, please take notice of the following:

1. The job description links have been redacted to include ONLY the scope of work for the craft.
2. Pursuant to NAC section 338.0095(1)(a) - A worker employed on a public work must be paid the applicable prevailing rate of wage for the type of work that the worker actually performs on the public work and in accordance with the recognized class of the worker.
3. The work description for a particular class is not intended to be jurisdictional in scope.
4. Any person who believes that a type of work is not classified, or who otherwise needs clarification pertaining to the recognized classes or job descriptions, shall contact the Labor Commissioner in writing for a determination of the applicable classification and pay rate for a particular type of work.
5. The job descriptions set forth or referenced herein supersede any, and all descriptions previously agreed upon by the Labor Commissioner in any settlement agreements or stipulations arising out of contested matters.
6. The following specific provisions, where applicable, shall prevail over any general provisions of the job descriptions:
 - Amendments to the prevailing wage determinations.
 - Group Classifications and/or descriptions recognized by the Labor Commissioner and included with wage determinations for a particular type of work in a particular county.

Zone Rates

The zone rate has been added to each applicable craft.

Premium Pay Premium pay for hours worked in excess of a shift of 8 hours or 12 hours, or such other time increment set forth in the Collective Bargaining Agreement or on a weekend or holiday.

Craft: AIR BALANCE TECHNICIAN (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Air Balance Technician Journeyman.....	68.43
Air Balance Technician-Foreman.....	72.45
Air Balance Technician-General Foreman.....	76.47

ADD ZONE RATE

In addition to AIR BALANCE rates add the applicable amounts per hour, calculated based on a road from the courthouse in Reno, Nevada:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 100 miles	\$5.00
Zone 3	Over 100 miles	\$10.00 the employee shall be provided reasonable lodging and meal expenses.

ADD PREMIUM PAY

All hourly rates are subject to Over Time (One and one half 1 ½) of the Regular rate:

1. For all hours worked over Eight (8) Hours in one day or shift.
2. For the first Eight (8) Hours work on Saturday.

All hourly rates are subject to Double Time of the Regular Rate:

1. For all hours worked over Ten (10) Hours in one day or shift.
2. For all hours worked over Eight (8) Hours on Saturday.
3. For all hours worked on Sunday, New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Nevada Day, Thanksgiving Day, Day after Thanksgiving, Day before Christmas, and Christmas Day.

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Nevada Day, Thanksgiving Day, Day after Thanksgiving, Day before Christmas, and Christmas Day

JOB DESCRIPTION: Excerpt from Sheet Metal Local 26 Collective Bargaining Agreement

(a) manufacture, fabrication, assembling, handling, erection, installation, dismantling, conditioning, adjustment, alteration, repairing and servicing of all ferrous or nonferrous metal work and all other materials used in lieu thereof and of all HVAC systems, air veyor systems, exhaust systems, and air-handling systems regardless of material used including the setting of all equipment and all reinforcements in connection therewith; (b) all lagging over insulation and all duct lining; (c) testing and balancing of all air-handling equipment and duct work; (d) the preparation of all shop and field sketches whether manually drawn or computer assisted used in fabrication and erection, including those taken from original architectural and engineering drawings or sketches; (e) metal roofing; and (f) all other work included in the jurisdictional claims of International Association of Sheet Metal, Air, Rail and Transportation Workers.

Craft: ALARM INSTALLER (Non-Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Alarm Installer.....32.77

JOB DESCRIPTION:

Includes but is not limited to:

1. Installing or testing electrical protective signaling systems used to provide notification of fire, burglary or other irregularities on the premises of the subscriber of the system;
2. Installing of wiring and signaling units;
3. Repairing electrical protective signaling systems
4. Starting up, programming and documenting systems;

Craft: BOILERMAKER (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Boilermaker.....	65.94
Boilermaker Foreman.....	65.94
Boilermaker General.....	65.94

ADD PREMIUM PAY

Premium pay for hours worked in excess of a shift of 8 hours or 12 hours or such other time increment set forth in the Collective Bargaining Agreement or on a weekend or holiday.

JOB DESCRIPTION:

Includes but is not limited to:

1. Constructing, assembling, maintaining and repairing stationary steam boilers and boiler house auxiliaries;
2. Aligning structures or plate sections to assemble boiler frame tanks or vats;
3. Assisting in the testing of assembled vessels, directing cleaning of boilers and boiler furnaces;
4. Inspecting and repairing boiler fittings, including, without limitation, safety valves, regulators, automatic-control mechanisms, water columns and auxiliary machines.

Craft: BRICKLAYER (Union Rate)
Prevailing wage rates include the base rate as well as all applicable fringes

Bricklayer Journeyman.....47.88
Bricklayer Foreman.....49.13

Zone 1	0 to 34 miles	\$0.00
Zone 2	35 to 75 miles	\$2.50
Zone 3	Over 75 miles	\$8.12

ADD PREMIUM PAY

Section A. Hours. The standard workday shall consist of eight (8) continuous hours of work between the hours of 5:30 a.m. and 4:30 p.m.,

Section B. Overtime All work in excess forty (40) hours during the established work week shall be paid at the rate of one and one half (1-1/2) times the hourly base wage rate in effect. Employees will be paid one and one-half (1-1/2) times the hourly wage rate for all hours worked over eight (8) in a single day, and double time (2x) after ten (10) hours in a single day.

1. Employees will be paid double time for hours worked on Union recognized Holidays.
2. Employees will be paid double time on Sundays.
3. Work performed on Saturday will be paid at one and one-half (1-1/2) times the regular wage rate, in accordance with Article XVII, Section D. Work performed on Saturdays in excess of eight (8) hours shall be paid at double the applicable hourly rate.

Section C.

1. The first shift shall be the regular day shift insofar as computing wage payments is concerned, and the first day shift shall work a regular eight-hour shift, with a one half-hour unpaid lunch period midway through the shift. The normal starting time for the first shift shall be between 5:30-10:00 a.m.
2. If two work shifts are established, the second shift shall consist of eight (8) hours of continuous work, with a one half-hour unpaid lunch period midway through the shift. Employees working on the second shift shall receive eight hours times the basic straight time rate plus an additional fifty cents (\$.50) per hour for each of those eight hours.
3. If three work shifts are established, the third shift shall consist of seven hours of continuous work, plus one half-hour unpaid lunch period midway through the shift. Employees working on the third shift shall receive the basic straight time rate plus three dollars and twenty-five cents (\$3.25) for each of those seven hours.
4. Time worked in excess of seven hours on the third shift shall be paid at the appropriate overtime rate.

RECOGNIZED HOLIDAYS

Holidays. The Employer agrees to recognize the following holidays: New Year's Day, Presidents' Day, Memorial Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day, Friday following Thanksgiving Day, and Christmas Day. Any holiday falling on a Sunday will be observed on the Monday following, and any holiday falling on a Saturday will be observed on the preceding Friday.

Job Descriptions Excerpt from Bricklayer and Allied Craftworkers Local Union No. 13 Collective Bargaining Agreement

1. BRICK MASONRY: Brick Masonry shall consist of, but not be limited to, the following work procedures and installation of the following materials: A. The laying of brick made from any material in, under or upon any structure or form of work where bricks are used, whether in the ground, or over its surface, or beneath water; in commercial and residential buildings, rolling mills, iron works, blast or smelter furnaces, lime or brick kilns; in mines or fortifications, and in all underground work, such as sewers, telegraph, electric and telephone conduits; including the installation of substitutes for brick such as all carbon materials, Karbate, Impervite or mixtures, all acid resistant materials, all terra cotta and porcelain materials, except where the foregoing materials are manufactured to substitute for tile as provided for under the category of Section 8, C, of this Code. B. All cutting of joints, pointing, cleaning and cutting of brick walls, fireproofing, blockarching, terra cotta cutting and setting, the laying and cutting of all tile plaster, mineral-wool, cork blocks and glass masonry, or any substitute for above materials, the laying of all pipe sewers or water mains and the filling of all joints on the same when such sewers or conduits are of any vitreous material, burnt clay or cement, or any substitute material used for the above purpose, the cutting, rubbing and grinding of all kinds of brick and the setting of all cut stone trimmings on brick buildings, and the preparation and erection of plastic, castables or any refractory materials. C. Cleaning, grouting, pointing, and other work necessary to achieve and complete the work under the foregoing categories; all waterproofing and black mastic waterproofing, silicone and/or substitutes sandwiched between masonry units in the interior of the wall. D. All terra cotta called unit tile in sizes over 6"x12" regardless of method of installation; all quarry tile over 9"x9"x1 1/4" in size; split brick or quarry tile or similar material if bedded and jointed with one operation. The bedding, jointing, and pointing of the above materials shall be the work of the craft installing same. E. All burnt clay extruded cellular products regardless of trade name or method of installation when used as a veneer on structures; all clay products known as terra cotta tile, unit tile, ceramic veneer and machine-made terra cotta and like materials in sizes larger than 6"x12", regardless of the method of installation. Where the preponderance of material to be installed is of the above size, and when material of lesser sizes is to be used in connection therewith, the bricklayers shall install all such materials. Brick paving comes under bricklayers' trade classification. F. The preparation, setup, calibration, operation, cleaning, and routine maintenance of any mechanical devices or robotics used to install masonry units and materials, or that otherwise assist the mason in performing any of the work described in Article II and Code 1 of the IU Constitution, as well as the preparation and ongoing maintenance of the work area to allow proper installation of masonry units and materials.

Craft: CARPENTER (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Carpenter.....	53.16
Carpenter Foreman.....	56.52
Carpenter General Foreman.....	60.22

ADD ZONE RATE

(Building and Heavy Highway and Dam Construction)

In addition to CARPENTER rates add the applicable amounts per hour, calculated from the Washoe County Courthouse:

Zone 1	0 to 75 miles	\$0.00 (Road miles from the Washoe County Courthouse)
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	Over 300 miles	\$6.00

ADD PREMIUM PAY

Any work performed over eight (8) hours per day and on Saturdays shall be compensated at time and one-half (1-1/2x) the appropriate hourly rate. All work performed on Sundays, holidays and over twelve (12) hours in one (1) day shall be compensated at two times (2x) the appropriate hourly rate. In the event a day's work is lost because of severe weather conditions or major mechanical breakdown, work may be performed on a voluntary basis on a Saturday at the straight time hourly rate for eight (8) hours provided the straight time.

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, 4th of July, Labor Day, Admission's Day, Thanksgiving Day, the Friday after Thanksgiving, Christmas Day hours worked in one (1) week do not exceed forty (40) hours.

JOB DESCRIPTION Excerpt from Southwest Regional Council of Carpenters and Affiliated Local Unions Master Labor Agreement

(1) All building construction, including but not limited to the construction, erection, alteration, repair, modification, demolition, addition, or improvement in whole or in part of any building structure. All rigging of Carpenters', and Piledrivers' materials.

(2) All heavy, highway and engineering construction, including but not limited to the construction, improvement, modification and demolition of all or any part of the streets, highways, bridges, viaducts, railroads, tunnels, airports, water supply, irrigation, flood control and draining systems, sewers and sanitation projects, dams, power houses, refineries, aqueducts, canals, river and harbor projects, wharves, docks, breakwaters, jetties, quarrying of breakwaters or rip rap stone or operations incidental to such heavy construction work and whether such work is above or below the water line level.

(3) The character of such work covered by this Agreement shall include but not be limited to all carpenter, concrete form work, shoring, drywall, metal stud, drywall finishing, plaster, scaffold, modular furniture, trade show work, insulation, acoustical, and lathing work on such construction.

(4) All interior and/or exterior wall finish work, including EIFS and other wet wall finish work.

Craft: CEMENT MASON (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Cement Mason.....	47.12
Cement Mason – Foreman.....	50.57

ADD ZONE RATE

In addition to CEMENT MASON rates add the applicable amounts per hour, calculated from the Reno Post Office, 50 So. Virginia St., Reno, Nevada:

Zone 1	0 to 90 miles	\$0.00
Zone 2	over 90 miles	\$6.00

ADD PREMIUM PAY

OVERTIME – Any worked performed over eight (8) hours per day shall be compensated at time and one half the hourly rate. All work performed after twelve (12) consecutive hours shall be paid at double the hourly rate. All worked performed on Saturdays shall be compensated at time and one half the hourly rate. All Sunday and Holiday work shall be paid for at double time.

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, Independence Day, Labor Day, Admissions Day, Thanksgiving Day and the following Friday following Thanksgiving Day, and Christmas

JOB DESCRIPTIONS

1. All building construction, including but not limited to the construction, erection, alteration, repair, modification, demolition, addition, or improvement in whole or in part of any building structure.
2. All heavy, highway and engineering construction, including but not limited to construction, improvement, modification, demolition, of all or any part of streets and highways (including sidewalks, curbs and gutters), bridges, viaducts, rail roads, tunnels, airports, water supply, irrigation, flood control and drainage systems, sewers and sanitation projects, dams, power houses, refineries, aqueducts, canals, river and harbor projects, wharves, docks, breakwaters, jetties, quarrying of breakwater or rip-rap stone, or operation incidental to such heavy construction work.
3. The work to be performed by Cement Masons shall include but not be limited to the following, when tools of the Cement Masons trade are used or required:

Setting screeds, screed pins, curb forms and curb and gutter forms, rodding, spreading and tamping concrete, hand application of curing compounds, applying topping (wet or dry) colors or grits; using Darby and push floats, hand troweling or hand floating; marking edging, brooming or brushing, using base cove or step tools; chipping, and stoning, patching or sacking; dry packing; spreading and finishing gypsum, operating mechanical finishers (concrete) such as Clary, Jackson, Bidwell Bridge Deck Paver or similar types; grinding machines; troweling machines, floating machines powered concrete saws; finishing of epoxy and resin materials, bush hammering and exposed finishes for architectural work.

Operation of skill saw, chain saw, Laser Screed, Laser Level, Curb and Slipform machines, Epoxy Type Injection pumps, stamps or other means of texturing, any new devices, which are beneficial to the construction of or with concrete or related products.

Craft: ELECTRICIAN COMMUNICATION TECHNICIAN (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Communication Installer.....	41.15
Communication Technician.....	45.78
Senior Technician	48.87

ADD ZONE RATE

In addition to Electrician Communication Tech rates add the applicable amounts per hour, calculated from the Washoe County Courthouse:

Zone 1	0 to 70 miles	\$0.00
Zone 2	70 to 90 miles	\$8.00
Zone 3	90 miles and over	\$10.00

ADD PREMIUM PAY

One and one half (1 ½) the regular straight time hourly rate shall be paid:

1. For all hours worked over eight (8) hours in one day or shift.
2. For the first eight (8) hours worked on Saturday

Double the regular straight time hourly rate shall be paid for all time:

1. For all hours worked over eight (10) hours in one day or shift.
2. For any hours worked on Sunday
3. For any hours worked on Holidays

Shift Rates

1. Swing shift to be paid at seventeen-point three (17.3) percent the regular straight time rate for hours between 4:30 p.m. and 1:00 a.m.
2. Graveyard shift to be paid at thirty-one-point four (33.4) percent the regular straight time rate for hours between 12:30 a.m. and 9:00 a.m.
3. Shifts are established for at least five (5) consecutive days or double the regular straight time rate shall be paid.

****Note – Double the straight time rate is the max rate paid. (No pyramiding of overtime rates)**

JOB DESCRIPTION:

The work covered by this Agreement shall include the installation testing, service and maintenance, of the following systems which utilize the transmission and/or transference of voice, sound, vision and digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call system, radio page, school intercom and sound, burglar alarms and low voltage master clock systems.

A. SOUND AND VOICE TRANSMISSION/TRANSFERENCE SYSTEMS 1. Background-foreground music 2. Intercom and telephone interconnect systems 3. Telephone systems 4. Nurse call systems 5. Radio page systems 6. School intercom and sound systems 7. Burglar alarm systems 8. Low-voltage master clock systems 9. Multi-media/multiplex systems 10. Sound and musical entertainment systems 11. RF Systems 12. Antennas and Wave Guide

B. FIRE ALARM SYSTEMS * 1. Installation, wire pulling and testing

C. Television and Video Systems 1. Television monitoring and surveillance systems 2. Video security systems 3. Video entertainment systems 4. Video educational systems 5. Microwave transmission systems 6. CATV and CCTV

D. Security Systems 1. Perimeter security systems 2. Vibration sensor systems 3. Card access systems 4. Access control systems 5. Sonar/Infrared monitoring equipment

E. COMMUNICATION SYSTEMS THAT TRANSMIT OR RECEIVE INFORMATION AND/OR CONTROL SYSTEMS THAT ARE INTRINSIC TO THE ABOVE LISTED SYSTEMS (IN THE SCOPE) 1. SCADA (Supervisory Control and Data Acquisition) 2. PCM (Pulse Code Modulation) 3. Inventory Control Systems 4. Digital Data Systems 5. Broadband and Baseband and Carriers 6. Point of Sale Systems 4 7. VSAT Data Systems 8. Data Communication Systems 9. RF and Remote-Control Systems 10. Fiber Optic Data Systems

Craft: ELECTRICIAN LINEMAN/GROUNDMAN/HEAVY EQUIPMENT OPERATOR
(Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Electrician-Groundman.....	56.09
Lineman-Journeyman.....	81.13
Lineman-Foreman.....	87.80
Lineman-General Foreman.....	94.54
Lineman-Equipment Man.....	67.81

ADD ZONE RATE

Electrician Lineman/Groundman/Heavy Equipment Operator, rates, add the applicable amounts per Day, Road Miles from the Employee's Residence to the Reporting Location:

ADD PREMIUM PAY

Premium pay for hours worked in excess of a shift of 8 hours or 12 hours or such other time increment set forth in the Collective Bargaining Agreement or on a weekend or holiday.

RECOGNIZED HOLIDAYS

New Year's Day, Martin Luther King Holiday, President's Day, Memorial Day, Independence Day, Labor Day, Nevada Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION:

Outside, overhead and underground construction and maintenance work on electrical transmission lines, switch yards, substations and distribution systems which shall include:

1. Pole line work (whether built of wood, metal or other material): the digging and back-filling of holes for poles or anchors (by hand or mechanical equipment); the loading or unloading, handling, sorting and moving of materials; the assembly or erection of all materials including the guying, stringing of conductors and fiber optics or other work necessary on through to the ultimate completion of such pole work.

2. Steel or metal structures used for the purpose of carrying electrical wire, conductors, or equipment (this includes transmission towers, outdoor substations, switch racks, or similar electrical structures); the moving of men, tools or equipment; the loading or unloading, handling, sorting and moving of materials; the assembly and erection of all materials used on the job site, including the assembly of the grillage and foundations, on through to the ultimate completion of such structures. Work covered shall include the grounding of all such structures except the bonding of stub-angle to rebar cage; the stringing and installation of wires, cables and insulators or other electrical equipment suspended from structure; also the handling and placing of transformers or O.C.B.'s and other related electrical equipment.

The moving of men, tools or equipment; the loading or unloading, handling, sorting and moving of materials; the assembly of all electrical materials on race-ways such as ducts, shall be performed by workmen under the Agreement. This shall also include CIC (cable in conduit), CC (coillable conduit), the placing of fish wire, the pulling of cables or wires through such race-ways, installing and making up of termination and the splicing of such conductors.

Street lighting systems where such work properly comes under the outside jurisdiction shall be handled in the same manner as pole line construction.

Installing and maintaining the catenary and trolley work and bonding of rails shall be handled in the same manner as pole line, and steel construction.

In connection with all of the above items, it is understood the scope of this Agreement shall include not only new installation work but shall also govern the repair, maintenance or dismantling of such structures, lines or equipment; the handling and operating of all equipment used to transport men, tools and/or materials on the job site as well as the equipment used to move, raise or place materials used in the Outside Branch of the Electrical Industry shall be performed by workmen under this Agreement unless otherwise excluded herein.

Craft: ELECTRICIAN – NEON SIGN
(Non-Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Electrician Neon Sign Journeyman.....35.92

ELECTRICIAN-NEON SIGN, includes but is not limited to:

- 1. Installing, servicing and repairing plastic, neon and illuminated signs;
- 2. Ascending ladders or operating hydraulic or electric hoist to install, service, or examine sign to determine cause of malfunction;
- 3. Wiring, rewiring or removing defective parts and installing new parts using electrician's tools;
- 4. Removing sign or part of sign for repairs, such as structural fabrication, scroll repair, or transformer repair;

Craft: ELECTRICIAN WIREMAN (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Wireman.....	63.45
Wireman-Cable Splicer.....	67.82
Wireman Foreman.....	67.82
Wireman General Foreman.....	72.20

ADD ZONE RATE

In addition to ELECTRICIAN-Wireman, rates, add the applicable amounts per hour, calculated from Washoe County Courthouse, Reno Nevada:

Zone 1	0 to 70 miles	\$0.00
Zone 2	70 to 90 miles	\$8.00
Zone 3	90 miles and over	\$10.00

ADD PREMIUM PAY

Premium pay for hours worked in excess of a shift of 8 hours or 12 hours or such other time increment One and one half (1 ½) the regular straight time hourly rate shall be paid:

1. For all hours worked over eight (8) hours in one day or shift.
2. For the first eight (8) hours worked on Saturday

Double the regular straight time hourly rate shall be paid for all time:

3. For all hours worked over ten (10) hours in one day or shift.
4. For any hours worked on Sunday
5. For any hours worked on Holidays

Shift Rates

1. Swing shift to be paid at seventeen-point three (17.3) percent the regular straight time rate for hours between 4:30 p.m. and 1:00 a.m.
2. Graveyard shift to be paid at thirty-one-point four (33.4) percent the regular straight time rate for hours between 12:30 a.m. and 9:00 a.m.
3. Shifts are established for at least five (5) consecutive days or double the regular straight time rate shall be paid.

****Note – Double the straight time rate is the max rate paid. (No pyramiding of overtime rates)**

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, Independence Day, Labor Day, Admission Day, Veteran's Day, Thanksgiving Day, Friday following Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from Agreement between NECA and Local Union 401, IBEW

All electrical construction, installation, or erection work including fabrication or prefabrication of boxes, brackets, bends and nipples and all electrical maintenance thereon including the final running tests. This shall include the installation and maintenance of temporary wiring and the installation of all electrical lighting, heat and power equipment, installation of all raceway systems, including underground conduits and all supports, underground utility conduits, photovoltaic power generation systems, wind power generation systems and geothermal power generating systems. Further all salvage of electrical work shall be included.

Craft: ELEVATOR CONSTRUCTOR (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Elevator Constructor-Journeyman Mechanic.....	113.70
Elevator Constructor-Journeyman Mechanic In Charge.....	123.43

ADD PREMIUM PAY

Work performed on Construction Work on Saturdays, Sundays and before and after 30 the regular working day on Monday to Friday, inclusive, shall be classed as overtime, and paid for at double the rate of single time.

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, Independence Day, Labor Day, Nevada Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from Agreement of International Union of Elevator Constructors

The handling and unloading of all equipment coming under the jurisdiction of the Elevator Constructor, from the time such equipment arrives at or near the building site, shall be handled and unloaded by the Elevator Constructors. Mechanical equipment such as a forklift or truck mounted swing boom may be used by the Elevator Constructors. A derrick, crane or material hoist can be used under the supervision of Elevator Constructors to handle and unload the heavy material described in Par. 5(a). Where unusual conditions are expected to exist prior to delivery of equipment at or near the building site in regard to handling and unloading of equipment in the primary or secondary jurisdiction of the local union, the Company shall contact the Local's Business Representative to make appropriate arrangements for the handling and unloading of such equipment. In areas outside the jurisdiction of the local union, the Company shall contact the Regional Director.

(b) The erecting and assembling of all elevator equipment to wit: electric, hydraulic, steam, belt, dumbwaiters, residence elevators, parking garage elevators (such as Bowser, Pigeon Hole, or similar types of elevators), shuttles, compressed air and handpower, automatic people movers, monorails, airport shuttles and like-named devices used in the transportation of people for short distances of travel (less than 5 miles), as well as vertical reciprocating conveyor systems.

(c) It is understood and agreed that the preassembly of all escalators, moving stairways and link belt carriers that may be done in the factory shall include the following:

1. Truss or truss sections with tracks, drive units, machines, handrail drive sheaves, drive chains, skirts on the incline sections but not curved sections, step chains and steps installed and permanently aligned.
2. Balustrade brackets may be shipped attached but not aligned.
3. Setting of all controllers and all wiring and conduit from the controller.

All other work on escalators, moving stairways and link belt carriers shall be performed in the field before or after the truss or truss sections are joined and/or hoisted and placed in permanent position. This includes any and all work not done in the factory. The erecting and assembly of all theater stage and curtain elevator equipment and guides and rigging thereto, organ consoles and orchestra elevators

- (d) All wiring, conduit, and raceways from main line feeder terminals on the controller to other elevator apparatus and operating circuits. Controllers are not to be shipped from the factory with extended wiring attached thereto.
- (e) The erecting of all guide rails.
- (f) The installation of all grating under the control of the Company. The installation of all counterweight screens, overhead work, either wood or iron, and all material used for mounting of elevator apparatus in machine room, overhead or below.
- (g) The drilling of overhead beams for attaching machines, sheaves, kick angles, and all other elevator equipment.
- (h) The setting of all templates.
- (i) All foundations, either of wood or metal, that should take the place of masonry.
- (j) The assembly of all cabs complete.
- (k) The installation of all indicators.
- (l) The erecting of all electrical or mechanical automatic or semi-automatic gates complete.
- (m) The hanging of all automatic or semi-automatic elevator hoistway doors, together with the installation of hangers and tracks.
- (n) The installation of all devices for opening and closing, and locking of elevator car and hoistway doors and gates.
- (o) The drilling of doors for mounting of closing devices.
- (p) The drilling of angle supports for mounting of closing devices except one template hole.
- (q) The drilling of sills for sill trips.
- (r) The operating of temporary cars.
- (s) The setting of all elevator pressure open or pit tanks.
- (t) The setting of hydraulic power units (power units include: motor, pump, drive valve system, internal piping, muffler, internal wiring, controller and tank). Where power units arrive in parts, they shall be assembled at the job site. The wiring and piping to and between multiple hydraulic power units shall be performed at the job site.
- (u) All air cushions with the exception of those built of brick or those put together with hot rivets.
- (v) Landing door entrances.

Craft: FENCE ERECTOR (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Fence Erector.....43.98

ADD ZONE RATE

In addition to FENCE ERECTOR rates add the applicable amounts per hour, calculated based on a road miles from either the Carson City Courthouse or the Washoe County Courthouse:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	300 miles or over	\$6.00

ADD PREMIUM PAY

One and one half (1 ½) the regular straight time hourly rate shall be paid:

1. For all hours worked over eight (8) hours in one day or shift.
2. For any hours worked on Saturday from midnight to midnight.

Double the regular straight time hourly rate shall be paid for all time:

1. For all hours worked over twelve (12) hours in one day or shift.
2. For any hours worked on Sunday from midnight to midnight.
3. For any hours worked on holidays from midnight to midnight.

RECOGNIZED HOLIDAYS

If any of these holidays fall on Sunday, the Monday following shall be considered a Holiday.

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION:

Includes but is not limited to:

1. Erecting or repairing chain link, wooden, tortoise, wire/wire mesh, or temporary fencing;
2. Mixing and pouring concrete around bases of posts and tamping soil into post hole to embed post;
3. Digging post holes with a spade, post hole digger or power-driven auger;
4. Aligning posts through the use of lines or by sighting;
5. Verifying vertical alignment of posts with a plumb bob or spirit level;

Craft: FLAG PERSON (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Flag Person.....40.86

ADD ZONE RATE

In addition to FLAG PERSON rates add the applicable amounts per hour, calculated based on a road miles from either the Carson City Courthouse or the Washoe County Courthouse:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	300 miles or over	\$6.00

ADD PREMIUM PAY

One and one half (1 ½) the regular straight time hourly rate shall be paid:

1. For all hours worked over eight (8) hours in one day or shift.
2. For any hours worked on Saturday from midnight to midnight.

Double the regular straight time hourly rate shall be paid for all time:

1. For all hours worked over twelve (12) hours in one day or shift.
2. For any hours worked on Sunday from midnight to midnight.
3. For any hours worked on holidays from midnight to midnight.

RECOGNIZED HOLIDAYS

If any of these holidays fall on Sunday, the Monday following shall be considered a Holiday.

New Year's Day, Memorial Day, 4th of July, Labor Day, Admission Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day

JOB DESCRIPTION

FLAG PERSON, includes but is not limited to:

1. Directing movement of vehicular traffic through construction projects;
2. Distributing traffic control signs and markers along site in designated pattern;
3. Informing drivers of detour routes through construction sites;

Craft: FLOOR COVERER (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Floor Coverer Journeyman.....	49.19
Floor Coverer Foreman.....	51.46

ADD PREMIUM PAY

Shift work

1. \$2.00 per hour will be added to the taxable net wage to shift schedule of hours worked between 6:00 p.m. and 6:00 a.m.

One and one half (1 ½) time -shall be calculated using one (1) hour of the taxable net wage and one half (1/2) the base wage, to be paid for all time:

1. For all hours worked over ten (10) hours in one day or shift.
2. For any hours worked on Saturday from midnight to midnight

Double time -shall be calculated using one (1) hour of the taxable net wage and one (1) of the base wage, to be paid for all time:

1. For any hours worked on Sunday from midnight to midnight
2. For any hours worked on holidays from midnight to midnight

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, Independence Day, Labor Day, Admissions Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from Agreement between Painters and Allied Trades DC 16 and Independent Flooring Contractors of No Nevada

Measuring, cutting, fabricating, fitting, installing to be cemented, tacked or otherwise applied to its base wherever it may be, all materials whether used either as a decorative covering or as an acoustical appliance such as carpets of all types and designs, wall carpets, sheet rubber, sheet vinyl, cork carpet, rubber tile, asphalt tile, tile, cork tile, linoleum tile, mastic in sheets or the tile from vinyl tile, interlocking tile, laminate flooring, engineered wood, hardwood, composition in sheet or tile form and all derivatives of above; the fittings of all devices for the attachment of the above materials and the fitting of all decorative or protective trim to and adjoining the above materials which shall include the drilling and plugging of holes and attaching of strips, slats, nosing, etc. on any base where the above materials are to be installed, or applied, such as drilling, plugging, slating, and slating for installing or fastening of carpet, the installing of all nosing, cap strips, corner beads and edging of any material and the preparatory work of the craft for all of the aforesaid. Also, the cleaning of rugs, carpets, and drapery hanging, make-up and the installation of drapes, the spraying and/or rolling of adhesives as required for double stick installation and carpet tiles.

Craft: GLAZIER (Non-Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Glazier Journeyman.....25.11

JOB DESCRIPTION:

Includes but is not limited to:

1. Installing, setting, cutting, preparing, or removal of glass, or materials used in lieu thereof, including, without limitation, in windows, doorways, showers, bathtubs, skylights and display cases;
2. Installing glass on surfaces, including, without limitation, fronts of buildings, interior walls and ceilings;
3. Installing pre-assembled framework for windows and doors designed to be fitted with glass panels, including stained glass windows by using hand tools;
4. Loading and arranging of glass on trucks at the site of the public work;

Craft: Highway Striper (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Highway Striper Journeyman.....	46.48
Highway Striper Foreman.....	46.98

ADD ZONE RATE

In addition to HIGHWAY STRIPER add the applicable amounts per hour, calculated based on a road miles from either the Carson City Courthouse or the Washoe County Courthouse:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	300 miles or over	\$6.00

ADD PREMIUM PAY

One and one half (1 ½) the regular straight time hourly rate shall be paid:

1. For all hours worked over eight (8) hours in one day or shift.
2. For any hours worked on Saturday from midnight to midnight.

Double the regular straight time hourly rate shall be paid for all time:

1. For all hours worked over twelve (12) hours in one day or shift.
2. For any hours worked on Sunday from midnight to midnight.
3. For any hours worked on holidays from midnight to midnight.

RECOGNIZED HOLIDAYS

If any of these holidays fall on Sunday, the Monday following shall be considered a Holiday.

New Year's Day, Memorial Day, 4th of July, Labor Day, Admission Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION:

Includes but is not limited to:

1. Painting highways, streets and parking surfaces by using manually propelled or mechanically propelled machines, brushes, rollers or spray guns;
2. Installing any device or application of any material used in lieu of paint for traffic direction, including, without limitation, buttons, tapes, plastics, rumble bars and other similar materials;

Craft: Hod Carrier-Brick Mason Tender (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Brick Mason	44.23
Brick Mason Foreman.....	44.63

ADD ZONE RATE

In addition to Hod Carrier Brick Mason Tender rates add the applicable amounts per hour, calculated based on road miles from the Washoe County Courthouse:

Zone	75 miles and Over	\$8.13
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ADD PREMIUM PAY

One and one half (1 ½) the regular straight time hourly rate shall be paid:

1. For all hours worked over eight (8) hours in one day or shift.
2. For any hours worked on Saturday from midn ight to midnight.

Double the regular straight time hourly rate shall be paid for all time:

1. For all hours worked over twelve (12) hours in one day or shift.
2. For any hours worked on Sunday from midnight to midnight.
3. For any hours worked on holidays from midnight to midnight.

RECOGNIZED HOLIDAYS

If any of these holidays fall on Sunday, the Monday following shall be considered a Holiday.

New Year's Day, Memorial Day, 4th of July, Labor Day, Admission Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from Agreement between No, NV Masonry Contractors and LIUNA Local 169

Conveying of all materials used by the Brick and Stone Masons from the first point of delivery to the Mechanic whether done manually or by a piece of machinery or equipment devised to replace the wheelbarrow or buggy, including but not limited to the forklift. The handling of Bricks, Blocks, mortar, or any other material to serve the bricklayer in any capacity building and dismantling scaffolds of any kind or type used by Bricklayers for masonry work including but not limited to tower scaffolds, access scaffolds, or other specialty scaffolds, mixing and tempering mortar by hand and/or machine, mixing grout and cleaning up after the bricklayer, the repairing and maintenance of all equipment, either on the job or in the yard.

Craft: Hod Carrier-Plasterer Tender (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Plasterer Tender-Journeyman.....	44.57
Plasterer Tender- Gun Tender.....	45.57
Plasterer Tender-Foreman.....	45.93

ADD ZONE RATE

In addition to: HOD CARRIER-PLASTERER TENDER rates add the applicable amounts per hour, calculated based on road miles from So. Virginia St., Reno, Nevada:

Zone 1	0 to 70 miles	\$0.00
Zone 2	70 miles and Over	\$8.00

ADD PREMIUM PAY

One and one half (1 ½) the regular straight time hourly rate shall be paid:

1. For all hours worked over eight (8) hours in one day or shift.
2. For any hours worked on Saturday from mid night to midnight.

Double the regular straight time hourly rate shall be paid for all time:

1. For all hours worked over twelve (12) hours in one day or shift.
2. For any hours worked on Sunday from midnight to midnight.
3. For any hours worked on holidays from midnight to midnight.

RECOGNIZED HOLIDAYS

If any of these holidays fall on Sunday, the Monday following shall be considered a Holiday.

New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from Agreement between Plasterers Contractors and LIUANA Local Union 169

Any Employee within the scope of this division tending or serving any other worker performing plasterers work, any plasterer, plasterers, or apprentices in any capacity performing plasterers work including but not limited to, handling and conveying of all materials after delivery used by plasters, including but not limited to, inside finish coat, outside finish coat, brown coat, scratch coat, sprayed or trowled on fireproofing, EIFS systems, and other materials or systems for the same or similar purpose whether done manually or by a piece of machinery or equipment devised to replace the wheelbarrow or buggy, including but not limited to the forklift, tusk hoist, and rigging and signaling for cranes to the point or points of application or installation, making mixing and preparing after delivery all materials used by plasters, whether by hand or machine including but not limited to mixers, pumps for plaster or fire proofing, plaster, finish coats, fireproofing, including Monocoat, Cafco or other materials for the same or similar use, moving any rolling scaffolding, building and handling all necessary trestle, scaffolding and planking of scaffolding for plasterers and lathers, building mortar boxes, mortar boards and stands, and the repairing and maintenance of all equipment either on the job or in the yard, the spreading of all temporary protective drop cloths, building paper or plastic covers and taping of same (in a composite crew with the plasterers when necessary), the cleaning of all floors, and debris, behind the plasterers or any other worker performing plasterers work in connection with the work performed all work necessary for cold weather protection and cure including but not limited to handling installing or tending to blankets, visqueen, and space heaters, and running putty.

Tending to plasterers or any other worker performing plasterers work on EFIS system work shall include all work after the wallboard is installed including but not limited to any preparatory sealing or leveling, placing foam, mesh, and plaster including any rough, finish, and color coats.

For sprayed on fire proofing work only, including Monocoat, Cafco or other materials for the same or similar use an Employer signatory to this Agreement and the Local 169, Laborers Master Agreement may employ Laborers at the Group 1 wage rate to perform overspray protection, the spreading of all temporary protective drop cloths, building paper or plastic covers and taping of same, the cleaning of all floors, and debris, cold weather protection and cure including but not limited to handling installing or tending to blankets, visqueen, and space heaters and moving rolling scaffolding.

Craft: Ironworker (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

SEE AMENDMENT 1a

Ironworker-Journeyman.....	76.90
Ironworker - Foreman.....	80.57
Ironworker -General Foreman.....	85.93

ADD ZONE RATE

SEE AMENDMENT 1

In addition to Iron Worker rates add the applicable amounts per day, calculated based on a road mile from the Reno City Hall.

Zone 1	60 to 75 miles	\$25.00
Zone 2	75 to 100 miles	\$50.00
Zone 3	100 miles and over	\$60.00

ADD PREMIUM PAY

One and one half (1X) the regular straight time hourly rate shall be paid:

1. For the first two (2) hours worked in excess of eight (8) on a regular workday Monday-Friday
2. For the first eight (8) hours on Saturday

Double the regular straight time hourly rate shall be paid for all time:

1. For all hours worked over ten (10) hours in one day or shift.
2. For any hours worked on Sunday.
3. For all hours worked over eight (8) on Saturday
4. For all hours worked on Holidays

Shift Pay

1. 2nd shift add 6% of hourly wage
2. 3rd shift add 13% of hourly wage
3. Dedicated shift add 6% of hourly wage

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB CLASSIFICATION: Excerpt from Agreement between NV AGC and DC of Ironworkers

Field fabrication and/or erection or deconstruction of structural, ornamental and reinforcing steel, including but not limited to the fabrication, rigging and signaling, erection and construction of all iron and steel, ornamental lead, bronze, brass, copper and aluminum, plastics and all other substitute materials, including, but not limited to, composites, carbon fiber and fiberglass, all barrier railings, handrail, aluminum, steel, glass and plastic, reinforced concrete structures or parts thereof; bridges, viaducts, inclines, dams, docks, dredges, vessels, locks, gates, guides, aqueducts, reservoirs, spillways, flumes, caissons, cofferdams, subways, tunnels, cableways, tramways, monorails, blast furnaces, stoves, kilns, coolers, crushers, agitators, pulverizers, mixers, concentrators, ovens, cupolas, roof decking such as but not limited to "Cofar", "Trusdeck", Mahon "M"; smoke conveyors, penstocks, flag poles, drums, shafting, shoring, fur and storage rooms, fans and hot rooms, stacks, bunkers, conveyors, dumpers, elevators, vats, tanks, enamel tanks, enamel vats, towers, pans, hoppers, plates, anchors, caps, corbels, lintels, Howe and combination trusses, grillage and foundation work, grating, bucks, partitions, hanging ceilings, hangers, clips, brackets, flooring, floor construction and domes, rolling shutters, curtains, frames; aluminum, rolling fire, won and iron doors, including supports; cast

tiling, air ducts, duct and trench frames and plates; wire work, railings, wire cable including pipe, guards, fencing, grill work, sidewalk and vault lights, skylights, roofs, canopies, light steel framing, marquees, awnings and other related equipment elevator and dumb waiter enclosures, elevator cars, tracks, fascias, aprons, operating devices, steel and aluminum sash, hardware and screens, frames, fronts, lockers, racks, book stacks, tables, shelving, metal furniture, seats, chutes, escalators, stairways including pre-engineered stairs, ventilators, boxes, fire escapes, signs, jail and cell work, safes, vaults, vault doors, safe deposit boxes, corrugated sheets when attached to steel frames, including insulation; frames in support of boilers; materials altered in field such as framing, cutting, bending, drilling, burning and welding including by acetylene gas and electric machines; metal forms and false work pertaining to concrete construction; seismic isolation systems and dampening systems including base isolators, sectional water tube and tubular boilers and stokers; traveling sheaves, vertical hydraulic elevators, bulkheads, skip hoists, making and installation of articles made of wire and fibrous rope, rigging in connection with pumps, compressors, forced and induced draft fans, air meters, Bailey meters, agitators, oxygen converters, cinder machines, pelletizing machines, reactor vessels, reactor spheres, completed tanks and assembled sections of completed tanks, scroll cases, refineries, hydroelectric power houses and steam plants, cogeneration plants, vessels and government departments; false work, travelers, scaffolding, pile drivers, sheet piling, derricks and powered derrick swinger including the erection, installation, handling and operating. Cranes erection, installation, handling and operating of same on all forms and types of construction work. The operation of Valla and Spider type battery and/or propane powered portable floor cranes having no operator seat utilized to install ironworker scope of work and the same on all forms and types of construction work. Crane work at the ports, including hammer-head cranes, container cranes and rubber tire cranes. Offloading, relocations, and commissioning of all burning and removal of sea bracing track layout; erection of apex boom extensions, back reach extensions, and rail replacement. Includes all welding, containment and structural modifications of the aforementioned items; railroad bridge work including maintenance thereof; moving, hoisting and lowering of machinery, modules, skid modules and placing of same on foundation, including bridges, cranes, intermittent use forklifts, derricks, buildings, piers and vessels; loading, unloading, necessary maintenance, erection, installation, removal, wrecking and dismantling of all of the above and all reinforcing work and submarine diving in connection with or about same; erection of steel towers, chutes and spouts for concrete where attached to towers and handling and fastening of cables and guys for same; unloading, racking, sorting, cutting, bending, hoisting, placing and tying including the use of any and all mechanical tying devices, burning and welding including stud welding of all iron, steel and metal in reinforced concrete construction including mesh for floor arches and the making of hoops and stirrups, metal forms and metal supports thereof; jacking of slip forms, installation of all wire, cable, parabolic cans, steel and all other materials, including, but not limited to, composites, carbon fiber and fiberglass, used for the purposes of prestressing including grouting of ducts, post stressing concrete girders, beams, columns, etc.; loading, unloading, hoisting, handling, signaling, placing and erection of all prestressed, post stressed, precast materials, G.F.R.C., Dryvit System, including the securing by bolting and/or welding and the installation of steeltex and wire mesh of any type when used for reinforced concrete construction; erection of all curtain wall; glass handrail; stay in place deck; automated and/or mechanical parking structures; offloading, staging, hoisting and setting of modular structures and micro-units; curtain wall systems and associated sealants. Window wall and entrances, panels, insulated and non-insulated, factory and field assembled, porcelain enameled panels, ceramic, laminated spandrelite, louvers and sunscreens; application of thiokol, neoprene and other sealants used to seal materials installed by Iron Workers; installation and handling of phenolic panels, including but not limited to, Trespa products and all similarly related materials and/or systems; installation of metal window stools and sills; installation of aluminum, bronze and steel thresholds; erection and dismantling of all types of cranes and changing of booms; erection of rock, sand and gravel plants, dismantling and loading out conveyors, aggregate plants, batch plants, abeleways, refrigeration plants, etc.; erection and dismantling of Monigan walking dragline, launchhammer bucket wheel excavator and other trenching equipment; signaling on highlines, whirley cranes and derricks, buck hoists, man hoists, fork lifts, material towers and scanning antennae; metal

and steel supports of all types; fabrication, assembling and erection of offshore drilling platforms or similar installations; dust collectors, precipitators, multi-plate, specialty welding processes, unloading, loading, hoisting, handling and rigging of all building materials delivered to the job site; hanging ceilings, tees, channels, beams, acoustical elements, sound barriers, computer floors, etc.; installation of stage rigging (including counterweights), curtains, draperies, traverse rods, tracks, cables, window cleaning equipment, powered work platforms, including and loading and unloading, erection installation and removal of powered chassis mounted elevating mast climbing work platforms, rigging in connection with display shows; ski lifts, etc.; wrecking of bridges, viaducts, elevated roads and structural steel and iron in buildings; all steel frames for openings, all porches, verandas, canopies and balconies; all overhead travelers, duo rails, tram rails; erection, setting, repairing of guard or collision rails on bridges and approaches, road ways or any other structures; handling and setting of all types of steel and metal joists, including metal box joists for truss lab and preformed keystone shaped metal joists; erection of steel and metal houses and packaged buildings; all translucent and plastic material on steel frame construction; the erection of solar energy systems, including but not limited to, photo voltaic, heliostat and parabolic systems, energy producing windmill type towers, wind turbine erection to included, but not limited to, prep work, boltup, tensioning or torque of bolts on base and all tower section turbine and blade assemblies; nuclear reactors, electromagnetic shielding plates and atomic vessels including all component parts; the plumbing, aligning and leveling of all materials and equipment through the use of optical instruments, LASER beams, etc., and the use of instruments to establish layout, installation and disposition of ironworker installed scope of work; the unloading, distributing, stockpiling and handling of all materials coming under the jurisdictional claims of the UNION such as to rail heads, storage yards, loading and unloading, hoisting, handling, signaling of all fabricated material and equipment at the jobsite (except FOB deliveries) related to the Iron Workers jurisdiction that is within the individual employers' contractual scope of work including from and to barge and ships to a lay down yard or construction project, etc., shall be done by the Iron Workers.

All reinforcing work in connection with field fabrication, including but not limited to the pre-assembly of reinforcing cages, loading and unloading, handling, racking, sorting, cutting, bending, hoisting, intermittent use of forklifts, placing, burning, welding and tying of all material including the use of any and all mechanical tying devices, or substitute materials, including but not limited to, composites, carbon fiber and fiberglass, stainless steel, used to reinforce concrete construction shall be done by Iron Workers within the individual employers' scope of work at the jobsite, excluding FOB deliveries. A working Iron Worker shall be employed for maintenance on jobs of substantial size while concrete is being poured on reinforcing steel, wire mesh and paper back steeltex but will not be required as a stand-by man. All work in connection with the installation, alignment, repair & modification of panelized roofing systems, pre-engineered fabric structures, aluminum clarifier coverings, carports, ministorages, and dock planks. All work in connection with the installation, alignment, repair and modification of bleachers, planking and stadium seating. All work in connection of installation of amusement rides including, but not limited to, the erection and alignment of all track, machinery and related components.

Craft: Laborer (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Landscaper	38.57
Furniture Mover	40.07
Group 1.....	43.73
Group 1A.....	40.86
Group 2.....	43.83
Group 3.....	43.98
Group 3A.....	47.41
Group 4.....	44.23
Group 4A.....	46.73
Group 5.....	44.53
Group 6.....	
Nozzlemen, Rodmen.....	43.53
Gunmen, Materialmen.....	44.23
Reboundmen.....	43.88
Gunit Foreman.....	44.93

ADD ZONE RATE

In addition to LABORER rates add the applicable amounts per hour, calculated based on a road miles from either the Carson City Courthouse or the Washoe County Courthouse:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	300 miles or over	\$6.00

ADD PREMIUM PAY

One and one half (1 ½) the regular straight time hourly rate shall be paid:

1. For all hours worked over eight (8) hours in one day or shift.
2. For any hours worked on Saturday from midn ight to midnight.

Double the regular straight time hourly rate shall be paid for all time:

1. For all hours worked over twelve (12) hours in one day or shift.
2. For any hours worked on Sunday from midnight to midnight.
3. For any hours worked on holidays from midnight to midnight.

RECOGNIZED HOLIDAYS SEE AMENDMENT 6

If any of these holidays fall on Sunday, the Monday following shall be considered a Holiday.

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from Agreement between AGC and LIUNA Local 169

The construction, erection, alteration, repair, modification, demolition, addition, improvement of all building, heavy and highway, utility, industrial and all other type(s) of construction.

SEE GROUP CLASSIFICATIONS

Craft: LUBRICATION AND SERVICE ENGINEER (MOBILE AND GREASE RACK) (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Lubrication and Service Engineer (mobile and grease rack).....65.08

ADD ZONE RATE

In addition to: **LUBRICATION AND SERVICE ENGINEER (MOBILE AND GREASE RACK)** rates add the applicable amounts per hour calculated based on a road miles from the Carson City Courthouse or Washoe County Courthouse.

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	300 miles and over	\$6.00

ADD PREMIUM PAY

1. One and one-half (1-1/2) times the applicable straight-time rate for the day, shift, work, equipment and classification shall be paid for all work (including repair work and field survey work) performed on Saturday and before a shift begins and after it ends, except when operating equipment servicing a craft that is receiving double time on commercial building construction, in which case double time shall be paid.

2. Overtime. The following rates shall apply on Sundays and holidays and all work before a shift begins and after it ends:

RECOGNIZED HOLIDAYS

Holidays. Double the applicable straight-time rate shall be paid for all work (including repair, maintenance and field survey work) performed on Sundays and the following holidays: New Year's Day (January 1); Memorial Day (last Monday in May); Independence Day (July 4); Labor Day (1st Monday in September); Nevada Admission Day (last Friday in October); Thanksgiving Day (4th Thursday in November); the day after Thanksgiving Day; and Christmas Day (December 25). Holidays falling on Sunday shall be observed on the following Monday. Holiday hours shall be reckoned on the same basis as Sunday hours.

Saturday Shift Period. On any shift, Saturday shall be the twenty-four-hour period commencing at 12:00 midnight Friday.

Sunday Shift Period. On any shift, Sunday shall be the twenty-four-hour period commencing at 12:00 midnight Saturday.

3. For hours worked in excess of 12) on any such workday, an Employee shall be paid two (2) times the regular straight-time rate of pay for each hour so worked.

Craft: Mechanical Insulator (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Mechanical Insulator-Mechanic.....	69.11
Mechanical Insulator-Foreman.....	73.11
Mechanical Insulator-General Foreman	75.11

ADD ZONE RATE SEE AMENDMENT 5

In addition to MECHANICAL INSULATOR rates add the applicable amounts per hour, calculated based on a radius figured from Reno City Hall:

Zone 1	0 to 20 miles	\$11.00
Zone 2	21 to 40 miles	\$21.00
Zone 3	41 to 60 miles	\$31.00
Zone 4	Over 60 miles	\$85.00

ADD PREMIUM PAY

One and one half times the minimum hourly wage rate shall be paid for the first two (2) hours of overtime work, directly following eight (8) hours Monday through Friday, and for the first ten (10) hours worked on Saturdays. Double the minimum hourly wage rate shall be paid for all other overtime worked Monday through Friday and in excess of ten (10) hours on Saturdays.

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from the Int'l Assoc. of Heat and Frost Insulators and Allied Workers Local 16 and the No. CA Chapter. Western Insulation Contractors Assoc.

65. Lining of all mechanical room surfaces and air handling shafts.
66. The filling and damming of fire stops and penetrations including, but not limited to, electrical and mechanical systems.
67. All foam applications for the purpose of thermal, acoustical, or fire protective purposes, including RTV foams or equivalents, applied to mechanical or electrical systems.
68. All duct lining, and duct wrapping, done on the job site, direct application and installation of fire protection of grease ducts, exhaust systems, or any other ductwork for acoustical or thermal purposes.
69. The insulation of all field joints on pre-insulated underground piping, and the pouring of Gilsilite or its equivalent.
70. Any finish material which is contiguous to the thermal or acoustical application.
71. The preparation, distribution of materials on job sites, assembling, molding, spraying, pouring, mixing, hanging, adjusting, repairing, dismantling, reconditioning, maintaining, finishing, and weather proofing of hot or cold thermal or acoustical insulation with such materials as may be specified.
72. The application of any material, including metal and PVC jacketing, Alumaguard or equivalent, on piping, fittings, valves, flanges, boilers, ducts, plenums, flues, tanks, vats, equipment and any other hot or cold surface for the purpose of thermal control.
73. The Agreement shall cover all other work of a specialty nature.

Craft: Millwright (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Millwright Journeyman.....	68.61
Millwright Welder.....	69.61
Millwright Foreman.....	72.67
Millwright General Foreman.....	77.14

ADD ZONE RATE

In addition to MILLWRIGHT rates, add the applicable amounts per hour, calculated on road miles from the Washoe County Courthouse:

Zone 1	0 to 15 Miles	\$0.00
Zone 2	15 to 35 Miles	\$2.50
Zone 3	Over 35 Miles	\$4.25

ADD PREMIUM PAY

First two (2) hours outside the regular constituted shift shall be at the rate of time and one-half (1½X).

Saturdays up to the first ten (10) hours shall be at the rate of time and one-half (1½X). All additional hours and Sundays and holidays shall be the rate of double time (2X). When working on Sundays and holidays, there will be one dollar and fifty cents (\$1.50) per hour additional paid to Pension Annuity.

RECOGNIZED HOLIDAYS

New Year's Day, Washington's Birthday (President's Day), Memorial Day, 4th of July, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving, Christmas Day. Admission Day is a recognized holiday in lieu of Veterans' Day.

JOB DESCRIPTION Excerpt from Southwest Regional Council of Carpenters and Affiliated Local Unions Master Labor Agreement

5006.18

The work of the millwrights, as spelled out in the Jurisdictional Claims Handbook referenced in Paragraph 5006.17 above, is as follows: The term "MILLWRIGHTS AND MACHINE ERECTORS" shall mean the, unloading, hoisting, rigging, skidding, moving, dismantling, aligning, erecting, assembling, repairing, maintaining and adjusting of all machinery and equipment installed either in buildings, factories, structures, or processing areas, either undercover, underground or elsewhere required to process material, handle, manufacture or service, be it powered or receiving power manually, by steam, gas, electric, gasoline, diesel, nuclear, solar, water, air or chemically; and in industries such as and including but not limited to the following (which are identified for the purpose of description: woodworking plants, canning industries, steel, coffee roasting plants, paper and pulp, cellophane, stone crushing, gravel and sand washing and handling, refineries, grain storage and handling, asphalt plants, sewage disposal and water plants, laundry, bakery, mixing plants, can, bottle and bag packing plants, textile mills, paint mills, breweries and milk processing plants, power plants, aluminum processing or manufacturing plants, and the amusement or entertainment field.

5006.19

Also included are installation of mechanical equipment in atomic energy plants, installation of reactors in power plants, installation of control rods and equipment in reactors, installation of mechanical

equipment in rocket missile bases, launchers, launching gantry, floating bases, hydraulic escape doors and any and all component parts thereto either assembled, semi-assembled or disassembled.

5006.20

Further included is the installation of, but not limited to the following: setting of all engines, motors, generators, air compressors and fans, pumps, scales, hoppers, conveyors of all types and sizes and their supports, escalators, man lifts, moving machinery, mechanical operator and/or automatic doors, roll-up doors, mechanical stage equipment, amusement devices, mechanical pin setters and spotters in bowling alleys, refrigeration equipment and installation of all types of equipment necessary and required to process material either in manufacturing or servicing, the handling and installation of pulleys, gears, sheaves, fly wheels, air and vacuum drives, worm drives and gear drives directly or indirectly coupled to motors, belts, chains, screws, legs, boots, guards, boot tanks, all bin valves, turn heads and indicators, shafting, bearing, cable sprockets, cutting all key seats in new and old work, troughs, chippers, filters, calendars, rolls, winders, reminders, slitters, cutters and wrapping machines; blowers, forging machines, rams, hydraulic or otherwise, planing, extruder, ball, dust collectors, equipment in meat packing plants and splicing of ropes and cables.

5006.21

Additionally included are the laying out, fabrication and installation of protection equipment, including machinery guards, the making and setting of templates for machinery, fabrication of bolts, nuts, pins and drilling of holes for any equipment which the millwrights install regardless of materials; all welding and burning regardless of type; fabrication of all lines, hose or tubing used in lubricating machinery installed by millwrights; grinding, cleaning, servicing and machine work necessary for any part of any equipment installed by the millwrights; and the breaking in and trial run, of any equipment or machinery installed by the millwrights

5006.22

When requested in writing by the Millwright Union, individual Employers who are parties to this Agreement shall furnish signed letters promptly on a date mutually agreed upon by both parties, but in no case more than thirty (30) days, on the letterhead of the individual Employer stating he is employing or had employed millwrights on a specific type of work and a specific job and paid the negotiated scale of wages and fringe benefits for such work.

5006.23

The individual Employer and the Local Union will cooperate promptly in attempting to resolve jurisdictional disputes that may arise on any job or project.

Craft: OPERATING ENGINEER (Union Rate)
Prevailing wage rates include the base rate as well as all applicable fringes

Operating Engineers	(SEE GROUP CLASSIFICATIONS)
Group 1.....	60.16
Group 1A.....	62.82
Group 2.....	63.36
Group 3.....	63.62
Group 4.....	64.36
Group 5.....	64.66
Group 6.....	64.86
Group 7.....	65.08
Group 8.....	65.67
Group 9.....	65.99
Group 10.....	66.34
Group 10A.....	66.53
Group 11.....	66.77
Group 11A.....	68.41
Group 11B.....	69.22
Foreman.....	68.41
Add \$12.5% to base rate for "Special" Shift	

Add Operating Engineers Zone Pay
Add Premium Pay

Craft: OPERATING ENGINEER (Union Rate)
STEEL FABRICATOR & ERECTOR

Prevailing wage rates include the base rate as well as all applicable fringes

Operating Engineers	(SEE GROUP CLASSIFICATIONS)
Group 1.....	75.36
Group 1 Truck Crane Oiler.....	69.19
Group 1 Oiler.....	67.23
Group 2.....	73.85
Group 2 Truck Crane Oiler.....	68.94
Group 2 Oiler.....	67.02
Group 3.....	72.61
Group 3 Truck Crane Oiler.....	68.72
Group 3 Oiler.....	66.80
Group 3 Hydraulic.....	68.39
Group 4.....	70.88
Group 5.....	69.78
Add \$12.5% to base rate for "Special" Shift	

Add Operating Engineers Zone Pay
Add Premium Pay

Craft: OPERATING ENGINEER (Union Rate)
PILEDRIIVER

Prevailing wage rates include the base rate as well as all applicable fringes

Operating Engineers	(SEE GROUP CLASSIFICATIONS)
Group 1.....	74.73
Group 1 Truck Crane Oiler.....	69.17
Group 1 Oiler.....	67.25
Group 2.....	73.09
Group 2 Truck Crane Oiler.....	68.96
Group 2 Oiler.....	67.05
Group 3.....	71.64
Group 3 Truck Crane Oiler.....	68.74
Group 3 Oiler.....	66.82
Group 4.....	70.13
Group 5.....	69.02
Group 6.....	65.74
Group 7.....	66.95
Group 8.....	65.99
Add \$12.5% to base rate for "Special" Shift	

ADD ZONE RATE

In addition to: **OPERATING ENGINEER, STEEL FABRICATOR & ERECTOR, and OPERATING ENGINEER PILEDRIIVER**, rates add the applicable amounts per hour calculated based on a road miles from the Carson City Courthouse or Washoe County Courthouse

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	300 miles over	\$6.00

ADD PREMIUM PAY

1. One and one-half (1-1/2) times the applicable straight-time rate for the day, shift, work, equipment and classification shall be paid for all work (including repair work and field survey work) performed on Saturday and before a shift begins and after it ends, except when operating equipment servicing a craft that is receiving double time on commercial building construction, in which case double time shall be paid.

2. Overtime. The following rates shall apply on Sundays and holidays and all work before a shift begins and after it ends:

RECOGNIZED HOLIDAYS

Holidays. Double the applicable straight-time rate shall be paid for all work (including repair, maintenance and field survey work) performed on Sundays and the following holidays: New Year's Day (January 1); Memorial Day (last Monday in May); Independence Day (July 4); Labor Day (1st Monday in September); Nevada Admission Day (last Friday in October); Thanksgiving Day (4th Thursday in November); the day after Thanksgiving Day; and Christmas Day (December 25). Holidays falling on Sunday shall be observed on the following Monday. Holiday hours shall be reckoned on the same basis as Sunday hours.

Saturday Shift Period. On any shift, Saturday shall be the twenty-four-hour period commencing at 12:00 midnight Friday.

Sunday Shift Period. On any shift, Sunday shall be the twenty-four-hour period commencing at 12:00 midnight Saturday.

3. For hours worked in excess of 12) on any such workday, an Employee shall be paid two (2) times the regular straight-time rate of pay for each hour so worked.

JOB DESCRIPTION, includes but is not limited to:

Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement.

Craft: PAINTER (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Brush/Roller Painter.....	45.50
Spray Painter/Paperhanger.....	46.83
Sandblaster.....	46.88
Structural Steel & Steeplejack.....	46.88
Swing Stage.....	47.24
Special Coating Application-Brush.....	47.29
Special Coating Application-Spray.....	47.29
Special Coating Application-Spray Steel.....	47.29
Foreman.....	\$1.00 above highest Journeyman

ADD PREMIUM PAY

One and one half (1 ½) the regular straight time hourly rate shall be paid:

1. For all hours worked over eight (8) hours in one day or shift unless the Union is notified when four (4) tens (10's) are instituted.
2. For any hours worked on Saturday from midnight to midnight
3. For any work performed in excess of the regular work week of forty (40) hours.

Double the regular straight time hourly rate shall be paid for all time:

1. For any hours worked on Sunday from midnight to midnight
2. For any hours worked on holidays from midnight to midnight

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from Agreement between Painters and Allied Trades DC 16 and Independent Flooring Contractors of No Nevada

a. All painting of residences, buildings, structures, industrial plants, tanks, vats, pipes, vessels, bridges, light poles, high tension poles, traffic and parking lines on highways, parking lots, playgrounds, factories, and air line strips; all sign, pictorial, coach, car automobile, carriage, aircraft machinery, ship and railroad equipment, mural and scenic painting; spackling of all surfaces where adhesive materials are used; and all drywall pointing, taping and finishing.

b. All decorators, paperhangers, hard wood finishers, grainers, glaziers, varnishers, enamellers

1. Paperhangers work shall be all material of whatever kind or quality applied to walls or ceilings with paste or adhesive; all tacking on the muslin or other materials which is used as wall or ceiling coverings or covered with material pasted on.

2. The scraping off of old paper, preparing of walls, etc., for paper hangers work.

3. The application of relief, stucco, plaster or decorative work shall not be considered paperhanger's work exclusively.

(c) All men engaged in applying or removing paints, pigments, extenders, metal primers and metal pigments, clear pigments, binders, thinners and dryers, primers and sealers, oil paints and enamels,

water colors and emulsions, clear coatings, waxes, stains, mastics, cement enamels and other special coatings, plastics, adhesives, coatings and sheet rubber and other linings, oils, varnishes, water colors, wall paper, wall coverings or other materials used in the various branches of the trade, and the cleaning and bleaching of all interior and exterior walls and surfaces with liquid, steam, sandblast or any other process and all work incidental thereto.

Craft: PILEDRIVER (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

See Amendment 3

Piledriver-Journeyman.....	52.46
Piledriver-Welder.....	53.46
Piledriver-Foreman.....	55.87
Piledriver-General Foreman.....	59.62
Tender.....	95.41
Stand-By Diver.....	56.87
Diver-Diving (Wet Pay).....	55.87

ADD ZONE RATE

In addition to PILEDRIVER rates add the applicable amounts per hour, calculated from the Washoe County Courthouse:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	Over 300 miles	\$6.00

ADD PREMIUM PAY

First two (2) hours outside the regular constituted shift shall be at the rate of time and one-half (1½X).

Saturdays up to the first ten (10) hours shall be at the rate of time and one-half (1½X). All additional hours and Sundays and holidays shall be the rate of double time (2X). When working on Sundays and holidays, there will be one dollar and fifty cents (\$1.50) per hour additional paid to Pension Annuity.

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, 4th of July, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving, Christmas Day.

JOB DESCRIPTION Excerpt from Southwest Regional Council of Carpenters and Affiliated Local Unions Master Labor Agreement

104.1 The Carpenters claim the layout, rigging, tagging, signaling, cutting, burning, welding, chain sawing, driving, setting and pulling of all soldier piles and soldier beams together with all necessary waling, shoring, underpinning, struts, bracing, capping and lagging necessary for construction of subterranean structures of all types to include, but not limited to subways, subway stations, buildings, storm drains, sewers, pipelines and all open cut and cover construction projects. The Carpenters further claim construction of all covers and access mats to include all necessary rigging for setting and removing, whether intermittently or regularly and installation and removal of timber decking.

(a) In addition to the work identified in Article I, the Pile Divers claim the operation of the following types of equipment when the operation of same is incidental to that work which falls under the jurisdiction of the United Brotherhood of Carpenters and Joiners of America or Pile Drivers Local Union No. 2375; mechanical forklifts of all types, boom trucks and any other mobile equipment as assigned by the employer necessary to complete the work. In addition, the operation of the power pack and vibratory hammer controls when driving or pulling, sheet pile, pile, soldier beams, cassinos or casing.

- (1) In the construction of waterfront and marine facilities, such as docks, piers, wharves, bulkheads, jetties, and similar structures, the pile driver classification should continue to apply, up to and including the decking thereof.
- (2) On all pile driving and caisson work on both land and water, the Pile Driver classification should apply.
- (3) In the construction of wooden bridges whether over land or over water, when composed of heavy timber, the Pile Driver classification should apply.
- (4) In the construction of concrete or steel bridges over land, the Pile Driver classification shall apply to the driving of piles and/or caisson work including the forms required for the capping of the piles or caissons immediately top of the piles or caissons. The capping of the piles is herein interpreted as being that concrete, wood, or other material resting on the top of the piles where driven or placed and does not include any further form work above the capping. In many instances it has been found that the capping is called the girder. The above shall apply on such concrete or steel bridges constructed over land, highways, railroads, overpasses and include cloverleafs, interchanges, etc.
- (5) In the construction of concrete or steel bridges over water, the Pile Driver classification shall apply up to and including all of the form work to the top of the column, piers, or abutments supporting the steel and/or any other superstructures.
- (6) In the erection of false work, when necessary for the support of work under the Pile Driver classification, then such false work shall fall within their classification. False work necessary for the support of work under the Carpenter classification shall be done within such Carpenter classification, with the exception that where pile driving or power equipment is used for heavy timber false work, then such work shall come under the Pile Driver classification. This would include all rigging, signaling and tagging incidental to the placing of the heavy timber.
- (7) In the construction of open-cut sewers, the Pile Driver classification shall apply on all piling including wood, steel or concrete sheet piling, all bracing timber and form work incidental to the construction thereof.

Craft: PLASTERER (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Plasterer-Journeyman.....	48.82
Plasterer-Foreman.....	52.13

ADD ZONE RATE

In addition to PLASTERER rates add the applicable amounts per hour, calculated from the South Virginia and Mill Street, Reno, Nevada:

Zone 1	0 to 70 miles	\$0.00
Zone 2	70 miles and over	\$8.00

ADD PREMIUM PAY

OVERTIME Eight (8) consecutive hours (exclusive of a meal period) shall constitute a day's work at straight time. Five (5) consecutive days of eight (8) consecutive hours (exclusive of a meal period), Monday through Friday, shall constitute a week's work. One and one half (1 ½) the regular straight time hourly rate shall be paid for all work over eight (8) hours. Sunday will be paid at double the regular straight time rate.

RECOGNIZED HOLIDAYS

All work performed on the following holidays shall be paid for at double the regular straight time rate: New Year's Day, Memorial Day, Fourth of July, Labor Day, Admissions Day, Thanksgiving Day and the Friday after Thanksgiving and also Christmas Day.

If any of the above holidays fall on Sunday, the Monday following shall be considered a holiday.

No work shall be permitted on the Fourth of July or Labor Day, regardless of compensation or donation, except in case of emergency or to protect life and property. Permission to work shall be granted by the representative of the Union or its officer.

JOB DESCRIPTION: Excerpt from Agreement No NV. Plasterers Master Labor Agreement

This includes but is not limited to:

1. All building construction, including but not limited to the construction, erection, alteration, repair, modification, demolition, addition, or improvement in whole or in part of any building structures,
2. All interior or exterior plastering construction, restoration, repair and inspection of cement, stucco, stone imitation or any patent material when ornamental molded plaster, and the setting of same. All specialty finishes such as veneer, venetian, marmoreno and grasello. All custom and specialty finishes, including but not limited to custom rock, carved plaster, brick and block veneer, stone and wood. Smooth and finish surfaces of full system E.I.F.S. including sticking and shaping of foam pieces or surfaces by adhesive or mechanical installation. All spray or towed on fireproofing, including cementitious and intumescent products. All plaster acoustical finish systems including, but not limited to, BASWA Phon and Fellert.
3. All work processes which represent technological change, replacement, modification or substitution for the work described above. In addition, all work and use of new materials or *2020-2024 Reno Plasterers Master Labor Agreement* 4 techniques involved in plaster construction including but not limited to what is known as green or sustainable construction technology.

Craft: PLUMBER/PIPEFITTER (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Plumber/Pipefitter-Journeyman.....	63.95
Plumber/Pipefitter-Foreman.....	68.18
Plumber/Pipefitter-General Foreman.....	72.41

ADD ZONE RATE

In addition to PLUMBER/PIPEFITTER rates add the applicable amounts per statute air mile radius from the Nevada freeway interchange of Interstate 80 and 580.

Zone 1	0 to 75	\$0.00
Zone 2	Over 75 miles	\$8.00

A separate free zone will be established for employees permanently residing and working within a seventy-five (75) statute air mile radius of the Elko, Nevada Post Office.

Zone 1	0 to 75	\$0.00
Zone 2	Over 75 miles	\$8.00

ADD PREMIUM PAY

Premium pay for hours worked in excess of a shift of 8 hours or 12 hours or such other time increment set forth in the Collective Bargaining Agreement or on a weekend or holiday.

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, Fourth of July, Labor Day, Nevada Admission Day, Thanksgiving Day, the Friday after Thanksgiving Day, Day Before Christmas and Christmas Day and any Friday preceding a Holiday falling on a Saturday, if worked, holidays shall be compensated at the double time rate.

JOB DESCRIPTION Excerpt from Agreement between LU 350 of United Assoc. of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of United States and Canada

Installation of all heating and refrigeration systems and competent parts thereof, including fabrication, assembling, erection installation, dismantling, repairing, reconditioning, adjusting, altering servicing, handling, distributing, and tying on all piping materials appurtenances and equipment by method, including all hangers and supports of every description, all other work including the the trade relevant to oil burner and all other types of heating and refrigeration equipment including low voltage controls.

Craft: REFRIGERATION MECHANIC (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Refrigeration-Journeyman.....	59.34
Refrigeration -Foreman.....	62.81
Refrigeration -General Foreman	66.27

ADD PREMIUM PAY

Premium pay for hours worked in excess of a shift of 8 hours or 12 hours or such other time increment set forth in the Collective Bargaining Agreement or on a weekend or holiday.

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, Fourth of July, Labor Day, Nevada Admission Day, Thanksgiving Day, the Friday after Thanksgiving Day, Day Before Christmas and Christmas Day and any Friday preceding a Holiday falling on a Saturday, if worked, holidays shall be compensated at the double time rate.

JOB DESCRIPTION Excerpt from Agreement between LU 350 of United Assoc. of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of United States and Canada

Installation of all heating and refrigeration systems and competent parts thereof, including fabrication, assembling, erection installation, dismantling, repairing, reconditioning, adjusting, altering servicing, handling, distributing, and tying on all piping materials appurtenances and equipment by method, including all hangars and supports of every description, all other work including the trade relevant to oil burner and all other types of heating and refrigeration equipment including low voltage controls.

Craft: ROOFER (Non-Union Rate)
(Does not include sheet metal roofs)

Prevailing wage rates include the base rate as well as all applicable fringes

Roofer-Journeyman.....32.63

ROOFER

Includes but is not limited to:

1. Installing and covering roofs and structures with slate, asphalt, wood and other related materials, other than sheet metal, by using brushes, knives, punches, hammers and other tools;
2. Spraying roofs, sidings and walls with material to bind, seal, insulate or soundproof sections of a structure;
3. Installation of all plastic, slate, slag, gravel, asphalt and composition roofing, and rock asphalt mastic when used for damp and waterproofing;
4. Installation of all damp resisting preparations when applied on roofs with mop, three-knot brush, roller, swab or spray system;
5. All types of preformed panels used in waterproofing;
6. Handling, hoisting and storing of all roofing, damp and waterproofing materials;
7. The tear-off and/or removal of roofing and roofing materials;

Craft: SHEET METAL WORKERS (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Sheet Metal Worker Journeyman.....	68.43
Sheet Metal Worker -Foreman.....	72.45
Sheet Metal Worker -General Foreman.....	76.47

ADD ZONE RATE

In addition to SHEET METAL rates add the applicable amounts per hour, calculated based on a road from the courthouse in Reno, Nevada:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 100 miles	\$5.00
Zone 3	Over 100 miles	\$10.00 the employee shall be provided reasonable lodging and meal expenses.

ADD PREMIUM PAY

All hourly rates are subject to Over Time (One and one half 1 ½) of the Regular rate:

1. For all hours worked over Eight (8) Hours in one day or shift.
2. For the first Eight (8) Hours work on Saturday.

All hourly rates are subject to Double Time of the Regular Rate:

1. For all hours worked over Ten (10) Hours in one day or shift.
2. For all hours worked over Eight (8) Hours on Saturday.
3. For all hours worked on Sunday, New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Nevada Day, Thanksgiving Day, Day after Thanksgiving, Day before Christmas, and Christmas Day.

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Nevada Day, Thanksgiving Day, Day after Thanksgiving, Day before Christmas, and Christmas Day

JOB DESCRIPTION: Excerpt from Sheet Metal Local 26 Collective Bargaining Agreement

(a) manufacture, fabrication, assembling, handling, erection, installation, dismantling, conditioning, adjustment, alteration, repairing and servicing of all ferrous or nonferrous metal work and all other materials used in lieu thereof and of all HVAC systems, air veyor systems, exhaust systems, and air-handling systems regardless of material used including the setting of all equipment and all reinforcements in connection therewith; (b) all lagging over insulation and all duct lining; (c) testing and balancing of all air-handling equipment and duct work; (d) the preparation of all shop and field sketches whether manually drawn or computer assisted used in fabrication and erection, including those taken from original architectural and engineering drawings or sketches; (e) metal roofing; and (f) all other work included in the jurisdictional claims of International Association of Sheet Metal, Air, Rail and Transportation Workers.

Craft: SPRINKLER FITTER (Non-Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Sprinkler Fitter-Journeyman.....26.27

JOB DESCRIPTION

Installing, dismantling, maintenance, repairs, adjustments and corrections of all fire protection and fire control systems Including the unloading, handling by hand, power equipment and installation of all piping or tubing, appurtenances and equipment pertaining thereto, including both overhead and underground water mains, fire hydrants and hydrant mains, standpipes, and hose connections to sprinkler systems, sprinkler tank heaters, air lines and thermal systems used in connection with sprinkler and alarms systems, also all tanks and pumps connected thereto. Also including shall be CO2 and Cardox Systems, Dry Chemical Systems, Foam Systems and all other fire protection systems, but excluding steam fire protection systems.

Craft: SOILS and MATERIAL TESTER (Non-Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Soil Tester (Certified).....42.84
Soils and Materials Tester.....42.84

Craft: SURVEYOR (Non-Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Surveyor.....21.57

SURVEYOR, includes but is not limited to:

1. Planning ground surveys designed to establish base lines, elevation and other geodetic measurements;
2. Compiling data relevant to the shape, contour, gravitation, location, elevation and dimension of land and land features on or near the surface of the Earth for engineering, map making, mining, land evaluation, construction and other purposes;
3. Surveying bodies of water to determine navigable channels and to secure data for construction of breakwaters, piers and other marine structures;
4. Computing data necessary for driving and connecting underground passages, underground storage and volume of underground deposits.

Craft: TAPER (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Taper-Journeyman.....	51.36
Taper-Foreman.....	52.86
Taper-General Foreman.....	53.86

ADD ZONE RATE

In addition to: TAPER rates add the applicable amounts per hour Zone Pay shall commence from Maryland Parkway and Charleston Boulevard and shall be paid as follows:

Zone 1	0 to 40 miles	\$0.00
Zone 2	40 to 60 miles	\$2.50
Zone 3	over 60 miles	\$4.25

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

ADD PREMIUM PAY

All overtime, except Sundays and holidays, will be time and one-half (1 1/2).

Sundays and holidays will be paid double time (2X). Any and all work performed in excess of the regular workday of eight (8) hours, or ten (10) hours if mutually agreed to, and the regular workweek of forty (40) hours shall be considered overtime and shall be paid for at one and one-half (1 1/2) times the regular hourly rate.

JOB DESCRIPTION: Excerpt from Agreement between DC 16 and the independent Drywall Contractors of Northern Nevada

SECTION 1 -- The scope of work covered by this Agreement shall include (but not be limited to) all work operations, including distribution to the point of application, as follows:

(a) Work or services pertaining to the preparation, spotting, pointing, detailing, flushing, sanding and finishing of interior and/or exterior gypsum, drywall, thin wall, concrete, steel, wood and plaster surfaces, spackling of all surfaces where adhesive materials are used; and all drywall pointing, taping and finishing.

(b) Work or services pertaining to the application of all finish or flushing materials regardless of method of application or type of surface on which materials are applied, including but not limited to texture and simulated acoustic materials of all types and the application of radiant heat fill and steel fireproofing materials.

(c) Work or services pertaining to the installation of protective coverings and masking prior to the application of finish materials.

(d) The operation and care of all taping tools and texturing equipment used in the finishing and texturing of drywall and other surfaces including brushes, rollers, spray texturing equipment, miscellaneous hand, mechanical, and power tools, and the operation and maintenance of compressors required in the finishing and texturing of such surfaces.

(e) No limitation shall be placed on the work covered by this Agreement by reason of the surface, type of material or purpose for which the materials used are designed or intended.

(f) The cleanup of all materials and debris occasioned by any job operation at the site of construction, alteration, or repair undertaken whether such operation occurs on the interior or exterior of a building structure.

Craft: TILE SETTER/TERRAZZO WORKER/MARBLE MASON FINISHER (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Tile Setter/Terrazzo Worker/Marble Mason- Finisher.....	36.32
Tile Setter/Terrazzo Worker/Marble Mason- Finisher Foreman.....	37.57
Tile Setter/Terrazzo Worker/Marble Mason Finisher- General Foremen.....	39.32

ADD PREMIUM PAY

All work in excess of forty (40) hours during the established work week shall be paid at the rate of one and one-half (1-1/2) times the hourly base wage rate in effect.

Employees shall be paid one and one-half (1-1/2) times the hourly wage rate for all hours worked over eight (8) in a single day and double time after ten (10) hours in a single day, Monday through Friday, except recognized holidays.

Daily Overtime Saturdays the first ten (10) hours performed on Saturday shall be paid at one and one-half (1-1/2) times the straight time wage rate.

Daily Overtime Sunday- Employees shall be paid double time on Sundays if forty (40) straight time hours have been worked during the proceeding work week.

Holidays shall be paid double time for hours owed on recognized holidays.

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day. Any holiday falling on a Sunday will be observed on Monday.

JOB DESCRIPTION: Excerpt from Agreement between BAC 13 Nevada of the Mountain West Administrative District Council Master Labor Agreement

FINISHER'S WORK:

Finisher's work shall consist of assisting, helping or supporting the tile, marble and terrazzo mechanic by performing their historic and traditional work assignments. required to complete the proper installation of the work covered by Sections 5, 7 and 8 of this Code.

Craft: TILE SETTER/TERRAZZO WORKER/MARBLE MASON (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Tile Setter Journeyman.....	46.12
Tile Setter Foreman.....	47.37
Tile Setter General Foreman.....	49.12
Terrazzo/Marble Mason-Journeyman	47.12
Terrazzo/Marble Mason-Foreman	48.32
Terrazzo/Marble Mason-General Foreman.....	50.12

ADD ZONE RATE

In addition to TILE SETTER/TERRAZZO WORKER/MARBLE MASON rates add the applicable amounts per hour, calculated based on a road miles of over fifty (50) miles from the Washoe County Courthouse in Reno, Nevada:

Zone 1	0 to 50 miles	\$0.00
Zone 2	50 to 75 miles	\$3.75
Zone 3	Over 70 miles	\$8.13

ADD PREMIUM PAY

All work in excess of forty (40) hours during the established work week shall be paid at the rate of one and one-half (1-1/2) times the hourly base wage rate in effect.

Employees shall be paid one and one-half (1-1/2) times the hourly wage rate for all hours worked over eight (8) in a single day and double time after ten (10) hours in a single day, Monday through Friday, except recognized holidays.

Daily Overtime Saturdays the first ten (10) hours performed on Saturday shall be paid at one and one-half (1-1/2) times the straight time wage rate.

Daily Overtime Sunday- Employees shall be paid double time on Sundays if forty (40) straight time hours have been worked during the proceeding work week.

Holidays shall be paid double time for hours owed on recognized holidays.

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day. Any holiday falling on a Sunday will be observed on Monday.

JOB DESCRIPTION: Excerpt from Agreement between BAC 13 Nevada of the Mountain West Administrative District Council Master Labor Agreement

TILE LAYERS' WORK:

Tile laying shall consist of, but not be limited to, the following work procedures and installation of the following materials:

A. The laying, cutting or setting of all tile where used for floors, walls, ceilings, walks, promenade roofs, stair treads, stair risers, facings, hearths, fireplaces, and decorative inserts, together with any marble plinths, thresholds or window stools used in connection with any tile work; also, preparing and setting all concrete, cement, brickwork, or other foundation or materials that may be required to properly set and complete such work; setting or bedding all tiling, stone, marble, composition, glass, mosaic, or other materials forming the facing, hearth or fireplace of a mantel, or the mantel complete, together with setting of all cement, brickwork, or other materials required in connection with the above work; also the slabbing and fabrication of tile mantels, counters and tile panels of every description, and the erection and installation of same; the building, shaping, forming, construction or repairing of all fireplace work, whether in connection with a mantel hearth facing or not, and the setting and preparing of all material, such as cement, plaster, mortar, brickwork, iron work or other materials necessary for the proper and safe construction and completion of such work, except that a mantel made exclusively of brick, marble or stone, shall be conceded to be bricklayers', marble setters' or stonemasons' work, respectively.

B. It will be understood that the word "tile" refers to all burned clay products, as used in the tile industry, either glazed or unglazed, and to all composition materials made in single units up to 15"x20"x2", except quarry tiles larger than 9"x9"x1 1/4", also to mixtures in tile form of cement, plastics and metals that are made for and intended for use as a finished floor surface, whether upon interior or exterior floors, stair treads, promenade roofs, garden walks, interior walls, ceilings, swimming pools, and all places where tile may be used to form a finished surface for practical use, sanitary finish or decorative purposes, for setting all accessories in connection therewith, or for decorative inserts in other materials.

C. All terra cotta called unit tile in sizes of 6"x12" or under, regardless of method of installation, quarry tile 9"x9"x1 1/4" or less; split brick or quarry tile or similar material where the bed is floated or screeded and the joints grouted. Where the work is installed by tile layers, the grouting and cleaning shall be supervised by the mechanic. The bedding, jointing, and pointing of the above materials shall be the work of the craft installing the same. All clay products known as terra cotta tile, unit tile, ceramic veneer and machine-made terra cotta, and like materials in sizes 6"x12" and less regardless of the method of installation. Where the preponderance of materials to be installed comes within the provisions of this Section and when there is also some material in excess of the sizes provided for in this Section, the tile setter shall install all such materials.

D. The preparation, setup, calibration, operation, cleaning, and routine maintenance of any mechanical devices or robotics used to install tile and related materials, or that otherwise assist the tile layer in performing any of the work described in Article II and Code 1 of the IU Constitution, as well as the preparation and ongoing maintenance of the work area to allow proper installation of tile and related materials.

Craft: TRAFFIC BARRIER ERECTOR (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Traffic Barrier Erector.....43.73

ADD ZONE RATE

In addition to LABORER rates add the applicable amounts per hour, calculated based on a road miles from either the Carson City Courthouse or the Washoe County Courthouse:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	300 miles and over	\$6.00

ADD PREMIUM PAY

One and one half (1 ½) the regular straight time hourly rate shall be paid:

1. For all hours worked over eight (8) hours in one day or shift.
2. For any hours worked on Saturday from midn ight to midnight.

Double the regular straight time hourly rate shall be paid for all time:

1. For all hours worked over twelve (12) hours in one day or shift.
2. For any hours worked on Sunday from midnight to midnight.
3. For any hours worked on holidays from midnight to midnight.

RECOGNIZED HOLIDAYS

If any of these holidays fall on Sunday, the Monday following shall be considered a Holiday.

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from Agreement between AGC and LIUNA Local 169

1. Distributing traffic control signs and markers along site in designated pattern;
2. Informing drivers of detour routes through construction sites;

Craft: Truck Driver (Non-Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Dump Trucks (Single or Multiple Units Including Semi's & Double Transfer Units), Dumpcretes and Bulk Cement Spreader

Under 4 yds. (water level).....	33.94
4 yds. & under 8 yds. (water level).....	33.94
8 yds. & under 18 yds. (water level).....	33.94
18 yds. & under 25 yds. (water level)	33.94
25 yds. & under 60 yds. (water level).....	33.94
60 yds. & under 75 yds. (water level)).....	33.94
75 yds. & under 100 yds. (water level)).....	33.94
100 yds. & under 150 yds. (water level)).....	33.94
150 yds. & under 250 yds. (water level)).....	33.94
250 yds. & under 350 yds. (water level)).....	33.94
350 yds. & over (water level).....	33.94

Transit Mix

Under 8 yds.....	33.94
Under 8 yds & including 12 yds.....	33.94
Over 12 yds.....	33.94

Transit Mix (Using Boom)

Transit mix with boom shall receive 16 cents per hour above the appropriate yardage classification rate of pay when such boom is used.....	33.94
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Water & Jetting Trucks

Up to 2,500 gallons.....	33.94
Up to 2,500 gallons & over.....	33.94
DW 20's & 21's & other similar Cat type, Terry Cobra LeTourneau pulls, Tournerocker, Euclid, & similar type equipment when pulling Aqua/Pak, Water Tank Trailers, & Fuel, and/or Grease Tank Trailer, or other miscellaneous Trailers, (except as defined under "Dump Trucks")	
Heavy Duty Transport (High Bed).....	33.94
Heavy Duty Transport(Gooseneck low bed).....	33.94
Tiltbed or Flatbed Pull Trailers..	33.94
Bootman, Comb. Bootman & Road Oiler.....	33.94
Flat Rack (2 or 3 axle unit).....	33.94

Bus & Manhaul Drivers

Up to 18,000 lbs. (single unit).....	33.94
18,000 lbs. and over	33.94
Warehousemen Spotter	33.94

Winch Truck & "A" Frame Drivers

Up to 18,000 lbs.	33.94
18,000 lbs. and over.....	33.94
Warehousemen Spotter.....	33.94
Warehouse Clerk.....	33.94
Tire Repairmen.....	33.94
Truck Repairmen.....	33.94
Pick Up Truck & Pilot Cars (Jobsite)	33.94
Pick Up Truck & Pilot Cars (Over the road)	33.94
Truck Oil Greaser.....	33.94
Fuel Truck Driver.....	33.94
Fuel Man & Fuel Island Man.....	33.94
Oil Tanker.....	33.94

Oil Tanker with Pup.....	33.94
Foreman.....	33.94

TRUCK DRIVER

Includes but is not limited to:

Driving a tractor trailer combination or a truck to transport goods or materials at the site of a public work or between sites of a public work. (Also, see descriptions listed with Truck Driver rates, if any.)

Craft: WELL DRILLER (Non-Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Well Driller.....31.27

JOB DESCRIPTIONS

1. Setting, operating or tending to portable drilling rig machinery and related equipment to drill wells;
2. Extending stabilizing jackscrews to support and level a drilling rig;
3. Installing water well pumps;
4. Drillings wells for industrial water supplies, irrigation water supplies or water supplies for any other purpose; dewatering or other similar purposes; exploration; hole drilling for geologic and hydrologic information; and core drilling for geologic information.

GROUP CLASSIFICATIONS

Group 1

- All cleanup work of debris, grounds, and building including windows and tile
- Dumpmen or Spotter (other than asphalt)
- Handling and Servicing of Flares, Watchmen
- General Laborer
- Guideposts and Highway Signs
- Guardrail Erection and Dismantling
- Limber, Brushloader and Piler
- Pavement Marking and Highway Striping
- Traffic Barrier Erector
- Tending to portable space heaters
- Profilograph work all types manual, self propelled or carts
- Gabion basket, building, handling, installation and rigging
- Dry set paver work
- Traffic Barrier Erector

Group 2

- Choker setter or Rigger (clearing work only) Pittsburgh
- Chipper and similar type brush shredders
- Concrete worker (wet or dry) all concrete work not listed in Group 3 included but not limited to: concrete forms stripping, handling, cleaning, oiling and moving to the next point of installation.
- Crusher or Grizzly Tender
- Greasing Dowels
- Guinea Chaser (Stakemen)
- Panel Forms (wood or metal) handling, cleaning and stripping of Loading and unloading, (Carrying and handling of all rods and material for use in reinforcing concrete
- Railroad Trackmen (maintenance, repair or builders)
- Sloper
- Semi-Skilled Wrecker (salvaging of building materials other than those listed in Group 3)
- Waterproofing work
- Epoxy rebar/dowels and anchoring dowel baskets
- Placement pouring of concrete including any epoxy resin or similar materials, rodding, spreading and tamping concrete, brooming or brushing, hand application of curing compounds, applying topping (wet or dry) colors or grits, and exposed finishes for architectural work
- Concrete patching, dry packing, chipping, stoning, and grouting
- Concrete cold weather/rain protection and curing
- Placement /anchoring of all earth stabilization/filters fabrics,
- Mechanically stabilized Earth (MSE) and Keystone type retaining walls rigging, placing , aligning, backfilling and installation of dead men and any stabilization compenents

Group 3

- Asphalt Workers (Ironers, Shovelers, Cutting Machine)
- Buggymobile
- Chainsaw, Faller, Logloader and Bucker

- Compactor (all types)
- Concrete Mixer under 1/2 yard
- Concrete Pan Work (Breadpan type), handling, cleaning\stripping
- Concrete Saw, Chipping, Grinding, Sanding, Vibrator
- Cribbing, Shoring, Lagging, Trench Jacking, Hand-Guided Lagging Hammer
- Curbing or Divider machine
- Curb Setter (precast or cut)
- Ditching Machine (hand-guided)
- Drillers Helper, Chuck Tender
- Fence erector including safety, chain link, turtle, field and barbe wire fencing
- Form Raiser, Slip Forms
- Grouting of Concrete Walls, Windows and Door Jams
- Headerboardmen
- Jackhammer, Pavement Breaker, Air Spade
- Mastic Worker (wet or dry)
- Pipewrapper, Kettlemen, Potmen, and men applying asphalt, creosote and similar type materials
- All Power Tools (air, gas, or electric), Post Driver
- Riprap-Stonepaver and RockSlinger, including placing of sack concrete wet or dry Rototiller
- Rigging and Signaling in connection with Laborers' work
- Sandblaster, Potmen, Gunmen or Nozzlemen water blasting not covered in group 5A
- Vibra-screed
- All demolition and wrecking work including but not limited to any torch work cutting, burning, plasma arc, dust control, and salvaging (removing and salvaging of all materials, windows, doors, plumbing, and electrical fixtures) and use of customary tools and equipment for demolition and wrecking
- All underpinning foundation work, digging and underpinning pits, removal of debris with tuggers or other methods, cutting, handling and installing all shoring boards and lagging boards used for underpinning and foundation work, placement and tying of steel reinforcing for underpinning piers, all tiebacks and soil nail work drilling and grouting, all soldier beam work and use of customary tools and equipment for underpinning foundation work

Group 3A

- Concrete Specialist
- Setting screeds
- Screed pins
- Curb forms and curb and gutter forms,
- Using Darby and push floats,
- Hand trowels or hand floating
- Marking edging
- Using base cove or step tools
- Spreading and finishing gypsum
- Concrete grinding machines (the terms does not include Rotomill machines for highway overlay grinding)
- Troweling machines,
- Floating machines
- Finishing of epoxy or resin materials,
- Operation of skill saw
- Laser Screed

- Laser Level
- Curb and Slipform machines,
- Stamps or other means or texturing,
- Any new devices which are beneficial to the construction of or with concrete or related products.

Group 4

- Burning and Welding in connection with Laborers' work
- Joy Drill Model TWM-2A, Gardner Denver Model DN143 and similar type drills (in accordance with Memorandum of Understanding between Laborers and Operating Engineers dated at Miami, Florida, Feb. 3, 1954) and Track Drillers, Diamond Core Drillers, Wagon Drillers, Mechanical Drillers on Multiple Units
- High scalers including but not limited to laying, anchoring, pinning, cabling and stretching of any rock fall netting, mesh or wire fabric and use of customary tools and equipment for high scaling
- Concrete pump operator
- Heavy Duty Vibrator with Stinger 5" diameter or over
- Pipelayer, Caulker and Bander
- Pipelayer-waterline, Sewerline, Gasoline, Conduit and all other types of composition for any purpose buried under ground outside of building including, stringing, trench shoring, backfilling sanding, caution taping, all walk behind equipment and spotting
- Laborer work in connection with micro tunneling, directional drilling and pipe-jacking
- Cathodic protection, grounding for pipe work
- Cleaning of Utility Lines
- Slip Lining of Utility Lines (including operation of Equipment)
- TV Monitoring and Grouting of Utility Lines
- Asphalt Rakers and Asphalt dump Man
- All mechanical and pressurized pipe work, including the installation of pipe above and below ground, cathodic protection, bolt up, and support installation in connection to water conveyance, c

Group 4A

- Foreman

Group 5

- Construction Specialists
- Blasters and Powdermen, all work of loading, placing, and blasting of all powder and explosives of any type, regardless of method used for such loading and placing
Asbestos removal
- Lead abatement
- Hazardous waste
- Material removal

Group 5A

- Pavement Marking and Highway Striping
- Pavement Marking and Highway Striping Foreman
- Pavement Marking and Highway Striping work includes but is not limited to: All work by any method performed in connection with the permanent or temporary application and installation of pavement marking of any kind, brand, type or style on parking lots, airfields, highways,

streets and other such surfaces and all work performed in connection with removal of pavement.

Group 6

- Guniting Foremen, Nozzlemen, Rodmen, Gunmen, Materialmen, Reboundmen
- Tunnel and shaft workers/miners and use of customary tools and equipment for tunnel and mine work All work performed in a compressed air tunnel shaft or chamber including the use of hand, power tools or equipment as necessary in connection with compressed air work

OPERATING ENGINEER, includes but is not limited to:

Group 1

- Engineer Assistant

Group 1A

- Heavy Duty Repairman Helper
- Oiler
- Parts man

Group 2

- Compressor Operator
- Material Loader and/or Conveyor Operator (handling building materials)
- Pump Operator

Group 3

- Bobcat or similar loader, 1/4 cu. yd. or less
- Concrete Curing Machines (streets, highways, airports, canals)
- Conveyor Belt Operator (tunnel)
- Forklift (under 20)
- Engineer Generating Plant (500 K.W.)
- Mixer Box Operator (concrete plant)
- Motorman
- Rotomist Operator
- Oiler (truck crane)

Group 4

- Concrete Mixer Operator, Skip type
- Dinky Operator
- Forklift (20' or over) or Lumber Stacker
- Ross Carrier
- Skip Loader Operator (under one (1) cu. yd.)
- Tie Spacer

Group 5

- Concrete Mixers (over one (1) cu. yd.)
- Concrete Pumps or Pumpcrete Guns
- Elevator and Material Hoist (one (1) drum)
- Groundman for Asphalt Milling and similar

Group 6

- Auger type drilling equipment up to and including 30 ft. depth digging capacity M.R.C.
- Boom Truck or Dual-Purpose a-Frame Truck
- B.L.H. Lima Road Pactor or similar
- Chip Box Spreader (Flaherty type or similar)
- Concrete Batch Plant (wet or dry)
- Concrete Saws (highways, streets, airports, canals)
- Locomotives (over thirty (30) tons)
- Maginnis International Full Slab Vibrator (airports, highways, canals and warehouses)
- Mechanical Finishers (concrete) (Clary, Johnson, Bidwell Bridge Deck or similar types)

- Mechanical Burn, Curb and/or Curb and Gutter Machine (concrete or asphalt)
- Pavement Breaker, Truck Mounted, with compressor combination
- Pavement Breaker or Tamper (with or without compressor combination)
- Power Jumbo Operator (setting slip-forms, etc., in tunnels)
- Roller Operator (except asphalt)
- Self-Propelled Tape Machine
- Self-Propelled Compactor (single engine)
- Self-Propelled Power Sweeper Operator
- Slip-Form Pump (power-driven by hydraulic, electric, air, gas, etc. lifting device for concrete forms)
- Small Rubber-Tired Tractors
- Snooper Crane, Paxton-Mitchell or similar
- Stationary Pipe Wrapping, Cleaning and Bending Machine Operator

Group 7

- Auger type drilling equipment over 30 ft. depth digging capacity M.R.C.
- Compressor (over 2)
- Concrete Conveyor or Concrete Pump, truck or equipment mounted (any assistance required shall be performed by an Assistant to Engineer) Boom length to apply Concrete Conveyor, Building Site
- Drilling and Boring Machine, vertical and horizontal (not to apply to waterliners, wagon drills or jack hammers)
- Crusher Plant Engineer
- Generators
- Kolman Loader
- Material Hoist (two (2) or more drums)
- Mine or Shaft Hoist
- Pipe Bending Machines (pipeline only)
- Pipe Cleaning Machines (tractor-propelled and supported)
- Pipe Wrapping Machines (tractor-propelled and supported)
- Portable Crushing and Screening Plants
- Post Driller And/Or Driver
- Pumps (over 2)
- Screedman (except asphaltic or concrete paving)
- Self-Propelled Boom-Type Lifting Device (center mount) (on ten (10) ton capacity or less)
- Slusher Operator
- Surface Heater and Planer Operator
- Trenching Machine (maximum digging capacity three (3) ft. depth) (Any assistance in the operation, if needed, shall be performed by an Assistant to Engineer)
- Truck-Type Loader
- Welding Machines (gasoline or diesel)

Group 8

- Asphalt Plant Engineer
- Asphalt Milling Machine
- Cast-In-Place Pipe-Laying Machine
- Combination Slusher and Motor Operator
- Concrete Batch Plant (multiple units)
- Dozer Operator

- Drill Doctor
- Elevating Grader Operator
- Grooving and Grinding Machine (highways)
- Ken Seal Operator
- Loader (up to and including two and one-half (2 1/2) cu. yds)
- Mechanical Trench Shield
- Mechanical Finishers or Spreader Machine (asphalt, Barber-Greene or similar)
- Mixermobile
- Push Cats
- Road Oil Mixing Machine Operator Wood-Mixer (and other similar Pugmill equipment)
- Roller Operator (asphalt)
- Rubber-Tired Earthmoving Equipment (up to and including thirty-five (35) cu. yds. "struck " M.R.C., Euclids, T-Pulls, DW10, 20, 21 and similar)
- Screedman (Barber-Greene and similar) (asphaltic or concrete paving)
- Self-Propelled Compactors with Dozer; Hyster 450, Cat 825 or similar
- Sheepfoot
- Small Tractor (with boom)
- Soil Stabilizer (P & H or equal)
- Timber Skidder (rubber-tired) or similar equipment
- Tractor-Drawn Scraper
- Tractor Operator
- Tractor-Mounted Compressor Drill Combination
- Trenching Machine Operator (over three (3) feet depth)
- Tri-Batch Paver
- Tunnel Badger or Tunnel Boring Machine Operator
- Tunnel Mole Boring Machine
- Vermeer T-600b Rock Cutter

Group 9

- Chicago Boom
- Combination Backhoe and Loader (up to and including 3/8 cu. yd.)
- Combination Mixer and Compressor (gunite)
- Heavy Duty Repairman and/or Welder
- Lull Hi-Lift (twenty (20) feet or over)
- Mucking Machine
- Sub-Grader (Gurries or other types)
- Tractor (with Boom) (D6 or larger)
- Track-Laying-Type Earthmoving Machine (single engine with tandem scrapers)

Group 10

- Boom-Type Backfilling Machine
- Bridge Crane
- Cargy-Lift or similar
- Chemical Grouting Machine
- Derricks (two (2) Group 10 Operators required when swing engine remote from hoist)
- Derrick Barges (except excavation work)
- Euclid Loader and similar types
- Heavy Duty Rotary Drill Rigs
- Lift-Slab (Vagtborg and similar types)

- Loader (over two and one-half (2 1/2 cu. yds. up to and including four (4) cu. yds.)
- Locomotive (over one hundred (100) tons, single or multiple units)
- Multiple-Engine Earthmoving Machines (Euclid Dozers, etc.)
- Pre-Stress Wire Wrapping Machine
- Rubber-Tired Scraper, Self-Loading
- Single-Engine Scraper (over thirty-five (35) cu. yds.)
- Shuttle Car (Reclaim Station)
- Train Loading Station
- Trenching Machine multi-engine with sloping attachments (Jefco or similar)
- Vacuum Cooling Plant
- Whirley Crane (up to and including twenty-five (25) tons)

Group 10A

- Backhoe-Hydraulic (up to and including one (1) cu. yd.)
- Backhoe (up to and including one (1) cu. yd.) (Cable)
- CMI Dual Lane Auto-Grader SP30 or similar type
- Cranes (not over twenty-five (25) tons) (hammerhead and gantry)
- Finish Blade
- Gradalls (up to and including one (1) cu. yd.)
- Motor Patrol Operator
- Power Shovels, Clamshells, Draglines, Cranes (up to and including one (1) cu. yd.)
- Rubber-Tired Scraper, Self-Loading (twin engine)
- Self-Propelled Boom-Type Lifting Device, center mount (over 10 tons up to and including 25 tons)

Group 11

- Automatic Asphalt or Concrete Slip-Form Paver
- Automatic Railroad Car Dumper
- Canal Trimmer
- Cary Lift, Campbell or similar type
- Cranes (over twenty-five (25) tons)
- Euclid Loader when controlled from the Pullcat
- Gradesetter, Grade Checker
- Highline Cableway Operator
- Loader (over four (4) cu. yds. up to and including twelve (12) cu. yds.)
- Multi-Engine Earthmoving Equipment (up to and including seventy-five (75) cu. yds. struck m.r.c.)
- Multi-Engine Scrapers (when used to Push Pull)
- Power Shovels, Clamshells, Draglines, Backhoes Gradalls (over one (1) cu. yd. and up to and including seven (7) cu. yds. m.r.c.)
- Self-Propelled Boom-Type Lifting Device (center mount) (over 25 tons m.r.c.)
- Self-Propelled Compactor (with multiple-propulsion power units)
- Single-Engine Rubber-Tired Earthmoving Machine, with Tandem Scraper
- Slip-Form Paver (concrete or asphalt)
- Tandem Cats and Scraper
- Tower Crane Mobile (including Rail Mount)
- Truck Mounted Hydraulic Crane when remote control equipped (over 10 tons up to and including 25 tons)
- Universal Liebherr and Tower Cranes (and similar types)

- Wheel Excavator (up to and including seven hundred fifty (750) cu. yds. per hour)
- Whirley Cranes (over twenty-five (25) tons)

Group 11A

- Band Wagons (in conjunction with Wheel Excavators)
- Operator of Helicopter) when used in construction work)
- Loader (over twelve (12) cu. yds.)
- Multi-Engine Earthmoving Equipment (over seventy-five (75) cu. yds. "struck" m.r.c.)
- Power Shovels. Clamshells, Draglines, Backhoes, and Gradalls (over seven 7 cu. yds. m.r.c.)
- Remote-Controlled Earth Moving Equipment
- Wheel Excavator (over seven hundred fifty (750) cu. yds. per hour)

Group 11B

- Holland Loader or similar or Loader (over 18 cu. yds.)
-

OPERATING ENGINEERS - Steel Fabricator & Erector

Group 1

- Cranes over 100 tons
- Derrick over 100 tons
- Self-Propelled Boom Type Lifting Devices over 100 tons

Group 2

- Cranes over 45 tons up to and including 100 tons
- Derrick, 100 tons and under
- Self-Propelled Boom Type Lifting Device, over 45 tons
- Tower Crane

Group 3

- Cranes, 45 tons and under
- Self-Propelled Boom Type Lifting Device, 45 tons and under

Group 4

- Chicago Boom
- Forklift, 10 tons and over
- Heavy Duty Repairman/Welder

Group 5

- Boom Cat
-

OPERATING ENGINEER -PILEDRIIVER

Group 1

- Derrick Barge Pedestal mounted over 100 tons
- Clamshells over 7 cu. yds.
- Self-Propelled Boom Type Lifting Device, over 100 tons
- Truck Crane or Crawler, land or barge mounted over 100 tons

Group 2

- Derrick Barge Pedestal mounted 45 tons up to and including 100 tons
- Clamshells up to and including 7 cu. yds.
- Self-Propelled Boom Type Lifting Device over 45 tons
- Truck Crane or Crawler, land or barge mounted, over 45 tons up to and including 100 tons

Group 3

- Derrick Barge Pedestal mounted under 45 tons
- Self-Propelled Boom Type Lifting Device 45 tons and under
- Skid/Scow Piledriver, any tonnage
- Truck Crane or Crawler, land or barge mounted 45 tons and under

Group 4

- Assistant Operator in lieu of Assistant to Engineer
- Forklift, 10 tons and over
- Heavy Duty Repairman/Welder

Group 5

No current classification

Group 6

- Deck Engineer

Group 7

No current classification

Group 8

- Deckhand
 - Fireman
-



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2021-2022 Prevailing Wage Rate Amendment

Amendment

- AMENDMENT 2
- Classification – Equipment Greaser
- County – Clark County and Southern Rural Regions
- Effective – October 4, 2021

The following represents the amended wage rates.

Craft:EQUIPMENT GREASER(Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Equipment Greaser (Rack).....	79.68
Equipment Greaser (Greaser Truck)	81.17
Equipment Greaser (Greaser Truck/Multi-Shift).....	82.27
Equipment Greaser Tunnel (Greaser Truck)	81.89

ADD ZONE RATE

In addition to: EQUIPMENT GREASER (RACK) rates add the applicable amounts per hour calculated from the City Hall of Las Vegas, Nevada:

Zone 1	0 to 32.5 miles	\$0.00
Zone 2	32.5 to 45 miles	\$3.00
Zone 3	45 to 60 miles	\$4.00
Zone 4	over 60 miles	\$4.50

ADD PREMIUM PAY

All time worked before 6:00 A.M. and after 5:00 P.M., or all time worked in excess of eight (8) consecutive hours, exclusive of meal periods, and all work performed on Saturdays, Sundays and holidays, shall be paid at the applicable overtime rate.

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.



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2021-2022 Prevailing Wage Rate Amendment 6

Amendment 6

- AMENDMENT 6
- Classification – Laborer Recognized Holidays
- County – Washoe County and Northern Nevada Rural Regions
- Effective – November 23, 2021

The following represents the amended wage rates.

Craft: Laborer(Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

RECOGNIZED HOLIDAYS

If any of these holidays fall on Sunday, the Monday following shall be considered a Holiday.

New Year's Day, President's Day, Memorial Day, Fourth of July, Labor Day, Admission Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.



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2021-2022 Prevailing Wage Rate Amendment

- AMENDMENT 8
- Classification - Equipment Greaser
- County - Clark County and Southern Rural Regions
- Effective - February 1, 2022

The following represents the amended wage rates.

Craft: EQUIPMENT GREASER (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Group 3 - Operator - Grease Rack	79.68
Group 4 - Operator - Grease Truck	81.17
Group 5 - Operator - Grease Truck/Multi-Shift	82.27
Group 5 - Operator Grease Truck Tunnel	81.89

ADD ZONE RATE

In addition to: EQUIPMENT GREASER (RACK) rates add the applicable amounts per hour calculated from the City Hall of Las Vegas, Nevada:

Zone 1	0 to 32.5 miles	\$0.00
Zone 2	32.5 to 45 miles	\$3.00
Zone 3	45 to 60 miles	\$4.00
Zone 4	over 60 miles	\$4.50

ADD PREMIUM PAY

All time worked before 6:00 A.M. and after 5:00 P.M., or all time worked in excess of eight (8) consecutive hours, exclusive of meal periods, and all work performed on Saturdays, Sundays and holidays, shall be paid at the applicable overtime rate.

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

- Lubricates moving parts of heavy equipment throughout the project or on the project.
- Check and fill miscellaneous equipment fluids. Changes oil in machine reservoirs; cleans and replaces oil filters.
- Remove and replace air and fuel filters.
- Ensures that automatic lubrication equipment operates correctly, replacing empty drums or malfunctioning lines.
- Fills automatic dispensers, oil cans, and oil cups.
- Utilizes fuel stand discharge nozzles and fuel and lube discharge guns.
- Inspect and operate auxiliary equipment, including boom assembly.
- Identifies machines and equipment requiring repair or maintenance through provided work orders and specifications. Maintain equipment per manufacturer's requirements.
- Identifies when and what type of preventive maintenance is required for heavy equipment; performs the maintenance, reporting any need for additional maintenance or repairs.
- Completes logs, reports, or other documentation related to the installation, replacement, modification, or changing of machine parts and attachments.
- Removes superfluous oil and grease from machinery, tools, equipment and on the project.
- Checks tire pressure and inflates tires when necessary.

00900 WORK CHANGE DIRECTIVES, CHANGE ORDERS & FIELD ORDERS

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Work Change Directive No. _____

Date of Issuance:

Effective Date:

Owner: **City of Fallon**

Owner's Contract No.:

Contractor:

Contractor's Project No.:

Engineer: **Lumos & Associates, Inc.**

Engineer's Project No.: **10514.000**

Project: **Sherman Street and North Broadway Street
Rehabilitation Project**

Contract Name: **PWP-CH-2022-408**

Contractor is directed to proceed promptly with the following change(s):

Description:

Attachments: *[List documents supporting change]*

Purpose for Work Change Directive:

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to: *[check one or both of the following]*

☐ Non-agreement on pricing of proposed change.

☐ Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price \$ [increase] [decrease].

Contract Time days [increase] [decrease].

Basis of estimated change in Contract Price:

☐ Lump Sum

☐ Unit Price

☐ Cost of the Work

☐ Other

RECOMMENDED:

AUTHORIZED BY:

RECEIVED:

By: _____
Engineer (Authorized Signature)

By: _____
Owner (Authorized Signature)

By: _____
Contractor (Authorized Signature)

Title: _____

Title: _____

Title: _____

Date: _____

Date: _____

Date: _____

++END OF WORK CHANGE DIRECTIVE++

Date of Issuance:	Effective Date:
Owner: City of Fallon	Owner's Contract No.:
Contractor:	Contractor's Project No.:
Engineer: Lumos & Associates, Inc.	Engineer's Project No.: 10514.000
Project: Sherman St. & N. Broadway St. Rehabilitation	Contract Name: PWP-CH-2022-408

The Contract is modified as follows upon execution of this Change Order:

Description:

Attachments: *[List documents supporting change]*

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES <i>[note changes in Milestones if applicable]</i>
Original Contract Price: \$ _____	Original Contract Times: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] from previously approved Change Orders No. ____ to No. ____: \$ _____	[Increase] [Decrease] from previously approved Change Orders No. ____ to No. ____: Substantial Completion: _____ Ready for Final Payment: _____ days
Contract Price prior to this Change Order: \$ _____	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] of this Change Order: \$ _____	[Increase] [Decrease] of this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
Contract Price incorporating this Change Order: \$ _____	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for Final Payment: _____ days or dates

RECOMMENDED:		ACCEPTED:		ACCEPTED:	
By: _____	By: _____	By: _____	By: _____	By: _____	By: _____
Engineer (if required)	Owner (Authorized Signature)	Contractor (Authorized Signature)			
Title: _____	Title: _____	Title: _____			
Date: _____	Date: _____	Date: _____			

++END OF CHANGE ORDER++

Field Order No. _____

Date of Issuance:

Effective Date:

Owner: **City of Fallon**

Owner's Contract No.:

Contractor:

Contractor's Project No.:

Engineer: **Lumos & Associates, Inc.**

Engineer's Project No.: **10514.000**

Project: **Sherman Street and North Broadway
Street Rehabilitation Project**

Contract Name: **PWP-CH-2022-408**

Contractor is hereby directed to promptly execute this Field Order, issued in accordance with General Conditions Paragraph 11.01, for minor changes in the Work without changes in Contract Price or Contract Times. If Contractor considers that a change in Contract Price or Contract Times is required, submit a Change Proposal before proceeding with this Work.

Reference: _____
Specification(s) Drawing(s) / Detail(s)

Description:

Attachments:

ISSUED:

RECEIVED:

By: _____ By: _____
Engineer (Authorized Signature) *Contractor (Authorized Signature)*

Title: _____ Title: _____

Date: _____ Date: _____

Copy to: Owner

++END OF FIELD ORDER++

TECHNICAL SPECIFICATIONS

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Section 01010

Summary of Work

1.1 General

- A. The Work to be performed under this Contract shall consist of furnishing all plant, tools, equipment, materials, supplies, and manufactured articles and furnishing all labor, transportation and services, including fuel, power, water, and essential communications, and performing all Work or other operations required for the fulfillment of the Contract in strict accordance with the Contract Documents. The Work shall be complete, and all Work, materials, and services not expressly indicated or called for in the Contract Documents which may be necessary for the complete and proper construction of the Work in good faith shall be provided by the **CONTRACTOR** as though originally so indicated, at no increase in cost to the **OWNER**.

2.1 Work Covered by Contract Documents

- A. The Work generally includes but is not limited to: Reconstruction of approximately 1,350 linear feet of N. Broadway Street and 700 linear feet of Sherman Street. This includes installing sidewalk, curb and gutter, valley gutter and spandrels, residential and commercial driveway apron improvements, ADA compliant pedestrian ramps, new catch basins, storm infiltration chambers, culvert extension and new headwalls, water main improvements, water service reconnections, sewer main and manhole improvements, striping, signage, traffic control, stormwater protection, and all miscellaneous and incidental work necessary to complete the project in conformance with the contract documents.

Bid Item Clarifications

Bid Item 1 - Mobilization/Demobilization/Erosion Control/Cleanup:

Work to be performed under this item shall consist of mobilization, demobilization, erosion control, and cleanup.

Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for work on the project; temporary power, water, sanitation facilities, and signage; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site.

Demobilization shall consist of all preparatory work and operations to remove all the facilities and personnel included in Mobilization.

Cleanup shall consist of neatly finishing the entire construction area after all the work indicated on the Plans and Specifications is completed and before final acceptance of the project. The entire construction area, including the roadway, parking, sidewalk areas, shoulders, driveways,

side street approaches, trenches and construction areas shall be neatly finished to the lines, grades, and cross-sections shown on the Improvement Plans as hereinafter specified.

A street sweeper vacuum truck must be used to clean the roadway section. A power broom with a water truck will not be an acceptable means of cleaning the site. Throughout all phases of construction until final acceptance of the project, the Contractor shall keep the work site clean and free from rubbish and debris. The Contractor shall also abate dust nuisance by cleaning, sweeping and sprinkling with water, or other means necessary. The use of water resulting in mud or ice on public streets will not be permitted as a substitute for sweeping or other methods.

All backfill, aggregate or waste materials being hauled to or from the construction site shall be covered with a canvas or plywood material to prevent dust from entering the atmosphere. Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately, and the area cleaned.

All existing catch basins and DI where BMP devices are installed, the BMP shall be completely removed and disposed. The inside and surrounding surface of the catch basin and/or DI shall be thoroughly cleaned at the completion of the project with a vacuum truck.

Erosion control shall consist of furnishing all materials, equipment, and labor for erosion controls, installation and maintenance of storm water protection devices, protection and cleaning of storm drain structures throughout the duration of the project. Conforming to the requirements of this section does not relieve the contractor of the cleanup requirements as described in other sections of the contract documents. Contractor is responsible for preparing a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the procedures set forth by the Nevada Department of Environmental Protection (NDEP).

Payment for mobilization/demobilization/erosion control/cleanup will be made as follows:

When 5% of the total original Contract amount is earned from other bid items, 50% of the amount of bid for mobilization/demobilization/erosion control/cleanup will be paid.

When 50% of the total original Contract amount is earned from other bid items, 90% of the amount bid for mobilization/demobilization/erosion control/cleanup will be paid.

Upon completion of all work on the project, including completion of punch list work and submittal of record drawings by the Contractor, 100% of the mobilization/demobilization/erosion control/cleanup item will be paid

Increases in the total Contract Price for any reason does not justify an increase in the lump sum bid price for MOBILIZATION/DEMobilIZATION/EROSION CONTROL/CLEANUP.

Bid Item 2 - Furnish and Provide Traffic Control

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to provide traffic control in accordance with the plans and specifications. Work shall include, but not be limited to preparation and distribution of traffic control plans for approval, advanced notices and reports, in addition to the setup, removal and maintenance of all barricades, signs, channelizing devices, barrels, cones, flag persons, detours, pilot cars, arrow

boards, message boards, temporary striping, temporary paving, temporary aggregate base, plantmix bituminous ramps, and incidentals necessary to provide all traffic control throughout the duration of the project. Refer to Section 01570 "Traffic Maintenance and Safety" of the Technical Specifications for specific traffic control requirements.

There shall be no additional payment for changes in the traffic control plan required as a result of changes in the Contractor's work method or schedule.

In general, payment associated with this item of work may be prorated based upon the percentage of work completed. Payment for FURNISH AND PROVIDE TRAFFIC CONTROL shall be made at the applicable unit price bid per lump sum which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 3 - Tree Removal by ISA Certified Arborist

This item is the performance of tree removal. The work comprising the unit price bid for this item shall consist of all labor, equipment, materials and incidentals necessary to remove all trees by an ISA Certified Arborist.

The final pay quantity shall be by field measurement of trees removed. Payment for PERFORM TREE REMOVAL BY ISA CERTIFIED ARBORIST shall be made at the applicable unit price bid per each and shall be deemed full compensation for all labor, materials, equipment and incidentals necessary to complete the work as specified.

Bid Item 4 - Perform Root Exposure and Mitigation by ISA Certified Arborist (Contingent Item)

This item is the performance of root exposure and mitigation. The work comprising the unit price bid for this item shall consist of all labor, equipment, materials and incidentals necessary to trim all trees, roots, landscaping, and stumps by an ISA Certified Arborist and to complete the special method root exposure work, including pneumatic or hydraulic spade tool, vacuum truck or similar device to remove the soil and material from the roots within the mitigation zone.

Removal of concrete, hand excavations and other methods for exposing tree roots are not considered special methods and are not subject to this bid item.

Payment for PERFORM ROOT EXPOSURE AND MITIGATION BY CERTIFIED ARBORIST shall be made at the contract hourly rate as shown on the "Bid Schedule." The final pay quantity shall be based on the submitted and approved invoice from the certified arborist.

The quantity of this contingent item of work, as set forth in the "Bid Schedule," represents no actual estimate, is nominal only, and may be greatly increased, decreased or reduced to zero. The increase or reduction of this quantity shall not constitute a basis for claim by the Contractor for extra payment or damages.

Bid Item 5 - Remove or Abandon Existing Storm Drain Pipe

The unit price bid for this item shall include all labor, equipment, materials and all incidentals necessary to either remove or abandon existing Storm Drain pipe by removal or grout abandonment at the locations indicated on the plans. Work shall include, but not be limited to saw cutting, excavation, shoring, offsite disposal of materials if removed, dewatering, perpetuation of drainage, concrete cap for abandonment, vent pipes and supply and completely

fill pipe with grout if not removed, and incidentals necessary for a complete removal or abandonment.

Payment for this item will be based on the unit bid price per linear foot for actual quantities measured in the field.

Payment for REMOVE OR ABANDON EXISTING STORM DRAIN PIPE shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 6 - Remove Existing Storm Drain Manhole

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to REMOVE EXISTING STORM DRAIN MANHOLE in reconstructed areas at the locations indicated on the plans. Work shall include, but not be limited to locating, verification of depth, sawcutting, disconnection from Storm Drain system, removal, off haul, backfill and all incidentals necessary for a complete removal.

The final pay quantity shall be by field measurement. Payment for REMOVE EXISTING STORM DRAIN MANHOLE shall be made at the applicable unit price bid per each and shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 7 - Install PCC ADA Pedestrian Ramp

The unit price bid for this item shall include all labor, materials, equipment, and incidentals necessary to INSTALL PCC ADA PEDESTRIAN RAMP. Removal includes the wings, landing, post curb, depressed and transitional curb and gutter, existing aggregate base and/or subgrade materials, as well as saw cutting bituminous plantmix pavement and/or concrete. Also included is the protection of existing utility/meter boxes (within pedestrian ramp limits) as indicated on the plans. The removal of existing materials includes excavation to the bottom of the new Type II Class B Aggregate Base grade depth within the dimensions of the PCC ADA pedestrian ramps in the areas indicated on the plans.

Installation includes the wings, landing, post curb, the supply and placement of truncated domes, and the installation of depressed and transitional curb and gutter (Type 1/1A or Rolled) directly adjacent to the front of the pedestrian ramp wings and landing except where pedestrian ramps are at an intersection with a spandrel and valley gutter. Where a valley gutter and spandrel are present the pedestrian ramp will be paid to the front face of curb only.

Additionally, this item also includes the supply, placement, and compaction of new Type II Class B Aggregate Base material to meet proposed base elevation (6-inch depth minimum). Placement of temporary bituminous plantmix pavement transition patches, as necessary, shall be included in this item at no additional charge to the City.

Contractor shall be responsible to verify that final slopes of the pedestrian ramps conform to the Americans with Disabilities Act Accessibility Guidelines (ADAAG). No direct payment shall be made for field changes to comply with ADAAG.

Any existing improvements adjacent to pedestrian ramps that are displaced or damaged, i.e. sod, sprinkler systems, bollards, signs, mailboxes, trees, shrubs, other facilities or appurtenances

shall be replaced or restored to the original position and condition prevailing prior to the start of operations at the Contractor's expense.

The final pay quantity shall be by field measurement of installed pedestrian ramps. Payment for INSTALL PCC ADA PEDESTRIAN RAMP shall be made at the applicable unit price bid per each and shall be deemed full compensation for all labor, materials, equipment and incidentals necessary to complete the work as specified.

Bid Item 8 - Install Type 1 PCC Curb & Gutter

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to INSTALL TYPE 1 PCC CURB AND GUTTER as indicated in the project plans. Removals include, but are not limited to, saw cutting, removal of existing PCC curb and gutter, existing materials to the bottom of the new Type II Class B Aggregate Base depth in the dimensions and areas indicated within the plans, temporary protection, and disposal of all removed materials at an approved offsite location.

PCC curb and gutter installation adjacent to pedestrian ramps and commercial driveway aprons will NOT be paid for under this item and will be paid for per unit cost under PCC Pedestrian Ramp or PCC Commercial Driveway.

installation includes the construction of Type 1 PCC curb and gutter and the supply and installation of new Type II Class B Aggregate Base material with a compacted thickness of 6-inches minimum. Placement of temporary bituminous plantmix pavement transition patches, as necessary, shall be included in this item at no additional charge to the City of Fallon.

Type 1 PCC curb and gutter shall be measured per linear foot to the nearest foot.

The final pay quantity shall be by field measurement of installed curb and gutter. Payment for TYPE 1 PCC CURB AND GUTTER shall be made at the applicable unit price bid per linear foot and shall be deemed full compensation for all labor, materials, equipment and incidentals necessary to complete the work as specified.

Bid Item 9 - Install PCC Sidewalk

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to INSTALL PCC SIDEWALK and transitional PCC flatwork as indicated in the project plans. Removals include, but are not limited to, saw cutting, removal of existing PCC sidewalk and flatwork, existing materials to the bottom of the new Type II Class B Aggregate Base depth in the dimensions and areas indicated within the plans, temporary protection, and disposal of all removed materials at an approved offsite location.

This bid item also includes protection of existing utility boxes/meters. Coordinate with the City of Fallon for water meter protection.

Installation includes the construction of PCC sidewalk and transitional PCC flatwork and the supply and installation of new Type II Class B Aggregate Base material with a compacted thickness of 4-inches minimum. Adjustment of existing water meter boxes (within sidewalk limits); any grading necessary behind the new sidewalk to achieve positive drainage at a

maximum slope of 3:1; and placement of temporary bituminous plantmix pavement transition patches, as necessary, shall be included in this item at no additional charge to the City of Fallon.

Contractor shall be responsible to verify that final slopes of the sidewalk within the ADA route conform to the Americans with Disabilities Act Accessibility Guidelines (ADAAG). No direct payment shall be made for field changes to comply with ADAAG. PCC flatwork transition areas are not required to meet ADA requirements.

Any existing improvements adjacent to new or replaced sidewalk and transitional PCC flatwork that are displaced or damaged during installation or grading operations, i.e. sod, sprinkler systems, bollards, signs, , trees, shrubs, landscape walls (excluding Keystone block walls specifically identified in plans), rock or bark mulches, other facilities or appurtenances shall be replaced or restored to the original position and condition prevailing prior to the start of operations at the Contractor's expense.

PCC sidewalk and flatwork shall be measured to the nearest tenth of a foot in each direction and reported to the nearest whole number in square feet.

Bid Item 10 - Install PCC Residential Driveway Apron

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to INSTALL PCC RESIDENTIAL DRIVEWAY APRON. Removals include existing PCC driveway aprons, the existing aggregate base and/or subgrade materials, saw cutting bituminous plantmix pavement and/or PCC, and removal and disposal of existing materials, to the bottom of the new Type II Class B Aggregate Base depth in the areas indicated on the plans. This Bid Item also includes protection of existing utility boxes/meters (within PCC driveway limits). Coordinate with the City of Fallon for water meter protection.

Installation includes the construction of PCC driveway aprons (6-inches), post curb as needed, and the supply and installation of new Type II Class B aggregate base material with a compacted thickness of 6-inches minimum. Adjustment of existing water meter boxes (within driveway limits); and placement of temporary bituminous plantmix pavement transition patches, as necessary, shall be included in this item at no additional charge to the City of Fallon.

Contractor shall be responsible to verify that final slopes of the driveway aprons conform to the Americans with Disabilities Act Accessibility Guidelines (ADAAG). No direct payment shall be made for field changes to comply with ADAAG.

Any existing improvements adjacent to new or replaced driveway aprons that are displaced or damaged, i.e. sod, sprinkler systems, bollards, signs, mailboxes, trees, shrubs, landscape walls, rock or bark mulches, other facilities or appurtenances shall be replaced or restored to the original position and condition prevailing prior to the start of operations at the Contractor's expense.

PCC curb and gutter adjacent to residential driveway shall NOT be included in this bid item. Curb and gutter will be measured and paid for as specified in bid item #8.

PCC Driveway Apron shall be measured to the nearest tenth of a foot in each direction and reported to the nearest whole number in square feet. PCC driveway aprons are measured from

the back of curb to the back of walk and extends the length of the driveway depression and wings.

The final pay quantity shall be by field measurement of installed PCC driveway apron. Payment for INSTALL PCC RESIDENTIAL DRIVEWAY APRON shall be made at the applicable unit price bid per square foot which shall be deemed full compensation for all materials, labor, equipment and incidentals necessary to complete each item as specified

Bid Item 11 - Install PCC Commercial Driveway Apron

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to INSTALL PCC COMMERCIAL DRIVEWAY APRON. Removals include existing PCC driveway aprons, depressed and transitional curb and gutter along the apron, the existing aggregate base and/or subgrade materials, saw cutting bituminous plantmix pavement and/or PCC, and removal and disposal of existing materials, to the bottom of the new Type II Class B Aggregate Base depth in the areas indicated on the plans. This Bid Item also includes protection of existing utility boxes/meters (within PCC driveway limits). Coordinate with the City of Fallon for water meter protection.

Installation includes the construction of PCC driveway aprons (6-inches), post curb as needed, procurement and installation of steel reinforcement (extending into curb and gutter), and the supply and installation of new Type II Class B aggregate base material with a compacted thickness of 6-inches minimum. Adjustment of existing water meter boxes (within driveway limits); and placement of temporary bituminous plantmix pavement transition patches, as necessary, shall be included in this item at no additional charge to the City of Fallon.

Contractor shall be responsible to verify that final slopes of the driveway aprons conform to the Americans with Disabilities Act Accessibility Guidelines (ADAAG). No direct payment shall be made for field changes to comply with ADAAG.

Any existing improvements adjacent to new or replaced driveway aprons that are displaced or damaged, i.e. sod, sprinkler systems, bollards, signs, mailboxes, trees, shrubs, landscape walls, rock or bark mulches, other facilities or appurtenances shall be replaced or restored to the original position and condition prevailing prior to the start of operations at the Contractor's expense.

PCC curb and gutter adjacent to commercial driveway shall be included in this bid item and measured as specified below.

PCC driveway apron shall be measured to the nearest tenth of a foot in each direction (including curb and gutter) and reported to the nearest whole number in square feet. PCC driveway aprons are measured from the back of curb to the back of walk and extends the length of the driveway depression and wings.

The final pay quantity shall be by field measurement of installed PCC driveway apron. Payment for INSTALL PCC COMMERCIAL DRIVEWAY APRON shall be made at the applicable unit price bid per square foot which shall be deemed full compensation for all materials, labor, equipment and incidentals necessary to complete each item as specified.

Bid Item 12 - Install PCC Driveway Transition

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to INSTALL PCC DRIVEWAY TRANSITION as indicated in the project plans. Removals include, but are not limited to, saw cutting, removal of existing PCC driveway transition, removal of existing materials to the bottom of the new Type II Class B Aggregate Base depth in the dimensions and areas indicated within the plans, temporary protection, and disposal of all removed materials at an approved offsite location.

This bid item also includes protection of existing utility boxes/meters. Coordinate with the City of Fallon for water meter protection and electrical pull box protection.

Replacement includes the construction of PCC driveway transitions (6-inches) and the supply and installation of new Type II Class B Aggregate Base material with a compacted thickness of 6-inches minimum. Adjustment of existing utility boxes (within driveway transition limits) shall be approved by the appropriate agency; any grading necessary around the new driveway transition to achieve positive drainage shall be included in this item at no additional charge to the City of Fallon.

An expansion joint shall be placed at the back of walk where driveway transitions are being poured. Driveway transitions include dowels into existing concrete driveways at no less than two dowels per panel.

Any existing improvements adjacent to new or replaced driveway transition that are displaced or damaged, i.e. sod, sprinkler systems, irrigation sleeves, bollards, signs, mailboxes, trees, shrubs, other facilities or appurtenances shall be replaced or restored to the original position and condition prevailing prior to the start of operations at the Contractor's expense.

PCC driveway transitions installed shall match the existing driveway finish, i.e. stamped, colored, or texturized concrete at no additional cost to the City of Fallon.

PCC driveway transitions shall be measured to the nearest tenth of a foot in each direction and reported to the nearest whole number in square feet. PCC driveway transitions are measured from the back of walk to the tie-in location of the existing driveway.

The final pay quantity shall be by field measurement of installed sidewalk. Payment for INSTALL PCC DRIVEWAY TRANSITION shall be made at the applicable unit price bid per square foot, which shall be deemed full compensation for all materials, labor, equipment and incidentals necessary to complete each item as specified.

Bid Item 13 - Install PCC Steps

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to INSTALL PCC STEPS, per the detail indicated on the plans. Work shall include, but not be limited to removal of existing materials, preparation of subgrade, aggregate base, placement, compaction, reinforcing steel, and incidentals necessary for a complete installation.

The quantity will be measured in square feet, which includes the vertical face area of the steps along with the horizontal area.

The final pay quantity shall be by field measurement. Payment for INSTALL PCC STEPS shall be made at the applicable unit price bid per square foot, which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 14 - Install PCC Post Curb

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to INSTALL PCC POST CURB as indicated in the project plans. Removals include, but are not limited to, saw cutting, removal of existing PCC post curb, existing materials to the bottom of the new Type II Class B Aggregate Base depth in the dimensions and areas indicated within the plans, temporary protection, and disposal of all removed materials at an approved offsite location.

Installation includes the construction of PCC post curb and the supply and installation of new Type II Class B Aggregate Base material with a compacted thickness of 6-inches minimum. Placement of temporary bituminous plantmix pavement transition patches, as necessary, shall be included in this item at no additional charge to the City of Fallon.

PCC post curb removal and replacement adjacent to pedestrian ramps and residential/commercial driveway aprons will NOT be paid for under this item and will be paid for per unit cost under PCC Pedestrian Ramp or PCC Residential/Commercial Driveway.

PCC post curb shall be measured per linear foot to the nearest foot.

The final pay quantity shall be by field measurement of installed PCC post curb. Payment for INSTALL PCC POST CURB shall be made at the applicable unit price bid per linear foot and shall be deemed full compensation for all labor, materials, equipment and incidentals necessary to complete the work as specified.

Bid Item 15 - Install PCC Valley Gutter and Spandrels

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to INSTALL PCC VALLEY GUTTER AND SPANDREL. Removals include existing PCC valley gutter and spandrel, the existing aggregate base and/or subgrade materials, saw cutting bituminous plantmix pavement and/or PCC, and removal and disposal of existing materials, to the bottom of the new Type II Class B Aggregate Base depth in the areas indicated on the plans.

Installation includes the construction of PCC valley gutter and spandrel, procurement and installation of steel reinforcement, and the supply and installation of new Type II Class B aggregate base material with a compacted thickness of 6-inches minimum. Pedestrian ramp removal and replacement will NOT be paid for under this item and will be paid for per unit cost under PCC Pedestrian Ramp.

Placement of temporary bituminous plantmix pavement transition patches, as necessary, shall be included in this item at no additional charge to the City of Fallon.

PCC valley gutter and spandrel shall be measured to the nearest tenth of a foot in each direction and reported to the nearest whole number in square feet.

The final pay quantity shall be by field measurement of installed PCC Valley Gutter and Spandrel. Payment for INSTALL PCC VALLEY GUTTER AND SPANDREL shall be made at the applicable unit

price bid per square foot which shall be deemed full compensation for all materials, labor, equipment and incidentals necessary to complete each item as specified.

Bid Item 16 - Install AC Driveway Transition

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to INSTALL AC DRIVEWAY TRANSITION as indicated in the project plans. Removals include, but are not limited to, saw cutting, removal of existing AC driveway transition, existing materials to the bottom of the new Type II Class B Aggregate Base depth in the dimensions and areas indicated within the plans, temporary protection, and disposal of all removed materials at an approved offsite location.

This bid item also includes protection of existing utility boxes/meters. Coordinate with City of Fallon for water meter protection and electrical pull box protection.

Replacement includes the construction of AC driveway transition and the supply and installation of new Type II Class B Aggregate Base material with a compacted thickness of 6-inches minimum. AC pavement depth installed shall match the existing depth of the driveway or a minimum of 4", whichever is greater. Adjustment of existing utility boxes (within driveway transition limits) shall be approved by the appropriate agency; any grading necessary around the new driveway transition to achieve positive drainage shall be included in this item at no additional charge to the City of Fallon.

Any existing improvements adjacent to new or replaced driveway transition that are displaced or damaged, i.e. sod, sprinkler systems, bollards, signs, mailboxes, trees, shrubs, other facilities or appurtenances shall be replaced or restored to the original position and condition prevailing prior to the start of operations at the Contractor's expense.

AC driveway transitions shall be measured to the nearest tenth of a foot in each direction and reported to the nearest whole number in square feet.

The final pay quantity shall be by field measurement of installed AC Driveway Transition. Payment for INSTALL AC DRIVEWAY TRANSITION shall be made at the applicable unit price bid per square foot, which shall be deemed full compensation for all materials, labor, equipment and incidentals necessary to complete each item as specified.

Bid Item 17 - Install Type II Aggregate Base (Driveway Transition/Fill Station)

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to INSTALL TYPE II AGGREGATE BASE DRIVEWAY TRANSITION/FILL STATION) as indicated in the project plans. Removals include, but are not limited to removal of existing materials to the bottom of the new Type II Class B Aggregate Base depth in the dimensions and areas indicated within the plans, temporary protection, and disposal of all removed materials at an approved offsite location.

Construction includes the supply of the Type II Aggregate Base material with a compacted thickness of 6-inches minimum. Adjustment of existing utility boxes (within the Type II Aggregate Base limits) shall be approved by the appropriate agency; any grading necessary around the Type II Aggregate Base to achieve positive drainage shall be included in this item at no additional charge to the City of Fallon.

Any existing improvements adjacent to the new Type II Aggregate Base that are displaced or damaged, i.e., sod, sprinkler systems, bollards, signs, mailboxes, trees, shrubs, or other facilities or appurtenances shall be replaced or restored to the original position and condition prevailing prior to the start of operations at the contractor's expense.

Type II Aggregate Base shall be measured to the nearest tenth of a foot in each direction and reported to the nearest whole number in square feet.

The final pay quantity shall be by field measurement of installed Type II Aggregate Base. Payment for INSTALL TYPE II AGGREGATE BASE (DRIVEWAY TRANSITION/FILL STATION) shall be made at the applicable unit price bid per square foot, which shall be deemed full compensation for all materials, labor, equipment and incidentals necessary to complete each item as specified.

Bid Item 18 - Reconstruct Composite Roadway Section (North Broadway Street)

The unit price bid for RECONSTRUCT COMPOSITE ROADWAY SECTION (NORTH BROADWAY) shall include all labor, equipment, materials, and all incidentals necessary to accommodate the new structural section. Work shall include, but not be limited to verification and protection of underground utilities, saw cutting, pulverization of composite materials, screening and removal of large particles, properly prepared subgrade to a depth of six (6) inches, regrading, moisture conditioning, preparation and compaction of pulverized materials, removal and disposal of excess pulverized material, placement and incorporation of eight (8) inches of recycled aggregate base, tack coat, four (4) inches of PG64-28NV bituminous plantmix pavement, and incidentals as necessary to accommodate the lines and grades shown on the plans. The bituminous plantmix pavement shall be compacted to between ninety-two percent (92%) and ninety-seven percent (97%) of the theoretical maximum density (Rice). All construction shall be done in accordance with the Standard Specifications for Public Works Construction (SSPWC), 2012 edition, Revision No. 8.

The contractor should be aware that the actual existing pavement and base thickness may vary, that steep crowns, flat crowns, off-set crowns, quarter crowns, excessive existing pavement thicknesses, or other variations in the existing section may necessitate pulverization of existing materials to depths greater than shown on the plans. Pulverization and pavement removal depths are generally measured from the lip of gutter, not from existing pavement height...on some streets, the past overlays cover the gutter pan, so the actual depth at the lip of gutter will be greater than the specified depth below the lip of gutter. Also, the Contractor shall pave a smooth riding surface, which conforms with the surface tolerance specification, rather than strictly follow the lip of gutter elevation (which may have significant humps and dips which we do not want to reflect in the pavement). As a result the finish grade of the top lift pavement shall have a nominal height $\frac{1}{4}$ " $\frac{1}{2}$ ", but may actually vary from 0" to $\frac{3}{4}$ " above the lip of gutter. No additional payment shall be made for excess material pulverized or import material that may be necessary to achieve the depths, lines, and grades shown on the plans.

It is expected that contract work is scheduled for completion in the 2022 construction season. If due to unforeseen circumstances the project cannot be completed in the 2022 construction season, there shall be no asphalt escalation clause in effect for this contract.

The final pay quantity shall be by field measurement of installed bituminous asphalt concrete. Payment for RECONSTRUCT COMPOSITE ROADWAY SECTION (NORTH BROADWAY) shall be made at the applicable unit price bid per square foot which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 19 - Reconstruct Composite Roadway Section (Sherman Street)

The unit price bid for RECONSTRUCT COMPOSITE ROADWAY SECTION (SHERMAN STREET) shall include all labor, equipment, materials, and all incidentals necessary to accommodate the new structural section. Work shall include, but not be limited to verification and protection of underground utilities, saw cutting, pulverization of composite materials, screening and removal of large particles, properly prepared subgrade to a depth of six (6) inches, regrading, moisture conditioning, preparation and compaction of pulverized materials, removal and disposal of excess pulverized material, placement and incorporation of six (6) inches of recycled aggregate base, tack coat, four (4) inches of PG64-28NV bituminous plantmix pavement, and incidentals as necessary to accommodate the lines and grades shown on the plans. The bituminous plantmix pavement shall be compacted to between ninety-two percent (92%) and ninety-seven percent (97%) of the theoretical maximum density (Rice). All construction shall be done in accordance with the Standard Specifications for Public Works Construction (SSPWC), 2012 edition, Revision No. 8.

The contractor should be aware that the actual existing pavement and base thickness may vary, that steep crowns, flat crowns, off-set crowns, quarter crowns, excessive existing pavement thicknesses, or other variations in the existing section may necessitate pulverization of existing materials to depths greater than shown on the plans. Pulverization and pavement removal depths are generally measured from the lip of gutter, not from existing pavement height...on some streets, the past overlays cover the gutter pan, so the actual depth at the lip of gutter will be greater than the specified depth below the lip of gutter. Also, the Contractor shall pave a smooth riding surface, which conforms with the surface tolerance specification, rather than strictly follow the lip of gutter elevation (which may have significant humps and dips which we do not want to reflect in the pavement). As a result the finish grade of the top lift pavement shall have a nominal height $\frac{1}{4}$ " $\frac{1}{2}$ ", but may actually vary from 0" to $\frac{3}{4}$ " above the lip of gutter. No additional payment shall be made for excess material pulverized or import material that may be necessary to achieve the depths, lines, and grades shown on the plans.

It is expected that contract work is scheduled for completion in the 2022 construction season. If due to unforeseen circumstances the project cannot be completed in the 2022 construction season, there shall be no asphalt escalation clause in effect for this contract.

The final pay quantity shall be by field measurement of installed bituminous asphalt concrete. Payment for RECONSTRUCT COMPOSITE ROADWAY SECTION (SHERMAN STREET) shall be made at the applicable unit price bid per square foot which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 20 - Overexcavation of Unsuitable Material and Backfill (Contingent Item)

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary for overexcavation of unsuitable material as determined by the Design Engineer,

covered (including sides) with geotextile stabilizing fabric (Mirafi HP370 or other equivalent) and replaced with at least 12 inches of 4- to 8-inch angular rock till with enough fines to fill the inter-rock pore spaces. Work shall include, but not be limited to, removal of unsuitable material, disposal of all removed materials at an approved offsite location; dewatering; preparation and compaction of material below the removal; placement and compaction of the imported pit run sub-base and all incidentals to complete the work as specified.

This item shall be considered a contingent item. The quantity indicated in the bid schedule represents no actual estimate, is nominal only, and may be greatly increased or decreased or reduced to zero. The increase or reduction of this quantity, as compared with that contained in the bid schedule, shall not constitute a basis for claim by the Contractor for extra payment or changed conditions.

The final pay quantity shall be by field measurement. Payment for OVEREXCAVATION OF UNSUITABLE MATERIAL shall be made at the applicable unit price bid per cubic yard which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 21 - Remove and Replace Traffic/Street Sign and Base

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to REMOVE AND REPLACE TRAFFIC/STREET SIGN AND BASE. Removals include existing signs, posts, and foundations as well as disposal at an approved offsite location. Where existing traffic control signs are removed, the Contractor shall install temporary signs of the same designation as close as possible to the original position immediately.

Replacement includes all labor, equipment, materials, and all incidentals necessary to install sign post, sign(s), and foundations at the locations indicated on the plans. Work shall include, but not be limited to excavation and incidentals necessary for a complete installation. All signs shall be installed behind the back of sidewalk.

The final pay quantity shall be by count of installed sign assembly. Payment for REMOVE AND REPLACE TRAFFIC/STREET SIGN AND BASE shall be made at the applicable unit price bid per each which shall be deemed full compensation for all materials, labor, equipment and incidentals necessary to complete each item as specified.

Bid Item 22 - Remove and Replace Existing Fencing (Wood or Chain-link)

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to REMOVE AND REPLACE EXISTING FENCING (WOOD, CHAIN-LINK). Removals include, but not limited to, existing boards, wire-mesh, posts, gates, and foundations as well as disposal at an approved offsite location.

Replacement includes all labor, equipment, materials, and all incidentals necessary to install fencing, including but not limited to, posts, footings, rails, braces, gates, latches, etc. at the locations indicated on the plans. Work shall include, but not be limited to excavation and incidentals necessary for a complete installation.

Fencing shall be measured per linear foot to the nearest foot.

Fence minimum height shall match existing fence being replaced. Support posts shall be set plumb, front faces on posts shall have a straight-line alignment and be set uniform distance apart. Gates shall be operational after re-installation.

The final pay quantity shall be by field measurement of installed remove and replace fence. Payment for REMOVE AND REPLACE EXISTING FENCE (WOOD OR CHSIN-LINK) shall be made at the applicable unit price bid per linear foot and shall be deemed full compensation for all labor, materials, equipment and incidentals necessary to complete the work as specified.

Bid Item 23 - Salvage, Relocate, and Re-install Existing Mailbox

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to SALVAGE, RELOCATE, AND RE-INSTALL EXISTING MAILBOXES. This work includes but is not limited to the safe storage of the existing materials and furnishing new base, anchor, and post if necessary. This work shall include all labor, material, tools, equipment, and incidentals necessary to complete the work. This work shall also include, if necessary, the placing of plantmix bituminous pavement and Portland cement concrete patches.

The final pay quantity shall be by field measurement. Payment for SALVAGE, RELOCATE, AND RE-INSTALL EXISTING MAILBOX shall be made at the applicable unit price bid per each and shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 24 - Protect and Adjust Communication/Water/Sewer/ Manhole to New Finish Grade

The unit price bid for this item shall include the protection and adjustment of new and existing manholes at the locations within asphalt reconstruction as indicated on the Improvement Plans and shall consist of all labor, equipment, materials and incidentals necessary for complete adjustment including, but not limited to, locating; referencing; protecting; adjusting to final grade; providing and placing new frame and cover; grouting grade rings and placing Portland cement concrete collar.

Payment for grade rings, frame and cover hardware for new manholes shall be included in the applicable manhole installation bid item.

The contractor shall be paid one time for final adjustment to finish grade of each manhole structure. There shall be no direct for subsequent adjustments to manhole structures during the course of construction.

The item shall be paid based on field measurement per each complete in place

Bid Item 25 - Protect and Adjust New or Existing Utility Valve

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to PROTECT AND ADJUST NEW OR EXISTING UTILITY VALVES to finish grade in reconstructed areas at the locations indicated on the plans. Work shall include, but not be limited to utility depth verification, locating, referencing, lowering, protecting, coordination with representatives of the utility valve owner, raising, final adjustment, concrete collar placement, cleaning valve box and riser pipe, replacement of riser pipe (if requested by valve owner), and all incidentals necessary for a complete installation. Acceptance of the utility valve final adjustment

shall be the responsibility of the Utility Valve Owner. Work shall be in accordance with the plans, specifications, and the utility owner requirements.

It shall be the responsibility of the contractor to make all necessary adjustments, either temporary or permanent, to maintain adequate accessibility to each valve at all times during construction. The contractor shall be responsible for any damages incurred to the facilities being lowered.

Payment for this item will be based on the unit bid price per each for actual quantities measured in the field.

Payment for PROTECT AND ADJUST NEW OR EXISTING UTILITY VALVE shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified

Bid Item 26 - Remove and Replace Electrical Standard or Traffic Rated Pull Box

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to REMOVE AND REPLACE STANDARD OR TRAFFIC RATED PULL BOX at the locations indicated on the plans. Work shall include, but not be limited to utility depth verification, excavation, dewatering, protection of existing improvements, and incidentals necessary for a complete removal and replacement.

The final pay quantity shall be by field measurement. Payment for REMOVE AND REPLACE STANDARD OR TRAFFIC RATED PULL BOX shall be made at the applicable unit price bid per each and shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 27 - Abandon Existing 4" Water Line by Removal or Grout Fill

The unit price bid for this item shall include all labor, materials, equipment and incidentals necessary to ABANDON EXISTING 4" WATER LINE BY REMOVAL OR GROUT FILLED, including, but not limited to verification of water line location and depth, saw cutting and asphalt removal and disposal, trench excavation, shoring and sheeting, dewatering, grout the entire section of existing waterline, cutting and removal of existing water main as required, removal of existing valves to be abandoned, installation of appropriately sized caps, and grout placement and pumping, as shown on the plans and as specified, complete and in place.

The final pay quantity shall be by field measurement. Payment for ABANDON EXISTING 4" WATER LINE BY REMOVAL OR GROUT FILLED shall be made at the applicable unit price bid per linear foot and shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 28 - Install 8" AWWA PVC C900 DR-18 Waterline

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to construct the 8-INCH AWWA PVC C900 DR-18 WATERLINE per the detail indicated on the plans. Work shall include, but not be limited to, coordination of delivery, storage and inspection of materials, saw cutting and asphalt removal and disposal, trench excavation, shoring and sheeting, protection of existing utilities, foundation preparation, dewatering, bedding per specification, backfill per specification, installation of waterline, field lok gaskets,

testing, line location tape and wire placement, leakage testing, joint restraints installation, thrust blocks, reducers, air release valves, fittings, install temporary pavement patch or concrete repair, and other appurtenance installation as required to provide the item, as shown on the plans and as specified, complete and in place.

The final pay quantity shall be by field measurement. Payment for 8-INCH AWWA PVC C900 DR-18 WATERLINE shall be made at the applicable unit price bid per linear foot which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 29 - Remove and Replace Existing Water Meter and Service

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to REMOVE AND REPLACE EXISTING WATER METER AND SERVICE per the detail indicated on the plans. Work shall include, but not be limited to, coordination of delivery, storage and inspection of materials, saw cutting and asphalt removal and disposal, trench excavation, shoring and sheeting, protection of existing utilities, foundation preparation, dewatering, bedding per specification, backfill per specification, furnishing and installing all service lines, coupling (reducer if applicable), service taps, corp stops, and locator wires; abandonment of service connections to existing mains, removal of existing service lines, laying and jointing pipe, pipe bedding, trench backfill and compaction; removal and replacement of the existing water meter, adjustment of the water meter setter, removal of the existing water meter box, installation of a new meter box (standard or traffic rated) and final adjustment, temporary asphalt pavement patch, and clean-up, and incidentals necessary for a complete installation.

The final pay quantity shall be by field measurement. Payment for REMOVE AND REPLACE EXISTING WATER METER AND SERVICE shall be made at the applicable unit price bid per each which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 30 - Remove Existing 6" Sewer and Replace with 8" SDR-35 PVC Sewer Main

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to REMOVE EXISTING 6" SEWER AND REPLACE WITH 8" SDR-35 PVC SEWER MAIN as indicated on the plans. Work shall include, but not be limited to, saw cut existing roadway, pothole investigation, protect existing utilities, excavate trench, shoring, bypass pumping, dewatering (if required), remove existing pipe, disposal of said pipe, removal and disposal of retired utility, pipes, valves and appurtenances, installation of new pipe, bedding, connections to new/existing manholes or pipe, sealing of manhole terminations, finishing of the connections to new/existing manholes, disposal of excavated materials, backfill, slurry backfill (if required), compaction, temporary pavement patching, clean-up, site restoration equal to or better than existing conditions, and incidental work necessary to complete the work.

Measurement shall not include the inside dimensions of the new/existing structures. The final pay quantity shall be by field measurement. Payment for REMOVE EXISTING 6" SEWER AND REPLACE WITH 8" SDR-35 PVC SEWER MAIN shall be made at the applicable unit price bid per linear foot which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 31 - Install New 8" SDR-35 PVC Sanitary Main

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to INSTALL NEW 8" SDR-35 PVC SEWER MAIN as indicated on the plans. Work shall include, but not be limited to, saw cut existing roadway, pothole investigation, protect existing utilities, excavate trench, shoring, bypass pumping, dewatering (if required), installation of new pipe, bedding, connections to new/existing manholes or pipe, sealing of manhole terminations, finishing of the connections to new/existing manholes, disposal of excavated materials, backfill, slurry backfill (if required), compaction, temporary pavement patching, clean-up, site restoration equal to or better than existing conditions, and incidental work necessary to complete the work.

Measurement shall not include the inside dimensions of the new/existing structures. The final pay quantity shall be by field measurement. Payment for INSTALL NEW 8" SDR-35 PVC SEWER MAIN shall be made at the applicable unit price bid per linear foot which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 32 - Remove Existing and Replace with Type I Polymer Sewer Manhole

Unit price bid for REMOVE EXISTING AND REPLACE WITH TYPE I POLYMER SEWER MANHOLE shall include all labor, materials, tools, equipment and incidentals necessary to, saw cut, bypass pumping, excavation, excavation shoring, disposal of excavated materials, removal of existing structures (in same location or close proximity), dewatering (if required), subgrade preparation, drain rock, aggregate base, concrete, reinforcing steel, pouring and forming of the base (if cast-in-place), placement of the barrel or box, cone, grade rings, frame, new cover, backfill, compaction, grouting unused stub outs, temporary asphalt patching, surface restoration and clean-up. Surface restoration shall be equal to or better than existing conditions.

This item does not include cleanouts installation as described in Bid item #34. Compensation for these items shall be considered as included in price bid for other items.

There shall be no direct payment for additional adjustments of manhole frame and cover that may be required after completion of the sanitary sewer manhole installation and prior to the final roadway construction. The Contractor has the option of plating manholes until roadway improvements are complete. If the Contractor chooses to plate manholes, the Contractor shall record the exact location and type of utility by labeling the assembly with numbers at locations visible for verification. Compensation for final adjustment to new finish grade including concrete collar is considered included in separate adjustment bid item #24.

There shall be no direct payment for base material, anchor bolts/rebar, galvanized steel grates and attachment materials, concrete pipe collars, pipe transition grout, pipe plugs or caps, concrete saddles or cleanouts. Compensation for these items as specified to perform the construction operations shall be considered as included in the price bid for other items of work and no additional compensation will be allowed the Contractor.

The final pay quantity shall be by field measurement. Payment for REMOVE EXISTING AND REPLACE WITH TYPE I POLYMER SEWER MANHOLE shall be made at the applicable unit price bid

per each, which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 33 - Install New Type 1 Polymer Sewer Manhole

Unit price bid for INSTALL NEW TYPE I POLYMER SEWER MANHOLE shall include all labor, materials, tools, equipment and incidentals necessary to, saw cut, bypass pumping, excavation, excavation shoring, disposal of excavated materials, dewatering (if required), subgrade preparation, drain rock, aggregate base, concrete, reinforcing steel, pouring and forming of the base (if cast-in-place), placement of the barrel or box, cone, grade rings, frame, new cover, backfill, compaction, grouting unused stub outs, temporary asphalt patching, surface restoration and clean-up. Surface restoration shall be equal to or better than existing conditions.

This item does not include cleanouts installation as described in Bid item #34. Compensation for these items shall be considered as included in price bid for other items.

There shall be no direct payment for additional adjustments of manhole frame and cover that may be required after completion of the sanitary sewer manhole installation and prior to the final roadway construction. The Contractor has the option of plating manholes until roadway improvements are complete. If the Contractor chooses to plate manholes, the Contractor shall record the exact location and type of utility by labeling the assembly with numbers at locations visible for verification. Compensation for final adjustment to new finish grade including concrete collar is considered included in separate adjustment bid item #24.

There shall be no direct payment for base material, anchor bolts/rebar, galvanized steel grates and attachment materials, concrete pipe collars, pipe transition grout, pipe plugs or caps, concrete saddles or cleanouts. Compensation for these items as specified to perform the construction operations shall be considered as included in the price bid for other items of work and no additional compensation will be allowed the Contractor.

The final pay quantity shall be by field measurement. Payment for INSTALL NEW TYPE I POLYMER SEWER MANHOLE shall be made at the applicable unit price bid per each, which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 34 - Remove and Replace Existing SDR-35 PVC Sewer Lateral (Contingent Item)

Unit price bid for REMOVE AND REPLACE EXISTING SDR-35 PVC SEWER LATERAL shall include all labor, materials, tools, equipment and incidentals necessary to, verify if existing lateral is active/inactive, excavate the sewer service lateral, extend the existing sewer service lateral to new main location and connecting it to the new sewer main, replacement of existing lateral with new PVC lateral from main to back of City right-of-way, installation of new cleanout at back of right-of-way, rerouting of laterals from manholes to new main, pipe connections and fittings, disposal of excavated materials, narrow trench construction, backfill, slurry backfill (if required) under water mains, installing a PVC sleeve or slurry encasement for sewer lateral when adequate separation (4') between new sewer lateral and existing water services cannot be achieved, protection of gas, telephone, or other utility crossings, compaction, temporary pavement patching, surface restoration in landscaped areas to equal to or better than pre-construction conditions.

Verify active/inactive sewer service laterals by field reconnaissance, direct contact with users, CCTV observation (crawler and push type cameras), dye tracing, use of locator devices, excavation, or any other approved practical technique. CCTV inspection from inside of the pipe is not sufficient to make a determination that a sewer lateral is inactive. If flow is evident by simple visual inspection, the sewer service lateral shall be reconnected with no further verification required. If no indications of flow are present during visual inspection or CCTV inspection, another technique such as a push camera, smoke or dye testing shall be required.

This item shall be considered a contingent item. The quantity indicated in the Base Bid – “Schedule of Prices” represents no actual estimate, is nominal only, and may be greatly increased or decreased or reduced to zero. The increase or reduction of this quantity, as compared with that contained in the Base Bid – “Schedule of Prices” shall not constitute a basis for claim by the Contractor for extra payment or changed conditions.

Bid Item 35 - Install Type 4R Catch Basin

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to INSTALL TYPE 4R CATCH BASINS at the locations indicated on the plans. Work shall include, but not be limited to utility depth verification, excavation, dewatering, clean disconnection from storm drain system, protection of existing improvements, water-tight connection to storm drain system, backfill, and incidentals necessary for a complete installation.

Payment for this item will be based on the unit bid price per each installation for actual quantities measured in the field.

Payment for INSTALL TYPE 4-R CATCH BASIN shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 36 - Remove Existing and Replace with Type 4R Catch Basin

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to REMOVE EXISTING AND REPLACE WITH TYPE 4R CATCH BASIN at the locations indicated on the plans. Work shall include, but not be limited to, utility depth verification, excavation, removal of existing structure, disposal of existing structure, dewatering, clean disconnection from storm drain system, protection of existing improvements, water-tight connection to storm drain system, backfill, and incidentals necessary for a complete removal and installation.

Payment for this item will be based on the unit bid price per each installation for actual quantities measured in the field.

The final pay quantity shall be by field measurement. Payment for REMOVE EXISTING AND REPLACE WITH TYPE 4R CATCH BASIN shall be made at the applicable unit price bid per each, which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 37 - Install SC-740 Infiltrators, Nyloplast Weir Structure, Pipe and Observation Ports

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to furnish and INSTALL SC-740 INFILTRATORS, NYLOPLAST WEIR STRUCTURE, PIPE AND OBSERVATION PORTS per the location and detail indicated on the plans. Work shall

include, but not be limited to preparation, excavation to appropriate sand layer for infiltration, bedding, placement, backfill and incidentals necessary for a complete installation.

The final pay quantity to shall be by field measurement of infiltration chambers only. The weir structure, observation port, and piping shall be considered incidental and no additional compensation will be allowed to the Contractor.

Payment for INSTALL SC-740 INFILTRATORS, NYLOPLAST WEIR STRUCTURE, PIPE AND OBSERVATION PORTS shall be made at the applicable unit price bid per each, which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 38 - CCTV Verification

This work shall consist of performing internal television inspection of new sanitary sewer pipelines after installation. The Contractor shall inspect the new pipe interior using a color closed circuit television (CCTV) camera and document the inspection in digital MPEG format with audio location and date information, inspection title information, and both hard copy and digital inspection logs. Video header information and inspection logs for the new pipe shall include, at a minimum, the City project number, pipe identification (pipe ID) as shown on the Improvement Plans, manhole identifications (manhole IDs), as shown on the Improvement Plans. The digital inspection logs shall be submitted in PDF format with a filename equal to the pipe ID (example: pipe ID = 3243, filename = 3243.pdf). The pipe inspection video shall be submitted in MPEG format with a filename that includes the pipe ID and date of the video as shown in the following example (example: pipe ID = 3243 and video date = April 8, 2010, filename = 3243CONSULT_04_08_2010.mpg). All digital files shall be submitted on a USB Flash Drive. There shall be a separate MPEG file for each run of pipe and each file shall be able to be viewed with Microsoft Windows Media Player.

The Contractor shall thoroughly clean and flush each pipe segment prior to initial CCTV inspection.

Payment for CCTV VERIFICATION work shall be made at the Unit Price bid per lump sum. Payment shall be compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

If for any reason, a portion if the project is deleted, the engineer may deduct an appropriate percentage of the lump sum payment for that portion of the CCTV work deleted.

Bid Item 39 - Install New 5'x3' Box Culvert

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to INSTALL NEW 5'x3' BOX CULVERT as indicated on the plans. Work shall include, but not be limited to, preparation, excavation, removal of existing headwall structure, protection of existing culvert structure, connection to existing culvert structure, bedding, placement of new culvert including reinforcement, backfill and incidentals necessary for a complete installation.

The final pay quantity shall be by field measurement. Payment for INSTALL NEW 5'x3' BOX CULVERT shall be made at the applicable unit price bid per linear foot which shall be deemed full

compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 40 - Install New PCC Headwall (Including Rip Rap Inlet and Outlet Protection)

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to INSTALL NEW PCC HEADWALL (INCLUDING RIP RAP INLET AND OUTLET PROTECTION) per the location and detail indicated on the plans. Work shall include, but not be limited to preparation, excavation, protection of new box culvert, connection to new box culvert, bedding, placement of new headwall including reinforcement, backfill, furnish and install class 150 rip rap and incidentals necessary for a complete installation.

The final pay quantity shall be by field measurement. Payment for INSTALL NEW PCC HEADWALL (INCLUDING RIP RAP INLET AND OUTLET PROTECTION) shall be made at the applicable unit price bid per each, which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 41 - Relocate Existing Fire Hydrant

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to RELOCATE EXISTING FIRE HYDRANT per the detail indicated on the plans. Work shall include, but not be limited to, remove fire hydrant lateral and valves, salvage the existing hydrant, installation of the fire hydrant service lateral and valve, trenching, saw cutting, excavation, shoring, protection of existing utilities, removal of existing pipe and offsite disposal of materials, dewatering, valve installation, lateral installation, hydrant reinstall, and all incidentals necessary for a complete installation.

Payment for this item will be based on the unit bid price per each for actual quantities measured in the field.

The final pay quantity shall be by field measurement. Payment for RELOCATE EXISTING FIRE HYDRANT shall be made at the applicable unit price bid per each, which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 42 - Install 4" Schedule 40 Electrical Conduit

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to furnish and INSTALL 4" SCHEDULE 40 ELECTRICAL CONDUIT at the locations indicated on the plans. Work shall include, but not be limited to utility depth verification, coordination with the City of Fallon Public Works, excavation, bedding, backfill, 4-inch Schedule 40 Conduit, 4-inch Schedule 40 (36-inch radius) conduit sweeps, end caps, pull string, dewatering, protection of existing improvements, and incidentals necessary for a complete installation.

Payment for INSTALL 4" SCHEDULE 40 ELECTRICAL CONDUIT shall be made at the applicable unit price bid per linear foot which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 43 - Install 4" Solid White Pavement Striping

The unit price bid for this item shall include all labor, equipment, materials and all incidentals necessary to install 4" SOLID WHITE PAVEMENT STRIPING at the locations indicated within the plans and specifications. Work shall include, but not be limited to surface preparation, priming, application, layout, and incidentals necessary for a complete installation.

The length of striping is measured from end to end of the line which includes gaps but does not include breaks. All pavement striping shall have a minimum of two (2) coats (full width of stripe) per application.

Temporary striping per shall be paid under this item and should be included in the price of this bid item. There shall be no direct payment for temporary striping.

Payment for this item shall be made at the applicable unit price bid per linear foot, which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 44 - Install 6" Solid White Pavement Striping

The unit price bid for this item shall include all labor, equipment, materials and all incidentals necessary to install 6" SOLID WHITE PAVEMENT STRIPING at the locations indicated within the plans and specifications. Work shall include, but not be limited to surface preparation, priming, application, layout, and incidentals necessary for a complete installation.

The length of striping is measured from end to end of the line which includes gaps but does not include breaks. All pavement striping shall have a minimum of two (2) coats (full width of stripe) per application.

Temporary striping per shall be paid under this item and should be included in the price of this bid item. There shall be no direct payment for temporary striping.

Payment for this item shall be made at the applicable unit price bid per linear foot, which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified

Bid Item 45 - Install 4" Double Yellow Pavement Striping

The unit price bid for this item shall include all labor, equipment, materials and all incidentals necessary to install 4" DOUBLE YELLOW PAVEMENT STRIPING at the locations indicated within the plans and specifications. Work shall include, but not be limited to surface preparation, priming, application, layout, and incidentals necessary for a complete installation.

The length of striping is measured from end to end of the line which includes gaps but does not include breaks. All pavement striping shall have a minimum of two (2) coats (full width of stripe) per application.

Temporary striping per shall be paid under this item and should be included in the price of this bid item. There shall be no direct payment for temporary striping.

Payment for this item shall be made at the applicable unit price bid per linear foot, which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified

Bid Item 46 - Install 2'x10' White Thermoplastic Crosswalk Keys

The unit price bid for this item shall include all labor, equipment, materials, surface preparation, priming, application, and all incidentals necessary to install all thermoplastic crosswalk pavement markings of the size and type as indicated on the plans.

Payment for this item will be based on the unit bid price per linear foot for actual quantities measured in the field.

The final pay quantity shall be by field measurement. Payment for 2'x10' SOLID WHITE THERMOPLASTIC CROSSWALK KEY shall be made at the applicable unit price bid per lineal foot which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 47 - Install 24" White Thermoplastic Stop Bar

This item is the placement of all 24" WHITE THERMOPLASTIC STOP BAR as indicated on the plans. The work comprising the unit price bid for this item shall consist of all labor, equipment, materials, and incidentals necessary to install stop bar striping.

Thermoplastic stop bar shall be measured per lineal foot to the nearest foot. Length of striping is measured from end to end of the line.

Payment for this item will be based on the unit bid price per lineal foot for actual quantities measured in the field which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 48 - Install 12" White Thermoplastic Stop Bar

This item is the placement of all 12" THERMOPLASTIC STOP BAR as indicated on the plans. The work comprising the unit price bid for this item shall consist of all labor, equipment, materials, and incidentals necessary to install stop bar striping.

Thermoplastic stop bar shall be measured per lineal foot to the nearest foot. Length of striping is measured from end to end of the line.

Payment for this item will be based on the unit bid price per lineal foot for actual quantities measured in the field which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 49 - Install Red or Yellow Curb Paint

The unit price bid for this item shall include all labor, equipment, materials, and all incidentals necessary to install RED OR YELLOW CURB PAINT at the locations indicated within the plans and specifications. Work shall include, but not be limited to surface preparation, priming, application, layout, and incidentals necessary for a complete installation.

The length of paint is measured from end to end of the line. Payment for this item will be based on the unit bid price per linear foot for actual quantities measured in the field.

Payment for this item shall be based on the applicable unit bid price per linear foot which shall be deemed full compensation for all labor, materials, equipment, and incidentals necessary to complete the work as specified.

Bid Item 50 - Contract Allowance

The lump sum unit price bid amount set forth in the bid schedule shall be the same for all bidders. This bid amount shall cover furnishing of materials, equipment, and labor and all incidentals for any work not included in the plans and specifications that may be directed by the CITY OF FALLON.

This bid item has been established to compensate for any costs allowed as a result of unforeseen interferences, changes to the work, or other items in connection with constructing the improvements, which require work or material by the Contractor in addition to those items included in the Contract. The amount to be included in the Contract for such work shall be as set forth in the bid schedule must be included by the Bidder.

There is no direct payment for this item. Payment will be made only for additional authorized work performed. Depending upon the amount of additional work authorized and completed at the close of the Contract, the amount bid may be used entirely, partially, or not at all.

3.1 Work Sequence

- A. The **OWNER**, **ENGINEER**, and **CONTRACTOR** will establish a complete Work schedule.

4.1 Contract Method

- A. The Work hereunder will be constructed under unit and lump sum Bid prices.

5.1 Contractor Use of Project Site

- A. The **CONTRACTOR's** use of the Project Site(s) shall be limited to its construction operations. The **CONTRACTOR** shall make arrangements for the storage of materials, fabrication facilities, and field offices.

6.1 Project Meetings

- A. Preconstruction Conference:

Prior to the commencement of Work at the Site, a preconstruction conference will be held at a mutually agreed time and place which shall be attended by the **CONTRACTOR's** Project Manager, its superintendent, and its Subcontractors as the **CONTRACTOR** deems appropriate. Other attendees will be:

1. Representatives of **OWNER**.
2. **ENGINEER** and Resident Project Representative.

3. Others as requested by **CONTRACTOR**, **OWNER**, or **ENGINEER**.
- B. The **CONTRACTOR** shall bring to the conference the submittals specified in Section 01300, "Contractor Submittals".
 - C. The purpose of the conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The complete agenda will be furnished to the **CONTRACTOR** prior to the meeting date. However, the **CONTRACTOR** should be prepared to discuss all the items listed below.
 1. Status of **CONTRACTOR**'s insurance and bonds.
 2. **CONTRACTOR**'s tentative schedules.
 3. Transmittal, review, and distribution of **CONTRACTOR**'s submittals.
 4. Processing applications for payment.
 5. Maintaining record documents.
 6. Critical Work sequencing.
 7. Field decisions, Work Change Directives and Change Orders.
 8. Use of Project Site, office and storage areas, security, and housekeeping.
 9. Major equipment deliveries and priorities.
 10. **CONTRACTOR**'s assignments for safety and first aid.
 11. Traffic Control Plan
 12. Storm Water Pollution Prevention Plan
 13. Cultural Resources
 14. Environmental Protection
 15. Dewatering Plan
 16. Sheeting and Shoring Plan
 - D. The **ENGINEER** will preside at the preconstruction conference and will arrange for keeping and distributing the minutes to all persons in attendance.
 - E. The **CONTRACTOR** and its Subcontractors should plan on the conference taking no less than one half of a working day.

7.1 **Progress Meetings**

- A. The **OWNER** shall schedule and hold regular on-site progress meetings at least weekly and at other times as requested by **ENGINEER** or as required by progress of the Work.

The **CONTRACTOR** and all Subcontractors active on the Site must attend each meeting. **CONTRACTOR** may, at its discretion, request attendance by representatives of its Suppliers, manufacturers, and other Subcontractors.

- B. The **OWNER** shall preside at the meetings and will arrange for keeping and distributing the minutes. The **ENGINEER** shall provide a copy of each of the meetings minutes to the **OWNER** and **CONTRACTOR**. The purpose of the meetings will be to review the progress of the Work, maintain coordination of efforts, discuss changes in scheduling, and resolve other problems which may develop. During each meeting, the **CONTRACTOR** is required to present any issues which may impact the Work, with a view to resolve these issues expeditiously.

Section 01020

Environmental Protection

PART 1 - GENERAL

- A. Scope. During the progress of the work, keep the work areas occupied by the **CONTRACTOR** in a neat and clean condition and protect the environment both onsite and offsite, throughout and upon completion of the Project.
- B. Submittals. Develop an Environmental Protection Plan. Distribute the plan to all employees and to all Subcontractors and their employees. The Environmental Protection Plan shall include, but not be limited to, the following items:
 - 1. Copies of required permits and their status.
 - 2. Proposed sanitary landfill site.
 - 3. Other proposed disposal sites.
 - 4. Copies of any agreements with public or private landowners regarding equipment, materials storage, borrow sites, fill sites, or disposal sites. Any such agreement made by the **CONTRACTOR** shall be invalid if its execution causes violation of local or regional grading, land use regulations or this Specification.

PART 2 - MITIGATION AND CONSTRUCTION IMPACTS

- A. Requirements: All operations shall comply with all Laws and Regulations.
- B. Definitions of Contaminants:
 - 1. Sediment: Soil and other debris that have been eroded and transported by runoff water.
 - 2. Solid Waste: Rubbish, debris, garbage and other discarded solid materials resulting from construction activities, including a variety of combustible and non-combustible wastes, such as ashes, waste materials that result from construction or maintenance and repair work, sagebrush, vegetation, leaves and tree trimmings.
 - 3. Chemical Waste: Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, disinfectants, organic chemicals and inorganic wastes. Some of the above may be classified as "hazardous."

4. Sanitary Wastes:

- a. Sewage: That which is considered as domestic sanitary sewage.
- b. Garbage: Refuse and scraps resulting from preparation, cooking, dispensing and consumption of food.

5. Hazardous Materials: As defined by applicable Laws and Regulations.

C. Protection of Natural Resources:

1. General: It is intended that the natural resources within the Project boundaries and outside the limits of permanent work performed under this Contract be preserved in their existing condition or be restored to an equivalent or improved condition upon completion of the Work. Confine construction activities to areas defined by the public roads, easements, and work area limits shown on the Drawings. Return construction areas to their pre-construction elevations except where surface elevations are otherwise noted to be changed on the Drawings. Maintain natural drainage patterns. Conduct construction activities to avoid ponding stagnant water conducive to mosquito breeding.

2. Land Resources: Do not remove, cut, deface, injure or destroy trees, shrubs, sagebrush, or grasses outside the work area limits. Do not remove, deface, injure or destroy trees within the Work area without permission from the **ENGINEER**.

a. Protection: Protect trees, sagebrush, grasses and shrubs that are located near the limits of the **CONTRACTOR's** work areas which may possibly be defaced, bruised or injured or otherwise damaged by the **CONTRACTOR's** operations.

b. Repair or Restoration: Repair or replace any trees, shrubs, sagebrush or other landscape features scarred or damaged by equipment or construction operations outside of the designated construction boundary limits.

c. Temporary Construction: Obliterate all signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials (not shown on the Drawings), or any other vestiges of construction as directed by the **ENGINEER**. Level all temporary roads, parking areas and any other areas that have become compacted or shaped. Apply a dust palliative, such as magnesium chloride, to all disturbed areas. Keep haul roads clear at all times of any object which creates an unsafe condition. Promptly remove any contaminants or construction material dropped from construction vehicles. Do not drop mud and debris from construction equipment on public streets. Sweep clean turning areas and pavement

entrances daily.

3. Water Resources:

- a. Investigate and comply with all applicable Laws and Regulations concerning the discharge (directly or indirectly) of pollutants to the underground and natural waters. Exercise every reasonable precaution to protect streams, lakes, and reservoirs from pollution with fuels, oils, bitumens, and other harmful materials and conduct and schedule operations so as to avoid or minimize muddying and silting of said streams, lakes, and reservoirs.

Water pollution control work is intended to provide prevention control and abatement of water pollution to streams, waterways and other bodies of water, and shall consist of constructing those facilities required. The **CONTRACTOR's** water pollution control measures shall be subject to approval by the **ENGINEER**.

The **CONTRACTOR** shall provide temporary water pollution control measures, including but not limited to, dikes, basins, and ditches, and shall apply straw and seed, which become necessary as a result of his or her operations. The **CONTRACTOR** shall coordinate water pollution control work with all other Work done on the Contract.

- b. Submit a plan to control water pollution effectively during construction of the Work. Such program shall show the schedule for the erosion control work for all water pollution control measures which the **CONTRACTOR** proposes to take in connection with construction of the Project to minimize the effects of construction operations upon adjacent streams and other bodies of water.

If an NPDES stormwater pollution prevention permit is required, the **CONTRACTOR** will be required to prepare a project specific Stormwater Pollution Prevention Plan (SWPPP) that details the specific Best Management Practices (BMP's) the **CONTRACTOR** proposes to use.

At the conclusion of the Project and when they are no longer needed, the Site must be cleaned of temporary BMP's. This must be one of the final operations by the **CONTRACTOR**.

The **OWNER** will not be liable to the **CONTRACTOR** for failure to accept all or any portion of an originally submitted or revised water pollution control plan, nor for any delays to the Work due to the **CONTRACTOR's** failure to submit an acceptable water pollution control plan.

c. The **CONTRACTOR** shall also conform to the following provisions:

- 1) Oily or greasy substances originating from the **CONTRACTOR's** operations shall not be allowed to enter or be placed where they will later enter any surface water.
- 2) Portland cement or fresh portland cement concrete shall not be allowed to enter any surface water.
- 3) Material derived from roadway work shall not be deposited in a surface water or course where it could be washed away by high stream flows.

4. Fish and Wildlife Resources: Perform all work and take such steps required to prevent any interference or disturbance to fish and wildlife. The **CONTRACTOR** will not be permitted to alter water flows or otherwise significantly disturb native habitat adjacent to the Project Site which are critical to fish and wildlife except as may be indicated or specified.

5. Cultural Resources: The Project does not pass through any known archaeological sites however unrecorded archaeological sites could be discovered during construction. Upon discovery of potential buried cultural materials, all ground disturbing work in the immediate area shall be halted and the **CONTRACTOR** shall immediately notify the **ENGINEER**. The **CONTRACTOR** shall protect the immediate area to prevent any further damage from occurring. Work shall remain halted in the immediate area pending further directions issued by the **ENGINEER**.

Contract Time may be adjusted if the Work halted is on the "Critical Path" by the total number of days for which the Work was halted. Contract Price may be adjusted if the **CONTRACTOR** sustains a loss which could not have been avoided by judicious handling of forces, equipment, and/or redirection of forces and/or equipment.

6. Noise Control: The following noise control procedures shall be employed by the **CONTRACTOR**:

- a. Maximum Noise Levels for any Residence, Business, or Other Populated Area: Noise levels for trenchers, pavers, graders and trucks shall not exceed 90 dBA at 50 feet as measured under the noisiest operating conditions. For all other equipment, noise levels shall not exceed 85 dBA at 50 feet.
- b. Equipment: Jack hammers shall be equipped with exhaust mufflers and steel muffling sleeves. Air compressors should be of a quiet type such as a "whisperized" compressor.

- c. Operations: Keep noisy equipment as far as possible from noise-sensitive site boundaries. Machines should not be left idling. Use electric power in lieu of internal combustion engine power wherever possible. Maintain equipment properly to reduce noise from excessive vibration, faulty mufflers, or other sources. All engines shall have mufflers.
 - d. Scheduling: Schedule noisy operations so as to minimize their duration at any given location.
 - e. Monitoring: To determine whether the above noise limits are being met and whether noise barriers are needed, the **CONTRACTOR** shall use a portable sound level meter meeting the requirements of American National Standards Institute Specification S1.4 for Type 2 sound level meters and be responsible for monitoring throughout construction. If non-complying noise levels are found, the **CONTRACTOR** shall be responsible for correction of excessive noise levels.
7. Dust Control, Air Pollution and Odor Control: Employ measures to prevent the creation of dust, air pollution and odors.
- a. If required, the **CONTRACTOR** shall apply for, pay all fees and obtain a Surface Area Disturbance (SAD) permit from the Nevada Division of Environmental Protection – Bureau of Air Pollution Control. Information and Instructions for Obtaining the SDA permit are available at <http://ndep.nv.gov/bapc/index.htm>.
 - b. Unpaved areas where vehicles are operated shall be sufficiently watered wetted down at least twice daily, preferably in the late morning and after work is done for the day, or given an equivalent form of treatment, to eliminate dust formation.
 - c. All material excavated or stockpiles will be sufficiently watered to prevent excessive amounts of dust. Watering, with complete coverage, will occur at least twice daily, preferably in the late morning and after work is done for the day. Enclosing, covering or applying soil binders may also be accepted.
 - d. All earth-moving and excavation activities shall cease when wind speeds exceed 25 mph or as directed by the **OWNER**. The **CONTRACTOR** shall use a portable hand-held anemometer on Site and be responsible for monitoring wind speed during earth moving and excavation activities. In addition to regularly scheduled watering, the Site shall be additionally watered, with complete coverage, during periods of high winds.
 - e. All material transported onsite and/or offsite will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

- f. The area disturbed by earth-moving or excavation operations will be minimized at all times.
 - g. After earth-moving or excavation operations and during construction activities, the **CONTRACTOR** will control fugitive dust emissions by ensuring that all active portions of the Site are watered to prevent excessive amounts of dust.
 - h. During construction, the **CONTRACTOR** will control fugitive dust emissions at all times by ensuring that construction-related vehicle speed does not exceed 15 mph on the Project Site and on unpaved roads.
 - i. During the construction phase, the **CONTRACTOR** will control ozone precursor emissions from construction equipment at all times by using the following procedure:
 - 1) Equipment engines will be maintained in good condition and in proper tune according to manufacturer's specifications and shall comply with the applicable Laws and Regulations.
 - 2) Machines should not be left idling.
 - 3) Construction activities and the delivery or hauling of Project-related materials shall be organized to maximize productivity and reduce truck and vehicle trips to the fullest extent practicable.
 - j. Store all volatile liquids, including fuels or solvents in closed containers.
 - k. No open burning of vegetation, debris, lumber or other scrap will be permitted. Cleared vegetation shall be chipped or shredded on Site and surface applied in approved areas in accordance with the **ENGINEER's** directions.
8. Construction Storage Areas: Storage of construction equipment and materials shall be limited to the designated **CONTRACTOR's** storage area.
- a. Store and service equipment at the designated **CONTRACTOR's** storage area where oil wastes shall be collected in containers. Oil wastes shall not be allowed to flow onto the ground or into surface waters. Containers shall be required at the construction Site for the disposal of materials such as paint, paint thinner, solvents, motor oil, fuels, resins and other environmentally deleterious substances. No dumping of surplus concrete or grout on the Site will be permitted.
9. Sanitation: During the construction period, provide adequate and conveniently located chemical sanitation facilities, properly screened, for use of construction

crews, the **ENGINEER**, and visitors to the Site. Facilities shall be regularly maintained.

10. Fire Prevention: Take steps to prevent fires including, but not limited to the following:

- a. Provide spark arrestors on all internal combustion engines.
- b. Store and handle flammable liquids in accordance with the Flammable and Combustible Liquids Code, NFPA 30.
- c. Provide fire extinguishers at hazardous locations or operations, such as welding.

II. Erosion and Sediment Transport Control:

- a. Discharge construction runoff into small drainages at frequent intervals to avoid buildup of large potentially erosive flows.
- b. Prevent runoff from flowing over unprotected slopes.
- c. Keep disturbed areas to the minimum necessary for construction.
- d. Keep runoff away from disturbed areas during construction.
- e. Direct flows over vegetated areas prior to discharge into public storm drainage systems.
- f. Trap sediment before it leaves the site, using such techniques as check dams, sediment ponds, or siltation fences.
- g. Remove and dispose of all project construction-generated siltation that occurs in offsite retention ponds.
- h. Confine construction to the dry season, whenever possible. If construction needs to be scheduled for the wet season, ensure that erosion and sediment transport control measures are ready for implementation prior to the onset of the first major storm of the season.
- i. Stabilize disturbed areas as quickly as possible.
- j. In addition, prior to, during, and after earthmoving or excavation operations, the **CONTRACTOR** shall implement Best Management Practices (BMPs) to reduce potential erosion and sedimentation impacts.

These BMPs will include the following:

- 1) A minimum number of access points for construction vehicle entry/egress will be designated to prevent vehicle track-out of

sediments, and traffic shall be prohibited over exposed soils during wet weather or when the Site is saturated or muddy.

- 2) Flags, markers, and/or temporary fences shall be installed prior to construction activities to avoid soil disturbance outside of the construction easements.
- 3) All material excavated shall be sufficiently watered to prevent excessive amounts of dust. Watering, with complete coverage, shall occur at least twice daily, preferably in the late morning and after work is done for the day.
- 4) The area disturbed by earthmoving or excavation operations shall be minimized at all times.
- 5) Disturbed areas shall be stabilized as quickly as possible.
- 6) At a minimum, sandbag dikes, silt fences, straw bales, or equivalent control practices shall be used for all significant sideslope and downslope boundaries on the construction area.

PART 3 - DISPOSAL OPERATIONS

A. Solid Waste Management:

1. Supply solid waste transfer containers. Daily remove all debris such as spent air filters, oil cartridges, cans, bottles, combustibles and litter. Take care to prevent trash and papers from blowing onto adjacent property. Encourage personnel to use refuse containers. Convey contents to a sanitary landfill.
2. Washing of concrete containers where wastewater may reach adjacent property or natural watercourses will not be permitted. Remove any excess concrete to the sanitary landfill.

B. Chemical Waste and Hazardous Materials Management: Furnish containers for storage of spent chemicals used during construction operations. Dispose of chemicals and hazardous materials in accordance with applicable regulations.

C. Garbage: Store garbage in covered containers, pick up daily and dispose of in a sanitary landfill.

D. Dispose of vegetation, weeds, rubble, and other materials removed by the clearing, stripping and grubbing operations off site at a suitable disposal site in accordance with applicable regulations.

E. Excavated Materials:

1. Excess Excavated Material:

- a. Excess excavated soils shall be disposed of in accordance with applicable Laws and Regulations.
- b. Rubbish shall consist of all materials not classified as suitable materials or rubble and shall include shrubbery, trees, timber, trash and garbage.

F. Disposal of Abandoned and Demolished Material

- 1. The **CONTRACTOR** shall dispose of all abandoned or demolished pipe and building materials and other appurtenances when encountered in the performance of the Work. Disposal of such materials shall be immediate and off the site of construction. Transportation and disposal of such materials shall be in accordance with local codes and ordinances governing locations and methods of disposal, and in conformance with all applicable safety laws, and to the particular requirements of Part 1926 of the OSHA Safety and Health Standards for Construction at no additional cost to the City of Fallon.

Section 01030

Reference Standards

PART 1 - General

- A. Titles of Sections and Paragraphs: Captions accompanying specification sections and paragraphs are for convenience of reference only and do not form a part of the Specifications.
- B. Applicable Publications: Whenever in these Specifications references are made to published specifications, codes, standards, or other requirements, it shall be understood that wherever no date is specified, only the latest specifications, standards, or requirements of the respective issuing agencies which have been published as of the date that the Work is advertised for Bids, shall apply; except to the extent that said standards or requirements may be in conflict with applicable laws, ordinances, or governing codes. No requirements set forth herein or shown on the Drawings shall be waived because of any provision of, or omission from, said standards or requirements.
- C. Specialists, Assignments: In certain instances, specification text requires (or implies) that specific Work is to be assigned to specialists or expert entities who must be engaged for the performance of that Work. Such assignments shall be recognized as special requirements over which the **CONTRACTOR** has no choice or option. These requirements shall not be interpreted so as to conflict with the enforcement of building codes and similar regulations governing the Work; also, they are not intended to interfere with local union jurisdiction settlements and similar conventions. Such assignments are intended to establish which party or entity involved in a specific unit of Work is recognized as "expert" for the indicated construction processes or operations. Nevertheless, the final responsibility for fulfillment of the entire set of Contract requirements remains with the **CONTRACTOR**.

PART 2 - Reference Specifications, Codes, and Standards

- A. Without limiting the generality of other requirements of the Specifications, all Work specified herein shall conform to or exceed the requirements of applicable codes and the applicable requirements of the following documents.
- B. References herein to "Building Code" or "Uniform Building Code" shall mean Uniform Building Code of the International Conference of Building Officials (ICBO). Similarly, references to "Mechanical Code" or "Uniform Mechanical Code," "Plumbing Code" or "Uniform Plumbing Code," "Fire Code" or "Uniform Fire Code," shall mean Uniform Mechanical Code, Uniform Plumbing Code, and Uniform Fire Code of the International Conference of the Building Officials (ICBO). "Electric Code" or "National Electric Code (NEC)" shall mean the National Electric Code of the National Fire Protection Association (NFPA). The latest edition of the codes as approved by the Municipal Code and used by the local agency as of the date that the Work is advertised for Bids, as adopted by the agency having jurisdiction, shall apply to the Work herein,

including all addenda, modifications, amendments, or other lawful changes thereto.

- C. In case of conflict between codes, reference standards, drawings and the other Contract Documents, the most stringent requirements shall govern. All conflicts shall be brought to the attention of the **ENGINEER** for clarification and directions prior to ordering or providing any materials or furnishing labor. The **CONTRACTOR** shall bid for the most stringent requirements.
- D. The **CONTRACTOR** shall construct the Work specified herein in accordance with the requirements of the Contract Documents and the referenced portions of those referenced codes, standards, and specifications listed herein.
- E. References herein to "OSHA Regulations for Construction" shall mean **Title 29, Part 1926, Construction Safety and Health Regulations**, Code of Federal Regulations (OSHA), including all changes and amendments thereto.
- F. References herein to "OSHA Standards" shall mean **Title 29, Part 1910, Occupational Safety and Health Standards**, Code of Federal Regulations (OSHA), including all changes and amendments thereto.

PART 3 - Regulations Related to Hazardous Materials

- A. The **CONTRACTOR** is responsible that all Work included in the Contract Documents, regardless if shown or not, shall comply with all EPA, OSHA, RCRA, NFPA, and any other Federal, State, and Local Regulations governing the storage and conveyance of hazardous materials, including petroleum products.
- B. Where no specific regulations exist, all chemical, hazardous, and petroleum product piping and storage in underground locations must be installed with double containment piping and tanks, or in separate concrete trenches and vaults, or with an approved lining which cannot be penetrated by the chemicals, unless waived in writing by the **OWNER**.

Section 01040

Quality Control

PART 1 - Definition

- A. Specific quality control requirements for the Work are indicated throughout the Contract Documents. The requirements of this Section are primarily related to performance of the Work beyond furnishing of manufactured products. The term "Quality Control" includes inspection, sampling and testing, and associated requirements.

PART 2 - Sampling and Testing

- A. Unless otherwise indicated, all sampling and testing shall be in accordance with the methods prescribed in the current standards of the ASTM, as applicable to the class and nature of the article or materials considered; however, the **OWNER** reserves the right to use any generally-accepted system of sampling and testing which, in the opinion of the **ENGINEER**, will ensure the **OWNER** that the quality of the workmanship is in full accord with the Contract Documents.
- B. Any waiver by the **OWNER** of any specific testing or other quality assurance measures, whether or not such waiver is accompanied by a guarantee of substantial performance as a relief from the specific testing or other quality assurance requirements as originally specified, and whether or not such guarantee is accompanied by a performance Bond to assure execution of any necessary corrective or remedial Work, shall not be construed as a waiver of any requirements of the Contract Documents.
- C. Notwithstanding the existence of such waiver, the **ENGINEER** reserves the right to make independent investigations and tests, and failure of any portion of the Work to meet any of the requirements of the Contract Documents shall be reasonable cause for the **ENGINEER** to require the removal or correction and reconstruction of any such Work in accordance with the General Conditions.

PART 3 - Installation

- A. Inspection: The **CONTRACTOR** shall inspect materials or equipment upon the arrival on the Project Site and immediately prior to installation and reject damaged and defective items.
- B. Measurements: The **CONTRACTOR** shall verify measurements and dimensions of the Work as an integral step of starting each installation.

- C. Manufacturer's Instructions: Where installations include manufactured products, the **CONTRACTOR** shall comply with manufacturer's applicable instructions and recommendations for installation, to whatever extent these are more explicit or more stringent than applicable requirements indicated in Contract Documents. This requirement applies whether the manufactured product is supplied by the **OWNER** or the **CONTRACTOR**.

END OF SECTION

Section 01050

Project Closeout

PART 1 - Final Cleanup

- A. The **CONTRACTOR** shall promptly remove from the vicinity of the completed Work all rubbish, unused materials, concrete forms, construction equipment, and temporary structures and facilities used during construction. Final acceptance of the Work by the **OWNER** will be withheld until the **CONTRACTOR** has satisfactorily complied with the foregoing requirements for final cleanup of the Project Site.

PART 2 - Closeout Timetable

- A. The **CONTRACTOR** shall establish dates for testing, acceptance periods, and on-site instructional periods (as required under the Contract). Such dates shall be established not less than one week prior to beginning any of the foregoing items, to allow the **OWNER**, the **ENGINEER**, and their authorized representatives sufficient time to schedule attendance at such activities.

PART 3 - Final Submittals

- A. The **CONTRACTOR** shall comply with the completion requirements contained in Section 17.0 of the General Conditions.

PART 4 - Maintenance and Guarantee

- A. The **CONTRACTOR** shall comply with the maintenance and guarantee requirements contained in Section 7.17 of the General Conditions.
- B. The **CONTRACTOR** shall make all repairs and replacements promptly. In the event the **CONTRACTOR** fails to make such repairs, the **OWNER** reserves the right to do the Work and the **CONTRACTOR** and his or her surety shall be liable to the **OWNER** for the cost thereof.

END OF SECTION

SECTION 01060

UTILITY ADJUSTMENTS

PART 1 - UTILITY ADJUSTMENT

Add to Subsection 323.05 - "Utility Manholes and Vaults" of the Standard Specifications as follows:

1. "Before lowering manholes, vaults, valve boxes, and test stations, the Contractor shall take inventory of the utilities to be adjusted. The Contractor shall record the exact location and type of utility by labeling the assembly with numbers at locations visible for verification. The labeling shall include utility site, collar, and lid to ensure proper match of hardware when utility adjustment is completed at the conclusion of the project."

The Contractor shall submit the utility inventory list to the Engineer and utility companies upon completion of utility lowering activity. The Contractor shall also keep a copy of the utility location inventory list on the project work site at all times for emergency shutoff purposes. The Contractor may post the list on the backside of the CITY OF FALLON Project Information sign.

The Contractor shall make all necessary adjustments, either temporary or permanent, to maintain adequate accessibility to each facility at all times during construction. The Contractor shall be responsible for any damages incurred to the facilities being adjusted.

The utility owner will provide replacement hardware for contractor installation for those that have either deteriorated or become obsolete. It is the contractor's responsibility to contact the utility owner for material replacement.

For all valve and manhole collars within the street section, Portland Cement Concrete shall be protected until 3,000 psi is obtained. The CITY OF FALLON Project Manager may consider other Contractor alternatives in lieu of the 12-hour strength requirement.

END OF SECTION

Section 01300

Contractor Submittals

PART 1 - General

- A. Wherever submittals are required hereunder, all such submittals by the **CONTRACTOR** shall be submitted to the **ENGINEER**.

PART 2 - Preconstruction Conference Submittals

- A. At the preconstruction conference referred to in Section 01110, "Summary of Work", the **CONTRACTOR** shall submit the following items to the **ENGINEER** for review:
 - 1. A preliminary schedule for the Work
 - 2. A schedule of Shop Drawings and Material Submittals

PART 3 - Contractor's Schedules

- A. Preliminary Schedule: At the preconstruction conference, the **CONTRACTOR** shall furnish to the **ENGINEER** a preliminary schedule for the Work showing its general plan for orderly completion of the Work and showing in detail its planned mobilization of plant and equipment, sequence of early operations, and timing of procurement of materials and equipment. The **CONTRACTOR** shall assist the **ENGINEER** in reviewing and evaluating such schedule.
- B. Detailed Schedule: Within 7 calendar days after the preconstruction conference, the **CONTRACTOR** shall furnish to the **ENGINEER** a detailed schedule for orderly completion of the Work, showing its planned sequences of operations, and the dates for commencement and completion of all important features of the Work including Milestone(s) dates.
 - 1. The schedule shall be comprehensive, covering both activities at the site of the Work and off-site activities such as design, procurement, and fabrication. The schedule shall be orderly and realistic and shall be revised as necessary to meet this requirement. The **CONTRACTOR** shall promptly advise the **ENGINEER** of any occurrence requiring substantial revision of the schedule and shall furnish a revised schedule within 3 calendar days of such occurrence.
 - 2. The detailed schedule and each revision thereof shall be subject to approval by the **ENGINEER** for conformity with the requirements of this Section. The **CONTRACTOR** shall assist the **ENGINEER** in reviewing and evaluating each schedule furnished. Disapproved schedules will be returned to the **CONTRACTOR**, shall be revised to correct the defects noted, and shall be resubmitted to the **ENGINEER** within 3 calendar days after receipt.

3. The schedule will be acceptable to the **ENGINEER** as providing an orderly progression of the Work to completion within the Contract Time (Milestone(s)), but such acceptance will neither impose on the **ENGINEER** responsibility for the progress or scheduling of the Work nor relieve the **CONTRACTOR** from full responsibility therefor.
 4. Form of Schedules: The **CONTRACTOR** shall submit 3 copies of each schedule and revised schedule furnished. The preliminary and detailed schedules shall be of the bar chart, or precedence types, at the **CONTRACTOR's** option. The precedence type schedule shall be in the form of a network diagram, activity listing, and input listing.
- C. Whenever there are changes in the Work, the **CONTRACTOR** shall proceed to immediately revise its schedule to accommodate the changed Work upon receipt of a written field order to make the changes, notwithstanding the fact that an agreement has not been reached regarding the cost of the changes. The **CONTRACTOR** shall complete the changed Work in accordance with the revised schedule. If, in the opinion of the **ENGINEER**, the **CONTRACTOR** is not performing the changed Work in accordance with the revised schedule, the **ENGINEER** may withhold certification of estimates for payment until such time that the **CONTRACTOR** does perform in accordance with the revised schedule.
- D. When required to perform and complete the changed Work in accordance with the revised schedule, the **CONTRACTOR** shall provide additional labor, materials, equipment, or other factors of production in excess of those in use before the changed Work was ordered.

PART 4 - Shop Drawings and Material Submittals

- A. Wherever called for in the Contract Documents, or where required by the **ENGINEER**, the **CONTRACTOR** shall furnish to the **ENGINEER** for review 5 copies of each Shop Drawing or Material Submittal. The required submittals shall include the Sample Public Notice Letters as referenced in Section 01570 of these specification. The **CONTRACTOR's** attention is also directed to Article 6.17 of the General Conditions.
- B. All Shop Drawings or Material Submittals shall be accompanied by a submittal transmittal form approved by the **ENGINEER**. Any submittal not accompanied by such a form, or where all applicable items on the form are not completed, will be returned for re-submittal.

- C. Normally, a separate transmittal form shall be used for each specific item or class of material or equipment for which a submittal is required. Transmittal of a submittal of various items using a single transmittal form will be permitted only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates review of the group or package as a whole.

A multiple-page submittal shall be collated into sets, and each set shall be stapled or bound, as appropriate, prior to transmittal to the **ENGINEER**.

- D. Except as may be indicated herein, the **ENGINEER** will return prints of each submittal to the **CONTRACTOR** with its comments noted thereon, within 14 calendar days following their receipt by the **ENGINEER**.
- E. If one copy of a submittal is returned to the **CONTRACTOR** marked "APPROVED", formal revision and resubmission of said submittal will not be required.
- F. If one copy of a submittal is returned to the **CONTRACTOR** marked "MAKE CORRECTIONS NOTED", the **CONTRACTOR** may begin implementing the Work method or incorporating the material and equipment covered by the submittal with the noted corrections. Resubmission of the said submittal will not be required.
- G. If a submittal is returned to the **CONTRACTOR** marked "DOES NOT CONFORM" or "CORRECT AND RESUBMIT", the **CONTRACTOR** shall revise said submittal and shall resubmit the required number of copies of said revised submittal to the **ENGINEER**.
- H. All **CONTRACTOR** Shop Drawings and Material Submittals shall be carefully reviewed by an authorized representative of the **CONTRACTOR**, prior to submission to the **ENGINEER**. Each submittal shall be dated, signed, and certified by the **CONTRACTOR** as being correct and in strict conformance with the Contract Documents.

END OF SECTION

SECTION 01570

TRAFFIC MAINTENANCE and SAFETY

1.01 SCOPE OF WORK

1.02 MAINTENANCE OF TRAFFIC

1.02.01 TRAFFIC CONTROL PLAN

1.02.02 TRAFFIC CONTROL NOTIFICATION

1.02.03 TRAFFIC CONTROL - GENERAL REQUIREMENTS

1.02.04 TRAFFIC CONTROL - PHASING AND ACCESS REQUIREMENTS

EXHIBITS 'A-B' SAMPLE PUBLIC NOTICE LETTERS

1.01 SCOPE OF WORK

The Work generally includes but is not limited to: Reconstruction of approximately 1,350 linear feet of N. Broadway Street and 700 linear feet of Sherman Street. This includes installing sidewalk, curb and gutter, valley gutter and spandrels, residential and commercial driveway apron improvements, ADA compliant pedestrian ramps, new catch basins, storm infiltration chambers, culvert extension and new headwalls, water main improvements, water service reconnections, sewer main and manhole improvements, striping, signage, traffic control, stormwater protection, and all miscellaneous and incidental work necessary to complete the project in conformance with the contract documents.

1.02 MAINTENANCE OF TRAFFIC

1.02.01 Traffic Control Plans

All traffic control shall conform to the 2009 edition of the Manual on Uniform Traffic Control Devices (MUTCD), including any revisions, and the 2020 edition of the State of Nevada Standard Plans for Road and Bridge Construction, specifically, Plans TC-1 through TC-22, and as directed by the Project Manager for the City of FALLON, hereinafter designated as "CITY OF FALLON" and/or "Agency".

The Contractor shall submit two (2) copies of proposed traffic control plans, with the same number of copies of the proposed project schedule, to the CITY OF FALLON for review and comments a minimum of seven (7) working days prior to the start of operations. **The proposed traffic control plans shall be prepared and signed by a Professional Traffic Operations Engineer (PTOE) or a Traffic Control Supervisor certified by the American Traffic Safety Services Association (ATSSA), hereinafter designated "TCS".** If the Contractor makes significant changes to the traffic control plans, these changes must also be prepared and signed by the PTOE/TCS. The final traffic control plans, signed by the PTOE/TCS shall be submitted to the CITY OF FALLON within five (5) working days after receipt of review comments to the proposed traffic control plans.

The contractor's traffic control plans shall include, but not be limited to, the following:

- Proposed construction zone and existing speed limits
- All construction signing
- Message Board locations
- Location of flaggers
- Types and location of traffic control devices
- Lane crossovers between construction phases
- Method for maintaining traffic signal functions
- Special events scheduling
- Detours
- Draft notification letters (2-day notice type)
- Lighting System Plans where night operations are permitted or for work accomplished one half hour after sunset to one half hour before sunrise.
- Letter of conformance stating that all Category 1 and 2 traffic control devices used on the project meet the evaluation criteria of NCHRP Report 350. Note that a sign together with its portable support is considered as a system, which together must meet the NCHRP Report 350 Requirements.

Where night operations are permitted or for work accomplished one half (1/2) hour after sunset to one half (1/2) hour before sunrise, submit a night lighting system plan for approval. Include the light types, locations, and the manner in which the lights will be moved. Submit the proposed system plan at least seven (7) calendar days before use. Use floodlights to illuminate the work area, flagger stations, equipment crossings, and other areas. Floodlights shall not produce a disabling glare condition for approaching road users. Do not use vehicle headlights or incandescent lights.

The CITY OF FALLON Project Manager will review the submittal and provide, if any, written comments and/or corrections to the Traffic Control Plans. If necessary, the Contractor and CITY OF FALLON Project Manager will meet to consider the comments and/or corrections to the plan prior to construction operations to resolve any issue relative to the traffic control plans. Upon resolution of all issues or acceptance of the traffic control plans as submitted, the CITY OF FALLON Project Manager shall accept the plans in writing. If during construction, revisions to the accepted plans are necessary for safety or accommodation to traffic, the Engineer or CITY OF FALLON Project Manager may require such revisions.

Any request by the Contractor to change the traffic control plans shall be submitted in writing and accompanied with drawings, prepared and signed by the PTOE/TCS, showing the appropriate aspects of the traffic control plans at least five (5) work days prior to implementation. Such requests must be approved in writing by the CITY OF FALLON Project Manager prior to implementation.

Acceptance by the CITY OF FALLON Project Manager of the submitted traffic control plans shall in no way relieve the Contractor of its responsibility for safety requirements. Acceptance of the traffic control plans by the CITY OF FALLON Project Manager indicates that the plans generally appear to conform to the contract requirements. Such acceptance shall in no way be construed as confirmation of the technical accuracy or adequacy of the contents of the plans and shall not

relieve the Contractor of the obligation to institute traffic control measures in full compliance with contract requirements, and which function safely and correctly, and are in conformance with applicable statutes, ordinances, and regulations.

Immediately after set up of new or modified traffic control plans, the Contractor shall have its Construction TCS inspect the controls installed in the field to determine if all required controls have been installed and are operating as intended. The Construction TCS shall submit to the CITY OF FALLON Project Manager a written inspection report on the traffic controls conformance with the approved traffic control plans and contract requirements. If the Construction TCS determines that the traffic controls are not in conformance with the approved traffic control plans, contract requirements, or determines that the traffic controls are not functioning as intended, the report shall address such deficiencies and make recommendations for changes. The CITY OF FALLON Project Manager may require the Contractor's PTOE/TCS to revise the traffic control plans accordingly. If during the course of construction, the CITY OF FALLON Project Manager determines that traffic controls have been modified or are not functioning as intended, the CITY OF FALLON may request the Contractor's PTOE/TCS to evaluate the traffic controls installed by the Contractor.

1.02.02 Traffic Control Notification

Draft notifications to residences and businesses will be submitted to the CITY OF FALLON Project Manager for review and approval before the Contractor distributes notices. The Contractor shall submit a final copy to the CITY OF FALLON Project Manager of all written notifications that the Contractor is required to distribute.

The Contractor shall prepare and deliver approved project information notices to all residences and businesses adjacent to the project to ensure that residences/businesses receive the notices no less than two (2) calendar days prior to beginning any construction operations. Depending on the operation, advanced notification up to seven (7) calendar days may be required. The notice (see Exhibit "A" at the end of this section for sample notice format) will include:

- General scope of project (description of project and limits, hours and days of operation, phasing information, lane closure, parking restrictions, etc.)
- Contractor contact and telephone number
- Other appropriate information requested by the CITY OF FALLON Project Manager

In the event the Contractor fails to comply with notification requirements, the CITY OF FALLON Project Manager may secure the services of a public notification agent to provide notification services, and deduct from payments to the Contractor all expenses related to this effort.

Changeable Message Signs (CMS) may be required depending on the Contractor's schedule.

1.02.03 Traffic Control — General Requirements

The Contractor shall designate a Construction TCS who shall be responsible for initiating, installing and maintaining all traffic control devices as shown on the traffic control plans, as specified in the MUTCD and these specifications. The Construction TCS shall be under the direct supervision of the Superintendent. The designated traffic control supervisor shall be available

to be contacted by the CITY OF FALLON Project Manager for the life of this contract. The designated traffic control supervisor shall be available to be on the work site within forty-five (45) minutes after notification by the CITY OF FALLON Project Manager. Submit the name, ATSSA certification number, and qualifications for CITY OF FALLON approval at the pre-construction conference. The Construction TCS shall:

- Have at least one year of field experience directly related to work site traffic control set up in a supervisory or responsible capacity and be certified by ATSSA as a worksite Traffic Control Supervisor.
- Understand the contract requirements.
- Understand the MUTCD requirements.
- Correct all traffic control deficiencies.
- Coordinate maintenance of traffic operations with the PTOE/TCS who prepared the traffic control plans, if a different person.
- Report all corrective actions to maintain and protect traffic through the project.
- Review work areas, equipment operation and storage, and material and handling and storage relative to traffic safety.
- Furnish weekly written certification to the CITY OF FALLON Project Manager that inspections and reviews were conducted and that traffic control devices met or exceeded the contract requirements. Weekly certification shall include daily records of traffic control activities and reviews.

The Contractor shall not proceed with any construction until traffic control plans and the Construction TCS have been approved and the proper traffic control has been provided to the satisfaction of the Design Engineer and the CITY OF FALLON Project Manager. Any days lost due to improper traffic control or lack of a Construction TCS, will be charged against the Contractor's allowable working days.

The Contractor shall maintain public traffic throughout the project in accordance with the approved traffic control plans and perform work in a manner that assures the safety and convenience of the public and protects the residents and property adjacent to the project. Should the Contractor choose to accomplish work methods or phasing which require modification to any part of the traffic control zone in the approved traffic control plans, the Contractor shall submit for approval a modified traffic control plans at least five (5) work days prior to implementation of such work or phasing. During the course of construction, the Contractor shall be prepared to provide access through the construction zone for police, fire or emergency vehicles which otherwise do not have through access due to traffic tie-ups and the inability to pass without entering the construction zone.

Flaggers will be required to control major business accesses. Additional flaggers may be required upon request by the Engineer and will be incidental. On occasions when flag control is necessary for safety or efficient traffic flow within signalized intersections, the Contractor must first turn the signal to flashing. The flaggers must not control the intersection with the signal in full operation. If flaggers enter the intersection to control traffic, they shall be equipped with proper attire and control devices. The number of flaggers and equipment/attire shall comply with applicable MUTCD, State, and local requirements. During non-construction hours, the intersections shall be controlled through a normal signal pattern or by some other approved method.

The Contractor shall provide and maintain temporary and permanent pavement markings in accordance with the MUTCD Part VI. Temporary pavement markings, most often reflective tabs, will be placed every one hundred (100) feet on the fog line, every fifty (50) feet on the center line, and every other stripe (approx. every 60 feet) on the lane lines. The tabs placed on the lane lines will be placed on the down stream edge of the lane line.

Storage of construction materials, supplies, and equipment within the public streets and alleys during night and weekend periods is prohibited, except where approved by CITY OF FALLON Project Manager. At no time shall materials, supplies, or equipment be stored or stockpiled within xx feet (see table below) of a travel lane unless separated by guardrail or concrete barrier rail.

Speed (mph)	Widths (ft)
55	23
45-50	16
30-40	13
20-25	10

Traffic control devices shall be removed as soon as they no longer apply to the current construction activities.

Should the Contractor neglect to prosecute the traffic control requirements properly or fail to perform any provision of the traffic control requirements, the CITY OF FALLON Project Manager, after twenty-four (24) hours written notice to the Contractor may without prejudice to any other remedy it may have, make good such deficiencies and deduct the cost thereof from the payment then or thereafter due the Contractor.

1.02.04 Traffic Control — Phasing and Access Requirements

Work shall be performed in a manner that will minimize inconvenience to businesses and the public.

Regardless of traffic control operations, public traffic shall not be stopped for more than 10 minutes and shall not be delayed for more than 30 minutes total through the project regardless of the number of work zones. Should these delay restrictions be exceeded, work shall be immediately suspended. The Contractor shall be required to submit written revised construction plans that address the delay problem. Upon approval from the CITY OF FALLON Project Manager, construction operations may resume. Working days will continue to be assessed during the suspension period.

The Contractor shall provide and maintain a minimum of one access to each business and/or private property adjacent to construction at all times. In all cases, driveway access is to be restored quickly, as soon as the conditions allow, rather than combined with daily site cleanup at the end of the work shift.

The Contractor's traffic control plans must indicate the intersection control strategy to be used throughout the project. In unique circumstances where alternative intersection control measures may improve public convenience, the CITY OF FALLON may consider alternative intersection control plans submitted by the Contractor.

Unless prior approval is granted by the CITY OF FALLON, the Contractor shall limit hours of operations to between 7:00 a.m. to 7:00 p.m., Monday through Friday (Normal Working Hours). This restriction applies to the operation and startup of equipment.

If work outside Normal Working Hours is requested by the Contractor, the Contractor shall submit the request in writing and obtain written approval from the CITY OF FALLON for Adjusted Working Hours. Work within the Adjusted Working Hours may commence within forty-eight (48) hours after approval by the CITY OF FALLON and distribution by the Contractor of written notifications to adjacent businesses of the approved Adjusted Working Hours. The CITY OF FALLON reserves the right to reject or rescind authorization of Adjusted Working Hours at any time if, in the CITY OF FALLON Project Manager's opinion, the Contractor's operations adversely impact the public; and the Contractor shall not be entitled to any additional payment from CITY OF FALLON or extension of time for rejection or rescindment of Adjusted Working Hours work. The authorization of Adjusted Working Hours work does not in any way relax or remove any other specification requirements for the work performed at night.

EXHIBIT "A" SAMPLE PUBLIC NOTICE LETTER (2 Working Days Prior to New Street Segment Construction)

Dear Property Owner and/or Tenant:

{NAME OF CONTRACTOR} has commenced the {PROJECT NAME}. To minimize inconvenience to adjacent properties during * (work operations), the City of FALLON has required {NAME OF CONTRACTOR} to not adversely impact intersections and major driveways. Some residential driveway and side street closures will be required.

During construction operations short traffic delays may occur. Access will be maintained to your property for the duration of this project; however, temporary driveway closures up to four hours or more may occur during certain activity. {NAME OF CONTRACTOR} will notify you 18-24 hours in advance of these temporary driveway closures. If you do not receive advance notice of driveway closure, please notify the CITY OF FALLON Project Manager. For safety reasons, parking on the street will not be possible within the construction traffic control zones during construction”.

If you have any questions or require additional information, you may contact the following:

- {NAME}, Project Superintendent — {NAME OF CONTRACTOR, (PHONE NUMBER)}
- Brian Byrd — CITY OF FALLON, (PHONE NUMBER)

Thanking you in advance for your cooperation and patience during the {PROJECT NAME}.

Sincerely,

Brian Byrd
Public Works Director
City of Fallon

{Name of Construction Manager}
{Title}
{Name of Contractor}

EXHIBIT "B" SAMPLE PUBLIC NOTICE DOOR HANGER (18-24 Hours Prior to Each Temporary Driveway/Side Street Closure Event)

THIS IS THE FRONT OF THE DOOR HANGER

Dear Property Owner and/or Tenant:

On {DATE}, {CONTRACTOR} will be (Enter description of work) * (**Add road or roads**) adjacent to your property. During this operation, temporary driveway closures and/or side street closures up to four (4) hours or more may occur. {CONTRACTOR} has been instructed to restore driveway access as quickly as possible. Please accept our apologies for this temporary inconvenience.

If you have any questions or require additional information, you may contact the following:

- {NAME}, Project Superintendent — {NAME OF CONTRACTOR, (PHONE NUMBER)}
- Brian Byrd — CITY OF FALLON, (PHONE NUMBER)

Thanking you in advance for your cooperation and patience during the {PROJECT NAME}.

Sincerely,

Brian Byrd
Public Works Director
City of Fallon

{Name of Construction Manager}
{Title}
{Name of Contractor}

END OF SECTION

SECTION 03110

CLEARING AND GRUBBING

PART 1 - PROTECTION:

- A. Roads and Walks: Keep roads and walks free of dirt and debris at all times.
- B. Utility Lines: Contact the Underground Service Alert 1-800-642-2444 at least two working days prior to construction for the location of all existing underground utilities. **Protect from damage all existing utility lines that are indicated to remain.** Notify the Engineer and Owner immediately of any damage to or encounter with an unknown existing utility line. The Contractor shall be responsible for the repair of any damage to existing utility lines that are indicated or made known to the Contractor prior to start of clearing and grubbing operations. When utility lines which are to be removed are encountered within the area of operations, the Contractor shall notify the Engineer in ample time to minimize interruption of the service.
- C. Blasting: The use of explosives will not be permitted.

PART 2 - GENERAL:

- A. The project site will be cleared and grubbed by the Contractor prior to the start of work. Any clearing and grubbing that may be required shall be completed as herein specified.

2.01 CLEARING:

- A. Clearing shall consist of the felling, trimming, and cutting into sections any on-site trees not designated to remain and the satisfactory disposal of those trees, and removal of other vegetation designated for removal, downed timber, snags, brush, fences, asphalt, and rubbish occurring within the areas to be cleared. Clearing shall also include the sawcut and removal of the existing asphalt concrete; concrete curbs, gutters, sidewalks, and driveways; signs and other incidental items within the limits of construction as shown on the plans. Cut off flush with or below the original ground surface trees, stumps, roots, brush, and other vegetation in areas to be cleared, except for trees and vegetation indicated or directed to be left standing. Sawcut and removal of existing asphalt to the lines designated on the plans. Clearing limits shall extend at least 5 feet beyond structural, pavement and engineered fill areas.

2.02 GRUBBING:

- A. Grubbing shall consist of the removal and disposal of roots larger than 3 inches in diameter, matted roots, and designated stumps from the indicated grubbing areas. Excavate this material together with logs, organic and metallic debris, brush, and refuse and remove to a depth of not less than 3 inches below the original soil surface in areas indicated to be grubbed and in areas indicated as construction areas under this contract. Fill depressions made by grubbing with suitable material and compact

in accordance with the requirements specified in Section titled "Earthwork," to make the new surface conform with the existing adjacent surface of the ground. Grubbing limits shall extend at least 5 feet beyond structural, pavement and engineered fill areas.

2.03 **DISPOSAL OF CLEARED AND GRUBBED MATERIALS:**

- A. All cleared and grubbed material except for those items shown on the plans to be salvaged, will become the property of the Contractor, and will be disposed off-site.

*** END OF SECTION ***

SECTION 03120

SITE GRADING

PART 1 - GENERAL

1.01 APPLICABLE PUBLICATIONS:

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1. American Society for Testing and Materials (ASTM) Publications:

- | | | |
|----|--------|---|
| a. | C 14 | Concrete Sewer, Storm Drain, and Culvert Pipe |
| b. | C 33 | Concrete Aggregates |
| c. | C 117 | Materials Finer than 75-Micrometer (No. 200) Sieve in Mineral Aggregates by Washing |
| d. | C 136 | Sieve or Screen Analysis of Fine and Coarse Aggregates |
| e. | D1140 | Amount of Material in Soils Finer (R 1971) than the No. 200 (75 micrometer) Sieve |
| f. | D 1556 | Density of Soil in Place by the Sand-Cone Method |
| g. | D 1557 | Moisture Density Relations of Soils and Soil-Aggregate Mixtures Using 10-lb. (4.54-kg) Rammer and 18-in. (457-mm) Drop |
| h. | D 2487 | Classification of Soils for Engineering Purposes |
| i. | D 6938 | Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth) |
| j. | D 4253 | Maximum Index Density of Soils Using Vibratory Table |
| k. | D 4254 | Minimum Index Density of Soils and Calculation of Relative Density |
| l. | D 4318 | Liquid Limit, Plastic Limit, and Plasticity Index of Soils |

2. Standard Specifications for Public Works Construction, 2012 Edition, (Standard Specifications). Materials and workmanship specified herein shall be in accordance with the Stand Specifications except as modified herein and except that contractual and payment provisions do not apply.

1.02 DESCRIPTION:

- A. The work includes performing site preparation, excavation, borrow, filling, backfilling, compacting, and finished grading necessary to construct the finished grades indicated for structures, pavements, new curbs, gutters and other on-grade slabs or site work. The site will be graded to finished subgrade to within 0.1 foot by the Contractor. Requirements for excavating and backfilling for utility lines or storm drains are contained in Section 03121, "Excavation and Fill." Requirements for pavement subbase, base course, and surface courses as well as for foundation and footing construction are specified in the respective sections for these systems.
1. Reference Standard Specifications: Materials and workmanship specified herein shall be in accordance with the Standard Specifications except as modified herein and except that contractual and payment provisions do not apply. Where the term "Architect" is used, it shall mean the Engineer.

1.03 DEFINITIONS:

- A. Backfill: Material used in refilling a cut or other excavation.
- B. Capillary Water Barrier: A layer of clean, poorly graded crushed rock, stone, or natural sand or gravel having a high porosity which is placed beneath a building slab with or without a vapor barrier to cut off the capillary flow of pore water to the area immediately below a slab.
- C. Cohesive Materials: Cohesive materials include materials classified by ASTM D 2487 as GC, SC, ML, CL, MH, and CH. Materials classified as GM and SM will be identified as cohesive only when fines have a plasticity index greater than zero.
- D. Cohesionless Materials: Cohesionless materials include materials classified by ASTM 2487 as GW, GP, SW, and SP. Materials classified as GM and SM will be identified as cohesionless only when the fines have a plasticity index of zero.
- E. Compaction: The process of mechanically stabilizing a material by increasing its density at a controlled moisture condition. "Degree of Compaction" is expressed as a percentage of the maximum density obtained by the test procedure described in ASTM D 1557 for general soil types.
- F. Controlled Fill (structural fill): A fill consisting of a specified soil mix or gradation of materials constructed to attain maximum bearing strength and minimize consolidation or differential settlement under a load. Controlled fill is sometimes called "structural fill" or "engineered select fill."
- G. Crushed Rock Subgrade: A layer of compacted crushed rock that replaces the in-place existing material to provide a stable, uniform bearing foundation for further construction.
- H. Embankment: A "fill" having a top that is higher than adjoining ground.
- I. Excavation: The removal of soil, rock, or hard material to obtain a specified depth or elevation.

- J. Fill: Specified material placed at a specified degree of compaction to obtain an indicated grade or elevation.
- K. Granular Subbase: A dense, well-graded aggregate mixture of sand-gravel or crushed stone with suitable binder soil, placed on a subgrade to provide a suitable foundation for further construction.
- L. Hard Material: Weathered rock, dense consolidated deposits or conglomerate materials which are not included in the definition of "rock" but which usually require the use of heavy excavation equipment with ripper teeth or the use of jack hammers for removal.
- M. Lift: A layer (or course) of soil placed on top of a previously prepared or placed soil in a fill or embankment.
- N. Rock: Solid, homogenous, interlocking crystalline material with firmly cemented, laminated, or foliated masses or conglomerate deposits, neither of which can be removed without systematic drilling and blasting, drilling and the use of expansion jacks or feather wedges, or the use of backhoe-mounted pneumatic hole punchers or rock breakers; also large boulders, buried masonry, or concrete other than pavement, exceeding 1/2 cubic yard in volume. Removal of "hard material" will not be considered rock excavation because of intermittent drilling and blasting that is performed merely to increase production.
- O. Soil: The loose surface material of the earth's crust resulting from the chemical and mechanical weathering of rock and organic material.
- P. Subgrade: The bottom layer of material (sometimes in-situ soil or rock) graded or otherwise prepared for supporting the addition of fill material, pavement courses, or a building slab.
- Q. Topsoil: In natural or undisturbed soil formations, the fine-grained, weathered material on the surface or directly below any loose or partially decomposed organic matter. Topsoil may be a dark-colored, fine, silty, or sandy material with a high content of well decomposed organic matter, often containing traces of the parent rock material. Gradation and material requirements specified herein apply to all topsoil references in this contract. The material shall be representative of productive soils in the vicinity.
- R. Unsatisfactory Material: Existing, in-place soil or other material which can be identified as having insufficient strength characteristics or stability to carry intended loads in fill or embankment without excessive consolidation or loss of stability. Materials classified as PT, OH, or OL by ASTM D 2487 are unsatisfactory. Unsatisfactory materials also include manmade fills, refuse, frozen material, uncompacted backfills for previous construction, unsound rock or soil lenses, or other deleterious or objectionable material.

1.04 SUBMITTALS:

- A. Certified Laboratory Test Reports:
 - 1. Engineered select material for controlled fills to provide required separation between native material and subgrade.

1.05 DELIVERY AND STORAGE:

- A. Deliver and store materials in a manner to prevent contamination or segregation.

1.06 CRITERIA FOR BIDDING:

- A. Base bids on the following criteria:
 - 1. Borrow material, and common fill material in the quantities required is not available at the project site.
 - 2. Engineered Select Fill is not available on-site.
 - 3. Pipe bedding and backfill materials are not available on-site.
 - 4. Unsuitable clay material is present on-site and shall not be used in fill areas under structures, pavements or concrete flatwork areas. It may be used as fill in Landscape areas.
 - 5. The site will be graded to finished subgrade and finished final grade as shown on the plans.

1.07 PROTECTION:

- A. Utilities: Contact the Underground Service Alert 1-800-227-2600 at least two (2) working days prior to construction for the location of all existing underground utilities. Movement of construction machinery and equipment over pipes and utilities during construction shall be at the Contractor's risk. For work immediately adjacent to or for excavations exposing a utility or other buried obstruction, use hand excavation as required by Nevada Revised Statutes, Chapter 455, "Excavations". Start hand or light equipment excavation on each side of the indicated obstruction and continue until the obstruction is uncovered or until clearance for the new grade is assured. Support uncovered lines or other existing work as affected by the contract excavation until approval for backfill is granted by the Engineer. Report damage to utility lines or subsurface construction immediately to the utility company and the Engineer.
- B. Protection and Restoration of Surfaces: Protect newly graded areas from traffic, erosion, and settlements. Repair and reestablish damaged or eroded slopes, elevations or grades and restore surface construction prior to acceptance. Protect ditches and storm drain inlets from water-borne soils by means of straw waddles.
 - 1. Dispose of excavated material in such a manner that it will not obstruct the flow of streams, endanger a partly finished structure, impair the efficiency or appearance of facilities, or be detrimental to the completed work.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Engineered Select Fill: Import soil used as engineered select fill below all footings and slabs-on-grade shall be nonexpansive, well-graded granular soil and be free of organics, other

perishable material and construction debris. In addition, it shall meet the following criteria:

<u>Sieve Size</u>	<u>Percent Passing (by dry weight)</u>
3"	100
No. 4	70-100
No. 200	0-25
Liquid Limit	35% maximum
Plasticity Index	12% maximum
R-Value	20 minimum (pavement areas only)

PART 3 - EXECUTION

3.01 SURFACE PREPARATION:

- A. Clearing and Grubbing: Perform as specified in Section 03110, "Clearing and Grubbing."
- B. Unsatisfactory Material: Remove organic matter, sod, muck and unsuitable clays under embankments when directed by the Engineer. If soft spots are encountered, the area shall be overexcavated and replaced with structural fill.
- C. Excavation:
 - 1. Unclassified Excavation: All site excavation not specifically covered under other sections will be "Unclassified Excavation." Excavate to the contours and dimensions indicated. Keep excavations free from water while construction is in progress. Notify the Engineer immediately in writing in the event that it becomes necessary to remove rock, hard material, or other material defined as unsatisfactory to a depth greater than indicated and an adjustment in contract price will be considered. Refill excavations cut below the depths indicated with fill and compact as specified herein. Excavate soil disturbed or weakened by the construction operations and soils permitted to soften from exposure to weather. Refill with fill and compact as specified herein at no additional cost to the Owner.

3.02 FILLING AND BACKFILLING:

- A. Filling and Backfilling Adjacent to Structures: Place backfill adjacent to structures and compact to prevent wedging action or eccentric loading upon or against the structures. Step or serrate slopes bounding or within areas to be backfilled to prevent sliding of the fill. Do not use equipment for backfilling operations or for the formation of embankments against structures that will overload the structure. Construct backfill for storm drains, manholes, utility lines, and other utility appurtenances using the material and compaction requirements specified herein for the adjacent or overlying work. Bedding and initial backfill requirements are defined in Section 312010, "Excavation and Fill." Backfilling against concrete will be done only after approval has been obtained from the Engineer.
- B. Engineered Select Fill: Filling under proposed structures where not covered by other sections, and under proposed roads and parking lots will be performed as defined in this section.

All expansive clay soils shall be removed and replaced with engineered select fill below all proposed foundations. A minimum of 1 foot of engineered select fill is required beneath all footings and a minimum of 3-feet of engineered select fill is required beneath the base material of all slab-on-grade areas.

Engineered select fill and onsite soils used as engineered fill in the deep fill areas shall extend laterally beyond the edge of a footing, slab or pavement area a distance equal to one-half the thickness of fill below the footing, slab or pavement area.

Before engineered select fill is placed, exposed soil surfaces shall be scarified to a minimum depth of 8 inches, moisture conditioned to near optimum moisture content and recompacted to at least 90 percent relative compaction or as approved by the Engineer.

Engineered select fill placed below bottom of footings and slab-on-grade areas shall be placed in lifts not exceeding 8 inches (loose thickness), moisture conditioned to near optimum moisture content and then compacted to at least 95 percent relative compaction, except for paved areas that shall be compacted to at least 90 percent relative compaction.

3.03 FINISHING OPERATIONS:

- A. Site Grading: Grade to finished grades indicated within 0.10 foot. Grade areas to drain water away from structures. Existing grades which are to remain but are disturbed by the Contractor's operations shall be restored to existing condition.
- B. Finishing Subgrades Under Structures and Pavements: Finish the surface of the top lift of the fill or top of the subgrade to the elevation and cross section indicated. The finished surface shall be smooth and of uniform texture. Lightly scarify or blade the finished surface to bring the finished surface to within 0.05 foot of the indicated grade and to eliminate imprints made by compaction and shaping equipment.
- C. Disposition of Surplus Material: Surplus or other soil material not required or suitable for filling, backfilling, or embankment shall be removed from the site and disposed of.
- D. Protection of Surfaces: Protect newly graded areas from traffic, erosion, and settlements that may occur. Repair or reestablish damaged grades, elevations, or slopes prior to acceptance of work.

3.04 FIELD SAMPLING AND TESTING:

- A. Testing to be done by the owner. The frequency shall be at least as shown below or pursuant to the Standard Specification requirements, whichever is greater.

TABLE 3.05

<u>Material Type</u>	<u>Location of Material</u>	<u>Test Frequency</u>
Fills and Backfills	Structures (adjacent to)	One test per 2000 sq. ft. per lift
Controlled Fills	Streets/Parking Areas	One test per lift per 3000 sq. ft.
Subgrades	Site	One test per 3,000 sq. ft.
Embankments of Borrow	Any	One test per lift per 500 cubic yards placed.
Native soil subgrade other than structures and parking	Any	One test or one test per 10,000. sq ft. whichever is greater

END OF SECTION

SECTION 03121

EXCAVATION & FILL

PART 1 - GENERAL

1.01 APPLICABLE PUBLICATIONS:

A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1. American Society for Testing and Materials (ASTM) Publications:

- | | | |
|----|--------|---|
| a. | C 14 | Concrete Sewer, Storm Drain, and Culvert Pipe |
| b. | C 33 | Concrete Aggregates |
| c. | C 76 | Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe |
| d. | D 422 | Particle-Size Analysis of Soils |
| e. | D 1140 | Amount of Material in Soils Finer than the No. 200 (75-micrometer) Sieve |
| f. | D 1556 | Density of Soil in Place by the Sand Cone-Method |
| g. | D 1557 | Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10-lb (4.54-kg) Rammer and 18-in. (457-mm) Drop |
| h. | D 2487 | Classification of Soils for Engineering Purposes |
| i. | D 6398 | Standard Test Method for in Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth) |
| j. | D 4318 | Liquid Limit, Plastic Limit, and Plasticity Index of Soils |

2. American Water Works Association (AWWA) Publications:

- a. M23-02 PVC Pipe - Design and Installation

3. Standard Specifications for Public Works Construction, 2012 Edition (Standard Specifications). Materials and workmanship specified herein shall be in accordance with the Standard Specifications except as modified herein and except that contractual and payment provisions do not apply.

1.02 DESCRIPTION:

- A. This section includes requirements for excavation, preparation of pipe-laying surface, pipe bedding, backfilling and compaction.
1. All work shall be performed in compliance with the applicable sections of the Standard Specifications except as modified herein.

1.03 DEFINITIONS:

- A. Backfill: Material used in refilling a trench or other excavation.
- B. Compaction: Any method of mechanically stabilizing a material by increasing its density at a controlled moisture condition. "Degree of Compaction" is expressed as a percentage of the maximum density obtained by the test procedure described in ASTM D 1557 for general soil types or ASTM D 4254 for isolated cohesionless materials.
- C. Granular Pipe Bedding: A dense, well-graded aggregate mixture of sand, gravel, or crushed stone (mixed individually, in combination with each other, or with suitable binder soil) placed on a subgrade to provide a suitable foundation for pipe.
- D. Hard Material: Weathered rock, dense consolidated deposits, or conglomerate materials which are not included in the definition of "rock" but which usually require the use of heavy excavation equipment, ripper teeth, or jack hammers for removal.
- E. Lift: A layer or course of soil placed on top of unprepared subgrade or a previously prepared or placed soil in a fill or backfill.
- F. Unsatisfactory Material: Soil or other material identified as having insufficient strength or stability to carry intended loads on trench backfills without excessive consolidation or loss of stability. Also backfill material which contains refuse, frozen material, large rocks, debris, and other material which could damage the pipe or cause the backfill not to compact. Materials classified as PT, OH, or OL by ASTM D 2487 are unsatisfactory.
- G. Unstable Material: Material in the trench bottom which lacks firmness to maintain alignment and prevent joints from separating in the pipe, conduit, or appurtenance structure during backfilling. This may be material otherwise identified as satisfactory which has been disturbed or saturated.

1.04 SUBMITTALS:

- A. Certified Test Reports:
1. Underdrain backfill material
 2. Concrete
 3. Trench Backfill Material
 4. Pipe Bedding Material

B. Manufacturers Certificates of Compliance:

1. Warning and identification tape
2. Submit any field test data not listed above sufficiently in advance of construction so as not to delay work.

1.05 DELIVERY AND STORAGE:

- A. Deliver and store materials in a manner to prevent contamination, segregation, freezing, and other damage.

1.06 CRITERIA FOR BIDDING:

A. Base bids on the following criteria:

1. Surface elevations and contours are approximate.
2. The character of the material to be excavated or found in the trench is uncertain.
3. Suitable bedding material in the quantities required is not available on site.
4. Suitable backfill material is not available on site.
5. Blasting will not be permitted.

1.07 PROTECTION:

A. Shoring and Sheeting: Provide shoring, bracing, trench boxes and sheeting as required.

1. Prevent undermining of pavements and slabs.
2. Prevent slippage or movement in banks or slopes adjacent to the excavation.

B. Utilities: Contact Underground Service 1-800-227-2600 at least two (2) working days prior to construction for the locations of all existing underground utilities. Movement of construction machinery and equipment over pipes and utilities during construction shall be at the Contractor's risk. Excavation made with power-driven equipment is not permitted within two feet of any known government-owned utility or subsurface construction. For work immediately adjacent to or for excavations exposing a utility or other buried obstruction, use hand or light equipment excavation. Start hand or light equipment excavation on each side of the indicated obstruction and continue until the obstruction is uncovered or until clearance for the new grade is assured. Support uncovered lines or other existing work affected by the contract excavation until approval for backfill is granted by the Engineer. Report damage to utility lines or subsurface construction immediately to the Engineer.

C. Structures and Surfaces: Protect newly backfilled areas and adjacent structures, slopes, or grades from traffic, erosion settlement, or any other damage. Repair and reestablish damaged or eroded grades and slopes and restore surface construction prior to

acceptance. Protect existing streams, ditches, and storm drain inlets from water-borne soil by means of straw bale dike or filter fabric dams.

Dispose of excavated material so that it will not obstruct the flow of streams, endanger a partly finished structure, impair the efficiency or appearance of any facilities, or be detrimental to the completed work.

PART 2 - PRODUCTS

2.01 SOIL MATERIALS:

- A. Provide soil materials as described below free of debris, roots, wood, scrap material, vegetable matter, refuse, soft unsound particles, ice, or other deleterious and objectionable materials.
1. Backfill: Bring trenches outside paved areas to grade indicated on the drawings. Use material excavated on the site of this project except around and up to 12 inches over pipe where Class A backfill shall be used per Section 200.03.02 of the Standard Specifications. **The material used above the Class A backfill will be considered unclassified and no testing other than for compaction will be required, except if a change in material source is proposed.**
 2. Special Backfill for Roads and Paved Areas: Backfill trenches under roads and paved areas as described in Section 03120, "Site Grading."
 3. Pipe Bedding Sand: Clean, sandy material, classified as SW or SP by ASTM D 2487, and meeting the requirements for Class A Backfill, in Section 200.03.02 of the Standard Specifications.
 4. Gravel: Clean, coarsely graded natural gravel, crushed stone or a combination thereof identified as having a classification of GP in accordance with ASTM D 2487 for bedding and backfill. Maximum particle size shall not exceed 2 inches.
 5. Borrow: Meeting requirement for general site fill and backfill. Obtain borrow materials in excess of those furnished from excavations off-site at locations designated by the Contractor and approved by the Engineer.

2.02 BURIED WARNING AND IDENTIFICATION TAPE:

- A. Polyethylene plastic warning tape manufactured specifically for warning and identification of buried utility lines. Provide tape on rolls, 3-inch minimum width, color coded as stated below for the intended utility with warning and identification imprinted in bold black letters continuously over the entire tape length. Warning and identification to read, "CAUTION, BURIED (intended service) LINE BELOW," or similar wording. Color and printing is to be permanent, unaffected by moisture or soil.

Warning Tape Color Codes

Red:	Electric
Yellow:	Gas, Oil, Dangerous Materials
Orange:	Telephone and Other Communications
Blue:	Water Systems
Green:	Sewer Systems
White:	Steam Systems

1. Warning Tape for Metallic Piping: Acid and alkali-resistant polyethylene plastic tape conforming to the width, color, and printing requirements indicated above. Minimum thickness of the tape shall be 0.003 inch. Tape shall have a minimum strength of 1500 psi lengthwise and 1250 psi crosswise with a maximum 350 percent elongation.
2. Detectable Warning Tape for Non-Metallic Piping: Polyethylene plastic tape conforming to the width, color, and printing requirements indicated above. Minimum thickness of the tape shall be 0.004 inch. Tape shall have a minimum strength of 1500 psi lengthwise and 1250 psi crosswise. The tape shall be manufactured with integral wires, foil backing, or other means of enabling detection by a metal detector when the tape is buried up to 3 feet deep. Encase the metallic element of the tape in a protective jacket or provide with other means of corrosion protection.

PART 3 - EXECUTION

3.01 SURFACE PREPARATION

- A. Cutting Pavement, Curbs, and Gutters: Sawcut with neat, parallel, straight lines one foot wider than trench width on each side of trenches and one foot beyond each edge of pits.

3.02 GENERAL EXCAVATION:

- A. Keep excavations free from water while construction is in progress. Notify the Engineer immediately in writing if it becomes necessary to remove rock or hard, unstable, or otherwise unsatisfactory material to a depth greater than indicated. Make trench sides as nearly vertical as practicable except where sloping of sides is allowed. Sides of trenches shall not be sloped from the bottom of the trench up to the elevation of the top of the pipe or conduit. Excavate ledge rock, boulders, and other unyielding material to an overdepth at least 6 inches below the bottom of the pipe conduit and appurtenances unless otherwise indicated or specified. Blasting will not be permitted. Overexcavate soft, weak, or wet excavations. Use gravel placed in 6-inch- maximum layers to refill overdepths to the proper grade. At the option of the Contractor, the excavations may be cut to an overdepth of not less than 4 inches and refilled to required grade as specified. Grade bottom of trenches accurately to provide uniform bearing and support for each section of pipe conduit structure on undisturbed soil, or bedding material as indicated or specified at every point along its entire length except for portions where it is necessary to excavate for bell holes and for making proper joints. Dig bell holes and depressions for joints after trench has been graded. Dimension of bell holes shall be only 1/2 inch greater than length, width, and depth of bell as required for properly making the particular type of joint to ensure that the

bell does not bear on the bottom of the excavation. Trench dimensions shall be indicated.

1. Shoring and Sheet piling: Shore and sheet excavations as appropriate to prevent injury to persons and damage to structures. Obtain approval from the Engineer prior to removing any shoring, sheeting, or bracing in excavations adjacent to on-grade slabs, foundations, or other structural elements.

3.03 GENERAL BEDDING:

- A. Shall be of the materials and depths as indicated for utility lines and utility line structures. Place bedding in 6-inch-maximum loose lifts. Provide uniform and continuous support for each section of structure except at bell holes or depressions necessary for making proper joints.

3.04 BURIED WARNING AND IDENTIFICATION TAPE:

- A. Install tape in accordance with manufacturer's recommendations except as modified herein. Bury tape 12 inches below finished grade; under pavements and slabs, bury tape 6 inches below top of subgrade.

3.05 GENERAL BACKFILLING:

- A. Construct backfill in two operations (initial and final) as indicated and specified in this section. Place initial backfill using pipe bedding sand in 6-inch-maximum loose lifts to one foot above pipe and conduit unless otherwise specified. Ensure that initially placed material is thoroughly compacted under pipe haunches by the use of 'J'-bars or other tools as recommended by the pipe manufacturer. Bring up evenly on each side and along the full length of the structure. Ensure that no damage is done to structures or their protective coatings. Place the remainder of the backfill in 8-inch-maximum loose lifts unless otherwise specified. Compact each loose lift as specified in paragraph "General Compaction" before placing the next lift. Do not backfill in freezing weather or where the material in the trench is already frozen or is muddy, except as authorized. Provide a minimum cover from final grade of 3 feet for water mains and gas mains, 1 foot for storm drains and 4 feet for sewer mains unless shown otherwise. Where settlements greater than the tolerance allowed herein for grading occur in trenches and pits due to improper compaction, excavate to the depth necessary to rectify the problem, then backfill and compact the excavation as specified herein and restore the surface to the required elevation. Coordinate backfilling with testing of utilities. Testing for the following shall be complete before final backfilling: water service, storm drainage, sanitary sewer service and gas distribution line. Provide buried warning and identification tape installed in accordance with the manufacturer's recommendation.

3.06 GENERAL COMPACTION:

- A. Use hand-operated, plate-type, vibratory, or other suitable hand tampers in areas not accessible to larger rollers or compactors. Avoid damaging pipes and protective pipe coatings. Compact material in accordance with the following unless otherwise specified. If necessary, alter, change, or modify selected equipment or compaction methods to meet specified compaction requirements.

1. Compaction of Pipe and Conduit Bedding: Compact to 90 percent of ASTM D 1557 maximum density.
2. Compaction of Backfill: Compact initial backfill material surrounding pipes, cables or conduits to 90 percent of ASTM D 1557 maximum density except where bedding and backfill are the same material. Where bedding and backfill are the same material, compact initial backfill to the density of the bedding. Under areas to be seeded or sodded, compact succeeding layers of final backfill to 85 percent of ASTM D 1557 maximum density. For utilities under roads, streets, building slabs or other areas to be paved compact succeeding layers to 90 percent of maximum dry density.

3.07 FINISH OPERATIONS:

- A. Grading: Finish to grades indicated within one-tenth of a foot. Grade areas to drain water away from structures. Grade existing grades that are to remain but have been disturbed by the Contractor's operations.
- B. Disposition of Surplus Material: Surplus or other soil material not required or suitable for filling, backfilling, or grading shall be removed from the Owner's property.
- C. Protection of Surfaces: Protect newly graded areas from traffic, erosion, and settlements that may occur. Repair or reestablish damaged grades, elevations, or slopes.
- D. Pavement Repair: Repair pavement, curbs, and gutters as indicated. Do not repair pavement until trench or pit has been backfilled and compacted as herein specified. Provide a temporary road surface of gravel over the backfilled portion until permanent pavement is repaired. Remove and dispose of temporary road surface material when permanent pavement is placed. As a minimum, maintain one-way traffic on roads and streets crossed by trenches; roads and streets shall be fully opened to traffic within one (1) day.

3.08 FIELD SAMPLING AND TESTING:

- A. **Testing to be done by owner.**

END OF SECTION

SECTION 03210

AGGREGATE BASE

PART 1 - GENERAL

1.01 PUBLICATIONS:

A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1. American Society for Testing and Materials (ASTM) Publications:

- a. C 29 Unit Weight and Voids in Aggregate
- b. C 117 Materials Finer than No. 200 (75-mm) Sieve in Mineral Aggregates by Washing
- c. C 131- Resistance to Degradation of Small Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
- d. C 136 Sieve Analysis of Fine and Coarse Aggregate
- e. D 75 Sampling Aggregates
- f. D 1556 Density of Soil in Place by the Sand-Cone Method
- g. D 1557 Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using a 10-lb (4.54-kg) Rammer and 18-in. (457-mm) Drop
- h. D 2217 Wet Preparation of Soil Samples for (R-98) Particle-Size Analysis and Determination of Soil Constants
- i. D 6398 Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth)
- j. D 4318 Liquid Limit, Plastic Limit and Plasticity Index of Soils

2. Standard Specifications for Public Works Construction, 2012 Edition (Standard Specifications), Sections 200 and 308. Materials and workmanship specified herein shall be in accordance with the Standard Specifications except as modified herein and except that contractual and payment provisions do not apply.

1.02 SUBMITTALS:

- A. Test Reports: Submit the following test reports conducted on the source within 1 year of the proposed use. The test results shall be approved by the engineer before delivery of materials to the site.
1. Gradation
 2. R-Value
 3. Atterberg Limits
 4. Percent of Wear
 5. Fractured Face

1.03 DELIVERY AND STORAGE:

- A. Inspect materials delivered to site for damage and store as to prevent segregation and contamination.

1.04 WEATHER LIMITATIONS:

- A. Do not construct base course when atmospheric temperature is below 35 degrees F or when rainfall or other weather conditions may detrimentally affect the quality of the finished course.

1.05 GENERAL REQUIREMENTS:

- A. All work shall be performed in strict compliance with Section 200 and 308 of the Standard Specifications for Public Works Construction.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Aggregates: Consist of durable and sound crushed gravel, crushed stone, or crushed slag, free of lumps or balls of clay or other objectionable matter. Crushed stone and gravel shall be free from flat, elongated, soft, or disintegrated pieces. Materials shall conform to the requirements for Type 2 Class B aggregate base or Type 1 Recycled Aggregate Base as specified in the Standard Specifications. Aggregate shall conform to the following gradation:

TYPE 2 CLASS B AGGREGATE BASE

Percentage by Weight	
<u>Sieves</u>	<u>Laboratory Sieves</u>
1-1/2 inch	---
1 inch	100
3/4 inch	90-100
No. 4	35-65
No. 16	15-40
No. 200	2-10

TYPE 1 RECYCLED AGGREGATE BASE

Percentage by Weight	
<u>Sieves</u>	<u>Laboratory Sieves</u>
2 inch	100
3/4 inch	70-100
No. 4	20-70
No. 200	0-12

1. The material shall have a liquid limit of not more than 35 and a plasticity index meeting Table 200.01.03-II in Standard Specifications as determined by ASTM D 4318 respectively.

2.02 CONSTRUCTION EQUIPMENT:

- A. Equipment shall be dependable and adequate for the purpose intended. Maintain equipment in satisfactory and safe operating condition. Subject to approval, special equipment dictated by local conditions may be used. Calibrated equipment, such as scales, batching equipment, spreaders, and similar items, shall have been recalibrated by an approved calibration laboratory within 12 months of commencing work.

PART 3 - EXECUTION

3.01 BASE COURSE:

- A. Construct the graded aggregate base course on a prepared subgrade, as indicated. Provide line and grade stakes for control. The base course shall consist of aggregate processed, deposited, spread, and compacted on a prepared surface. The Contractor shall be responsible for protection of completed areas against detrimental effects. Recondition, reshape, and recompact areas damaged by freezing, rainfall, or other weather conditions.

3.02 MIXING OF MATERIALS:

- A. Proportion aggregates by weight or volume in quantities to meet specified requirements after the base course has been placed and compacted. Incorporate, during the mixing operation, water in quantities sufficient to provide the necessary moisture content for the specified compaction. Mixing operations shall produce satisfactory uniform blending and the method of placement shall not produce segregation.

3.03 PLACING:

- A. Place mixed materials on prepared subgrade or subbase in layers of uniform thickness. When a compacted course 6 inches in thickness is required, place material in a single layer. When a compacted course in excess of 6 inches is required, place material in layers of equal thickness. Do not exceed 6 inches or have less than 3 inches in thickness for any compacted layer. Place layers so that when compacted, they will be true to grades or levels required with the least possible surface disturbance. Where the base course is constructed in more than one layer, clean the previously constructed layers of loose and foreign matter. Maintain material water content during the placing period to obtain the compaction specified. Make adjustments in placing procedures or equipment to obtain true grades, to

minimize segregation and degradation, to reduce or increase water content, and to insure a satisfactory base course.

3.04 COMPACTING AND FINISHING:

- A. Immediately following the placing, spread the finished mixture uniformly in a layer and bring to optimum moisture content. The loose thickness and the surface of the layer shall be such that the specified density and the required thickness shall be obtained after compaction. Compact the layer with steel-faced, vibrating or pneumatic-tired rollers, or other suitable compacting equipment or combinations thereof. Continue compacting until the layer is compacted through the full depth to a field density of at least 95 percent of the maximum density at optimum moisture content tested in accordance with ASTM D 1557. In areas not accessible to rollers or compactors, compact the mixture with mechanical hand tampers. If the mixture is excessively moistened by rain, aerate by blade graders, or other suitable equipment. Aerate until the moisture content allows for the compaction to the required density. Finish the surface of the layer by a combination of rolling and blading. Final surface shall be smooth and free from waves, irregularities, and from ruts or soft yielding spots.

3.05 FINISHING AT EDGES OF BASE COURSE:

- A. Place earth or other approved materials along the edges of the base course in such quantity that it will compact to the thickness of the course being constructed. When the course is being constructed in two or more layers, place material to the thickness of each layer. In each operation, allow at least a one-foot width of the shoulder to be rolled and compacted simultaneously with the rolling and compacting of each layer.

3.06 MAINTENANCE:

- A. After construction is completed, maintain the base course throughout, except where portion of the succeeding course is under construction thereon. Maintenance includes drainage, rolling, shaping, and watering, as necessary, to maintain the course in proper condition. Correct deficiencies in thickness, composition, construction, smoothness, and density, which develop during the maintenance, to conform to the requirements specified herein. Maintain sufficient moisture by light sprinkling with water at the surface to prevent a dusty condition.

3.07 FIELD SAMPLING AND TESTING:

- A. Testing to be performed by the Contractor. Submit test results prepared by an approved laboratory certifying compliance of the material source with the specifications at least 14 days prior to proposed date of use. Testing must have been completed within the past 12 months of proposed date of use.
- B. Testing to be performed by the Owner. Acquire approval of materials and material sources in advance of the use of such materials in the work. Replace base where samples are removed.
- 1. Sampling:
 - a. Aggregates at the Source: Prior to production and delivery of aggregates, take at least one initial sample in accordance with ASTM D 75. Collect each

sample by taking three incremental samples at random from the source material to make a composite sample of not less than 50 pounds. Repeat above sampling when source of material is changed or when unacceptable deficiencies or variations from specified grading of materials are found in testing.

- b. During Construction: Take one random sample from each 1000 tons of completed course material, but not less than one random sample per day's run. Take samples in accordance with ASTM D 75.
- c. Sample Identification: Place each sample in a clean container, securely fastened to prevent loss of material. Tag each sample for identification and with the following information:

Contract No. _____

Sample No. _____ Quality _____

Date of Sample _____

Sampler _____

Source _____

Intended Use _____

For Testing _____

2. Testing:

- a. Aggregates: Test each sample of base course material without delay. Make gradation tests from each sample in accordance with ASTM C 136. Make sieve analysis on material passing the No. 200 sieve in accordance with ASTM C 117.
- b. Field Density Tests: Take one test for each 500 cubic yards or 10,000 square feet of each layer of base course unless otherwise specified.
- c. Laboratory Density Tests: In accordance with ASTM D 1557, Method C.
- d. Thickness Tests: Measure thickness of base course at intervals such that there will be a depth measurement for at least each 500 square yards of complete base course. Make depth measurements by test holes, at least 3 inches in diameter, through the base course. Where base course deficiency is more than 1/2 inch, correct by scarifying, adding mixture of proper gradation, reblading, and recompact. Where the measured thickness is more than 1/2 inch thicker than indicated, consider it as the indicated thickness plus 1/2 inch for determining the average. The average thickness is the average of the depth measurements and shall not under run the thickness indicated.

END OF SECTION

SECTION 03212

BITUMINOUS PAVING

PART 1 - GENERAL

1.01 APPLICABLE PUBLICATIONS:

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1. American Society for Testing and Materials (ASTM) Publications:

- | | | |
|----|--------|---|
| a. | C 29 | Unit Weight and Voids in Aggregate |
| b. | C 88 | Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate |
| c. | C 117 | Materials Finer Than 75-um (No. 200) Sieve in Mineral Aggregates by Washing |
| d. | C 127 | Specific Gravity and Absorption of Coarse Aggregate |
| e. | C 128 | Specific Gravity and Absorption of Fine Aggregate |
| f. | C 131 | Resistance to Degradation of Small-Size Coarse Aggregates by Abrasion and Impact in the Los Angeles Machine |
| g. | C 136 | Sieve Analysis of Fine and Coarse Aggregates |
| h. | D 70 | Specific Gravity and Density of Semi-Solid Bituminous Material |
| i. | D 75 | Sampling Aggregates |
| j. | D 242 | Mineral Filler for Bituminous Paving Mixtures |
| k. | D 546 | Sieve Analysis of Mineral Filler for Road and Paving Materials |
| l. | D 692 | Coarse Aggregate for Bituminous Paving Mixtures |
| m. | D 854 | Specific Gravity of Soils Solids by Water Pycnometer |
| n. | D 979 | Sampling Bituminous Paving Mixtures |
| o. | D 1073 | Fine Aggregate for Bituminous Paving Mixtures |
| p. | D 1075 | Effect of Water on Cohesion of Compacted Bituminous Mixtures |

- q. D 1188 Bulk Specific Gravity of Compacted (R 1976) Bituminous Mixtures Using Paraffin-Coated Specimens
 - r. D 1461 Moisture or Volatile Distillates in Bituminous Paving Mixtures
 - s. D 1559 Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus
 - t. D 2041 Theoretical Maximum Specific Gravity of Bituminous Paving Mixtures
 - u. D 2172 Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
 - v. D 2726 Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Saturated Surface - Dry Specimens
 - w. D 3381 Viscosity-Graded Asphalt Cement for Use in Pavement Construction
2. American National Standards Institute (ANSI) Publications:
- a. A10.17-1975 Safe Operating Practice for Asphalt Pavement Construction
3. The Asphalt Institute Manual Series:
- a. MS-2 Mix Design Methods for Asphalt Concrete
4. Standard Specifications for Public Works Construction; 2012 Edition (Standard Specifications). Materials and workmanship specified herein shall be in accordance with the Standard Specifications except as modified herein and except that contractual and payment provisions do not apply.

1.02 STANDARD SPECIFICATIONS:

A. Whenever this specification is referenced, the following is understood:

- 1. Interpretation of Standard Specifications:
 - a. Whenever the term Architect occurs, it shall mean the Engineer.
 - b. All references to statistical testing are deleted.
 - c. Whenever a discrepancy occurs between the Standard Specifications and this specification, it is understood that this specification governs.
 - d. All references to measurement and payment are deleted.

1.03 GENERAL REQUIREMENTS:

- A. All work shall be performed in strict compliance with Section 320 of the Standard Specifications, except as modified herein.
- B. The pavement shall consist of hot mineral aggregate uniformly mixed with hot bituminous material. Place the pavement in one or more layers, as indicated. Provide line and grade stakes as necessary for control. Place grade stakes in lanes parallel to the center line of the areas to be paved and suitably spaced for string lining.

1.04 SUBMITTALS:

- A. Certificate of Compliance: Submit a certificate of compliance for each shipment of bituminous material used in the mix. Submit certificate of compliance for all striping materials.

Submit test results prepared by an approved commercial laboratory verifying compliance with the Specifications for the source materials proposed for use. Submit test results at least 14 days in advance of proposed use.

- B. Job Mix Formula: Submit a job mix formula, prepared within one year of submittal by an approved commercial laboratory, for approval prior to preparing and placing the bituminous mixture. Design mix using procedures contained in Chapter III, Marshall Method of Mix Design, of the Asphalt Institute MS-2. The formulas shall indicate the physical properties of the mixes as shown by tests made by the approved commercial laboratory using materials identical to those to be used on this project. Submit all formulas with materials samples. The job mix formula for each mixture shall be in effect until modified in writing by the Contractor and approved by the Owner. Provide a new job mix formula for each source change.
 - 1. Required Data: The job-mix formula shall show the following: the source and proportions (percent by weight) of each ingredient of the mixture; the correct gradation (the percentages passing each size sieve listed in the specifications for the mixture to be used) for the aggregate and mineral filler from each separate source and from each different size to be used in the mixture and for the composite mixture; the amount of material passing the No. 200 sieve; the number of blows of hammer compaction per side of molded specimen; the temperature viscosity relationship of the asphalt cement; the stability, flow, percent voids in mineral aggregate, percent air voids, unit weight; asphalt absorption by the aggregate; effective asphalt content as percent by weight of total mix; the temperature of the mixture immediately upon completion of mixing; the asphalt viscosity grade and/or penetration range; and

The Results of:

As Determined by:

Specific Gravity of Asphalt

ASTM D 70

Coarse Aggregate:

Absorptive and Bulk Specific Gravity

ASTM C 127

Abrasion Loss

ASTM C 131

Soundness Loss

ASTM C 88

Stripping Tests

ASTM D 1664

% Crushed Pieces in Gravel

Counting by Observation and Weight

Fine Aggregates:

Absorptive and Bulk

Specific Gravity

ASTM C 128

Soundness Loss

ASTM C 88

Bituminous Mixture:

Bulk Specific Gravity

ASTM D 1188 or D 2726

Theoretical Maximum

Specific Gravity

ASTM D 2041

Index of Retained Strength

ASTM D 1075

2. Charts: Plot and submit, on a grain size chart, the specified aggregate gradation band, the job mix gradation and the job mix tolerance band.
3. Specimens: ASTM D 1559 for the making and testing of all bituminous specimens with the following exceptions:
 - a. Compaction: Apply 50 blows for mix number.
 - b. Curves: Plot and submit curves for the wearing course to show the effect on the test properties of at least four different percentages of asphalt on the unit weight, stability, flow, air voids, and voids in mineral aggregate; each point on the curves shall represent the average of at least four specimens.
 - c. Cooling of Specimen: After compaction is completed, allow the specimen to cool in air to the same temperature approximately as that of the water (77 degrees F) to be used in the specific gravity determination.
4. Selection of Optimum Asphalt Content: Base selection on percent of total mix and the average of the values at the following points on the curves for each mix:

Stability

Peak

Unit Weight

Peak

Percent Air Voids

Median

5. Composition of Mixtures: The bituminous plantmix shall be composed of a mixture of aggregates, filler if required, and bituminous material. The several aggregate fractions

shall be sized, uniformly graded, and combined in such proportions that the resulting mixture meets the grading requirements of the job-mix formula, and the requirements of Section 320 of the Standard Specifications, except for Marshall stability and flow.

- a. The Contractor shall submit in writing for approval a job-mix formula with single values for:
 - i. The percentage of aggregate passing each specified sieve.
 - ii. The percentage of bitumen to be added (to 0.1 percent).
 - iii. Marshall Stability, Pounds (1800 minimum).
 - iv. Voids, Total Mix, Percent (3-5%).
 - v. Flow, Marshall (8-20).
- b. The mixture furnished shall conform to this job-mix formula, within the range of tolerances specified in 320.02.01.

6. Variations from Formula: Variations from the approved job-mix formula shall not exceed the following; however, in no case shall the job-mix formula, with tolerances applied, fall outside the general limits for aggregate gradation and bituminous material specified herein:

<u>Aggregate Passing</u>	<u>Tolerance (Plus or Minus)</u>
No. 4 and larger sieves	7 percent
No. 8 to 100 sieves	4 percent
No. 200	2 percent
Asphalt Cement	0.5 percent of total wt. of mix
Temperature of Mixture as discharged	20 degrees F

1.05 DELIVERY AND STORAGE:

- A. Inspect materials delivered to the site for damage and store with a minimum of handling. Store aggregates in such a manner as to prevent segregation, contamination, or intermixing of the different aggregate sizes.

1.06 TRAFFIC CONTROL:

- A. Vehicular traffic, including heavy equipment, shall not be permitted on the pavement until the surface temperature has cooled to at least 120 degrees F. Surface temperature shall be measured by approved surface thermometers or other satisfactory methods.

1.07 OPERATIONAL SAFETY AND HEALTH GUIDELINES:

In addition to the requirements of the General Provisions, conduct mixing and delivery of bituminous materials and paving operations in accordance with ANSI A10.17.

1.08 WEATHER LIMITATIONS:

- A. Place the bituminous mixture only on dry surfaces. Bituminous mixture may not be placed when the air temperature is below 40 degrees F, when windchill factor is below 40 degrees F or when weather conditions otherwise prevent the proper handling or finishing of the bituminous mixtures.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Aggregates: Grade and proportion aggregates and filler so that the combined mineral aggregate conforms to the criteria specified herein.
 - 1. Aggregate for asphaltic concrete shall conform to Section 200 of the Standard Specifications, **Type 2** for individual test result conforming to 1-inch maximum size gradation (Table 200.02.03-I).
- B. Asphaltic Materials:
 - 1. Asphalt Cement: Section 201 of the Standard Specifications. Asphalt Cement shall be **PG64-28NV**

PART 3 - EXECUTION

3.01 CONSTRUCTION PROCEDURES:

- A. Mixing: Produce bituminous mixture in a plant as specified in Section 320 of the Standard Specifications.
- B. Transportation of Bituminous Mixtures: Transport bituminous material from the mixing plant to the paving site in trucks having tight, clean, smooth beds that have been coated with a minimum amount of concentrated solution of hydrated lime and water or other approved coating to prevent adhesion of the mixture to the truck bodies. Petroleum products will not be permitted for coating truck bodies. Make deliveries so that the spreading and rolling of all the mixture prepared for one day's run can be completed during daylight, unless adequate approved artificial lighting is provided by Engineer. Deliver mixture to the area to be paved in such a manner that the temperature at the time of dumping into the spreader will be higher than that specified herein. Any loads that are below minimum temperature, that have crusts of cold unworkable material, or that have been wet excessively by rain shall be rejected. Hauling over freshly laid material is not permitted.
- C. Placing:
 - 1. Surface Preparation of Underlying Course: Prior to the laying of the asphalt concrete, contractor shall clean underlying course of all foreign or objectionable matter with power blowers or power brooms, supplemented by hand brooms and other cleaning methods where necessary.
 - 2. Spraying of Contact Surfaces: Contractor shall spray contact surfaces of previously constructed pavement with a thin coat of bituminous material conforming to Section 316 of the Standard Specifications. Paint contact surfaces of structures with a thin coat

of emulsion or other approved bituminous material prior to placing the bituminous mixture.

3. General Requirements for Use of Bituminous Spreaders: The range of temperatures of the mixtures at the time of spreading behind the paver shall be between 235 degrees F and 300 degrees F. Bituminous concrete having temperatures less than minimum spreading temperature prior to compaction, will be rejected. Contractor shall adjust spreader and regulate speed so that the surface of the course is smooth and continuous without tears and pulling, and of such depth that, when compacted, the surface conforms with the cross section, grade, and contour indicated. Unless otherwise directed, Contractor shall begin the placing along the centerline of areas to be paved on a crowned section or on the high side of area with a one-way slope, and in the direction of the major traffic flow. Place mixture in consecutive adjacent strips having a minimum width of 10 feet, except where the edge lanes require strips less than 10 feet to complete the area. Contractor shall construct longitudinal joints and edges to true line markings. Establish lines parallel to the centerline of the area to be paved, and place string lines coinciding with the established lines for the spreading machine to follow. The number and location of the lines shall be as directed. When specified grade and smoothness requirements can be met for initial lane construction by use of an approved long ski-type device of not less than 30 feet in length and for subsequent lane construction by use of a short ski or shoe, in-place string lines for grade control may be omitted. Contractor shall place mixture as nearly continuous as possible, and adjust the speed of placing as directed, to permit proper rolling.
- D. Compaction of Mixture: Affect compaction by rolling, Contractor shall begin rolling as soon as placement of the mixture will bear the rollers without undue displacement. Continue rolling until all roller marks are eliminated and the course has a density of at least 96 percent but not more than 100 percent of that attained in a laboratory specimen of the same mixture prepared in accordance with ASTM D 1559. Operation of rollers shall be by competent and experienced operators. Contractor shall provide sufficient rollers for each spreading machine in operation on the job and to handle plant output. Skin patching of an area after compaction is not permitted. Contractor shall remove any mixture that becomes mixed with foreign material or is defective, replace with fresh mixture, and compact to the density of the surrounding area.
- E. Joints: All joints shall present the same texture, density, and smoothness as other portions of the course. Carefully make joints between old and new pavement or within new pavements in a manner as to ensure a thorough and continuous bond between old and new sections of the course. Paint all vertical contact surfaces of previously constructed sections with a thin uniform coat of emulsion or other approved bituminous material just before the fresh mixture is placed.
 1. Transverse: The roller shall pass over the unprotected end of the freshly laid mixture only when the laying of the course is to be discontinued. Except when an approved bulkhead is used, cut back the edge of the previously laid course to expose an even, vertical surface for the full thickness of the course. When required, rake fresh mixture against the joints, thoroughly tamp with hot tampers, smooth with hot smoothers, and roll. In all cases, transverse joints in adjacent lanes shall be offset a minimum of two feet.
 2. Longitudinal Joints: Space joints so that they will not coincide with that of existing pavement or previously placed courses and will be at least one foot distant. When the edges of the longitudinal joints are irregular, honeycombed, or poorly compacted, cut back all unsatisfactory sections of joint to expose an even vertical surface for the full

thickness of the course. When required, rake fresh mixture against the joint, thoroughly tamp with hot tampers, and roll while hot.

3.02 FIELD SAMPLING AND TESTING:

- A. Sampling and testing to be performed by others, except for the submittals specified in Section 1.04.

1. Sampling:

- a. Aggregates at Source: Prior to production and delivery of aggregates, take at least one initial sample in accordance with ASTM D 75 at the source.
- b. Cold Feed Aggregate Sampling: Take one sample daily from the belt conveying materials from the cold feed. Collect materials in three increments at random to make a representative composite sample of not less than 50 pounds. Take samples in accordance with ASTM D 75.
- c. Mineral Filler: ASTM C 183. Take samples large enough to provide ample material for testing.
- d. Pavement and Mixture: Take samples for the determination of mix properties, thickness and density of the completed pavements. Take samples and test at not less than frequency specified hereinafter and at the beginning of plant operations; for each day's work as a minimum; each change in the mix or equipment; and as often as directed. Accomplish sampling in accordance with ASTM D 979.
- e. Sample Identification: Furnish each sample in a clean container, securely fastened to prevent loss of material. Tag each sample for identification. The tag shall contain the following information:

Contract No. _____

Sample No. _____ Quality _____

Date of Sample _____

Sampler _____

Source _____

Intended Use _____

For Testing _____

1. Testing:

- a. Aggregates: ASTM C 136 for gradation tests. ASTM D 546 for mineral filler. ASTM D 1664 for stripping tests.

- b. Bituminous Materials: Certificate of compliance is required for each shipment of bituminous material to be used in the mix.
- c. Bituminous Mix: ASTM D 2172. Test one sample for each 500 tons, or fraction thereof, of the uncompacted mix for extraction and sieve analysis per ASTM C 136 and C 117. Test one sample for each 500 tons or fraction thereof for stability and flow per ASTM D 1559.
- d. Pavement Courses:
 - i. Density: For each 500 tons or each lift of less than 500 tons of bituminous course placed, determine the representative laboratory density by averaging the density of four laboratory specimens prepared in accordance with ASTM D 1559; samples for these specimens shall be taken from the uncompacted mat behind the paver; the Contractor shall record in an approved manner the project areas represented by the laboratory densities. From each representative area so recorded, determine field density of the pavement by averaging the densities of 4-inch diameter cores obtained from the wearing course; take one core for each 500 square yards or fraction thereof of course placed. The density of the laboratory prepared specimens and the cored samples will be determined in accordance with ASTM D 1188 or D 2726, as applicable. Separate pavement layers by sawing or other approved means. The density shall be not less than the specified density. The Contractor shall correct areas of insufficient density by removing the pavement in question and replacing with new pavement.
 - ii. Thickness: Determine thickness of the wearing course from samples taken for the field density test. The maximum allowable deficiency at any point shall not be more than 1/4 inch less than the indicated thickness for any course. The average thickness of the course or of the combined courses shall be not less than the indicated thickness. Where the deficiency is more than the specified tolerances, the Contractor shall correct each such representative area or areas by removing the pavement in question and replacing with new pavement.
 - iii. Finished Grades: The finish grades of each course placed shall not vary from the finish elevations, profiles and cross sections indicated on the drawings by more than 1/2-inch. Within 45 days after completion of final placement, the Owner will inform the Contractor in writing of all paved areas that fail to meet the final grades indicated within the specified tolerance. The Contractor shall correct deficient paved areas by removing existing work and replacing with new materials meeting the specifications without additional cost to the Owner. Skin patching for correcting low areas will not be permitted.

END OF SECTION

SECTION 03213

CONCRETE WALKWAYS, CURB & GUTTERS, VALLEY GUTTERS, AND SPANDRELS

PART 1 - GENERAL

1.01 GENERAL PROVISIONS:

- A. The General Provisions of the Contract, including the Special Provisions apply to the Work specified in this Section.

1.02 WORK INCLUDED:

- A. Construction of all concrete curb, gutters, spandrels, walks, and driveways, as shown on the plans and as required by the specifications.

1.03 RELATED WORK:

- A. Section 03212 - Bituminous Paving

1.04 REFERENCE STANDARDS:

- A. Standard Specifications for Public Works Construction, 2012 Edition, Revision 8 (Standard Specifications). Materials and workmanship specified herein shall be in accordance with the Standard Specifications except as modified herein and except that contractual and payment provisions do not apply.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Concrete shall comply with the requirements of Section 202 of the Standard Specifications unless otherwise specified herein. Unless otherwise indicated on the drawings, concrete shall have a minimum 28-day compressive strength of 4,000 psi, and shall contain an air entraining agent sufficient to produce entrained air content within the range of 4.5 to 7.5 percent. Maximum water/cement ratio shall be 0.45. Maximum slump shall be 4 inches. Aggregates shall conform to ASTM C-33. Coarse aggregates shall be either No. 57 or No. 67, as indicated in Section 200.05 of the Standard Specifications. Cement shall be Type II and shall meet the requirements of ASTM C 595. All concrete used for exterior concrete curbs, gutters, walks, and driveways shall be fiber reinforced.

2.02 AGGREGATE BASE:

- A. Aggregate base shall conform to the requirements of Section 03210.

2.03 CONCRETE FIBERS:

- A. Concrete fibers for all designated areas shall be 100% virgin polypropylene material. Fibers shall be ½" or ¾" in length. Fibers shall be used at a minimum dosage rate of 1½ lbs. per cubic yard.

PART 3 - EXECUTION

3.01 CONSTRUCTION OF CURBS, GUTTERS, SIDEWALKS AND DRIVEWAYS:

- A. Forming, placement, joints, finishing and curing shall all be accomplished in conformance with the applicable paragraphs of Section 312 of the Standard Specifications. All walks to slope a maximum of 2% transverse to walking patterns, unless shown otherwise.
- B. All concrete sidewalks, curbs and gutters, valley gutters, and spandrels shall have weakened plane joints every 10 feet on center except as noted otherwise on the plans. Concrete sidewalks shall have ½" expansion joints every 30 feet on center. Expansion joints shall be filled with preformed joint filler material to a point ¾" below the surface and the remaining void completely filled with joint sealant.

3.02 WEATHER LIMITATIONS:

- A. Cold Weather: ACI 306R. Provide 50 degrees F minimum concrete temperature. Obtain approval prior to placing concrete when the ambient temperature is below 40 degrees F or when concrete is likely to be subjected to freezing temperatures within 24 hours. Cover concrete and provide sufficient heat to maintain concrete while curing. Limit the rate of cooling to 5 degrees F in any one hour and 50 degrees F per 24 hours after heat application.
- B. Hot Weather: ACI 305R. Provide and maintain required concrete temperature below 90 degrees F using Figure 2.1.5 in ACI 305R to prevent the evaporation rate from exceeding 0.2 pound of water per square foot of exposed concrete per hour. Cool ingredients before mixing or use other suitable means to control concrete temperature and prevent rapid drying of newly placed concrete. Shade the fresh concrete as soon as possible after placing. Start curing when the surface of the fresh concrete is sufficiently hard to permit curing without damage. Provide water hoses, pipes, spraying equipment, and water hauling equipment (where worksite is remote to water source) to maintain a moist concrete surface throughout the curing period. Provide burlap cover or other suitable, permeable material with fog spray or continuous wetting of the concrete when weather conditions prevent the use of either liquid membrane curing compound or impervious sheets. For vertical surfaces, protect forms from direct sunlight and add water to top of structure once concrete is set.

3.03 FINISHES:

- A. Broomed: Provide for in areas shown on the plans and ramps, unless otherwise indicated.

Provide a floated finish, then finish with a flexible bristle broom. Permit surface to harden sufficiently to retain the scoring or ridges. Broom transverse to traffic or at right angles to the slope of the slab.

3.04 SAMPLING AND TESTING:

- A. To be performed by owner. The following is an example of the type and frequency of testing which will occur.
1. Sampling: ASTM C 172. Collect samples of fresh concrete to perform tests specified. ASTM C31 for making test specimens.
 2. Testing:
 - a. Slump Tests: ASTM C143. Take concrete samples during concrete placement. The maximum slump may be increased as specified with the addition of an approved admixture provided that the water-cement ratio is not exceeded. Perform tests at commencement of concrete placement, when test cylinders are made, and for each batch (minimum) or every 50 cubic yards (maximum) of concrete.
 - b. Temperature Tests: Test the concrete delivered and the concrete in the forms. Perform tests in hot or cold weather conditions (below 50 degrees F and above 80 degrees F) for each batch (minimum) or every 10 cubic yards (maximum) of concrete, until the specified temperature is obtained, and whenever test cylinders and slump tests are made.
 - c. Compressive Strength Tests: ASTM C39. Make five (5) test cylinders for each set of tests in accordance with ASTM C31. Test one cylinder at 7 days, one cylinder at 14 days, two cylinders at 28 days, and hold one cylinder in reserve. Provide concrete cylinders for compressive tests not less than once a day, nor less than once for each 50 cubic yards of concrete. Double the cylinder collection frequency and number of batches samples when pumping concrete. If the average strength of the 28-day test cylinders is less than f'_c and a maximum of one single cylinder is less than f'_c minus 300 psi, take three ASTM C42 core samples and test. If the average strength of the 28-day test cylinders is less than f'_c and two or more cylinders are less than f'_c minus 300 psi, take six core samples and test. Concrete represented by core tests shall be considered structurally adequate if the average of three cores is equal to at least 85 percent of f'_c and if no single core is less than 75 percent of f'_c . Locations represented by erratic core strengths shall be retested. Remove concrete not meeting strength criteria and provide new, acceptable concrete. Repair core holes with non-shrink grout. Match color and finish of adjacent concrete.
 - d. Air Content: ASTM C173 or ASTM C231. Test air-entrained concrete for air content at the same frequency as specified for slump tests.

END OF SECTION

SECTION 03217

PERMANENT PAVEMENT STRIPING and MARKINGS

- 1.01 PERMANENT PAVEMENT STRIPING and MARKINGS
 - 1.01A PAINTED PAVEMENT MARKINGS
 - 1.01B THERMOPLASTIC PAVEMENT MARKINGS

1.01 PERMANENT PAVEMENT STRIPING AND MARKING

1.01A PAINTED PAVEMENT MARKINGS (TYPE II)

1. Temporary/Permanent painted (traffic paint) pavement markings shall be in accordance with Section 636 of the latest edition of "Standard Specifications for Road and Bridge Construction" published by the State of Nevada, Department of Transportation (NDOT) with the following exceptions:
 - a. Temporary/Permanent painted (traffic paint) pavement markings shall be striped to the width and length of the final plan for each stripe.
 - b. Temporary/Permanent striping shall be a minimum dry thickness of 15 Mil (0.015).
 - c. Glass beads shall be placed on all temporary painted pavement markings.
 - d. Surface shall be swept prior to placement of any temporary painted pavement marking.
2. All streets which are temporary striped will get a second coat of painted pavement markings a minimum of 3 days later. Permanent painted (traffic paint) pavement markings shall be in accordance with Section 632 of the latest edition of "Standard Specifications for Road and Bridge Construction" published by the State of Nevada, Department of Transportation (NDOT) with the following exceptions:
 - a. Epoxy paint is not allowed.
 - b. Surface shall be swept prior to placement of any permanent painted pavement marking.
 - c. Permanent striping shall be a minimum dry thickness of 15 Mil (0.015). The final minimum dry thickness, including the Temporary/Permanent pavement marking, shall be 30 Mil +/- 2 mil (0.030+/-0.002 inch). Contractor will be responsible for protection of the painted surface until properly cured to prevent tracking of materials by vehicles.
 - d. Glass beads shall be placed at a minimum rate of 6 lbs per gallon of paint placed
 - e. Permanent Pavement Marking will be placed a minimum of 3 days after completion of the temporary/permanent markings.

1.01B **THERMOPLASTIC PAVEMENT MARKING FILM**

1. Preformed Thermoplastic Pavement Marking shall be in accordance with Section 634 and Section 732 of the 2001 edition of "Standard Specifications for Road and Bridge Construction" published by the State of Nevada, Department of Transportation (NDOT) with the following exceptions:
 - a. All thermoplastic pavement markings will be 0.090 inches thick with the exception the markings for the Bike Lanes which will be 0.075 inches.
 - b. Prior to placement of the thermoplastic pavement markings, the existing surface shall be pre-heated.
 - c. Thermoplastic Pavement Marking will be placed a minimum of 48-hours (2-days) after completion of final paving.
 - d. Extruded Thermoplastic Pavement Markings shall **NOT** be allowed.

END OF SECTION

SECTION 03292

LANDSCAPING

PART 1 - GENERAL

1.01 APPLICABLE PUBLICATIONS:

- A. The publications listed form a part of these specifications to the extent referenced. The publications are referred to in the text by the basic designation only.
 - 1. The Standard Specifications for Public Works Construction, 2012 Edition (Standard Specifications), Section 333.00. Materials and workmanship specified herein shall be in accordance with the Standard Specifications except as modified herein and except that contractual and payment provisions do not apply.

1.02 SUBMITTALS:

- A. Submit one (1) data sheet or product information of each material listed below for approval prior to delivery of materials to the project site.
 - 1. Sod
 - 2. Trees
 - 3. Irrigation Materials

1.03 DELIVERY AND STORAGE:

- A. Deliver materials to and store at the site in a manner which will maintain the materials in their original manufactured or fabricated condition until ready for use.
- B. Sod shall not be delivered until it is immediately ready for installation and shall be installed within 30 hours of harvesting. Any stored sod shall be kept moist and not allowed to dry out.
- C. Trees or bushes shall not be delivered until they are immediately ready for installation and shall be installed within 5 days of delivery. Any stored trees shall be kept moist and not allowed to dry out.

1.04 PROTECTION:

- A. Roads and Walks: Keep roads and walks free of dirt and debris at all times.
- B. Adjacent Landscape: Existing and new Landscape located within and adjacent to the project shall be protected at all times. Any damaged or disturbed landscape outside the limits indicated on the plans shall be replaced to a like new or better condition at no cost to the Owner.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Sod: Sod shall be a Kentucky Bluegrass / Fescue mix – “Oasis Blue Fescue”, from Western Turf in Reno, or approved equal.

1. Lawn Sod: Sod shall be machine cut at a uniform thickness of 3/4" excluding top growth and thatch. Each individual slab shall be strong enough to support its own weight when lifted by one end and shall be free of any netting. The sod shall be harvested, delivered, and planted within 30 hours.

PART 3 - EXECUTION

3.01 SOD:

- A. Ground Preparation

Contractor to scrape off the entire existing turf area to a depth of 3 inches and dispose all turf off site. Contractor to then rip soils to a depth of 6 inches, protecting all existing laterals. Do not work clay soils when wet – coordinate with the Owner on the irrigation schedule for optimum soil conditions. Work around existing valve boxes to protect them. Existing heads shall be protected. After ripping add the soil amendments and mechanically incorporate into the top 6 inches of soil. Soil amendments to be shall include humus, gypsum and iron sulfate as needed for healthy sod growth. Smooth the soil and uniformly grade the area per the plan notes. Rake out any rocks or debris over ¾" in size in the top 3" of soil. After grading has occurred keep all heavy equipment off the lawn area to avoid compaction.

- B. Sod Installation

Irrigate the ground thoroughly then roll and complete the final grading and raking operations. Lay sod at right angles to slopes or flow of water, lay slabs tightly together with no overlap. Stagger rows so joints do not touch. Blend edges smoothly with surrounding grades. Sod shall be 3/4" below any adjacent hard surface (i.e., sidewalk, top of mowing strip, etc.). Immediately after sod is laid, roll to remove air pockets, and obtain uniform grade. Any areas of settlement should be corrected by lifting sod, grading or recompact the area, then repeat steps above. Apply water to the sodded area at rate sufficient to ensure a thorough wetting of the soil to a depth of 4" minimum. Keep the sod area moist until it has rooted in the soil. Water will be furnished by the owner for use by the contractor.

- C. During the turf rooting period the lawn area shall be kept uniformly moist, but not wet.

- D. Irrigation water will be furnished by the owner for use by the contractor.

3.02 TREES:

- A. Trees shall be of the type and size noted in the plans and installed in accordance with the notes and details contained therein.

END OF SECTION

SECTION 0331

WATER DISTRIBUTION SYSTEM

PART 1 - GENERAL

1.01 APPLICABLE PUBLICATIONS:

A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1. American National Standards Institute (ANSI) Publications:
 - a. B16.18-2001 Cast Copper Alloy Solder-Joint Pressure Fittings
 - b. B16.22-2001 Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings
 - c. B16.26-2006 Cast Copper Alloy Fittings for Flared Copper Tubes
 - d. B18.2.2-1987 Square and Hex Nuts (R2005)
 - e. B18.5-2008 Round Head Bolts (Inch Series)
2. American Society for Testing and Materials (ASTM) Publications:
 - a. A 47M Malleable Iron Castings
 - b. A 48M Gray Iron Castings
 - c. A 307 Carbon Steel Externally Threaded Standard Fasteners
 - d. B 32 Solder Metal
 - e. B 42 Seamless Copper Pipe, Standard Sizes
 - f. B 88 Seamless Copper Water Tube
 - g. C 94M Ready-Mixed Concrete
 - h. C 150M Portland Cement
 - i. D 2241 Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-PR)
 - j. D 2564 Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings

- k. D2774 Underground Installation of (R 1978)
Thermoplastic Pressure Piping
 - l. D 2855 Making Solvent-Cemented Joints with Poly (Vinyl
Chloride) (PVC) Pipe and Fittings
 - m. D 3139 Joints for Plastic Pressure Pipes Using Flexible
Elastomeric Seals
 - n. D 3261 Butt Heat Fusion Polyethylene (PE) Plastic Fittings
for Polyethylene (PE) Plastic Pipe and Tubing
 - o. F 402 Safe Handling of Solvent Cements and Primers
Used for Joining Thermoplastic Pipe and Fittings
 - p. F 477 Elastomeric Seals (Gaskets) for (R 1981) Joining
Plastic Pipe
3. American Water Works Association (AWWA) Publications:
- a. C110-08 Gray-Iron and Ductile-Iron Fittings, 3 in. through
48 in., for Water and Other Liquids
 - b. C500-09 Gate Valves, 3 in. through 48 in. NPS, for Water
and Sewage Systems
 - c. C502-05 Dry-Barrel Fire Hydrants
 - d. C651-05 Disinfecting Water Mains
 - e. C651-05 Grooved and Shouldered Type Joints
 - f. C800-05 Threads for Underground Service Line Fittings
 - g. C900-07 Polyvinyl Chloride (PVC) Pressure Pipe, 4 in.
through 12 in., for Water
 - h. C901-08 Polyethylene (PE) Pressure Pipe, Tubing and
Fittings, 1/2 in. through 3 in., for Water
4. National Fire Protection Association (NFPA) Publication:
- a. NFPA 24-2010 Installation of Private Fire Service Mains and
Their Appurtenances
5. Uni-Bell Plastic Pipe Association (UNI) Publication:
- a. UNI-B-3-79 Installation of Polyvinyl Chloride (PVC) Pressure
Pipe Complying with AWWA Standard C-900

6. Standard Specifications for Public Works Construction; 2012 Edition (Standard Specification). Materials and workmanship specified herein shall be in accordance with the Standard Specifications except as modified herein and except that contractual and payment provisions do not apply.

1.02 GENERAL REQUIREMENTS:

- A. All work shall be performed in compliance with Section 307 of the Standard Specifications for Public Works Construction except as modified herein.
- B. Water Mains and Fire Service Lines, indicated as ductile-iron pipe and polyvinyl chloride (PVC) plastic water main pipe (6 or 8 inch). Provide fire hydrants and assembly, including gate valve, where indicated.
- C. Water Service Lines (indicated as 3/4 to 4 inch): Provide water service lines from water distribution main to building service at a point approximately 5 feet from building. Water service lines shall be polyethylene (PE). Polyvinyl chloride (PVC) plastic water main pipe and gate valves as specified for water mains shall be used for service lines when a size larger than 2" is specified. Provide water service line appurtenances where specified and where indicated.
- D. Manufacturer's Data: Submit manufacturer's standard drawings or catalog cuts of the following items, except where both are specified:
 1. Pipe and Fittings
 2. Joints and Couplings, including gaskets for joints (submit both drawings and cuts for push-on and rubber-gasketed bell and spigot joints)
 3. Valves
 4. Corporation Stops
 5. Valve Boxes
- E. Standards Compliance:
 1. Submit manufacturer's certificates of conformance or compliance for each of the following materials which are specified to conform to publications referenced under paragraph, "Materials" in this section:
 - a. Pipe and Fittings, including shop-applied linings and coatings
 - b. Pipe Joint Materials
 - c. Valves
 - d. Fire Hydrants
 2. All tests required by the applicable referenced publication shall have been performed, whether specified in that publication to be mandatory or otherwise. For tests which are not specified in the referenced publication to be performed at definite intervals during manufacture, the tests shall have been performed within 3

years of the date of submittal of certificates on the same type, class, grade, and size of material as is being provided for the project.

1.03 DELIVERY, STORAGE, AND HANDLING OF MATERIALS:

- A. Delivery and Storage: Inspect materials delivered to site for damage. Unload and store with minimum handling. Store materials on site in enclosures or under protective covering. Store plastic piping and rubber gaskets under cover out of direct sunlight. Do not store materials directly on the ground. Keep inside of pipes and fittings free of dirt and debris.
- B. Handling: Handle pipe, fittings, valves, hydrants, and other accessories in such manner as to ensure delivery to the trench in sound undamaged condition. Take special care to avoid injury to coatings and linings on pipe and fittings; make satisfactory repairs if coatings or linings are damaged. Carry pipe to the trench; do not drag it. Do not leave rubber gaskets and plastic piping that are not to be installed immediately out in the sunlight, but store under cover out of direct sunlight.

PART 2 - PRODUCTS

2.01 MATERIALS: PIPING MATERIALS FOR WATER DISTRIBUTION MAINS:

- A. Ductile-Iron Piping:
 - 1. Pipe and Fittings: Ductile-iron pipe shall conform to AWWA C151 and shall be Thickness Class 50 minimum. Flanged pipe shall conform to AWWA C115. Fittings shall conform to AWWA C110; fittings with push-on joint ends shall conform to the same requirements as fittings with mechanical-joint ends, except that the bell design shall be modified, as approved, for push-on joint. Fittings shall have pressure rating at least equivalent to that of the pipe. Ends of pipe and fittings shall be suitable for the joints specified in the following paragraph. Pipe and fittings shall have cement-mortar lining conforming to AWWA C104, standard thickness.
 - 2. Joints and Jointing Material:
 - a. Joints, General: Joints for pipe and fittings shall be push-on joints except as otherwise indicated. The following optional jointing methods may be employed, either in whole or in part:
 - i. Mechanical-joint in lieu of push-on joint.
 - b. Push-on Joints: Shape of pipe ends and fitting ends, gaskets, and lubricant for joint assembly shall conform to AWWA C111.
 - c. Mechanical Joints: Dimensional and material requirements for pipe ends, glands, bolts and nuts, and gaskets shall conform to AWWA C111.
 - d. Flanged Joints: Bolts, nuts, and gaskets for flanged connections shall be as recommended in the Appendix to AWWA C115.

B. Polyvinyl Chloride (PVC) Plastic Water Main Pipe and Associated Fittings:

1. Pipe and Fittings: Pipe shall conform to AWWA C900 and shall be plain end or gasket bell end, Pressure Class 150 (DR 18) with cast-iron-pipe-equivalent OD. Fittings shall be gray-iron or ductile-iron conforming to AWWA C110, and shall have cement-mortar lining conforming to AWWA C104, standard thickness. Fittings with push-on joint ends shall conform to the same requirements as fittings with mechanical-joint ends, except that bell design shall be modified, as approved, for push-on joint suitable for use with PVC plastic pipe specified in this paragraph.
2. Joints and Jointing Material: Joints for pipe shall be push-on joints as specified in ASTM D 3139. Joints between pipe and metal fittings, valves, and other accessories shall be push-on joints as specified in ASTM D 3139 or shall be compression-type joints/mechanical-joints as respectively specified in ASTM D 3139 and AWWA C111. Each joint connection shall be provided with an elastomeric gasket suitable for the bell or coupling with which it is to be used. Gaskets for push-on joints for pipe shall conform to ASTM F 477. Gaskets for push-on joints and compression-type joints/mechanical-joints for joint connections between pipe and metal fittings, valves, and other accessories shall be as specified in AWWA C111 respectively for push-on joints and mechanical-joints. Mechanically coupled joints using a sleeve-type mechanical coupling, as specified in paragraph, "Sleeve-Type Mechanical Couplings," may be used as an optional jointing method in lieu of push-on joints on plain-end PVC plastic pipe, subject to the limitations specified for mechanically coupled joints using a sleeve-type mechanical coupling and to the use of internal stiffeners as specified for compression-type joints in ASTM D 3139.

2.02 PIPING MATERIALS FOR WATER SERVICE LINES:

Where pipe sections made of dissimilar metals are to be joined, an insulating joint as specified below in paragraph, "Insulating Joints," shall be provided.

- A. Brass Pipe and Associated Fittings: Pipe shall conform to ASTM B 43, Regular, threaded ends. Fittings shall be brass or bronze conforming to Fed. Spec. WW-P-460, Class A, 125-pound pressure rating.
- B. Copper Pipe and Associated Fittings: Pipe shall conform to ASTM B 42, Regular, threaded ends. Fittings shall be brass or bronze conforming to Fed. Spec. WW-P-460, Class A, 125-pound pressure rating.
- C. Copper Tubing and Associated Fittings: Tubing shall conform to ASTM B 88, Type K. Fittings for solder-type joint shall conform to ANSI B16.18 or ANSI B16.22; fittings for compression-type joint shall conform to ANSI B16.26, flared tube type.
- D. Plastic Piping: All plastic pipe and fittings shall bear the seal of approval of the National Sanitation Foundation for potable water service. Plastic pipe and fittings shall be supplied from the same source.
 1. Polyvinyl Chloride (PVC) Plastic Piping: Pipe shall conform to AWWA C900, with SDR as necessary to provide 150 psi minimum pressure rating. Fittings shall conform to AWWA C900. Pipe and fittings shall be of the same PVC plastic material and shall

be one of the following pipe/fitting combinations, as marked on the pipe and fitting, respectively.

2. Polyethylene (PE) Plastic Piping: Pipe shall conform to AWWA C901, OD base with DR as necessary to provide 150 psi minimum pressure rating. Fittings shall conform to ASTM D 326. Pipe and fittings material shall be PE 3406.
- E. Insulating Joints: Joints between pipe of dissimilar metals shall have a rubber-gasketed or other suitable approved type of insulating joint or dielectric coupling which will effectively prevent metal-to-metal contact between adjacent sections of piping.

2.03 VALVES, HYDRANTS, AND OTHER WATER MAIN ACCESSORIES:

- A. Gate Valves on Buried Piping: Except as otherwise specified in this paragraph, valves shall conform to AWWA C500 or to UL 262. Valves conforming to AWWA C500 shall be non-rising stem type with double-disc gates having parallel or inclined seat. Valves conforming to UL 262 shall be inside-screw type with operating nut, shall have split wedge or double disc type gate, and shall be designed for a hydraulic working pressure of 150 psi. Valves shall open by counterclockwise rotation of the valve stem. Stuffing boxes shall have O-ring stem seals, except when gearing is specified in this paragraph, in which case conventional packing shall be used in place of O-ring seal. Stuffing boxes shall be bolted and constructed so as to permit easy removal of parts for repair. Valves shall have mechanical-joint or push-on joint ends and gaskets conforming to AWWA C111, except that valves may have special ends, as approved, for connection to asbestos-cement or concrete piping or to sleeve-type mechanical coupling. Valve ends and gaskets for connection to asbestos-cement or concrete piping or to sleeve-type mechanical coupling shall conform to the applicable requirements specified respectively for the joint or coupling. Valves shall have mechanical-joint ends only; ends and gaskets shall conform to AWWA C111. Where a post indicator is shown, the valve shall have an indicator post flange; indicator post flange for AWWA C500 valve shall conform to the applicable requirements of UL 262.
- B. Fire Hydrants:
 1. Fire Hydrants, General: Hydrants shall be dry-barrel type. Fire hydrant shall be, Mueller Super Centurion 200 with 5 ¼" valve opening with 5" Storz type quick connect fitting or approved equal, color: Red.
- C. Valve Boxes: Each gate valve on buried piping shall be provided with an adjustable cast-iron or precast concrete valve box of a size suitable for the valve on which it is to be used. The head shall be round and the lid shall have the word "WATER" cast on it. The least diameter of the shaft of the box shall be 5-1/4 inches. Each cast-iron box shall be given a heavy coat of bituminous paint.
- D. Tracer Wire for Nonmetallic Piping: Tracer wire shall be coated copper or aluminum wire not less than 0.10 inch in diameter and shall be provided in sufficient length to be continuous over each separate run of nonmetallic pipe.

2.04 WATER SERVICE LINE APPURTENANCES:

- A. Corporation Stops: Corporation stops shall be ground key type; shall be made of bronze conforming to ASTM B 61 or ASTM B 62; and shall be suitable for the working pressure of the system. Ends shall be suitable for solder-joint, flanged lead joint, or flared tube compression type joint. Threaded ends for inlet and outlet of corporation stops shall conform to AWWA C800; coupling nut for connection to flared copper tubing shall conform to ANSI B16.26.
- B. Curb or Service Stops: Curb or service stops shall be ground key, round way, inverted key type; shall be made of bronze conforming to ASTM B 61 or ASTM B 62; and shall be suitable for the working pressure of the system. Ends shall be as appropriate for connection to the service piping. Arrow shall be cast into body of the curb or service stop indicating direction of flow.
- C. Gate Valves on Buried Piping: Valves, except for size, shall conform to AWWA C509 or to UL 262 and shall be of one make. Valves conforming to AWWA C509 shall be non-rising stem type with double-disc gates having parallel or inclined seat. Valves conforming to UL 262 shall be inside-screw type with operating nut, shall have split wedge or double disc type gate, and shall be designed for a hydraulic working pressure of 175 psi. Valves shall open by counterclockwise rotation of the valve stem. Stuffing boxes shall have O-ring stem seals and shall be bolted and constructed so as to permit easy removal of parts for repair. Valves on 3-inch service lines shall have ends suitable for joining to the pipe used. Push-on joint ends or mechanical-joint ends for joining to PVC plastic water main pipe; gaskets and pipe ends shall conform to AWWA C111.
- D. Curb Boxes: Each curb or service stop shall be provided with an adjustable cast-iron curb box of a size suitable for the stop on which it is to be used. The head shall be round and the lid shall have the word "WATER" cast on it. Each box shall be given a heavy coat of bituminous paint.
- E. Valve Boxes: Each gate valve on buried piping shall be provided with an adjustable cast-iron or precast concrete valve box of a size suitable for the valve on which it is to be used. The head shall be round and the lid shall have the word "WATER" cast on it. The least diameter of the shaft of the box shall be 5-1/4 inches. Each cast-iron box shall be given a heavy coat of bituminous paint.

PART 3 - EXECUTION

3.01 INSTALLATION OF PIPELINES:

General Requirements: These requirements shall only apply to all pipeline installation except where specific exception is made in the "Special Requirements..." paragraphs hereunder.

- A. Location of Water Lines: The work covered by this section shall terminate at a point approximately 5 feet from the building, unless otherwise indicated on the drawings. Where the location of the water line is not clearly defined by dimensions on the drawings, do not lay water line closer horizontally than 10 feet from any sewer line. Where water lines cross under gravity sewer lines, encase sewer line fully in concrete for a distance of at least 10 feet on each side of the crossing, unless sewer line is made of pressure pipe with rubber-

gasketed joints and no joint is located within 3 feet horizontally of the crossing. Do not lay water lines in the same trench with gas lines, fuel lines or electric wiring.

- B. Earthwork: All earthwork shall be in accordance with Section 03121, "Excavation and Fill."
- C. Pipe Laying and Jointing: Pipe, fittings, valves, and accessories will be carefully inspected by the Contractor before and after installation and those found defective will be rejected. Remove fins and burrs from pipe and fittings. Before placing in position, clean pipe, fittings, valves, and accessories and maintain in a clean condition. Provide proper facilities for lowering sections of pipe into trenches. Do not under any circumstances drop or dump pipe, fittings, valves, or any other water line material into trenches. Cut pipe accurately to measurements established at the site and work into place without springing or forcing. Replace by one of the proper dimensions any pipe or fitting that does not allow sufficient space for proper installation of jointing material. Blocking or wedging between bells and spigots will not be permitted. Lay bell-and-spigot pipe with the bell end pointing in the direction of laying. Grade the pipeline in straight lines, taking care to avoid the formation of any dips or low points. Support pipe at its proper elevation and grade, taking care to secure firm and uniform support. Wood support blocking will not be permitted. Lay pipe so that the full length of each section of pipe and each fitting will rest solidly on the pipe bedding; excavate recesses to accommodate bells, joints, and couplings. Provide anchors and supports where indicated and where necessary for fastening work into place. Make proper provision for expansion and contraction of pipelines. Keep trenches free of water until joints have been properly made. At the end of each day's work, close open ends of pipe temporarily with wood blocks or bulkheads. Do not lay pipe when conditions of trench or weather are unsuitable.
- D. Installation of Tracer Wire: Install a continuous length of tracer wire for the full length of each run of nonmetallic pipe. Attach wire to top of pipe in such manner that it will not be displaced during construction operations.
- E. Connections to Existing Lines: Make connections to existing water lines in an approved manner and do so with a minimum interruption of service on the existing line. Where connections to existing lines are made under pressure, make these connections in accordance with the recommendations of a manufacturer of pipe of which the line being tapped is made, except as otherwise specified in this paragraph. Tap concrete pipe in accordance with the requirements of AWWA Manual M9 for tapping concrete pressure pipe.

3.02 SPECIAL REQUIREMENTS FOR INSTALLATION OF DUCTILE-IRON PIPING:

- A. Installation, General: Install pipe and fittings in accordance with the general requirements for installation of pipelines and with the requirements of AWWA C600 for pipe installation, joint assembly, valve-and-fitting installation, and thrust restraint, except as otherwise specified in the other subparagraphs hereunder.
- B. Jointing: Make push-on joints with the gaskets and lubricant previously specified for this type joint; assemble these joints in accordance with the applicable requirements of AWWA C600 for joint assembly. Make mechanical-joints with the gaskets, glands, bolts, and nuts previously specified for this type joint; assemble these joints in accordance with the applicable requirements of AWWA C600 for joint assembly and with the recommendations

of Appendix A to AWWA C111. Make flanged joints with the gaskets, bolts, and nuts previously specified for this type joint. Make flanged joints up tight, taking care to avoid undue strain on flanges, fittings, valves, and other equipment and accessories. Align bolt holes for each flanged joint. Use full size bolts for the bolt holes; use of undersized bolts to make up for misalignment of bolt holes or for any other purpose will not be permitted. Do not allow adjoining flange faces to be out of parallel to such degree that the flanged joint cannot be made watertight without overstraining the flange. When any flanged pipe or fitting has dimensions that do not allow the making of a proper flanged joint as specified in this paragraph, replace it by one of proper dimensions. Assemble joints made with sleeve-type mechanical couplings in accordance with the recommendations of the coupling manufacturer, as approved. Make grooved and shouldered type joints with the couplings previously specified for this type joint connecting pipe with the grooved or shouldered ends previously specified for this type joint; assemble these joints in accordance with the recommendations of the coupling manufacturer, as approved. Groove pipe in the field only with approved groove cutting equipment designed especially for the purpose and produced by a manufacturer of grooved joint couplings; secure approval for field-cut grooves before assembling the joint. Make insulating joints with the gaskets, sleeves, washers, bolts, and nuts previously specified for this type joint. Assemble insulating joints as specified for flanged joints, except that bolts with insulating sleeves shall be full size for the bolt holes. Take special care to assure that there is no metal-to-metal contact between dissimilar metals after the joint has been assembled.

- C. Pipe Anchorage: Provide concrete thrust blocks for pipe anchorage. Thrust blocks shall be in accordance with the requirements of AWWA C600 for thrust restraint, and shall be located at all bends, tees, crosses and dead ends. Use concrete conforming to ASTM C 94 having a minimum compressive strength of 2,000 psi at 28 days; or use concrete of a mix not leaner than one part cement, 2-1/2 parts sand, and 5 parts gravel, having the same minimum compressive strength.

3.03 SPECIAL REQUIREMENTS FOR INSTALLATION OF PVC PLASTIC WATER MAIN PIPE AND ASSOCIATED FITTINGS:

- A. Installation, General: Install pipe and fittings in accordance with the general requirements for installation of pipelines and with the requirements of UNI B-3 for laying of pipe, joining PVC pipe to fittings and accessories, and setting of hydrants, valves, and fittings, except as otherwise specified in the other subparagraphs hereunder.
- B. Joining: Make push-on joints with the elastomeric gaskets previously specified for this type joint, using either elastomeric-gasket bell-end pipe or elastomeric-gasket couplings. Use push-on joint having factory-made bevel on pipe ends for pipe-to-pipe joint connections only; for push-on joint connections to metal fittings, valves, and other accessories, cut spigot end of pipe off square and re-bevel pipe end to a bevel approximately the same as that on ductile-iron pipe used for the same type of joint. Use an approved lubricant recommended by the pipe manufacturer for push-on joints. Assemble push-on joints for pipe-to-pipe joint connections in accordance with the requirements of UNI B-3 for laying the pipe. Assemble push-on joints for connection to fittings, valves, and other accessories in accordance with the requirements of UNI B-3 for joining PVC pipe to fittings and accessories and with the applicable requirements of AWWA C600 for joint assembly. Make compression-type joints/mechanical-joints with the gaskets, glands, bolts, nuts, and internal stiffeners previously specified for this type joint; assemble these joints in

accordance with the requirements of UNI B-3 for joining PVC pipe to fittings and accessories, with the applicable requirements of AWWA C600 for joint assembly, and with the recommendations of Appendix A to AWWA C111. Cut off spigot end of pipe for compression-type joint/mechanical-joint connections and do not re-bevel. Assemble joints made with sleeve-type mechanical couplings in accordance with the recommendations of the coupling manufacturer, as approved, using internal stiffeners as previously specified for compression-type joints.

- C. Pipe Anchorage: Provide concrete thrust blocks backing for pipe anchorage. Thrust blocks shall be in accordance with the requirements of UNI B-3 for reaction or thrust blocking and plugging of dead ends, except that size and positioning of thrust blocks, except as otherwise indicated. Use concrete conforming to ASTM C 94 having a minimum compressive strength of 2,000 psi at 28 days; or use concrete of a mix not leaner than one part cement, 2-1/2 parts sand, and 5 parts gravel, having the same minimum compressive strength. Metal harness shall be as indicated.

3.04 INSTALLATION OF VALVES AND HYDRANTS FOR WATER MAINS:

- A. Installation of Valves: Install gate valves in accordance with the requirements of AWWA C509 for valve-and-fitting installation. Make and assemble joints to gate valves as previously specified for making and assembling the same type joints between pipe and fittings.
- B. Installation of Hydrants: Install hydrants in accordance with the requirements of AWWA C600 for hydrant installation, as indicated. Make and assemble joints as previously specified for making and assembling the same type joints between pipe and fittings.
- C. Installation of Post Indicator Valve: Install PIV in accordance with National Fire Code and as directed by the Fire Marshall. Details shown are schematic only.

3.05 SPECIAL REQUIREMENTS FOR INSTALLATION OF WATER SERVICE PIPING:

- A. Installation, General: Connect water service piping to the building service where the building service has been installed. Where building service has not been installed, terminate water service lines approximately 5 feet from the building line at a point directed by the Engineer; such water service lines shall be closed with plugs or caps.
- B. Metallic Piping:
 - 1. Metallic Piping Installation, General: Install pipe and fittings in accordance with the general requirements for installation of pipelines and with the applicable requirements of AWWA C600 for pipe installation, except as otherwise specified in the other subparagraphs hereunder.
 - 2. Jointing:
 - a. Screwed Joints: Make screwed joints up tight with a stiff mixture of graphite and oil, inert filler and oil, or an approved graphite compound; apply to male threads only. Threads shall be full cut; do not leave more than three threads on the pipe exposed after assembling the joint.

- b. Joints for Copper Tubing: Cut copper tubing with square ends; remove fins and burrs. Handle tubing carefully; replace dented, gouged, or otherwise damaged tubing with undamaged tubing. Make solder joints using ASTM B 32, alloy grade Sb5 of equivalent solder. Before making joint, clean ends of tubing and inside of fitting or coupling with wire brush or abrasive. Then apply a rosin flux to the tubing end and on recess inside of fitting or coupling. Then insert tubing end into fitting or coupling for the full depth of the recess and solder. For compression joints on flared tubing, insert tubing through the coupling nut and then flare tubing with an approved flaring tool.
- c. Flanged Joints: Make flanged joints up tight, taking care to avoid undue strain on flanges, valves, fittings, and accessories.

C. Plastic Piping:

- 1. Plastic Piping Installation, General: Install pipe and fittings in accordance with the general requirements for installation of pipelines and with the applicable requirements of AWWA C900.
- 2. Jointing: Make plastic pipe joints to other pipe materials in accordance with the recommendations of the plastic pipe manufacturer, as approved.
- 3. Connections to Water Mains: Connect plastic pipe service lines to water mains in accordance with the recommendations of the plastic pipe manufacturer, as approved.

3.06 DISINFECTION:

- A. Flush and disinfect new potable water lines and affected portions of existing potable water lines in accordance with AWWA C601. Apply chlorine by the continuous feed method.

3.07 FIELD TESTS AND INSPECTIONS:

- A. Field Tests and Inspections, General: The Engineer will conduct field inspections and witness all field tests specified in this section. The Contractor shall perform all field tests, and provide all labor, equipment, and incidentals required for testing, except that water needed for field tests will be furnished by the Owner. The Contractor shall produce evidence, when required, that any item of work has been constructed properly in accordance with the drawings and specifications. Do not begin testing on any section of a pipeline where concrete thrust blocks have been provided until at least 5 days after placing of the concrete.
- B. Testing Procedure: Test water mains and water service lines in accordance with the applicable standard specified in this paragraph, except for the special testing requirements given in the following paragraph. Test ductile-iron water mains and water service lines in accordance with the requirements of AWWA C600 for hydrostatic testing. The amount of leakage on ductile-iron pipelines with mechanical-joints or push-on joints shall not exceed the amounts given in AWWA C600; no leakage will be allowed at joints made by any other

method. Test PVC plastic water mains and water service lines made with PVC plastic water main pipe in accordance with the requirements of UNI B-3 for pressure and leakage tests. The amount of leakage on pipelines made of PVC plastic water main pipe shall not exceed the amounts given in UNI B-3, except that at joints made with sleeve-type mechanical couplings, no leakage will be allowed.

- C. Special Testing Requirements: For pressure test, use a hydrostatic pressure 50 psi greater than the maximum working pressure of the system, but not less than 200 psi. Hold this pressure for not less than 2 hours. Prior to the pressure test, fill that portion of the pipeline being tested with water for a soaking period of not less than 24 hours. For leakage test, use a hydrostatic pressure not less than the maximum working pressure of the system. Leakage test may be performed at the same time and at the same test pressure as the pressure test.

END OF SECTION

SECTION 03341

STORM DRAIN - SANITARY SEWER SYSTEMS

PART 1 - GENERAL

1.01 APPLICABLE PUBLICATIONS:

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
 - 1. Standard Specifications for Public Works Construction; 2012 Edition (Standard Specification). Materials and workmanship specified herein shall be in accordance with the Standard Specifications except as modified herein and except that contractual and payment provisions do not apply.

1.02 GENERAL REQUIREMENTS:

- A. All work shall be performed by Contractor in strict compliance with Section 306 of the Standard Specifications except as modified herein.
- B. Storm Drain Gravity System: The system shall include catch basins, lateral pipe, and infiltration chambers.
 - 1. Pipelines: Provide laterals of polyvinyl chloride (PVC) plastic pipe as indicated on the drawings.
 - 2. Infiltration Chambers: Provide infiltration chambers, observation ports, drain basin and weir structures at the locations indicated, constructed as shown on the drawings or per manufacturer's direction. Infiltration chambers shall be SC-740 Stormtech or approved equal.
 - 3. Catch Basins: Provide catch basins at the location indicated, constructed as shown on drawings or per manufacturer's direction.
 - 4. Manholes: Provide manholes at the location indicated, constructed as shown on drawings or per manufacture's direction.
- C. Sanitary Sewer Gravity System: The system shall include cleanouts, lateral pipe, construction of sanitary sewer main, and manholes.
 - 1. Pipelines: Provide mains and laterals of polyvinyl chloride (PVC) plastic pipe as indicated on the drawings.
 - 2. Cleanouts: Provide cleanouts at the location indicated, constructed as shown on drawings or per manufacture's direction.
 - 3. Manholes: Provide manholes at the location indicated, constructed as shown on drawings or per manufacture's direction. Manholes shall be precast Polymer Armorock™ or approved equal.

- D. Layout Drawings: Layout drawings will not be required.
- E. Manufacturer's Data: Submit manufacturer's standard drawings or catalog cuts of the following items:
 - 1. Fittings
 - 2. Joints and Couplings
 - 3. Pipe
 - 4. Pre-cast manhole stack drawings
 - 5. Infiltration Chambers

1.03 DELIVERY, STORAGE, AND HANDLING OF MATERIALS:

- A. Delivery and Storage:

Piping: Inspect materials delivered to site for damage; store with minimum of handling. Store materials on site in enclosures or under protective coverings. Store plastic piping and rubber gaskets under cover out of direct sunlight. Do not store materials directly on the ground. Keep inside of pipes and fittings free of dirt and debris.

- B. Handling: Handle pipe, fittings, and other accessories in such manner as to ensure delivery to the trench in sound undamaged condition. Take special care not to injure linings of pipe and fittings; if lining is damaged, make satisfactory repairs. Carry pipe to trench; do not drag it. Do not leave rubber gaskets and plastic piping that are not to be installed immediately in the sunlight, but store under cover out of direct sunlight.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Storm Drain and Sanitary Sewer Piping:

- 1. Polyvinyl Chloride (PVC) Plastic Piping:

- a. Pipe and Fittings: Pipe and fittings shall conform to ASTM D3033 or D3034, shall be SDR 35, with ends suitable for elastomeric gasket joints.
- b. Joints and Jointing Material: Joints shall conform to ASTM D3212. Gaskets shall conform to ASTM F477.

- B. Concrete Materials: Concrete materials shall be as specified in Section 204 of the City Standard Specifications.

- C. Polymer Sewer Manholes: Provide sanitary sewer precast polymer Armorock™ or approved equal.

- D. Metal Items:

- 1. Frames, Covers, and Gratings: Frames, covers, and gratings shall conform to Section 204.03 of the Standard Specifications and shall be of cast iron, as indicated.

PART 3 - EXECUTION

3.01 INSTALLATION OF PIPELINES AND APPURTENANT CONSTRUCTION:

- A. General Requirements for Installation of Pipelines: These requirements shall only apply to all pipeline installation except where specific exception is made in the "Special Requirements..." paragraphs hereunder.
1. Location: The work covered by this section shall terminate at a point indicated by the plans. Where storm drain lines pass above water lines, or maintain less than 18" vertical clearance below water lines, encase storm drain in concrete for a distance of 10 feet on each side of the crossing, or substitute rubber-gasketed pressure pipe for the pipe being used for the same distance. Where sanitary sewer lines pass below water lines, lay pipe so that no joint in the storm drain line will be closer than 3 feet, horizontal distance, to the water line.
 2. Earthwork: All earthwork shall be in accordance with Section 03121, "Excavation and Fill."
 3. Pipe Laying and Jointing: Each pipe and fitting will be inspected before and after installation and those found defective will be rejected. Provide proper facilities for lowering sections of pipe into trenches. Lay non-pressure pipe with the bell or groove ends in the upgrade direction. Adjust spigots in bells and tongues in grooves to give a uniform space all around. Blocking or wedging between bells and spigots or tongues and grooves will not be permitted. Replace by one of the proper dimensions any pipe or fitting that does not allow sufficient space for proper caulking or installation of joint material. At the end of each day's work, close open ends of pipe temporarily with wood blocks or bulkheads.
 2. Connections to Concrete Structures: Make connections to existing lines and structures in an approved manner.
- B. Special Requirements for Installation of PVC Pipe and Fittings: Install pipe and fittings in accordance with the general requirements for installation of pipelines and with the requirements of the pipe manufacturer for laying and joining pipe and fittings. Make joints with the gaskets previously specified for joints with this piping; assemble these joints in accordance with the requirements of the pipe manufacturer for assembly of joints. Make joints to other pipe materials in accordance with the recommendations of the plastic pipe manufacturer.
- C. Concrete Work: Cast-in-place concrete shall be in accordance with Section 204 of the City Standard Specification.
- D. Pre-cast Concrete Work: Construct all items in accordance with the Standard Specifications using portland cement or polymer concrete materials.
- E. Metal Work:
1. Workmanship and Finish: Perform metal work so that workmanship and finish will be equal to the best practice in modern structural shops and foundries. Form iron to shape and size with sharp lines and angles. Perform shearing and punching so that

clean true lines and surfaces are produced. Make castings sound and free from warp, cold shuts, and blow holes that may impair their strength or appearance. Give exposed surfaces a smooth finish with sharp well-defined lines and arises. Provide necessary rabbets, lugs, and brackets wherever necessary.

2. Field Painting: After installation, clean cast-iron frames, covers, rust, grease, dirt, and other deleterious materials and give a coat of bituminous paint. Do not paint surfaces subject to abrasion.

3.02 FIELD TESTS AND INSPECTIONS:

- A. General: The Architect will conduct field inspections and witness all field tests specified in this section and the project plans. The Contractor shall perform all field tests and provide all labor, equipment, and incidentals required for testing. The Contractor shall be able to produce evidence, when required, that any item of work has been constructed properly in accordance with the drawings and specifications.

END OF SECTION

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