

- D. 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.
- E. 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.
- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to 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 directly attributable to any such suspension. Any Change Proposal seeking such adjustments must 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) 10 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) written 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 7 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 will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 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 for any loss of anticipated profits or revenue, post-termination overhead costs, 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 7 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, 7 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, pursuant to Article 12; and
 - 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise 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;
 - 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.

See SC-17.02

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
 - 1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 - 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 - 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

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 will not constitute a waiver of that provision, nor will 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 of the Contract or 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 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party 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.

18.09 *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.

18.10 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

END OF GENERAL CONDITIONS

SECTION 10 - SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement EJCDC® C-700, Standard General Conditions of the Construction Contract (2018). The General Conditions remain in full force and effect except as amended.

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—for example, "Paragraph SC-4.05."

Article 1—DEFINITIONS AND TERMINOLOGY

SC-1.01. Renumber Paragraph 1.01.A.38 to 1.01.A.38.a, and add the following new paragraph:

- A. 1.01.A.38.b. Specialist—The term Specialist refers to a person, partnership, firm, or corporation of established reputation (or if newly organized, whose personnel have previously established a reputation in the same field), which is regularly engaged in, and which maintains a regular force of workers skilled in either (as applicable) manufacturing or fabricating items required by the Contract Documents, or otherwise performing Work required by the Contract Documents. Where the Specifications require the installation by a Specialist, that term shall also be deemed to mean either the manufacturer of the item, a person, partnership, firm, or corporation licensed by the manufacturer, or a person, partnership, firm, or corporation who will perform the Work under the manufacturer's direct supervision.

Article 2—PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

SC-2.01 Delete Paragraphs 2.01.B. and C. in their entirety and insert the following in their place:

- B. *Evidence of Contractor's Insurance:* When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner copies of the policies (including all endorsements, and identification of applicable self-insured retentions and deductibles) of insurance required to be provided by Contractor in this Contract. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

2.02 *Copies of Documents*

SC-2.02 Amend Paragraph 2.02.A. to read as follows:

Owner shall furnish to Contractor hard copies of the Contract Documents as are reasonably necessary, with a maximum of five (5) sets, for execution of the work. Additional copies will be furnished, upon request, at the cost of production.

Article 3—**CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE**

3.01 *Intent*

SC-3.01 Delete Paragraph 3.01.C in its entirety.

Article 4—**COMMENCEMENT AND PROGRESS OF THE WORK**

4.01 *Commencement of Contract Times; Notice to Proceed*

SC-4.01. Delete the third sentence of Paragraph 4.01.A in its entirety.

4.03 *Reference Points*

SC-4.03. Delete the first sentence of Paragraph 4.03.A in its entirety.

4.04 *Progress Schedule*

SC-4.04. Add the following new paragraphs to the end of Paragraph 4.04.B:

4.04.C. The Contractor shall submit a construction schedule within ten (10) days of Notice of Award. Thereafter, the Contractor shall submit an updated construction schedule every month.

4.04.D. Contractor shall comply with the requirements of Washoe County Development Code Division 4, Article 414, "Noise and Lighting Standards" in the performance of the Work. However, NO equipment operation, including "warm up," shall occur prior to 8:00 a.m. nor after 7:00 p.m., excluding Saturdays, Sundays, and holidays recognized by Owner. The Engineer shall have final say as to the adequacy of the equipment for other than day use, and no additional payment shall be made to Contractor for the rental of equipment to meet these limitations.

Article 5—**SITE, SUBSURFACE AND PHYSICAL CONDITIONS, HAZARDOUS ENVIRONMENTAL CONDITIONS**

5.02 *Use of Site and Other Areas*

SC-5.02. Add the following language to the end of Paragraph 5.02.A.1:

Contractor shall not enter upon nor use property not under Owner control until appropriate easements have been executed and a copy is on file at the Site.

5.03 *Subsurface and Physical Conditions*

SC-5.03. Delete Paragraph 5.03.C in its entirety and insert the following in its place:

5.03.C Those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site is as follows:

5.03.C.1. No subsurface explorations and/or tests have been performed. The Contractor shall have full responsibility with respect to subsurface conditions at the sites.

5.03.C.2. Similar work in Incline Village has uncovered existing OD steel water mains with pipe wrap manufactured with asbestos-containing materials (ACM). Testing has indicated ACM pipe wrap discovered was in a non-friable state. The Contractor shall have full responsibility with respect to state and federal laws on handling and disposal of materials encountered for this work. No additional compensation will be considered for this work.

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.D:

5.03.E. Contractor may examine copies of reports and drawings identified immediately above that were not included with the Bidding Documents at 1220 Sweetwater Road, Incline Village, NV during regular business hours, or may request copies from Engineer at the cost of reproduction.

5.03.F. The Contractor shall verify the locations and dimensions of all existing equipment and structures, whether shown on the plans or not, and shall have full responsibility with respect to physical conditions in or relating to such structures and equipment.

5.03.G. Contractor is advised that the Lake Tahoe basin is known for large rocks and boulders buried under the surface, and it is common to find boulders within the work area.

5.04 *Differing Subsurface or Physical Conditions*

SC-5.04 Delete Paragraph 5.04.A in its entirety and insert the following in its place:

5.04.A. Notice by Contractor: If Contractor believes that any subsurface condition that is uncovered or revealed at the Site differs materially from conditions ordinarily encountered in the Tahoe Basin 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 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. Owner shall issue a written statement to Contractor regarding the subsurface or physical condition in question, addressing the resumption or continuation of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:

5.04.A.2.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 becoming bound under a negotiated contract, or otherwise; or

5.04.A.2.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 Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or

5.04.A.2.c. Contractor failed to give the written notice as required by SC-5.04.A.

SC-5.04 Delete Paragraph 5.04.E.4 in its entirety and insert the following in its place:

5.04.E.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, no later than 7 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question-

5.06 *Hazardous Environmental Conditions*

SC-5.06. Delete Paragraphs 5.06.A and Paragraph 5.06.B in their entirety and insert the following in their place:

5.06.A. No reports or drawings related to Hazardous Environmental Conditions are known to Owner.

Article 6—BONDS AND INSURANCE

6.02 Insurance—General Provisions

SC-6.02. Add the following new paragraph immediately after Paragraph 6.02.A:

6.02.A.1. Surety and insurance companies from which the bonds and insurance for this Project are purchased shall have an A.M. Best's rating of no less "A (FSC-VII)."

SC-6.02. Add the following new paragraph immediately after Paragraph 6.02.J:

6.02.K. Contractor shall furnish properly executed certificates of insurance to Owner prior to commencement of Work under this agreement. Such certificates shall: clearly evidence all coverage required herein, including specific evidence of an endorsement naming Owner and Engineer as an additional insured, as well as all exclusions to the policies; indicate whether coverage provided is on a claims-made or occurrence basis; provide that such insurance shall not be materially changed, terminated or allowed to expire except on 30 days prior written notice to Owner; and be forwarded to: IVGID Engineering Division, 1220 Sweetwater Road, Incline Village, NV 89451. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the District, its officers, employees or volunteers.

6.03 Contractor's Insurance

SC-6.03. Add the following new paragraphs immediately following Paragraph 6.03.A:

6.03.A.1. Workman's Compensation: It is understood and agreed that there shall be no Industrial Insurance coverage provided for the Contractor or any Subcontractor by the District; and in view of NRS 616.280 and 617.210 requiring that Contractor comply with the provisions of Chapters 616 and 617 of NRS, Contractor shall, before commencing work under the provisions of this Agreement, furnish to the District a Certificate of Insurance from an admitted insurance company in the State of Nevada.

6.03.A.2. General Liability: Contractor shall purchase General Liability including appropriate Auto Liability with a \$2,000,000 combined single limit per occurrence, for bodily injury, personal injury and property damage.

6.03.A.3. Commercial Insurance: Contractor shall procure and maintain for the duration of the Contract, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Contractor, his/her agents, representatives, employees, or subcontractors. Contractor shall purchase General Liability, Auto Liability, Workers' Compensation, and Professional Liability Insurance (if applicable) coverage as required. Contractor shall have a Certificate of Insurance issued to the Incline Village General Improvement District naming it as additional insured, indicating coverage types amounts and duration of the policy. All certificates shall provide for a minimum written notice of thirty (30) days to be provided to District in the event of material change, termination or non-renewal by either Contractor or carrier.

SC-6.03. Add the following new paragraph immediately following Paragraph 6.03.C:

6.03.D. Deductible and/or Self-Insured Retention (SIR)

1. Any deductible and/or SIR must be declared to and approved by the Owner. The District reserves the right to request additional documentation (financial or otherwise) prior to giving its approval of the deductible and/or SIR and prior to executing the underlying Agreement. Any changes to the deductible and/or SIR made during the term of this Agreement or during the term of any policy, just be approved by the Owner prior to the change taking effective.

6.04 *Builder's Risk and Other Property Insurance*

SC-6.04 Delete Paragraph 6.04.A and insert the following in its place:

- A. Owner shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.

Article 7—**CONTRACTOR'S RESPONSIBILITIES**

7.01 Add the following after paragraph 7.01B

7.01.C **Means and methods.** The contractor shall notify the Owner and Engineer immediately upon a proposed change to the means and methods for completing the project work if the proposed means and methods are different than as allowed for in the contract documents as accepted at the bid award. The Contractor shall notify the owner in writing PRIOR to starting any worked by means and methods that vary from the original documents.

7.03 Add the following after paragraph 7.03.C:

7.03.D **Working Hours.** Working hours shall be limited to 8:00 a.m. to 5:30 p.m. Monday through Friday unless otherwise directed by Owner. No equipment operation, including "warm up", refueling or maintenance, shall occur outside these hours. Contractor shall not permit the performance of work outside these hours without Owner's written consent given after prior written notice to Engineer.

CONTRACTOR shall comply with all local and regional Noise Ordinances in the performance of the work. The ENGINEER shall have final say as to the adequacy of the equipment for other than day use and no additional payment shall be made to CONTRACTOR for the rental of equipment to meet these limitations.

Documented instances of noise producing activities by the CONTRACTOR outside of the permitted working hours shall result in a written warning for the first offense and a \$500 penalty for each subsequent offense.

CONTRACTOR understands that water service to any property cannot be interrupted for more than four (4) hours. No interruption is allowed on weekends or holidays. Water service interruptions to businesses shall not occur during business hours without consent of the business owner. CONTRACTOR must notify IVGID at least 72-hours in advance of disrupting water service and any affected resident(s) or businesses at least 48 hours in advance. CONTRACTOR is responsible for notification to affected customers and businesses. IVGID will supply CONTRACTOR with a list of addresses to notify, and supply door hangers. CONTRACTOR is responsible for filling out each door hanger and hanging or securing the notices on the front door of each residence or business. CONTRACTOR will make every effort to speak

with the customer(s) in person regarding the interruption of service. These requirements may necessitate work during the weekends or evenings. No additional payment will be made to CONTRACTOR because of these conditions.

7.04 *Services, Materials, and Equipment*

SC-7.04. Add the following new paragraph to the end of Paragraph 7.04.C:

7.03.D. Any materials or work not meeting Contract requirements shall be resubmitted to the Engineer or reconstructed at the Contractor's expense. Contractor is to be aware of District's Ordinance 1, the Solid Waste Ordinance, and pay specific attention to Section 4.5, Dumpster Use, Location and Enclosure. Any construction dumpster on the job site that is not properly enclosed shall be a fully locking roll-top, and is to remain locked and secured at all times.

7.07 *Services, Materials, and Equipment*

SC-7.07. Add the following language at the end of Paragraph 7.07.A:

Contractor shall perform a minimum of 50 percent of the onsite labor with its own employees.

7.09 *Permits*

SC-7.09. Add the following new paragraph to the end of Paragraph 7.09.A:

7.09.B. All permits, licenses, and inspection fees necessary for prosecution and completion of the work shall be secured and paid for by the Contractor, unless otherwise specified:

1. The Contractor shall conduct all Work in accordance with the Tahoe Regional Planning Agency (TRPA) Code of Ordinances, whether shown on the plans or not. If the Contractor fails to follow any requirements which result in a penalty by TRPA to the Owner, the Contractor shall be responsible for any costs associated with the penalty.
2. Contractor to acquire Washoe County Street Cut permits from Washoe County Road Department prior to starting any work. Contractor will pay all fees associated with acquiring this permit. Contractor will pay all penalties associated with this permit.
3. Contractor shall be responsible for dust control throughout all phases of construction. All local ordinances regarding dust control shall be complied with, including the Washoe County Health Department requirements. The responsibility of obtaining the regulations and requirements, including obtaining a Dust Control Permit, if required, and full compliance with such ordinances is solely that of the Contractor.

7.11 *Laws and Regulations*

SC-7.11. Add the following new paragraph(s) immediately after Paragraph 7.11.C:

7.11.D. While not intended to be inclusive of all Laws or Regulations for which Contractor may be responsible under Paragraph 7.11, the following Laws or Regulations are included as mandated by statute or for the convenience of Contractor:

7.11.D.1. Prevailing Wage Rates:

7.11.D.1.a. Pursuant to NRS 338.020, hourly and daily rate of wages must not be less than prevailing wage in Washoe County. The most current schedule of prevailing wage rates as of contract award date, as determined by the Labor Commission of the State of Nevada, is included herein and shall be posted onsite.

7.11.D.2. Fair Employment Practices:

7.11.D.2.a. Pursuant to NRS 338.125, in connection with performance of Work under these Contract Documents, Contractor agrees not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation, or age. 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.

7.11.D.2.b. Contractor further agrees to insert this provision in all subcontracts thereunder except subcontracts for standard commercial supplies or raw materials.

7.11.D.2.c. Any violation of such provision by a Contractor shall constitute a material breach of Contract.

7.11.D.3. Preferential Employment:

7.11.D.3.a. Pursuant to NRS 338.130, Contractor shall give preference in hiring, the qualifications of the applicants being equal: (a) First: To honorably discharged soldiers, sailors, and marines of the United States who are citizens of the State of Nevada; and (b) Second: To other citizens of the State of Nevada.

7.11.D.3.b. If the provisions of NRS 338.130 are not complied with by Contractor, Contract shall be void, and any failure or refusal to comply with any of the provisions of this section shall render any such Contract void.

7.11.D.4, SB 207, Apprenticeship Utilization Act

Contractor shall comply with Chapter 527, Statutes of Nevada 2019, enacted by the Nevada Legislature by passage of Senate Bill 207, which requires contractor and subcontractors to comply with certain requirements relating to the use of apprentices on public works projects. The Prime Contractor will be liable for any subcontractor non-compliance.

7.11.E. The Contractor shall submit all certified payroll payrolls electronically via the internet into the Owner's contracted tracking system LCPtracker. 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. Upon issuance of the Notice to Proceed, the Owner will provide the Contractor with the website addresses and a Login Identification with a password to access the payroll system. The Contractor is responsible for the set-up of access to the payroll system to their subcontractors. Training to utilize the system is available on the LCPtracker website.

7.13 *Safety and Protection*

SC-7.13. Add the following new paragraph immediately after 7.13.G:

7.13.G.1. The following Owner safety program(s) are applicable to the Work:

1. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work to be performed under this Agreement. The Contractor shall take all necessary precautions for the safety of, and shall provide all necessary protection to prevent damage, injury, or loss to:
 - a. All employees and all other persons who may be affected by the operations of this Agreement.

- b. All materials and equipment whether in storage on or off the construction site.
 - c. Other property at the construction site or adjacent to the construction site, including but not limited to trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.
 2. The Contractor shall comply with all applicable laws, ordinances, rules, regulations, and others of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. The Contractor shall erect and maintain, as required by existing conditions and progress on the project, all necessary safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent utilities. Contractor shall comply with OSHA's Hazard Communication Standards.
 3. The Contractor shall designate a responsible member of his/her organization at the construction site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated in writing by the Contractor to the Owner.
 4. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with any confined space entries to be performed during completion of work under this Agreement. Contractor responsibilities include but are not limited to:
 - a. Review and be familiar with the Owner's online written Confined Space program.
 - b. Review documented information about Owner's confined spaces in which entry is intended. This information includes identified hazards for each permit-required confined space. The Contractor shall be responsible for performing their own hazard assessment prior to any confined space entry.
 - c. Contractor shall have their own confined space entry program. Upon request of the Owner, Contractor will provide a statement confirming they are in compliance with their confined space entry program including requirements for confined space training for employees associated with the Work.
 - d. Be responsible for following all confined space requirements established by the provisions in CFR 1910.146 and its chapters.
 - e. Coordinate entry operations with the Owner when employees from the Contractor will be working in or near confined spaces.
 - f. Debrief the Owner on any hazards confronted or created at the completion of entry operations.
 - g. Place signs stating, "Danger, Follow Confined Space Entry Procedures Before Entering" at each confined space to be entered. The Contractor shall never leave a confined space open or unattended.

7.18 *Indemnification*

SC-7.18. Add the following new paragraph immediately after Paragraph 7.18.B:

7.18.C. The Contractor agrees to hold harmless, indemnify and defend Owner, his employees, agents, consultants, or representatives from any loss or liability, financial or otherwise resulting from any claim, demand, suit, action or cause of action based on bodily injury, including death, or property damage, including damage to Contractor's property caused by any action, either direct or passive, the omission, failure to act, or negligence on the part of the Contractor, his employees, agents, representatives or subcontractors arising out of the performance of work under these Contract Documents by the Contractor, or by others under the direction or supervision of the Contractor.

In determining the nature of the claim against Owner, the incident underlying the claim shall determine the nature of the claim, notwithstanding the form of the allegations against Owner.

In the event of a claim or lawsuit against Owner, Contractor shall reimburse Owner for cost of Owner's personnel in defending such actions. Reimbursement for the time spent by such personnel shall be the rate charged for such services by the private sector.

Article 8—OTHER WORK AT THE SITE

No suggested Supplementary Conditions in this Article.

Article 9—OWNER'S RESPONSIBILITIES

9.12 *Owner's Site Representative*

SC-9.12 Add the following new paragraphs immediately after Paragraph 9.12 of the General Conditions:

9.13 *Owner as Resident Project Representative*

9.13.A. Owner may furnish Project representation during the construction period. The duties, responsibilities, and limitations of authority specified for Engineer in Article 10, Engineer's Status During Construction, and elsewhere in the Contract Documents will be those of Owner.

9.13.B. In addition to the Resident Project Representative which may be furnished by Engineer, Owner may furnish an Owner's Site representative to assist Engineer. The responsibilities, authorities, and limitations of authority of Owner's Site representative will be as specified for Engineer's Resident Project Representative.

Article 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.05 Determinations for Unit Price Work

SC-10.05. Delete Paragraph 10.05 in its entirety and replace it with the following paragraph:

10.05. The Engineer will have the authority to determine the actual quantities and classifications of the items of Unit Price Work performed by the Contractor, and the written decisions of the Engineer on such matters will be final, binding on the Owner and Contractor, and not subject to appeal (except as modified by the Engineer to reflect changed factual conditions).

10.07 Limitations on Engineer's Authority and Responsibilities

SC-10.07. Add the following new paragraph immediately after Paragraph 10.07.E:

10.07.F. Contractors, Subcontractors, Suppliers, and others on the Project, or their sureties, shall maintain no direct action against Engineer, its officers, employees, affiliated corporations, and subcontractors, for any Claim arising out of, in connection with, or resulting from the engineering services performed. Only the Owner will be the beneficiary of any undertaking by Engineer.

Article 11—CHANGES TO THE CONTRACT

11.03 Work Change Directives

SC-11.03B Delete Paragraphs in 11.03.B.1 and 11.03.B.2 in their entirety and replace it with the following sections:

1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment prior to starting the Work set out in the Work Change Directive.
2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 10 days after issuance of the Work Change Directive.

11.07 *Change of Contract Price*

SC-11.07. Add the following two (2) new paragraph immediately after Paragraph 11.07.C:

11.07.D. In the event Contractor submits request for additional compensation as a result of a change or differing Site conditions, or as a result of delays, acceleration, or loss of productivity, Owner reserves right, upon written request, to audit and inspect Contractor's books and records relating to the Project. Upon written request for an audit, Contractor shall make its books and records available within 14 days of request. Owner shall specifically designate identity of auditor. As part of audit, Contractor shall make available its books and records relating to the Project, including but not limited to Bidding Documents, cost reports, payroll records, material invoices, subcontracts, purchase orders, daily timesheets, and daily diaries. Audit shall be limited to those cost items which are sought by Contractor in a change order or claim submission to Owner.

11.07.E. In absence of an approved contract change order or written authorization, the Contractor shall not be entitled to payment for any changed or Extra Work.

11.08 *Change of Contract Times*

SC-11.08. Add the following new paragraph immediately after Paragraph 11.08.B:

11.08.C. In absence of an approved contract change order or written authorization, the Contractor shall not be entitled to any adjustment of Contract time for any changed or Extra Work.

Article 12—CLAIMS

No suggested Supplementary Conditions in this Article.

Article 13—COST OF WORK; ALLOWANCES, UNIT PRICE WORK

No suggested Supplementary Conditions in this Article.

Article 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

No suggested Supplementary Conditions in this Article.

Article 15—PAYMENTS TO CONTRACTOR, SET OFFS; COMPLETIONS; CORRECTION PERIOD

No suggested Supplementary Conditions in this Article.

Article 16—SUSPENSION OF WORK AND TERMINATION

No suggested Supplementary Conditions in this Article.

Article 17—FINAL RESOLUTIONS OF DISPUTES

17.02 Arbitration

SC-17.02. Add the following new paragraph immediately after Paragraph 17.01.

SC-17.02.A. All matters subject to final resolution under this Article will be decided by arbitration in accordance with the rules of NRS, subject to the conditions and limitations of this paragraph. This agreement to arbitrate and any other agreement or consent to arbitrate entered into will be specifically enforceable under the prevailing law of any court having jurisdiction.

SC-17.02.B. The demand for arbitration will be filed in writing with the other party to the Contract and with the selected arbitrator or arbitration provider, and a copy will be sent to Engineer for information. The demand for arbitration will be made within the specific time required in this Article, or if no specified time is applicable within a reasonable time after the matter in question has arisen, and in no event shall any such demand be made after the date when institution of legal or equitable proceedings based on such matter in question would be barred by the applicable statute of limitations. The demand for arbitration should include specific reference to Paragraph SC-17.02.D below.

SC-17.02.C. No arbitration arising out of or relating to the Contract shall include by consolidation, joinder, or in any other manner any other individual or entity (including Engineer, and Engineer's consultants and the officers, directors, partners, agents, employees or consultants of any of them) who is not a party to this Contract unless:

SC-17.02.C.1. the inclusion of such other individual or entity is necessary if complete relief is to be afforded among those who are already parties to the arbitration; and

SC-17.02.C.2. such other individual or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration and which will arise in such proceedings.

SC-17.02.D. The award rendered by the arbitrator(s) shall be consistent with the agreement of the parties, in writing, and include a concise breakdown of the award, and a written explanation

of the award specifically citing the Contract provisions deemed applicable and relied on in making the award.

SC-17.02.E. The award will be final. Judgment may be entered upon it in any court having jurisdiction thereof, and it will not be subject to modification or appeal, subject to provisions of the Laws and Regulations relating to vacating or modifying an arbitral award.

SC-17.02.F. The fees and expenses of the arbitrators and any arbitration service shall be shared equally by Owner and Contractor.

Article 18—MISCELLANEOUS

No suggested Supplementary Conditions in this Article.

END OF SUPPLEMENTARY CONDITIONS

STATE OF NEVADA

STEVE SISOLAK
GOVERNOR

TERRY REYNOLDS
DIRECTOR

BRETT K. HARRIS
LABOR COMMISSIONER



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2023 PREVAILING WAGE RATES WASHOE COUNTY

DATE OF DETERMINATION: October 1, 2022

**APPLICABLE FOR PUBLIC WORKS PROJECTS OVER \$100,000 BID/AWARDED
OCTOBER 1, 2022 THROUGH SEPTEMBER 30, 2023**

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	8
Cement Mason	9
Electrician – Communication Technician	10
Electrician - Lineman	12
Electrician – Neon Sign	14
Electrician - Wireman	15
Elevator Constructor	16
Fence Erector	18
Flagperson	19
Floorcoverer	20
Glazier	21
Highway Striper	22
Hod Carrier-Brick Mason	23
Hod Carrier – Plasterer Tender	24
Ironworker	26
Laborer	29
Lubrication And Service Engineer (Mobile And Grease Rack)	46
Mechanical Insulator	31
Millwright	32
Operating Engineer	34
Operating Engineer – Steel Fabricator & Erector	34
Operating Engineer – Piledriver	35
Painter	37
Piledriver (Non-Equipment)	39
Plasterer	40
Plumber/Pipefitter	41
Refrigeration	42
Roofer	43
Sheet Metal Worker	45
Soils and Material Tester	46
Sprinkler Fitter	46
Surveyor	46
Taper	47
Tile/Terrazzo Worker/Marble Mason Finisher	49
Tile/Terrazzo Worker/Marble Mason	49
Traffic Barrier Erector	51
Truck Driver	52
Well Driller	54
Group Classifications	
Labor Group Classifications	55
Operating Engineers	59

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.....	71.50
Air Balance Technician-Foreman.....	75.71
Air Balance Technician-General Foreman.....	79.93

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.....33.79

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.....	48.71
Bricklayer Foreman.....	49.96

Add Zone pay

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 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, Fourth 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

This shall apply to and cover the work of Brick/Block Masonry, Stone Masonry, Artificial Masonry
 Marble Masonry.

Craft: CARPENTER (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Carpenter Journeyman.....	54.91
Carpenter Foreman.....	58.32
Carpenter General Foreman.....	62.07

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 hours worked in one (1) week do not exceed forty (40) hours.

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, 4th of July, Labor Day, Admission'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

- (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 - Journeyman.....	48.92
Cement Mason - Foreman.....	52.55

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.....	44.79
Communication Technician.....	49.66
Senior Technician	52.91

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 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.....37.06

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.....	69.61
Wireman-Cable Splicer.....	75.41
Wireman Forman.....	75.41
Wireman General Foreman.....	81.21

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.....	117.95
Elevator Constructor-Journeyman Mechanic In Charge.....	128.06

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.....45.78

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, Fourth of July, Labor Day, Admission 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.....42.66

ADD ZONE RATE

In addition to FLAG PERSON 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, Fourth 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.....	50.69
Floor Coverer Foreman.....	54.12

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.....25.25

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.....	48.28
Highway Striper Foreman.....	48.78

ADD ZONE RATE

In addition to HIGHWAY STRIPER 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:

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 Journeyman.....	46.03
Brick Mason Foreman.....	46.43

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 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, Fourth 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.....	46.37
Plasterer Tender- Gun Tender.....	47.37
Plasterer Tender-Foreman.....	47.73

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, President's Day, Memorial Day, Fourth of July, Labor Day, Admission Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from Agreement between Plasterers Contractors and LIUNA 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

Ironworker-Journeyman.....	78.74
Ironworker - Foreman.....	83.21
Ironworker -General Foreman.....	88.13

ADD ZONE RATE

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	\$20.00
Zone 2	75 to 100 miles	\$25.00
Zone 3	100 miles and over	\$75.00

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, ableways, 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	40.37
Furniture Mover	41.87
Group 1.....	45.53
Group 1A.....	42.66
Group 2.....	45.63
Group 3.....	45.78
Group 3A.....	48.21
Group 4.....	46.03
Group 4A.....	48.53
Group 5.....	46.33
Group 6	
Nozzlemen, Rodmen.....	45.33
Gunmen, Materialmen.....	46.03
Reboundmen.....	45.68
Gunite Foreman.....	46.73

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 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, Fourth of July, Labor Day, Admission 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

SEE AMENDMENT 2

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.....	72.11
Mechanical Insulator-Foreman.....	76.11
Mechanical Insulator-General Foreman	78.11

ADD ZONE RATE

In addition to MECHANICAL INSULATOR rates add the applicable amounts per DAY, 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.....	71.01
Millwright Welder.....	72.01
Millwright Foreman.....	75.30
Millwright General Foreman.....	80.02

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. Admission Day is a recognized holiday in lieu of Veterans' Day.

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.

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

SEE AMENDMENT 2

Operating Engineers	(SEE GROUP CLASSIFICATIONS)	
Group 1.....		63.11
Group 1A.....		65.82
Group 2.....		66.35
Group 3.....		66.62
Group 4.....		67.36
Group 5.....		67.66
Group 6.....		67.86
Group 7.....		68.08
Group 8.....		68.67
Group 9.....		68.99
Group 10.....		69.34
Group 10A.....		69.53
Group 11.....		69.77
Group 11A.....		71.41
Group 11B.....		72.22
Foreman.....		68.80
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.....		78.36
Group 1 Truck Crane Oiler.....		72.19
Group 1 Oiler.....		70.23
Group 2.....		76.85
Group 2 Truck Crane Oiler.....		71.94
Group 2 Oiler.....		70.02
Group 3.....		75.61
Group 3 Truck Crane Oiler.....		71.72
Group 3 Oiler.....		69.80
Group 3 Hydraulic.....		71.39
Group 4.....		73.88
Group 5.....		72.78
Add \$12.5% to base rate for "Special" Shift.....		

Add Operating Engineers Zone Pay
Add Premium Pay

Craft: OPERATING ENGINEER (Union Rate)
PILEDRIVER

Prevailing wage rates include the base rate as well as all applicable fringes

Operating Engineers	(SEE GROUP CLASSIFICATIONS)
Group 1.....	77.88
Group 1 Truck Crane Oiler.....	72.37
Group 1 Oiler.....	70.45
Group 2.....	76.29
Group 2 Truck Crane Oiler.....	72.16
Group 2 Oiler.....	70.25
Group 3.....	72.03
Group 3 Truck Crane Oiler.....	74.84
Group 3 Oiler.....	71.94
Group 4.....	73.33
Group 5.....	72.22
Group 6.....	68.94
Group 7.....	70.15
Group 8.....	69.19
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	\$5.00
Zone 3	150 to 300 miles	\$6.00
Zone 4	300 miles over	\$7.00

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.....	47.34
Spray Painter/Paperhanger.....	49.00
Sandblaster.....	49.05
Structural Steel & Steeplejack.....	49.05
Swing Stage.....	49.34
Special Coating Application-Brush.....	49.39
Special Coating Application-Spray.....	49.39
Special Coating Application-Spray Steel.....	49.39
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: PILEDRIIVER (Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Piledriver-Journeyman.....	55.41
Piledriver-Welder.....	56.41
Piledriver-Foreman.....	58.87
Piledriver-General Foreman.....	62.68
Tender.....	58.87
Stand-By Diver.....	59.87
Diver-Diving (Wet Pay).....	98.96

ADD ZONE RATE

In addition to PILEDRIIVER 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

In addition, the operation of the power pack and vibratory hammer controls when driving or pulling, sheet pile, pile, soldier beams, caissons 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 cloverleaves, 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 toweled 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.....	66.95
Plumber/Pipefitter-Foreman.....	71.48
Plumber/Pipefitter-General Foreman.....	76.01

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 hangars 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.....33.64

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.....	71.50
Sheet Metal Worker -Foreman.....	75.71
Sheet Metal Worker -General Foreman.....	79.93

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.....27.08

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).....44.17

Soils and Materials Tester.....44.17

Craft: SURVEYOR (Non-Union Rate)

Prevailing wage rates include the base rate as well as all applicable fringes

Surveyor.....38.81

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.....	53.86
Taper-Foreman.....	57.75

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.....	37.82
Tile Setter/Terrazzo Worker/Marble Mason- Finisher Foreman.....	39.07
Tile Setter/Terrazzo Worker/Marble Mason Finisher- General Foremen.....	40.82

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.....	47.87
Tile Setter Foreman.....	49.12
Tile Setter General Foreman.....	50.87
Terrazzo/Marble Mason-Journeyman	49.37
Terrazzo/Marble Mason-Foreman	50.62
Terrazzo/Marble Mason-General Foreman.....	52.37

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.....45.53

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).....	28.72
4 yds. & under 8 yds. (water level).....	28.72
8 yds. & under 18 yds. (water level).....	28.72
18 yds. & under 25 yds. (water level)	28.72
25 yds. & under 60 yds. (water level).....	28.72
60 yds. & under 75 yds. (water level)).....	28.72
75 yds. & under 100 yds. (water level)).....	28.72
100 yds. & under 150 yds. (water level)).....	28.72
150 yds. & under 250 yds. (water level)).....	28.72
250 yds. & under 350 yds. (water level)).....	28.72
350 yds. & over (water level).....	28.72

Transit Mix

Under 8 yds.....	28.72
Under 8 yds & including 12 yds.....	28.72
Over 12 yds.....	28.72

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..... 28.72

Water & Jetting Trucks

Up to 2,500 gallons.....	28.72
Up to 2,500 gallons & over.....	28.72
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).....	28.72
Heavy Duty Transport(Gooseneck low bed).....	28.72
Tiltbed or Flatbed Pull Trailers.. ..	28.72
Bootman, Comb. Bootman & Road Oiler.....	28.72
Flat Rack (2 or 3 axle unit).....	28.72

Bus & Manhaul Drivers

Up to 18,000 lbs. (single unit).....	28.72
18,000 lbs. and over	28.72
Warehousemen Spotter	28.72

Winch Truck & "A" Frame Drivers

Up to 18,000 lbs.	28.72
18,000 lbs. and over.....	28.72
Warehousemen Spotter.....	28.72
Warehouse Clerk.....	28.72
Tire Repairmen.....	28.72
Truck Repairmen.....	28.72
Pick Up Truck & Pilot Cars (Jobsite)	28.72
Pick Up Truck & Pilot Cars (Over the road)	28.72
Truck Oil Greaser.....	28.72
Fuel Truck Driver.....	28.72
Fuel Man & Fuel Island Man.....	28.72
Oil Tanker.....	28.72

Oil Tanker with Pup.....	28.72
Foreman.....	28.72

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.....31.29

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

LABORER, includes but is not limited to:

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 components

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 t any torch work cutting, burning, plasma are, 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 us 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

- Oiler (Construction)
- Partsman

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
- Rodman/Chainman
- 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
- Instrument Man
- 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
- Soil Tester (Certified)
- Soils and Materials Tester
- 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

- Articulated on-Site Dump Trucks
- 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
- Stiff Frame Off Road Haul Trucks
- Grooving and Grinding Machine (highways)
- Ken Seal Operator
- Marination Plant
- Loader (up to and including two and one-half (2 1/2) cu. yds)
- Mechanical Finishers or Spreader Machine (asphalt, Barber-Greene or similar)
- Shuttle Buggy
- Mechanical Trench Shield
- 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)
- Water Pull
- 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
- Track Loader
- 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
- Vacuum Truck(excludes trailer mounted vaccums)

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
- Cary-Lift or similar
- Chemical Grouting Machine
- Chief of Party
- 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 Repairman
- 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
- Finish Blade
- 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 -PILEDRIVER

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
-

STEVE SISOLAK
Governor

TERRY REYNOLDS
Director

BRETT HARRIS
Labor Commissioner

STATE OF NEVADA



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1818 COLLEGE PARKWAY, SUITE 102
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PHONE (775) 684-1890
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Department of Business & Industry
OFFICE OF THE LABOR COMMISSIONER

<http://www.labor.nv.gov>

2022-2023 Prevailing Wage

Amendment 2

- **AMENDMENT 2 – CLERICAL**
- **Classifications:**
 - Lubrication and Service Engineer
 - Operating Engineers
 - Operating Engineers – Steel Fabricator & Erector
 - Operating Engineers – Piledriver
- **County – Washoe County Region and Northern Nevada Rural Region**
- **Effective – October 1, 2022**

The following represents the amended wage rates.

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)68.43

Add Operating Engineers Zone Pay

Add Premium Pay

2022-2023 Prevailing Wage

Amendment 2

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.....	63.41
Group 1A.....	66.17
Group 2.....	66.70
Group 3.....	66.97
Group 4.....	67.71
Group 5.....	68.01
Group 6.....	68.18
Group 7.....	68.43
Group 8.....	69.02
Group 9.....	69.34
Group 10.....	69.69
Group 10A.....	69.88
Group 11.....	70.12
Group 11A.....	71.76
Group 11B.....	72.57
Foreman.....	71.76
Add \$12.5% to base rate for "Special" Shift	

Add Operating Engineers Zone Pay
Add Premium Pay

2022-2023 Prevailing Wage

Amendment 2

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.....	78.17
Group 1 Truck Crane Oiler.....	72.54
Group 1 Oiler.....	70.58
Group 2.....	77.20
Group 2 Truck Crane Oiler.....	72.29
Group 2 Oiler.....	70.37
Group 3.....	75.96
Group 3 Truck Crane Oiler.....	72.07
Group 3 Oiler.....	70.15
Group 3 Hydraulic.....	71.74
Group 4.....	74.23
Group 5.....	73.13
Add \$12.5% to base rate for "Special" Shift.....	

2022-2023 Prevailing Wage

Amendment 2

Craft: OPERATING ENGINEER (Union Rate)
 PILEDRIVER

Prevailing wage rates include the base rate as well as all applicable fringes

Operating Engineers
 (SEE GROUP CLASSIFICATIONS)

Group 1.....	78.18
Group 1 Truck Crane Oiler.....	72.72
Group 1 Oiler.....	70.80
Group 2.....	76.64
Goup 2 Truck Crane Oiler.....	72.51
Group 2 Oiler.....	70.60
Group 3.....	75.19
Group 3 Truck Crane Oiler.....	72.29
Group 3 Oiler.....	70.37
Group 4.....	73.68
Group 5.....	72.57
Group 6.....	69.29
Group 7.....	70.50
Group 8.....	69.54
Add \$12.5% to base rate for "Special" Shift.....	

ADD ZONE RATE

In addition to: **OPERATING ENGINEER, STEEL FABRICATOR & ERECTOR, and OPERATING ENGINEER PILEDRIVER**, 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	\$5.00
Zone 3	150 to 300 miles	\$6.00
Zone 4	300 miles over	\$7.00

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.

"General Decision Number: NV20230026 01/27/2023

Superseded General Decision Number: NV20220026

State: Nevada

Construction Type: Heavy
HEAVY CONSTRUCTION PROJECTS (including sewer/water construction).

County: Washoe 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).

<p>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:</p>	<ul style="list-style-type: none"> . Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$16.20 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 2023.
<p>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:</p>	<ul style="list-style-type: none"> . Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$12.15 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 2023.

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 <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/06/2023
1	01/27/2023

CARP0971-013 07/01/2022

	Rates	Fringes
CARPENTER (Includes Form Work)...	\$ 34.13	19.53

ELEC0401-011 01/01/2022

	Rates	Fringes
ELECTRICIAN.....	\$ 42.50	20.95

ENGI0003-015 07/01/2021

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
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 8: Sheepsfoot

GROUP 10: Grade Setter

GROUP 10A: Power Shovels (up to and including one [1] cu. yd.)

GROUP 11: Power Shovels (over one [1] cu. yd. and up to and including seven [7] cu. yds. m.r.c.)

GROUP 11A: Power Shovels (over seven [7] cu. yds. m.r.c.)

ENGI0003-030 07/01/2020

	Rates	Fringes
POWER EQUIPMENT OPERATOR (09) Mechanic and Backhoe Loader Combo.....	\$ 42.18	24.50

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)

* ENGI0012-021 10/01/2022

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 49.89	30.85
GROUP 4.....	\$ 50.48	30.85
GROUP 8.....	\$ 50.77	30.85
GROUP 12.....	\$ 50.77	30.85

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

Group 1: Oiler

Group 4: Screed Operator (Asphalt or Concrete); Rock Wheel Saw/Trencher

Group 8: Compactor (self-propelled); Drilling Machine Operator

Group 12: Vermeer Rock Trencher (or similar type).

IRON0416-002 10/01/2022

	Rates	Fringes
IRONWORKER, REINFORCING.....	\$ 42.71	36.13

IRON0433-002 10/01/2022

	Rates	Fringes
IRONWORKER, STRUCTURAL.....	\$ 42.71	36.13

* LAB00169-003 10/01/2022

	Rates	Fringes
LABORER		
(1) Common or General; Cones/ Barricades/ Barrels- Setter/Mover/Sweeper.....	\$ 30.05	15.02
(1A) Flagger.....	\$ 27.18	15.02
(3) Asphalt Shoveler, Spreader and Distributor; Concrete Saw (Hand Held/Walk Behind); Mason		

Tender - Cement/Concrete;...\$ 30.30	15.02
(4) Asphalt Raker;	
Pipelayer.....\$ 30.55	15.02

PLAS0797-009 07/01/2022

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...\$ 45.04		16.92

SUNV2014-026 09/08/2016

	Rates	Fringes
OPERATOR:		
Backhoe/Excavator/Trackhoe.....\$ 32.26		17.65
OPERATOR: Bobcat/Skid		
Steer/Skid Loader.....\$ 34.97		0.00
OPERATOR: Broom/Sweeper.....\$ 36.66		12.22
OPERATOR: Grader/Blade.....\$ 26.49		7.78
OPERATOR: Loader.....\$ 33.53		17.10
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....\$ 29.57		0.00
OPERATOR: Roller.....\$ 33.69		12.22
TRUCK DRIVER: Dump Truck.....\$ 22.28		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.

=====
END OF GENERAL DECISIO"

Technical Specifications

Table of Contents

<u>Section</u>	<u>Item</u>	<u>Prepared By</u>	<u>Pages</u>
01110	Summary of Work	Shaw	01110-1 through 4
01140	Environmental Protection	Shaw	01140-1 through 8
01190	Reference Standards	Shaw	01190-1 through 2
01300	Contractor Submittals	Shaw	01300-1 through 3
01505	Mobilization/Demobilization	Shaw	01505-1
01570	Traffic Maintenance and Safety	Shaw	01570-1 through 2
01770	Project Commissioning and Closeout	Shaw	01770-1 through 2
02100	Road Repair	Shaw	02100-1 through 3
02315	Trenching, Backfilling and Compacting	Shaw	02315-1 through 4
02510	Water Piping and Appurtenances	Shaw	02510-1 through 13
02533	Ductile Iron Pipe	Shaw	02533-1 through 2
02536	Polyvinyl Chloride Pressure Pipe	Shaw	02536-1 through 2
02539	High Density Polyethylene Pipe	Shaw	02539-1 through 3
15110	Valves	Shaw	15110-1 through 3

The following persons prepared and approved the individual Technical Specifications as indicated in the Technical Specifications Table of Contents.



Section 01110
Summary of Work

1.0 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.

2.0 Work Covered by Contract Documents

- A. The Work includes:

Bid Item 1 - Mobilization/Demobilization: This item includes providing all labor, equipment, materials, transportation and services and other incidentals necessary for mobilization, demobilization, temporary facilities, site security, required insurance, bonds; permits and permit fees; and any other items of work not specifically described in any other bid item herein. The cost for Mobilization/Demobilization shall not exceed five (5) percent of the total bid for this project without documented justification.

Bid Item 2 – Temporary Traffic Control: This item shall include providing all labor, materials, equipment, services and other incidentals necessary to provide traffic control in accordance with the plans and specifications and to facilitate installation of pipeline and appurtenances. This item shall include the preparation and submittal of traffic control plans and notices; flaggers and traffic control personnel; and the installation, operation, maintenance and removal of temporary traffic control devices. Partial payment may be made based upon percent completion of the work.

Bid Item 3 – Temporary Erosion Control: This item of work includes providing all labor, materials, equipment, services and other incidentals necessary for the installation, maintenance, repair, and removal of storm water erosion control BMPs on a regular basis during the course of the work.

Bid Item 4 – WL Connection Assembly Sheet P1 Section A-A: This item of work includes providing all labor, materials, equipment, services and incidentals necessary to connect the new 8" water main to the existing 8" water main in Lakeshore Boulevard; the work includes potholing and verifying the location of the existing 8" OD steel water main; vertical and horizontal adjustments and fittings to the existing 8" main to align with the 8" connection; installation of a new 8" tee; new pipe, fittings, and appurtenances; thrust blocks; trenching, bedding and backfill; testing and disinfection; complete and ready for operation. Valves and pipe is listed as a separate bid item.

Bid Item 5 – WL Connection Assembly Sheet P3 Sta. 32+15: This item of work includes providing all labor, materials, equipment, services and incidentals necessary to connect the; new 8" water main to the existing 8" water main in Martis Peak Drive; the work includes cutting existing pipe, installation of a new 8" tee; new pipe, fittings, and appurtenances; thrust blocks; trenching, bedding and backfill; testing and disinfection; complete and ready

for operation. Valve is listed as a separate bid item.

Bid Item 6 - 8" Waterline: This item of work includes providing all labor, materials, equipment, services and incidentals necessary for the installation of 8-inch waterline. The work includes, trenching, trench dewatering and shoring; bedding, backfill and compaction; fittings, test stations, appurtenances, thrust blocks, testing and disinfection; temporary flushing assemblies; construction surveying; landscape, drainage ditch, storm drain and fencing repair; and all incidentals and appurtenances as required for complete installation ready for service. Valves and connections to existing water mains are separate bid items.

Bid Item 7 – 8-inch Gate Valve: This item of work includes providing all labor, materials, equipment, services and other incidentals to install 8-inch gate valves including valve, anchor block, valve box, riser and concrete collar; incidentals; ready for operation.

Bid Item 8 – Fire Hydrant Assembly: The work includes providing all labor, materials, equipment, services and incidentals necessary to install a fire hydrant assembly including pipe, valves and fittings; valve box, riser and concrete collar; trenching, excavation, backfill and compaction; testing and disinfection; and all incidentals and appurtenances, ready for service. Gate valve is included in this bid item.

Bid Item 9 – Water Service Re-Connects: The work includes providing all labor, materials, equipment, services and incidentals necessary for the re-connects of PE or copper service lateral waterline (sizes may vary), from the new water main to the service lateral at the locations where indicated on the plans; all locations identified on the drawings which may vary. Work shall include pavement saw cutting or milling, pavement removal, potholing in advance, trenching, bedding, service saddle, corp stop, compression coupling, fittings, appurtenances, backfill and temporary pavement patching as required for complete installation, ready for service. The bid price for service lateral is each from main to existing service lateral; install lengths may vary.

Bid Item 10 - Abandon Existing Water Valve: The work includes providing all labor, materials, equipment, services and incidentals necessary to abandon-in-place water valves and valve boxes includes demolition, valve box removal, backfill and compaction and all other incidental work required for valve abandonment.

Bid Item 11 – 1" Combination Air Valve: The work includes providing all labor, materials, equipment, services and incidentals necessary to install an air release valve assembly at locations shown on the plans and in accordance with Detail 4 Sheet D1 including but not limited to temporary pavement patches, trenching, backfilling and compacting; pipe, fittings, thrust blocks, pressure testing, disinfection, removal and disposal of materials or obstructions encountered during construction; precast concrete box, valves, ARV vent tube, slope stabilization and erosion prevention, safety and protection, and all the related incidental work and appurtenances.

Bid Item 12 - Bollard: The work includes providing all labor, materials, equipment, services, and incidentals necessary to construct bollards in accordance with Detail 3 on Sheet D3.

Bid Item 13 – Cut & Cap Water Main or Cut and Plug Existing Pipe: The work includes providing all labor, materials, equipment, services and incidentals necessary to abandon the existing pipe by excavating and exposing the existing pipe at the locations shown on the drawings and cutting pipe and installed concrete pipe plugs; includes excavation, backfill and compaction; and all incidentals and appurtenances to complete the work.

Bid Item 14 – Roadway & Existing Facility Repair – The work includes providing all labor, materials, equipment, and services necessary to repair streets, roadways, driveways and landscaping disturbed by the project. Includes permanent and temporary pavement patches, aggregate base materials, asphalt milling and overlay; and slurry seal as indicated on the plans. This item of work includes construction surveying and quality control; includes prime coat, tack coat, sawcutting, adjustment of existing utility boxes and manholes to facilitate pavement repair including concrete collars (not including new water valve boxes covered under other bid items); and all incidental work complete, in place and accepted by Washoe County; and ready for traffic. This item of work includes replacing existing survey monuments that are required to be removed to facilitate the installation of pipelines or other items of work; includes survey box, cover, survey maker, concrete collar; trenching, excavation, and backfill: all incidentals and appurtenances, ready for service and in conformance to local standards and appurtenances, ready for service and in conformance to local standards, requirements and Washoe County regulations. This item of work also includes repairing existing concrete sidewalks, curbs, and gutters; driveways, valley gutters and other concrete surfaces that were removed and/or damaged to facilitate the installation of proposed water improvements or otherwise indicated for replacement on the plans; includes concrete, aggregate base, form work, compaction, repair and restoration of landscaping and fencing disturbed as a result of the project. Permits and permit fees are the responsibility of the contractor, the cost of which are included in Bid Item 1. Traffic control is included in Bid Item 2.

- B. The Work is located in Incline Village, Washoe County, Nevada.

3.0 Work Sequence

- A. The OWNER, ENGINEER, and CONTRACTOR will establish a complete Work schedule.

4.0 Contract Method

- A. The Work hereunder will be constructed under lump sum and unit Bid prices.

5.0 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 with the OWNER for the storage of materials, staging of equipment, fabrication facilities, and field offices.

6.0 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.

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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 of 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 and protection of existing streets.
 12. Storm Water Pollution Prevention 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.

7.0 Progress Meetings

- A. The CONTRACTOR shall schedule and hold regular on-site progress meetings at least bi-monthly 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. The OWNER and ENGINEER may periodically attend the progress meetings.
- B. The CONTRACTOR shall preside at the meetings and will arrange for keeping and distributing the minutes. The CONTRACTOR shall provide a copy of each of the meetings minutes to the ENGINEER. 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 his Work, with a view to resolve these issues expeditiously.

Section 01140
ENVIRONMENTAL PROTECTION

1.0 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. **CONTRACTOR** shall abide by all TRPA codes found in Section 4.0.
- B. Submittals. Develop an Environmental Protection Plan (EPP). Distribute the EPP to all employees and regularly review the EPP with all employees and all Subcontractors and their employees. The EPP shall address, but not be limited to, the items identified in this specification.

2.0 MITIGATION AND CONSTRUCTION IMPACTS

- A. Requirements: All operations shall comply with all applicable Laws and Regulations and TRPA Requirements.
- 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, concrete, asphalt, wood and other discarded solid materials resulting from construction activities.
 - 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**.

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. 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 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 his operations upon adjacent streams and other bodies of water.

The **CONTRACTOR** shall investigate if a Stormwater Pollution Prevention Permit (SWPPP) is required and if it is determined that it is required, **CONTRACTOR** shall make application including payment of fees and comply with all terms of the Permit including the preparing a project specific Stormwater Pollution Prevention Plan (SWPPP) that details the specific Best Management Practices (BMP's) the **CONTRACTOR** proposes to use and comply with the permit.

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 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.
 - d. The **CONTRACTOR** shall obtain a temporary discharge permit required for the surface discharge of any water derived from pipeline flushing and testing operations from the Nevada Division of Environmental Protection and shall dechlorinate the water as required.
4. Fish and Wildlife Resources: Perform all work and take such steps required to prevent any interference or disturbance to fish and wildlife.
 5. Cultural Resources/Native American Human Remains/Human Bones/Fossils: Upon discovery of any cultural resources (historic or prehistoric site or object), Native American human remains, funerary items, sacred objects or objects of cultural patrimony, or discovery of any humans bones or remains, or fossil resources anywhere on the Project all ground disturbing work within 330 feet of the discovery shall be halted. The **CONTRACTOR** shall immediately notify the **OWNER** and **ENGINEER** and protect the area to prevent any further damage from occurring. The **OWNER** will immediately notify the State of Nevada Historic Preservation Office (SHPO). The **CONTRACTOR** may not resume work in the immediate area until authorized to do so by the **ENGINEER**. The 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 his 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

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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.
7. Dust Control, Air Pollution and Odor Control: Employ measures to prevent the creation of dust, air pollution and odors.
- a. The **CONTRACTOR** shall investigate if a Surface Area Disturbance (SAD) permit is required. If a permit is required **CONTRACTOR** shall make application, including payment of fees, and comply with all terms of the permit.
 - 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. The Site shall be additionally watered as required, 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.

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- 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 as necessary and as required by Laws and Regulation and applicable permits and stipulations to prevent fires.
11. 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. Ensure that erosion and sediment transport control measures are in place, maintained and ready for implementation prior to any forecasted storms.
- 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 trackout 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.

3.0 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 and other materials removed by the clearing, stripping and grubbing operations off site at a suitable disposal site in accordance with applicable Laws and Regulations and/or chip and shred materials locally on site and evenly spread across the disturbed area that the vegetative materials were derived from. Transporting chipped and shredded materials derived from one location to another application location will not be allowed.
 - E. Excavated Materials:
 1. Excess Excavated Material:
 - a. Excess excavated soils shall be disposed of in accordance with applicable Laws and Regulations and these Contract Documents.
 - 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 unless specifically indicated otherwise. 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.

4.0 TRPA Standards

1. Sediment and Erosion Control

Appropriate measures shall be taken to control sediment and prevent erosion from graded or unstable ground. Erosion control structures shall be installed and maintained in an operable condition for ground disturbing activities. Sediment and erosion control measures shall, at minimum, conform to the following provisions of the TRPA Code of Ordinances:

- Chapter 33, Grading and Construction

- Section 60.1, Water Quality Control
- Section 60.3, Source Water Protection
- Section 60.4, Best Management Practice Requirements

Erosion control structures shall be installed before activities commence and shall remain in place until disturbed sites are stabilized or winterized (see Subparagraph 33.3.1D of the TRPA Code for winterization requirements}. Erosion control measures shall include revegetation with TRPA approved plant species and soil mulching with composted organic materials when necessary to increase soil moisture holding capacity of soils. Revegetated areas shall be protected from future disturbance and irrigated as necessary to ensure plant growth during the first growing season.

2. Vegetation Protection

Vegetation within, or adjacent to, construction areas shall be protected in accordance with Chapter 61 and other applicable provisions of the TRPA Code. All trees and native vegetation to remain on or adjacent to a construction site shall be fenced for protection in accordance with all applicable provisions of the TRPA Regional Plan, including but not limited to Section 33.8 of the TRPA Code. No equipment shall enter into, and no materials shall be placed within, areas protected by fencing.

3. Dust Control

Appropriate measures shall be taken to prevent the transport of fugitive dust from ground disturbing activities in accordance with all applicable provisions of the TRPA Regional Plan, including but not limited to Subsection 33.3.3 of the TRPA Code. These measures shall be employed when activities commence and shall continue until disturbed sites are stabilized.

4. Noise and Hours of Operation

Construction, maintenance, and demolition activities creating noise in excess of the TRPA single event noise or community noise level standards in Section 68.9 of the TRPA Code shall be considered exempt provided that such work is conducted between the hours of 8:00 a.m. and 6:30p.m. Emergency work to protect life or property is also exempt from the TRPA noise standards.

Section 01190
REFERENCE STANDARDS

1.0 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**.

2.0 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). American Water Works Association (AWWA). Nevada Administrative Code (NAC 445A). “Electric Code” or “National Electric Code (NEC)” shall mean the National Electric Code of the National Fire Protection Association (NFPA), Tahoe Regional Planning Agency (TRPA) Chapter 33. 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

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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.

3.0 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 01300
CONTRACTOR SUBMITTALS

1.0 General

- A. Wherever submittals are required hereunder, all such submittals by the **CONTRACTOR** shall be submitted to the **ENGINEER**.
- B. One initial submittal and one resubmittal for each submittal will be reviewed by the **ENGINEER** at no cost to the **CONTRACTOR**. Subsequent resubmittals will be reviewed at a cost to the **CONTRACTOR** of \$180.00/hour, the aggregate amount of which will be deducted from the final payment via Change Order.

2.0 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 submittals

3.0 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.

4.0 Shop Drawings

- 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 submittal. The **CONTRACTOR**'s attention is also directed to Article 7.16 of the General Conditions.
- B. All Shop Drawings 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**.

Submittals containing multiple manufacturers for the same specific item or class of material or equipment will not be accepted.

- 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 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.

Section 01505
MOBILIZATION/DEMobilIZATION

1.0 Scope

- A. 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 offices, buildings and other facilities necessary for Work on the Project; for premiums on Bonds and insurance for the Project, construction surveying/staking, permits, final project clean up including removal of all temporary facilities, and for all other work and operations which must be performed or costs incurred before beginning production work on the various Contract items and after the Project is complete.

2.0 Materials

- A. Materials shall consist of equipment, buildings, and tools necessary to move to the Project Site to perform Work. Material bid items shall not be included in mobilization.

3.0 Staging

- A. Setting up of offices and the use of private property for storage or work area shall be executed in a legal manner in accordance with local and state codes and ordinances.

4.0 Measurement and Payment

- A. Measurement shall include all preparatory work, equipment, and establishment of operations prior to construction as well as those incurred after construction. Mobilization/demobilization costs for subcontracted work shall be considered to be included in the Contract unit price Bid item by the **CONTRACTOR**.

Section 01570
TRAFFIC MAINTENANCE AND SAFETY

1.0 GENERAL

The **CONTRACTOR** shall conduct the Work in such a manner as will obstruct and inconvenience traffic as little as possible. Existing traveled roads and their adjacent streets within the work area shall be kept open and in a good, dust free and safe condition for traffic at all times. The **CONTRACTOR** shall remove any material or debris on a daily basis resulting from or caused by operations and repair any damage which may result from operations.

The **CONTRACTOR** shall continually provide access to businesses, parking lots, residences, garages and farms. When access must be temporarily denied due to construction operations, such as installation of a buried pipeline directly in front of a driveway, the **CONTRACTOR** shall notify the property owner, or responsible party, of such closure not less than 24 hours in advance of closure. The notification must be in writing with a copy to the Resident Project Representative and include an estimated duration of the closure.

The **CONTRACTOR** shall at all times during the progress of the Work provide, erect and maintain all the necessary barricades, danger signals, temporary striping and signs, provide a sufficient number of flaggers and take all the necessary precautions for the protection of the Work and safety of the public. Illuminate barricades and obstructions at night with reflectorized signs and lights from sunset to sunrise.

The **CONTRACTOR** shall keep all roads open to two way traffic at all times unless otherwise approved by the **ENGINEER** and **OWNER**. If the roadway is not sufficiently safe to maintain two way traffic, one way traffic or road closures with appropriate detours will be allowed.

2.0 TRAFFIC CONTROL PLAN/ENCROACHMENT PERMIT

The **CONTRACTOR** will be required to conform to a traffic control plan at all times while working within the public right of way. The traffic control plan shall be in accordance with *Part VI Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility, and Incident Management Operations*, latest edition, as prepared by the U.S. Department of Transportation Federal Highway Administration, the State of Nevada, Standard Plans for Road and Bridge Construction, the Work Zone Traffic Control Handbook, and as required by the governmental agency having jurisdiction over the road. The traffic control plan shall be prepared by an ATSSA certified traffic planner.

The traffic control plan must be submitted to the **ENGINEER** and the governmental agency having jurisdiction over the road for approval prior to construction commencing. The **CONTRACTOR** must submit the traffic control plan sufficiently in advance of construction to allow ample time for review and approval.

3.0 DETOURS

The **CONTRACTOR** may request detouring thru traffic in those work areas where it is impractical or impossible to safely maintain traffic. Any detour requests must be approved by the **ENGINEER** and the governmental agency having jurisdiction over the road to be detoured and the detour route.

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Any allowed detours will be subject to the following conditions:

1. Maintaining the detour in good condition.
2. Providing and maintaining the detour marking signs.
3. When the detour is no longer necessary, repair the detour route to original or better condition.

3.0 EMERGENCY AGENCY NOTIFICATION

The **CONTRACTOR** shall notify police, fire and ambulance agencies when traffic patterns are to be altered due to construction operations. Such notifications shall be in writing with a copy to the **ENGINEER** and submitted at least 24 hours in advance of construction commencing.

5.0 TEMPORARY ROAD PATCHES

As required by the governmental agency having jurisdiction over the road as required by Washoe County EE Permit requirements.

6.0 CLEANUP

During periods when the **CONTRACTOR** is not working and at least daily, lanes open for traffic must be cleared of dirt, debris and all other material. Barricades and flashers shall be placed sufficiently close together so that there is no question about the required routes for traffic.

Section 01770
PROJECT COMMISSIONING AND CLOSEOUT

1.0 Commissioning

- 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.
- B. After all the Work has been installed, but prior to the **CONTRACTOR** requesting Substantial Completion, the **CONTRACTOR** shall start all systems and ensure that all systems are properly adjusted and working.
- C. During the Substantial Completion walkthrough, **CONTRACTOR** shall demonstrate to the **ENGINEER** that all the systems are operational and functioning properly and as a whole.
- D. **CONTRACTOR** shall bear all the additional costs incurred by the **OWNER** including but not limited to standby time and/or additional trips required by the **ENGINEER** and his consultants if systems are found to be not operational or functioning at the time that the Substantial Completion walkthrough is performed.

2.0 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, signs 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.
- B. The **CONTRACTOR** shall apply a chloride salt dust palliative to all areas disturbed by construction (excluding paved areas and areas that receive aggregate base). Application rates shall be per the manufacturer's requirements.

3.0 Final Submittals

- A. The **CONTRACTOR** shall comply with the completion requirements contained in Article 15.0 of the General Conditions.

4.0 Maintenance and Guarantee

- A. The **CONTRACTOR** shall comply with the maintenance and guarantee requirements contained in Article 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 surety shall be liable to the **OWNER** for the cost thereof..

Section 02100

Road and Other Surface Improvement Repair

1.0 GENERAL

- A. This section specifies the requirements for repair and replacement, to their original or better condition of existing facilities which have been cut, damaged or removed during construction.
- B. All Work performed under this section shall conform to the latest edition the Standard Specifications for Public Works Construction, (SSPWC aka "Orange Book", Washoe County, Nevada) and the Nevada Department of Transportation Standard Specifications and Plans for Road and Bridge Construction as applicable.
- C. The **CONTRACTOR** is required to obtain Permits from the governmental agency having jurisdiction over the street where trenching work is performed. The **CONTRACTOR** shall prepare and submit all permit applications and pay all permit fees. The Permit must be at the job site at all times during construction and encroachment in Washoe County right-of-way.
- D. The **CONTRACTOR** shall be responsible for obtaining approved traffic control plans.
- E. The **CONTRACTOR** shall take every reasonable precaution to protect the existing facilities during the performance of the Work in accordance with paragraph 7.13 of the General Conditions.

2.0 MATERIALS

- A. Aggregate Base

Aggregate base course materials shall be Type 2, Class B, per Section 200.01.03 of the Orange Book. Aggregate Base materials to be supplied and placed by the **CONTRACTOR** as required.

- B. Hot Mix Asphalt

Hot Mix Asphalt (HMA) for permanent patching and overlay surfaces shall be a Type 3 (Type 2 in NDOT ROW), PG 64-28NV, 3% voids, 50 blow mix with lime and no more than 15% RAP.

- C. Slurry Seal

Slurry seal shall be a Type 2 Slurry Seal in accordance with Section 318 or the SSPWC.

D. Temporary Cold Patch

Cold patch shall be a Durapatch Product 1707 3/8" cold mix or EZ Street patch from Syar Industries or Engineer approved or equal.

E. Concrete

Shall be 4000 psi minimum at 28 days, minimum 6 sack of cement per cubic yard, w/c of 0.45, air entrainment 6% ($\pm 1.5\%$), slump 1-4 inches.

3.0 ROAD CONSTRUCTION

A. Construction shall be subject to and governed by the applicable standards referenced.

B. Asphaltic concrete pavement shall be constructed to the lines, grades and limits shown in the Drawings or described in the specifications.

C. The asphalt concrete shall be constructed to the normal compacted thickness required on the plans, and in no instance shall the thickness be more than 1/4 inch less than that specified unless required to prevent ponding of water or to facilitate drainage, or where feathered to match existing pavement if approved by the **ENGINEER**. Compaction will be accomplished using steel drum and pneumatic rollers as required by Section 320 of the SSPWC. Hand work will be permitted only in areas where access with the self-propelled paver is prevented.

D. The thickness of the asphalt concrete shall be as shown on the Drawings or described in the specifications. The average of three thickness measurements spaced not more than 100 feet apart shall be at least equal to the specified thickness of asphalt concrete with no single measurement being less than 1/2 inch thinner than the specified thickness.

E. Asphaltic concrete shall be placed when the weather and ground surface conditions meet or exceed the weather limitations of Section 320.03.11 of the SSPWC.

E. A tack coat shall be applied to all exposed aggregate base surfaces and existing asphalt edges prior to paving.

F. The surface shall be constructed to facilitate drainage and to prevent the ponding of water.

G. Slurry seal shall be applied immediately after paving.

H. Compaction testing from a third party testing and inspection firm shall be required on trench backfill and structural road base materials provided by the Contractor.

I. All public street painting, pavement striping, reflectors and other markings displaced or destroyed by the **CONTRACTOR** during performance of the Work shall be replaced by the **CONTRACTOR** in accordance with the referenced standards.

5.0 CONCRETE CURB, GUTTERS AND SIDEWALKS

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- A. Concrete Curbs, Gutters, Sidewalks, and Driveways damaged by the **CONTRACTOR** during the performance of the Work shall be repaired in accordance with the Contract Documents and applicable standards referenced. Flow lines shall be returned to original elevations.

6.0 OTHER IMPROVEMETNS

- A. All signs, mailboxes, fences, and other facilities moved, displaced or destroyed by the **CONTRACTOR** during the performance of the Work shall be replaced by the **CONTRACTOR** to an equal or better condition that existed before construction.

7.0 TEMPORARY ROAD PATCHES

- A. Temporary pavement patches are required by until permanent pavement repair is accomplished. No overnight open or plated trenches are allowed.

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Section 02315
TRENCHING, BACKFILLING, AND COMPACTING

1.0 General

- A. Trenching excavation shall include the removal and replacement (when applicable) of all materials or obstructions of any nature when encountered in the installation (including, but not necessarily limited to asphalt, water, signs, fences, driveways, sidewalk, curb and gutter, utilities, abandoned utilities, and excavated soil) and removal of all sheeting and bracing and the control of water necessary to construct the Work as shown. Unless otherwise indicated on the Drawings or permitted by the **ENGINEER**, excavation shall be by open cut. Trenching machines may be used, except where their use will result in damage to Underground Facilities or other property at the Site.
- B. Trench excavation work shall be performed in a safe and proper manner with suitable precautions being taken against hazards of every kind in accordance with Article 7.11 of the General Conditions. Trench excavations shall provide adequate working space and clearances for the Work to be performed herein, and for installation and removal of any sheeting and shoring that may be required.
- C. No backfill materials shall be installed on frozen surfaces, nor shall frozen materials, including the backfill itself, snow, or ice be placed in any backfill.
- D. The **CONTRACTOR** shall attentively examine the Site in such a manner that he can confirm existing Subsurface and Physical Conditions and Underground Facilities in accordance with Article 5 of the General Conditions. He shall satisfy himself of the quality and quantity of exposed materials and subsurface soil or rock deposits and depths to groundwater. The selection of equipment for use on the Project and the order of Work will be the **CONTRACTOR**'s responsibility such that the requirements included in the following sections have been met.

2.0 Compaction Testing

- A. Where referred to herein, relative compaction shall mean the in-place dry density of soil expressed as a percentage of the maximum dry density of the same material, as determined by ASTM D1557, Compaction Test Procedure. Optimum moisture content shall mean the moisture content at maximum dry density as determined above. The **CONTRACTOR** shall be responsible for attaining the required densities throughout the trench. The **OWNER** may take periodic and random field density tests at his cost to assure compliance in accordance with Article 14.02 of the General Conditions. This testing, however, shall in no way relieve the **CONTRACTOR** of his responsibility for attaining the required densities including obtaining confirmation from independent laboratories at his cost that the densities are meeting the Specifications. Any soils that fail to meet the required densities shall be considered as defective Work and will be treated in accordance with Article 14.03 of the General Conditions. This includes, but is not limited to, the **CONTRACTOR** being responsible for paying the costs associated with retesting the rejected area following correction of the Work.

3.0 Materials

- A. Pipe Bedding and Trench Backfill
 - 1. All trenches shall be backfilled after pipe fittings and appurtenances have been installed, inspected, and approved for backfill.
 - 2. Bedding and backfilling shall include the placement and compaction of the material in trenches or excavations. All bedding and backfill shall be compacted throughout with approved compaction equipment.
 - 3. Bedding and backfill materials are shown on the construction drawings and details.

4.0 Construction

- A. Trench Configuration and Alignment
 - 1. Trenches and other excavations shall have the minimum width which the **CONTRACTOR** can effectively excavate and install the improvements. Excessive widths will not be permitted. Within the pipe bedding zone, trenches shall have a required width between 16 and 24 inches greater than the outside diameter of the pipe to be installed. This shall include the width required for trench shoring. Deviations from this required width must be submitted to the **ENGINEER** in writing for approval. The bottom of the trench shall be graded uniformly to provide a continuous and uniform support for the bedding material under the pipe and to allow the pipe to be laid to the grades and alignments shown in the Plans.
- B. Pipe Bedding
 - 1. The trench shall be over-excavated to the depth below the bottom of the pipe shown in the Drawings. The pipe bedding at the trench bottom shall have a flat or semicircular cross section. The bottom of the trench for all pipe shall be graded and prepared to provide a firm unyielding surface with uniform bearing throughout each length of pipe except for the excavation required at the joints. Pipe couplings shall not rest on the trench bottom and laying the pipe on mounds will not be allowed.
- C. Procedure at Pipe Zone
 - 1. After center loading the pipe to prevent lateral movement, the material specified in the trench detail shown on the Drawings shall be placed in the trench simultaneously on each side of the pipe for the full width of the trench in layers not to exceed 8 inches in loose depth. The bedding shall be thoroughly worked into the pipe haunches with a J-bar or other acceptable device. Each layer or lift shall be compacted on each side of the pipe throughout the pipe zone to the densities shown in the Drawings.
- D. Procedure Above the Pipe Zone
 - 1. The backfill shall meet the requirements of the trench details shown on the Drawings. All backfill material shall be placed in layers not to exceed 8 inches in loose thickness. The lift should then be compacted with approved compaction equipment to the densities shown in the trench section on the Drawings.

5.0 Sheeting and Shoring

- A. Excavation for trenches shall meet all applicable Laws and Regulations in accordance with paragraph 7.11 of the General Conditions.
- B. During backfilling, any shoring shall be carefully removed by **CONTRACTOR** in such a manner as will result in a minimum of caving, lateral movement, or flowing of the soil. On approval of the **ENGINEER**, **CONTRACTOR** may leave shoring in place, but in such an event, no payment will be made by the **OWNER** for such materials left in place. Where trench shoring is left in place, it shall not be braced against the pipe.

6.0 Disposal of Materials Encountered During Trenching

- A. The legal disposal including the handling and transportation of excess soils shall be the responsibility of the **CONTRACTOR**. Debris-free soils shall be disposed of offsite at locations approved by the **ENGINEER** or as indicated on the Drawings. Any soils that are allowed to be wasted on site must be bladed out, spread evenly and uniformly, proof rolled and compacted over the entire designated wasting area. Mounding will not be allowed.
- B. Vegetative matter may be chipped or shredded and used for erosion control in disturbed areas as allowed by the **ENGINEER** or legally disposed of off Site.
- C. Waste materials encountered during trenching including but not limited to asphalt, concrete, abandoned utilities and other rubbish and waste materials shall be removed from the Site and legally disposed of unless indicated otherwise.
- D. Materials that are specifically identified for salvage shall be reasonable protected while they are removed and delivered to the **OWNER**.

7.0 Control and Disposal of Water

- A. The **CONTRACTOR** shall arrange for the legal disposal of water as a result of dewatering operations and meet all applicable Laws and Regulations.
- B. When water is encountered, the **CONTRACTOR** shall furnish, install, maintain and operate all the necessary machinery, appliances, and equipment to keep excavations free from water until the placing of the bedding material, laying and joining of the pipe, pouring of concrete, and placing of the backfill material has been completed, inspected, and approved and all danger of flotation and other damages are removed.
- C. Water pumped from the trench shall be legally disposed of in such a manner as will not cause injury to the environment, public or private property, or constitute a nuisance or menace to the public.

8.0 Maximum Length of Open Trench

- A. Open trench at any one time shall be limited to 200 feet per pipeline laying crew; any exception to this requirement shall require the **ENGINEER**'s approval.
- B. Trenching or excavation shall not be allowed to remain open during the hours of darkness or on weekends, holidays, or other periods when the Work is not in progress. During such periods, trenching or excavations shall be backfilled to the surrounding grade or completely covered with steel plating or other suitable materials. With prior written concurrence of the

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ENGINEER that such measures are impracticable, the **CONTRACTOR** may erect sound and substantial fencing and/or barricades completely around the periphery of such trenching or excavations to the satisfaction of the **ENGINEER**.

9.0 Special Foundation Treatment

- A. Whenever the bottom of the trench is soft, yielding, or, in the opinion of the **ENGINEER**, otherwise unsuitable as a foundation for the pipe or bedding material, the unsuitable material shall be removed and replaced with suitable excavated material or gravel. Payment of this Work will be made only if the bottom of the trench has become unstable due to circumstances beyond the control of the **CONTRACTOR**. Payment for this Work will be made in accordance with Article 11 of the General Conditions.

10.0 Cobble and Boulder Excavation

- A. Excavations may contain cobbles and boulders and weathered and harder bedrock. No additional payment will be made for these excavations. Payment for the Work over and beyond the capability of a 450 excavator will be made in accordance with Article 11 of the General Conditions.

11.0 Repairs Required by Trench Settlement

- A. If, at any time during a period of one (1) year dating from the date of Substantial Completion of the Project, there shall be any settlement of the trenches requiring repairs to be made, or should any other defect appear in the system due to negligence or carelessness on the part of the **CONTRACTOR**, the **OWNER** will notify the **CONTRACTOR** to immediately make such repairs as may be deemed necessary at the **CONTRACTOR**'s expense.

Section 02510
WATER PIPING AND APPURTENANCES

1.0 Applicable Publication

- A. The publications listed below, including the latest revisions 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:
 2. American Society for Testing and Materials (ASTM) Publications:
 3. American Water Works Association (AWWA) Publications:
 4. National Sanitation Foundation (NSF) Publications:
 5. National Fire Protection Association (NFPA) Publication:
 6. Underwriters' Laboratories, Inc. (UL) Publications:
 7. Uni-Bell Plastic Pipe Association (UNI) Publication:
 8. Standard Specifications for Public Works Construction (Orange Book, Latest Revision).

2.0 General Requirement

- A. This section covers pressure water supply pipe which shall be furnished and installed complete with all jointing materials, fittings and other appurtenances shown on the Drawings or otherwise required for a complete installation. The **CONTRACTOR** shall furnish, install and test pipe, fittings and appurtenances of the dimensions and types and to the lines and grades shown on the Drawings and specified herein.
- B. Identification Marks. Pipe and couplings shall be clearly and permanently marked with all information required by AWWA, C151, C200, and C900.
- C. Testing. All materials shall be sampled and tested in accordance with all requirements of AWWA, C151, C200, and C900. Pipe not manufactured in the United States shall be tested as required above by an approved testing laboratory within the United States.
- D. Affidavit of Compliance. The manufacturer shall furnish an Affidavit of Compliance certifying that all tests have been conducted and that the materials comply with the applicable standards and these specifications. Test information shall be retained and shall be provided to the **ENGINEER**.
- E. Installation shall conform to the requirements of AWWA C600 (C600-C606) for pressure lines except as modified by these specifications and as shown on the Drawings.
- F. All laying, jointing and testing for defects and leakage shall be performed in the presence of the **ENGINEER** or the Resident Project Representative and shall be subject to his approval before

acceptance. Materials found during construction to have defects will be rejected and the **CONTRACTOR** shall promptly remove such defective material from the site.

- G. All wetted materials and/or complete assemblies to come into contact with potable water shall be ANSI/NSF 61 third party certified and NSF 372 third party certified as applicable.

3.0 Submittal

- A. Submit manufacturer's standard drawings or catalog cuts of items specified.

4.0 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.

5.0 Pressure Pipe

- A. Ductile Iron Pipe: As Specified in Section 02533 (if applicable)
- B. PVC Pipe: As Specified in Section 02536 (if applicable)
- C. HDPE Pipe: As Specified in Section 02539 (if applicable)
- D. Polyethylene encasement: Polyethylene encasement shall comply with AWWA C105.
- E. Polyethylene tubing shall be copper tubing size (CPS), pressure class 200.

6.0 Rubber Rings

Rubber rings for joint sealing shall conform to ASTM D1869.

7.0 Fittings

- A. Fittings shall be standard gray iron or ductile iron conforming to AWWA C110 or C153. Fittings shall be pressure rated for 350 psi (3"-24"). All fittings shall be NSF 61 certified.
- B. Fittings shall be cement mortar lined in accordance with AWWA C104. Exterior shall be shop-coated with a bituminous coating applied approximately of 1 mil thick. Buried fittings shall be double wrapped with polyethylene per AWWA C105.
- C. Flanges:

1. Flanges shall conform to ANSI B16.1 and shall have bolt circles compatible with ANSI 125/150 lb.
2. Studs and bolts shall be of such length that no less than ¼-inch nor more than 1/2-inch will be projected through the nut when drawn tight. All bolt heads and nuts shall be hexagonal except where special shapes are required.
3. Gaskets shall conform to ASTM D1330, Grade I and II, black EPDM type, 1/8-inch thick, NSF certified or Engineer approved equal is acceptable.

D. Bolts

E. All T-Bolts shall be ASTM A242 weathering steel with minimum yield strength of 45,000 PSI. All T-Bolts & nuts shall be threaded in accordance with ANSI/ASME B1.1, Class 2A fit, with coarse-thread series. Heavy hex nuts shall be used. Bolt heads shall be in accordance with the dimensions of ANSI/AWWA C111 / A21.11-95. T-Bolts and nuts shall be coated with Tripac 2000 Blue or equal.

a. All Bolts shall be carbon steel with a minimum 105,000 PSI tensile strength conforming to SAE J429 Grade 5. Bolts shall be standard ANSI B1.1, Class 2A coarse threads. Nuts shall conform to ASTM A563 and be standard ANSI B1.1, Class 2A coarse threads. All bolt heads and nuts shall be hexagonal. Identification on the head of the bolt shall be three slash marks. Bolts and nuts shall be coated with Tripac 2000 or equal.

b. All T-Bolts shall be ASTM A242 weathering steel with minimum yield of 45,000 PSI. All T-Bolts & nuts shall be threaded in accordance with ANSI/ASME B1.1, Class 2A fit, with coarse-thread series. Heavy hex nuts shall be used. Bolt heads shall be in accordance with the dimensions of ANSI/AWWA C111 / A21.11-95. T-Bolts and nuts shall be coated with Tripac 2000 Blue or equal.

F. Mechanical joints shall conform to AWWA C110 or C153.

F. Restrained Mechanical Joints

a. Ductile Iron Pipe: Mechanical joint valves and fittings where indicated on the Drawings shall be restrained using a mechanical joint ductile iron retainer gland, shall have a pressure rating of 350 psi, and shall be EBAA Series 1100, or **ENGINEER** approved or Equal.

b. PVC Pressure Pipe: Mechanical joint valves and fittings where indicated on the Drawings shall be restrained using a mechanical joint PVC pressure pipe retainer gland rated at a minimum working pressure equal to the pressure class of the pipe being utilized, and shall be EBAA Series 2000, or **ENGINEER** approved or Equal.

E. Restrained Pipe Joints

1. Ductile Iron Pipe: Restraint shall be provided by the use of a Field Lok 350 gasket as manufactured by US Pipe or **ENGINEER** approved or Equal

2. PVC Pressure Pipe: Pipe joints, where indicated on the Drawings, shall be restrained at the bells using a restraint ring incorporating a gripping surface used to grip the pipe rated at a minimum working pressure equal to the pressure class of the pipe being utilized, and shall be EBAA Series 1900 or 2800, or **ENGINEER** approved or Equal. Restrained PVC joint pipe with locking gasket. Diamond Plastics Diamond Lok-21, NAPCO Certa-Lok, or Engineer approved or equal is acceptable.

F. Mega Flanges (MF)

Mega Flanges shall be made of ductile iron conforming to ASTM A536 and have flange bolt circles compatible with ANSI 125/150 lb. standard. Flange adapters shall be capable of a minimum of three degrees of deflection during assembly or permit lengths of pipe to be field cut to within 0.6 of maximum distance between flanges to allow for simplified alignment of flanged appurtenances. The mega flanges shall have a pressure rating of 350 psi when used on ductile iron pipe and a pressure rating equal to the pipe when used on PVC pipe. Mega Flanges shall be EBAA Series 2100 Mega Flange, or **ENGINEER** approved or Equal. For short spools, where Megaflange cannot be utilized, EZ Flanges shall be utilized and shall be EBAA Series 1000, or **ENGINEER** approved or Equal.

G. Transition Couplings.

Transition couplings shall be straight or reducing as required. Center and end rings shall be ductile iron per ASTM A536, gaskets shall be SBR per ASTM C2000 MBA 710, NSF approved. Bolts and nuts shall be trackhead bolts, heavy hex nuts, UNC 5/8" rolled thread, high strength, low alloy corrosion resistant steel per AWWA C111. All parts and pieces shall receive an 8 to 12 mil fusion bonded epoxy coating. T-Bolts and Nuts shall be coated with a polytetrafluoroethylene dry film protective coating and lubricant. Any coating in contact with potable water must be NSF 61 certified. Buried couplings shall be double wrapped with polyethylene per AWWA C105. The coupling shall be a 501 or RC501 as manufactured by Romac Industries or approved or equal. All transition couplings shall be NSF 61 certified.

H. Flange Coupling Adapters (3"-12").

Flange coupling adapters flange body shall be ductile iron per ASTM A536, Grade 65-45-12, Class 125/150, end rings shall be ductile iron per ASTM A536, gaskets shall be compounded for water and service and meet the requirements of AWWA C219, ASTM D2000 and be NSF 61 Certified. Bolts and nuts shall be trackhead bolts, heavy hex nuts, UNC 5/8" rolled thread, high strength, and low alloy corrosion resistant steel per AWWA C111. All parts and pieces shall receive an 8 to 12 mil fusion bonded epoxy coating. T-Bolts and Nuts shall be coated with a polytetrafluoroethylene dry film protective coating and lubricant. Any coating in contact with potable water must be NSF approved. Anchor pins, when specified on the Drawings shall be 316 SS. Buried couplings shall be double wrapped with polyethylene per AWWA C105. The flange coupling adapter shall be rated for 260 psi and shall be a FCA501 as manufactured by Romac Industries or Hymax or approved or equal.

I. Flange Coupling Adapters (14" and greater).

Flange coupling adapters flange body shall be carbon steel with minimum yield of 30,000 psi. End rings shall be contoured rolled mill section carbon steel per ASTM A536, gaskets shall be SBR per ASTM C2000 MBA 710, NSF 61 approved. Bolts and nuts shall be trackhead bolts, heavy hex nuts, UNC 5/8" rolled thread, high strength, and low alloy corrosion resistant steel per AWWA C111. All parts and pieces shall receive an 8 to 12 mil fusion bonded epoxy coating. T-Bolts and Nuts shall be coated with a polytetrafluoroethylene dry film protective coating and lubricant. Anchor pins, when specified on the Drawings shall be 316 SS. Buried couplings shall be double wrapped with polyethylene per AWWA C105. The flange coupling adapter shall match the maximum pressure rating of the flange and shall be a FCA400 as manufactured by Romac Industries or approved or equal.

J. Insulating Flange Sets

Flange insulation sets shall be utilized whenever two different metallic pipes are connected. The sets shall contain full-faced gaskets, full-length sleeves, and double washers. Insulation material for the flange insulation sets shall be phenolic resin and flanged-faced gaskets shall be neoprene-faced phenolic resin. All insulating materials shall be of a type designated by the manufacturer as suitable for use at operating pressures of 150 psi. Flange insulation sets shall be approved by **ENGINEER** prior to installation.

8.0 Valves & Valve Boxes

- A. Gate Valves: As Specified in Section 15110.
- G. Butterfly Valves: As Specified in Section 15110
- H. Valve Boxes: Christy G5 or approved equal shall be provided.

9.0 Service Clamps

- A. Service clamps shall be full circle type, AWWA approved for PVC or ductile iron pipe, of the size specified on the Drawings minimum rated working pressure of 250 psi. Saddles shall be fusion bonded epoxy lined and coated and straps and bolts shall be 304 stainless steel. Service Saddles shall be Mueller or approved equal. Service clamps shall be individual observed by the Engineer or Owners representative during install. The **CONTRACTOR** shall install with the use of a torque wrench and no power tools are allowed for service clamps.

10.0 Corporation Stops

- A. Corporation stops shall be ball valve, bronze conforming to ASTM B 61 (AP) or ASTM B 62, and suitable for a working pressure of 250 psi. Stop shall be lead free and NSF certified. Inlet end shall be IP threaded, outlet end shall be suitable for connection to PE plastic pipe, Mueller Ori Seal, or approved equal.

11.0 Tapping Sleeves

- A. Tapping sleeves: Shall be constructed of stainless steel rated to a pressure of 150 psi. Sleeves shall be Mueller or approved equal tapping sleeves.

12.0 Underground Warning Tape & Tracer Wire

- A. Underground warning tape shall be detectable metallic and minimum 3 inches wide. The tape shall be of the specific color and wording as indicated on the Drawings. Tracer wire shall be 12 gauge insulated solid copper insulated wire.

13.0 Chlorine Tablets & Adhesive

- A. OWNER will supply sodium hypochlorite 12.5% solution. Tablets not allowed.

14.0 Trenching, Bedding, And Backfill

- A. Requirements for trenching, excavation, bedding and backfill shall be as specified in Section 02315 of these Specifications; and as required by applicable permits and regulations; and as required by applicable safety codes.
- B. Pipe shall be laid on a shaped trench foundation or shaped bedding as required and with properly dug bell or coupling holes. Supporting pipe on blocks or mounds of earth or bedding material will not be permitted.

15.0 Handling

- A. Pipe, fittings and accessories shall be handled in a manner that will insure installation in a sound, undamaged condition. Equipment, tools, and methods used in unloading, reloading, hauling, and laying pipe and fittings shall be such that the pipe and fittings are not damaged. Hooks inserted in ends of pipe shall have broad, well-padded contact surfaces. No unpadded hooks or wire brushes shall be permitted to contact plastic lining. Pipe and fittings in which lining has been broken, split, or loosened shall be replaced by and at the expense of the **CONTRACTOR**. Where damaged areas are small and readily accessible, the **CONTRACTOR** may be permitted to repair the lining in accordance with the manufacturer's instructions.

16.0 Cutting

- A. Cutting and machining of pipe shall be accomplished in accordance with the pipe manufacturer's standard recommendations. Pipe shall not be cut with a cold chisel, flame, standard iron pipe cutter, nor any other method that may fracture the pipe, produce ragged, uneven edges, or split the pipe end. Cut ends shall be machined smooth to the proper dimensions.

17.0 Pipe Laying

- A. The pipe shall be laid to the lines shown on the Drawings and specified herein and the sections shall be closely jointed to form a smooth flow line. Immediately before placing each section of pipe in final position, the bedding shall be checked by the **ENGINEER** or his designated representative for firmness and uniformity of surface. Vertical deviations shall be field fit by **CONTRACTOR** and at no time shall vertical curve radii exceed manufacturer's recommendations. **CONTRACTOR** shall supply and install vertical elbows as required to maintain minimum depth requirements.
- B. The radius of curvature of the trench that can be used without exceeding the allowable deflection shall be as specified by the pipe manufacturer. The deflection at any flexible joint shall not exceed that prescribed by the manufacturer of the pipe. The manufacturer's printed installation guide outlining the radii of curvature that can be negotiated with pipe sections of various lengths shall be followed.
- C. Proper implements, tools, and facilities as recommended by the pipe manufacturer's standard printed installation instructions shall be provided and used by the **CONTRACTOR** for safe and efficient execution of the work. All pipe, fittings, valves, and accessories shall be carefully lowered into the trench by means of derrick, ropes, or other suitable equipment in such a manner as to prevent damage to pipe and fittings. Under no circumstances shall pipe or accessories be dropped or dumped into the trench.
- D. The pipe and accessories shall be inspected for defects prior to lowering into the trench. Any defective, damaged, or unsound pipe shall be repaired or replaced. All foreign matter or dirt shall be removed from the interior of the pipe before lowering into position in the trench. Pipe shall be kept thoroughly clean during and after laying. All openings on the pipe line shall be closed with watertight expandable type sewer plugs or test plugs at the end of each day's operation or whenever the pipe openings are left unattended. The use of burlap, wood, or other similar temporary plugs will not be permitted.

18.0 Jointing

- A. The bell end of the pipe shall contain a rubber gasket.
- B. The gasket and the gasket seat (if applicable) inside the bell shall be wiped clean before the gasket is inserted. At this time a thin film of lubricant shall be applied to the gasket and to the outside of the clean pipe end. Lubricant other than that furnished with the pipe shall not be used. The end of the pipe shall be then be inserted carefully into the bell to complete the joint. The use of the backhoe bucket or similar to force the pipe together will not be allowed.
- C. The assembly of the joint shall be made in accordance with the printed recommendations of the manufacturer. This shall be accomplished with an assembly tool if so recommended by the manufacturer, so that the resulting position of the sleeve shall be such that it is centered over pipe ends. Insert the pipe so that the stop line is flush with the bell end. **Any section of pipe where the stop line is not visible after insertion will be automatically rejected.** Field cut pipe shall be marked with a stop line prior to insertion. After assembling the coupling, the rubber gasket location shall be checked with a suitable gauge. Gaskets for the full circumference of the pipe shall be located at a distance from the bell end as recommended

by the manufacturer of the couplings. If the distance does not fall within required limits, the joint shall be disassembled and reassembled in an acceptable manner.

- D. When pipe laying is not in progress, the open end of the pipe shall be closed by approved means to prevent trench water from entering pipe. Adequate backfill shall be deposited on pipe to prevent floating of pipe. Any pipe which has floated shall be removed from the trench, cleaned, and relaid in an acceptable manner. No pipe shall be laid when, in the opinion of the **ENGINEER**, the trench conditions or weather are unsuitable for such work.
- E. The lubricant used in the installation of sealing gaskets shall be suitable for use in potable water be NSF 61 Certified and shall be acceptable to the pipe manufacturer. It shall be submitted for approval in the submittal process and delivered to the job site in enclosed containers and shall be kept clean.

19.0 Installation of Fittings

- A. Fittings shall be installed utilizing standard installation procedures. Fittings shall be lowered into trench by means of rope, cable, chain, or other acceptable means without damage to the fittings. Cable, rope, or other devices used for lowering fitting into trench, shall be attached around exterior of fitting for handling. Under no circumstances shall the cable, rope, or other device be attached through the fitting's interior for handling. Fitting shall be carefully connected to pipe or other facility, and joint shall be checked to insure a sound and proper joint.

20.0 Thrust Blocking

- A. Thrust blocks shall be installed such that they bear against the pipe fitting (not the pipe) on one side and against undisturbed earth on the other side.
- B. Thrust block concrete shall not obstruct removal of flange bolts from fittings. Concrete shall be prevented from adhering to the fittings. Either a liquid bond breaker shall be applied to the fitting, or an impervious membrane (plastic, building paper, etc.) shall be used.
- C. Concrete thrust blocking shall be provided at all tees, elbows, wyes, caps, valves, hydrants, reducers, and other points of unbalanced thrust. Thrust blocking shall be poured so the thrust surface bears against undisturbed soil.
- D. Thrust block shall also be utilized where restrained joints are specified when indicated on the Drawings.

21.0 Installation of Valve Boxes

- A. All buried valves (and corporation stops when indicated on the Drawings) shall be installed with valve boxes.
- B. Valve Boxes: Center the valve boxes and set plumb over the wrench nuts of the valves. Set valve boxes so that they do not transmit shock or stress to the valves. Set the valve box covers flush with the surface of the finished pavement as shown or such other level as may

be ordered by the **ENGINEER**. Cut extensions to the proper length so that the valve box does not ride on the extension when set at grade.

- C. Backfill shall be the same as specified for the adjacent pipe. Place backfill around the valve boxes and thoroughly compact to a density equal to that specified for the adjacent trench and in such a manner that will not damage or displace the valve box from proper alignment or grade. Misaligned valve boxes shall be excavated, plumbed, and backfilled at the Contractor's expense.

22.0 PVC Pressure Testing-New Pipe

A. General

1. The entire pressure pipeline shall be subjected to a pressure/leakage test in accordance with AWWA C605 and the following procedure:
2. All appurtenances of the entire main line, including service saddles and corporation stops, shall be installed prior to testing. The pipeline shall be tested at a pressure equal to the class of pipe or 50 psi over working pressure, whichever is greater. Minimum Test Pressure 200 psi for a period of 2 hrs. The tests shall be made in the presence of the **ENGINEER** or his representative.
3. The line shall then be allowed to stand for one hour without the addition of water and the pressure recorded at the end of that hour.

4. The initial test pressure shall then be restored by addition of water and the quantity of water added to reach test pressure accurately measured and recorded. The quantity added shall not exceed that allowed by the following formula;

$$Q \text{ (gallon/hour)} = \text{Length (ft)} \times \text{Diameter (inches)} \times \text{SQRT}(\text{Pressure (psi)})/148,000$$

Should the leakage exceed the specified amount or should leaks be otherwise noted, the **CONTRACTOR** shall locate points of leakage, rework the line and again test the line.

5. Except where otherwise required by permits or the direction of the **ENGINEER**, it is intended that the pressure/leakage test be conducted with the trench backfilled.
6. All tools, pumps, fill points, gauges, meters, temporary valves and bulkheads, bracing, and other equipment needed for testing shall be provided by the **CONTRACTOR** at his expense and shall be subject to approval by the **ENGINEER**. Disposal of test water shall be as specified for disposal of flushing water. The test pressure shall be measured at the low point of each test section.

B. Measurement of Leakage

1. Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe, or any valved section thereof, to maintain pressure within 5 psi (0.35 Bar) of the specified test pressure after the air in the pipeline has been

expelled and the pipe filled with water. The quantity of water supplied to maintain pressure shall be quantified by means of a positive displacement measurement from a reservoir of known volume. Leakage shall not be measured by a drop in pressure in a test section over a period of time.

C. Allowable Leakage

1. No pipe installation will be accepted if the leakage for the section of the line that is tested is greater than allowed by the Standard Specifications.
2. If the test leakage in any section is greater than permitted, the **CONTRACTOR** shall, at his own expense, locate and repair the defective materials until the leakage is within the permitted allowance. All visible leaks shall be repaired regardless of the amount or rate of leakage.
3. Disinfection of water mains shall be accomplished in accordance with all the requirements set forth in AWWA C651 unless otherwise specified herein.

23.0 Ductile Iron Pressure Testing-New Pipe

A. General

1. The entire pressure pipeline shall be subjected to a pressure/leakage test in accordance with AWWA C600 and the following procedure:
2. Sections of the line not exceeding 1,000 feet in length shall be tested by first filling the line with water and allowing the section to stand under slight pressure for 24 hours. The installation of saddles and taps in the main strictly for the purpose of pressure testing is not allowed unless approved by the **ENGINEER**.
3. The pressure shall then be raised and held at the test pressure (at the lowest point) by the addition of water for a minimum of two hours at the following test pressures;

Pressure Class 350 150 psi

4. The line shall then be allowed to stand for one hour without the addition of water and the pressure recorded at the end of that hour.
5. The initial test pressure shall then be restored by addition of water and the quantity of water added to reach test pressure accurately measured and recorded. The quantity added shall not exceed that allowed by the following formula;

$$Q \text{ (gallon/hour)} = \text{Length (ft)} \times \text{Diameter (inches)} \times \text{SQRT(Pressure (psi))/148,000}$$

Should the leakage exceed the specified amount or should leaks be otherwise noted, the **CONTRACTOR** shall locate points of leakage, rework the line and again test the line.

6. Except where otherwise required by permits or the direction of the **ENGINEER**, it is intended that the pressure/leakage test be conducted with the trench backfilled.
 7. All tools, pumps, fill points, gauges, meters, temporary valves and bulkheads, bracing, and other equipment needed for testing shall be provided by the **CONTRACTOR** at his expense and shall be subject to approval by the **ENGINEER**. Disposal of test water shall be as specified for disposal of flushing water. The test pressure shall be measured at the low point of each test section.
- B. Measurement of Leakage
1. Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe, or any valved section thereof, to maintain pressure within 5 psi (0.35 Bar) of the specified test pressure after the air in the pipeline has been expelled and the pipe filled with water. The quantity of water supplied to maintain pressure shall be quantified by means of a positive displacement measurement from a reservoir of known volume. Leakage shall not be measured by a drop in pressure in a test section over a period of time.
- C. Allowable Leakage
1. No pipe installation will be accepted if the leakage for the section of the line that is tested is greater than allowed by the Standard Specifications.
 2. If the test leakage in any section is greater than permitted, the **CONTRACTOR** shall, at his own expense, locate and repair the defective materials until the leakage is within the permitted allowance. All visible leaks shall be repaired regardless of the amount or rate of leakage.
 3. Disinfection of water mains shall be accomplished in accordance with all the requirements set forth in AWWA C651 unless otherwise specified herein.

24.0 Disinfection and Cleanliness

- A. Disinfection of water mains shall be accomplished in accordance with all the requirements set forth in AWWA C651 and as specified herein.
- B. Precautions shall be taken to protect pipe interiors, fittings, and valves against contamination. Pipe delivered for construction shall be strung so as to minimize entrance of foreign material. When pipe laying is not in progress, for example, at the close of the day's work, all openings in the pipeline shall be closed by water tight plugs. Joints of all pipe in the trench shall be completed before work is stopped. If water accumulates in the trench, the plugs shall remain in place until the trench is dry.
- C. If dirt that, in the opinion of the **ENGINEER**, will not be removed by flushing enters the pipe, the interior of the pipe shall be cleaned and swabbed as necessary with a 5 percent hypochlorite disinfecting solution.

- D. No contaminated material capable of supporting prolific growth of micro-organisms shall be used for sealing joints. Packing material shall be handled in such a manner as to avoid contamination.

25.0 Disinfection-New Pipe

- A. Best practice is to keep all stockpiled and installed pipes and fittings clean at all times. Before being placed in service, the entire main line shall be pre-flushed if determined by ENGINEER and then chlorinated by the CONTRACTOR. Chlorine shall be applied by the following methods: Sodium hypochlorite water mixture, unless the District Engineer approves another method. Tablets are not allowed. The chlorinating agent shall be applied at the beginning of each section adjacent to the feeder connection and shall be injected through a corporation stop, hydrant, or other connection ensuring treatment of the entire line. Provide backflow protection on Fire Hydrants and dedicated disinfected hoses, fittings and appurtenances. Only certified potable water trucks may be used when a hydrant is not available. Test points are required every 300 feet along the line being tested with no less than two (2) test points for sections of less than 300 feet. Water shall be fed slowly into the line with chlorine applied in amounts to produce a dosage of 50 parts per million. Portions of the existing mains, which have been connected to a new line or otherwise contaminated by construction, shall be included in the system being sterilized. The solution shall remain in the line for a minimum of 24 hours. A residual of not less than 10 parts per million shall be produced in all parts of the line after the 24-hour period. During the chlorination process, all in line valves shall be operated. Chlorine samples are to be taken at pipeline ends and every 300' in between.
- B. OWNER will supply sodium hypochlorite 12.5% solution. Tablets not allowed. CONTRACTOR shall provide equipment to mix chlorine and ensure even mixing throughout the pipe. Pool or Spa chemicals shall not be used.
- C. Pressure test will not test back against any closed valve. Pressure test will not test back against any valve in the existing water system. Pressure test requires air gap between existing system and new pipe.
- D. During tie-ins sections of pipe used to make tie-ins will be kept clean and swabbed with a 1% min. hypochlorite solution.
- E. 16-hour Bac-T tests to occur only Monday-Wednesday.
- F. Samples to be taken no later than 3pm
- G. Final Flushing. After the applicable retention period, the heavily chlorinated water shall be flushed with potable water from the main until the chlorine concentration in the water leaving the main is no higher than that generally prevailing in the system, or less than 1 mg/l. Chlorine residual determination shall be made to ascertain that the heavily chlorinated water has been removed from the pipeline. **CONTRACTOR** shall conduct chlorine resident test in the presence of the **ENGINEER's** designated representative or designated Utility personnel. **CONTRACTOR** shall obtain any discharge permits required for the surface discharge of the flushing water from the Nevada Division of Environmental Protection and shall dechlorinate the water as required.

- H. Bacteriologic Testing shall comply with AWWA C651-05, NAC 445A.67145 and NAC 445A.67265 which requires two sets of samples taken at least 24 hours apart from each test section (as outlined in Section 02510, Part 27.0.F). After final flushing and before the water main is connected and placed in service, the **CONTRACTOR** shall collect representative sample on each end and over the entire length of the main at existing access points (approximate 1,200 foot intervals or as otherwise allowed by the **ENGINEER**) and test for bacteriologic quality and shall show the absence of coliform organisms. The installation of saddles and taps in the main strictly for the purpose of sampling is not allowed unless approved by the **ENGINEER**. Test shall be performed by a laboratory certified by the State of Nevada.
- I. If the initial disinfection fails to produce satisfactory samples, disinfection shall be repeated until satisfactory samples have been obtained. The tablet method cannot be used in these subsequent disinfections, and the continuous feed or slug method of chlorination shall be used. IVGID must obtain WCHD approval before placing any portion of a water project in service.

26.0 Disinfection-Cutting into or Repairing Existing Mains and Final Connections

- A. Shall comply with AWWA C651.
- B. Trench Treatment. Wet excavations shall be treated with liberal amounts of hypochlorite tablets.
- C. Swabbing with Hypochlorite Solution. The interior of pipe, valves, fittings and appurtenances shall be swabbed, sprayed and/or dipped with a NSF 60 approved 1 percent hypochlorite solution. Valves shall be disinfected both in the open and closed positions.
- D. Cleanliness. Every effort shall be made to prevent any water, soil or other contamination from entering into the pipe, fittings or appurtenances at any time.
- E. Flushing. The pipe shall be thoroughly flushed immediately after completion of the work and shall be continued until discolored water is eliminated. If valve and hydrant locations permit, flush toward the work location from both directions.
- F. If, in the sole opinion of the **ENGINEER**, **CONTRACTOR** has not strictly adhered to the above requirements, **ENGINEER** will require that **CONTRACTOR**, at his cost, properly obtain representative samples for bacteriological testing at several locations surrounding the work area following flushing and then delivering them to a State of Nevada Certified laboratory. The **CONTRACTOR** will also be required to perform duplicate sampling after 24 hours of collecting the first set of samples from the same previous sample points. Positive results will require additional flushing and sampling, and possible boil water order, the cost of which will all be borne by the **CONTRACTOR**.

Section 02533
DUCTILE IRON PIPE

1.0 General

- A. The **CONTRACTOR** shall furnish all materials, equipment, and services for the complete installation of ductile iron pipe. Ductile iron pipe shall be installed in the locations and of the sizes shown on the Drawings.

2.0 Materials

A. Ductile Iron Pipe

1. Unless otherwise specified or shown on the Drawings, ductile iron pipe shall be Pressure Class 350 (4"-12") or Pressure Class 250 (14"-20") and shall conform to the standard for "Ductile Iron Pipe, Centrifugally Cast, for Water, AWWA C151".
2. Ductile iron pipe shall be cement mortar lined in accordance with the standard for "Cement Mortar Lining for Ductile Iron Pipe and Fittings for Water, AWWA C104".
3. Ductile iron pipe installed below grade shall employ either mechanical joints, push-on joints or flange joints conforming to the standard for "Rubber Gasket Joints for Ductile Iron Pressure Pipe and Fittings, AWWA C111" as indicated on the Drawings.
4. Ductile iron pipe installed above grade shall employ flanged joints conforming to the standard for "Flanged Ductile Iron Pipe with Ductile Iron or Gray Iron Threaded Flanges, AWWA C115".
5. Testing of ductile iron pipe shall be in accordance with Section 02510 of these Specifications.
6. All buried ductile iron pipe shall be wrapped in polyethylene in accordance with AWWA C105.

B. Fittings

1. Unless otherwise specified or shown on the Drawings, all fittings to be used with ductile iron pipe shall conform to the standard for "Ductile Iron and Gray Iron Fittings, 3-inch through 48 inch, for Water and Other Liquids, AWWA C110". All ductile iron pipe fittings shall be lined with cement mortar in accordance with the requirements of the standard for "Cement Mortar Lining for Ductile Iron Pipe and Fittings for Water, AWWA C104". All above grade fittings and joint connections shall be thoroughly cleaned and coated in accordance with Section 09973 of these Specifications. Mechanical joint fittings shall be restrained with EBAA Megalug Series 1100 or **ENGINEER** approved equal where indicated on the Drawings.
2. All buried ductile iron fittings shall be wrapped in polyethylene in accordance with AWWA C105.
3. Unless specifically indicated otherwise, all buried nuts, bolts and T Heads shall be

supplied with a factory applied fluoropolymer coating. The coating shall be low friction, wear and corrosion resistant. Any coated bolts, nuts or T Heads damaged during installation shall be removed from the job site and replaced. Coating system shall be Tripac 2000, or Equal.

3.0 Installation

- A. Ductile iron pipe shall be installed in accordance with the standard for “Installation of Ductile Iron Water Mains and their Appurtenances, AWWA C600”, and the manufacturer’s recommendations except as otherwise provided herein or shown on the drawings.
- B. All damaged or defective ductile iron pipe and appurtenances shall be rejected and removed from the Project Site.
- C. Transition couplings shall be in accordance with Section 15120 of these Specifications.
- D. Ductile pipe installation shall conform to the applicable part of Section 02315. Trenches shall be in a reasonably dry condition when the pipe is laid. The **CONTRACTOR** shall employ dewatering methods as required to maintain the trench in a reasonably dry condition. Necessary facilities shall be provided by the **CONTRACTOR** for lowering and properly placing the pipe sections into the trench without damage. The pipe shall be laid carefully to the lines and grades, or to the minimum depths shown on the drawings, and the sections shall be closely jointed to form a smooth flow line.
- E. The maximum allowable joint deflection for push-on type joint and mechanical joint pipe shall be as follows:

Pipe Size	Deflection Angle Degree	Maximum Offset (inches)		Radius of Curve (feet)	
		18 ft. Length	20 ft. Length	18 ft. Length	20 ft. Length
Push-On Type Joint					
4” – 12”	2.5	9	10	415	460
Mechanical Joint Pipe					
4”	4.0	15	17	260	290
6”	3.5	13	15	295	330
8” – 12”	2.5	9	10	415	460
14” – 36”	3.0	11	12	340	380

Section 02536
POLYVINYL CHLORIDE PRESSURE PIPE

1.0 General

- A. This specification designates general requirements for Polyvinyl Chloride (PVC) pressure pipe. The **CONTRACTOR** shall furnish all materials, equipment, and services for the complete installation of PVC pressure pipe. PVC pressure pipe shall be installed in the locations and for the sizes and pressure classes shown in the Plans.

2.0 Materials (2" – 3")

- A. Pipe

The materials shall meet ASTM D1784 cell class 12454B and manufactured in accordance with ASTM 02241 (pressure rating 160 and 200) or ASTM D1785 (schedule 40). Pipe shall be furnished in 20 foot laying lengths.

- B. Joints

Joints shall be either solvent weld joints or restrained gasketed joints. Elastomeric gaskets shall meet the requirements of the "Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe, ASTM F477".

- C. Fittings

Fittings shall be either solvent weld or restrained gasketed. Fittings shall carry the same pressure ratings as the pipe to which they are being utilized on.

3.0 Materials (4" – 12")

- A. Pipe

Unless otherwise specified or shown on the Drawings, polyvinyl chloride pressure pipe, 4 inches through 12 inches, shall be DR 14 and shall conform to the "Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 inches through 60 inches, AWWA C900". Polyvinyl chloride pressure pipe shall have been manufactured within the 18 month period prior to installation. Polyvinyl chloride pressure pipe shall be date coded by the manufacturer with the **ENGINEER** being provided the manufacturer's code for translation. Manufactured by Diamond Plastics or equal.

- B. Joints

Unless indicated otherwise on the Plans, joints shall be integral bell and spigot with a solid cross section elastomeric ring. Joints shall meet the requirements of AWWA C900. Elastomeric rings shall conform to the "Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe, ASTM F477".

- C. Fittings

Unless otherwise specified or shown on the Drawings, all fittings to be used with polyvinyl chloride pressure pipe, 4 inches through 12 inches, shall conform to the standard for "Ductile

Iron and Gray Iron Fittings, 3 inches through 48 inches, for Water and Other Liquids, AWWA C110". All cast iron fittings shall be lined with cement mortar in accordance with the requirements of the Standard for "Cement Mortar Lining for Ductile Iron Pipe and Fittings for Water, AWWA C104".

Fittings shall be wrapped in polyethylene in accordance with AWWA C105.

Fittings shall be restrained with Megalug Series 2000 by EBAA Iron, Inc., or **ENGINEER** approved equal where indicated on the Drawings.

Unless specifically indicated otherwise, all buried nuts, bolts and T Heads shall be supplied with a factory applied fluoropolymer coating. The coating shall be low friction, wear and corrosion resistant. Any coated bolts, nuts or T Heads damaged during installation shall be removed from the job site and replaced. Coating system shall be Tripac 2000, or Equal.

4.0 Installation

- A. Polyvinyl chloride pressure pipe shall be installed in accordance with "Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water, AWWA C605", and the manufacturer's recommendations except as otherwise provided herein or shown on the Drawings.
- B. Polyvinyl chloride pressure pipe showing signs of physical damage or unacceptable ultraviolet exposure as determined through visual inspection by the **ENGINEER** will be rejected.
- C. Polyvinyl chloride pressure pipe shall be deflected uniformly throughout each pipe length. Deflection shall be accomplished by staking the pipe on both sides of the joint so that deflection at the joint is minimized. The maximum allowable pipe deflection for factory belled pipe shall be as follows:

Pipe Size	Maximum Offset (inches)	Minimum Radius of Curvature for 20' Lengths
4"	24"	100'
6"	17"	144'
8"	12"	189'
10"	11"	231'
12"	9"	275'
14"	10"	255'
16"	8"	290'
18"	7"	325'
20"	7"	360'
24"	6"	430'

- D. Testing of PVC pressure pipe shall be in accordance with Section 02510 of these specifications.

Section 02539
High Density Polyethylene Pipe

1.0 General

- 1.1 This section covers the requirements for High Density Polyethylene Pipe (HDPE) Pressure Pipe.
- 1.2 HDPE pressure pipe shall be installed in the locations and for the sizes and pressure classes shown on the Plans.
- 1.3 The manufacturer shall provide an Affidavit of Compliance to the **ENGINEER** that all materials provided on the Project comply with the requirements of the applicable AWWA standard. Quality Control records corresponding to the pipe furnished on the Project shall be attached to the Certificate of Compliance. These items shall be submitted prior to the delivery of any material to the Project or as approved by the **ENGINEER**.

2.0 Materials (1/2" – 3")

2.1 Pipe

HDPE pipe shall be SDR 9, 200 psi rated. HDPE pipe shall be produced to the dimensions and tolerances specified in ASTM F-714, AWWA C901 and NSF 61. The pipe shall be homogenous throughout and free of visible cracks, holes, voids, foreign inclusions, and shall be identical in color, density, melt index, and other physical properties throughout.

2.2 Joints

Unless otherwise indicated, the HDPE pipe and fittings shall be jointed by the heating and butt fusion method utilizing a hydraulic fusion machine.

2.3 Fittings

HDPE pipe fittings shall be standard commercial products manufactured by injection molding or by exclusion and machining. The fittings shall be pressure rated by the manufacturer to provide a working pressure equal to the pipe.

3.0 Materials (4" & Larger)

3.1 Pipe

The pipe shall comply with ASTM F714, AWWA C906 and NSF 61. HDPE pressure pipe shall meet the requirements for PE3408 as defined in ASTM D-3350. The materials shall be formulated with carbon black. Markings shall include manufacturer, nominal size, materials code, fabrication date, DR, pressure class and AWWA C906. The pipe shall be IPS sized and the DR rating shall be as indicated on the Drawings.

3.2 Joints

Unless otherwise indicated, the HDPE pipe and fittings shall be jointed by the heating and butt fusion method utilizing a hydraulic fusion machine. Mechanical joining of polyethylene pipe and/or fittings where so specified in the Drawings shall be achieved by use of a polyethylene flange adaptor and back-up ring. The polyethylene flange adaptor

shall be of the same specifications as the pipe except will be made from black plate stock.

3.3 Fittings

HDPE pressure fittings shall meet the requirements set forth in ASTM D-1248 and D-3350. Fittings shall carry the same pressure rating as the pipe to which they are joined. At the point of fusion, the O.D. and minimum wall thickness shall match the O.D. and the minimum wall thickness for the same pipe size.

4.0 Installation

4.1 HDPE pipe shall be installed in strict accordance with the manufacturer's recommendations and the specifications. Plate temperatures, heating times, manufacturer's specifications and recommendations shall take into consideration actual local climatic conditions.

4.2 Heating and pressure shall be recorded at each joint utilizing a data logger device such as a McElroy Wired Data Logger. The records shall be provided regularly to the **ENGINEER**.

4.3 The minimum allowed bending radius shall conform with the following:

<u>DR</u>	<u>Minimum Radius (in diameters)</u>
32.5	20
26	18
21	16
17	13
15.5	12
11 and lower	10

4.4 Any pipe that is nicked, gouged or otherwise damaged during the installation shall be cut out and replaced.

5.0 Qualification Procedure

5.1 Any person jointing polyethylene pipe shall have received formal training approved by the pipe manufacturer in each of the fusion procedures required for the Project. Such person must show written documentation to the **ENGINEER** that shows satisfactory completion of such training.

5.2 Any person joining polyethylene pipe may be required to make a sample joint for each procedure he uses at any time. Each sample joint must pass the following inspections and tests:

A. Pressure and tensile testing as described in Section 192.283, CFR,

B. Ultrasonically inspected and found not to contain flaws, or

C. Cut into at least three strips, each of which is:

1. Visually examined and found free of voids or discontinuity on the cut surface

of the joint.

2. Deformed by bending, torque or impact, and if failure occurs, must not initiate in the joint area.
- 5.3 A person must be re-qualified under an applicable procedure during a 12 month period if that person:
- a. Does not make any joints under the procedure.
 - b. Has three joints or 3% of the joints made, whichever is greater, that are found to be acceptable by paragraph 192.513, CFR.

6.0 Testing

6.1 Joints

Bend back testing to verify joint fusion integrity may be required by the **ENGINEER** or Resident Project Representative of any joint.

The maximum allowable misalignment variance of a joint will be 10% of the pipe wall thickness. Any joint exceeding 10% will be rejected.

6.2 Pressure Testing

Testing of HDPE pressure pipe shall be in accordance with Section 02510 of these Specifications.

Section 15110 VALVES

1.0 General

- A. The term “valves” as used in this section shall refer to all valves specified within these Specifications.
- B. The **CONTRACTOR** shall furnish all valves in accordance with the Drawings and Specifications. All valves, including component parts thereof, shall equal or exceed the requirements set forth herein, and shall be manufactured by a firm normally engaged in the manufacture of such valves. All valves furnished for the Work shall be new and shall be currently under manufacture. Valves discontinued by the manufacturer as of the Bid opening date will not be acceptable.
- C. All valves shall be designed for a minimum water working pressure that equals or exceeds the working pressure of the pipe that the valve is being installed in unless otherwise indicated and as approved by the **ENGINEER**.
- D. The **CONTRACTOR** shall install and test all valves furnished in conformance with the Contract Documents.
- E. Valves shall be furnished with flanged ends, hub ends, mechanical joint ends, or any combination thereof as required by the Drawings or these Specifications.
- F. Valve flanges may be raised or plain faced with either a smooth or serrated finish and shall be faced and drilled to ANSI B 16.1, Class 125/150 cast iron flange dimensions unless otherwise shown on the Drawings or specified in these Specifications.
- G. Shop Drawings for each valve type shall be furnished in accordance with Section 01300 of these Specifications. Shop Drawings shall be submitted with the valve operator in the position and orientation as shown on the Drawings.
- H. All exposed valves shall be provided with an exterior protective coating. Buried valves shall receive the standard manufacturer’s coating for buried service and shall be wrapped in polyethylene.
- I. All valve operators shall turn clockwise to close.
- J. Pressure rating and manufacturer’s name shall be cast on each valve body.
- K. Valves of the same type shall be of one manufacturer.
- L. All valves shall be NSF 61 Certified.

2.0 Gate Valves

- A. Gate Valves, 3” and Smaller

Gate valves, 3 inches and smaller, shall be of non-rising stem design with brass or bronze solid wedge disc rated for 150 psi (unless indicated otherwise) and with screwed ends.

- B. Resilient Wedge Gate Valves, 4” through 12”
1. Resilient wedge gate valves and component parts thereof shall conform to the following standards, except as otherwise specified in these Specifications:
 - a. AWWA C515, Resilient-Wedge Gate Valves for Water Supply Service
 - b. ASTM B 62, Composition Bronze or Ounce Metal Castings
 - c. AWWA C550, Protective Interior Coatings for Valves and Hydrants
 2. Gate valves shall be of the iron-bodied, non-rising stem type with O-ring stem seals and shall be rated at 350 psi.
 3. All interior parts of the gate valve, except the valve body and stem, shall be made of bronze conforming to the requirements of ASTM B 62. Valve stems shall be of bronze containing not more than 5% of zinc, not more than 2% of aluminum, and shall have a minimum tensile strength of 60,000 psi, a yield strength of 40,000 psi, and an elongation of at least 10% in two inches, as determined by a test coupon poured from the same ladle from which the valve stems to be furnished are poured.
 4. Gate valves shall be suitable for installation in the vertical or horizontal position.
 5. Gate valves shall have the bonnet connected to the body by means of bolts and nuts or studs which are cadmium-plated steel or stainless steel 304 or 316. Type II Service Class I zinc-plated bolts are also acceptable.
 6. Non-buried valves shall be provided with manual hand wheels. All non-buried actuators shall provide external indication of disc position. Buried service valves shall have a buried service actuator with 2-inch square operating nut sized to operate with a maximum input of 150 foot pounds.
 7. Resilient-wedge gate valves shall be as manufactured by Mueller, or **ENGINEER** approved equal.

3.0 Combination Air Release Valves

A. The combination air release valve shall be single body double orifice and comply with AWWA C-512. The body inlet shall be baffled to protect the float from direct forces of rushing air and water to prevent premature valve shut off. The seat must be fastened to the valve cover without distortion for drop tight shut off. The floats shall be hermetically sealed. The plug or float shall be center guided through hex bushings for positive shut off. Valve exterior shall be painted with an NSP approved primer. Each valve shall be equipped with a drain plug.

B. The materials of construction shall be as follows:

Body and Cover	Cast Iron per ASTM A126 GR B
Float	Heavy Stainless Steel per ASTM A240
Needle & Seat	Buna-N
Plug	Bronze per ASTM B124
Leverage Frame	Delrin/Cast Iron per ASTM D2133/ASTM A126 GR B

- C. Minimum working pressure rating shall meet or exceed the pressure class rating of the pipe that the valve is being installed on.
- D. The combination air release valve shall be DeZurik-APCO, Crispin Model UL or **ENGINEER** approved or Equal.

**INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT
PROFESSIONAL SERVICES AGREEMENT**

1. PARTIES AND DATE.

This Agreement is made and entered into as of **Date**, by and between the Incline Village General Improvement District, a Nevada general improvement district (“District”) and **Shaw Engineering, Ltd.**, a domestic corporation, with its principal place of business at 20 Vine Street, Reno, Nevada (“Consultant”). The District and Consultant are sometimes individually referred to as “Party” and collectively as “Parties.”

2. RECITALS.

2.1 District. District is a general improvement district organized under the laws of the State of Nevada, with power to contract for services necessary to achieve its purpose.

2.2 Consultant. Consultant desires to perform and assume responsibility for the provision of certain professional services required by the District on the terms and conditions set forth in this Agreement. Consultant represents that it is experienced in providing engineering design services to public clients, is licensed in the State of Nevada, and is familiar with the plans of District.

2.3 Project. District desires to engage Consultant to review contractor submittals, attend preconstruction conference, respond to RFI’s or other questions that may arise during construction, perform periodic observation during the construction, perform a substantial completion walkthrough, develop punch list, and provide record drawings to owner and NDEP-BSDW for the District’s Crystal Peak Watermain Replacement Project (“Project”).

3. TERMS.

3.1 Scope of Services and Term.

3.1.1 General Scope of Services. Consultant promises and agrees to furnish to the District, all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the Project design services necessary for the Project (“Services”). The types of services to be provided are more particularly described in Exhibit A attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations. As described in Section 3.3, the District shall pay for such services in accordance with the Schedule of Charges set forth in Exhibit B.

3.1.2 Term. The term of this Agreement shall be from April 29, 2023 to October 15, 2023, unless earlier terminated as provided herein. The Parties may, by mutual, written consent, extend the term of this Agreement if necessary to complete the Project.

3.2 Responsibilities of Consultant.

3.2.1 Control and Payment of Subordinates; Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement and such directions and amendments from District as herein provided. The District retains Consultant on an independent contractor basis and not as an employee. No employee or agent of Consultant shall become an employee of District. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall also not be employees of the District and shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Consultant shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

3.2.2 Schedule of Services. Consultant shall perform its services in a prompt and timely manner within the term of this Agreement and shall commence performance upon receipt of written notice from the District to proceed ("Notice to Proceed"). The Notice to Proceed shall set forth the date of commencement of work.

3.2.3 Conformance to Applicable Requirements. All work prepared by Consultant shall be subject to the District's approval.

3.2.4 Substitution of Key Personnel. Consultant has represented to the District that certain key personnel will perform and coordinate the Services under this Agreement. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence subject to the District's written approval. In the event that the District and Consultant cannot agree as to the substitution of key personnel, the District shall be entitled to terminate this Agreement for cause. As discussed below, any personnel who fail or refuse to perform the Services in a manner acceptable to the District, or who are determined by the District to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project or a threat to the safety of persons or property, shall be promptly removed from the Project by the Consultant at the request of the District. The key personnel for performance of this Agreement are as follows: Cody Black, P.E.

3.2.5 District's Representative. The District hereby designates Kate Nelson, P.E., IVGID Engineering Manager, or her designee, to act as its representative for the performance of this Agreement ("District's Representative"). The District's Representative shall have the power to act on behalf of the District for all purposes under this Contract. Consultant shall not accept direction or orders from any person other than the District's Representative or his or her designee.

3.2.6 Consultant's Representative. Consultant hereby designates Cody Black, P.E., Principal Engineer, or his designee, to act as its representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to represent and act on behalf of the Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his best skill and attention, and shall

be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Services under this Agreement.

3.2.7 Coordination of Services. Consultant agrees to work closely with the District staff in the performance of Services and shall be available to the District's staff, consultants and other staff at all reasonable times.

3.2.8 Standard of Care; Performance of Employees. Consultant shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of Nevada. Consultant represents and maintains that it is skilled in the professional calling necessary to perform the Services. Consultant warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Finally, Consultant represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, including a Washoe County Business License, and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Consultant shall perform, at its own cost and expense and without reimbursement from the District, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein. Any employee of the Consultant or its sub-consultants who is determined by the District to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the District, shall be promptly removed from the Project by the Consultant and shall not be re-employed to perform any of the Services or to work on the Project.

3.2.9 Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, and shall give all notices required by law. If required, Consultant shall assist District, as requested, in obtaining and maintaining all permits required of Consultant by federal, state and local regulatory agencies. Consultant shall be liable for all violations of local, state and federal laws, rules and regulations in connection with the Project and the Services. If the Consultant performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the District, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold the District, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.2.10 Insurance.

3.2.10.1 Time for Compliance. Consultant shall not commence the Services under this Agreement until it has provided evidence satisfactory to the District that it has secured all insurance required under this section. In addition, Consultant shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the District that the subcontractor has secured all insurance required under this section.

3.2.10.2 Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance meeting the requirements set forth herein. Consultant shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(A) Minimum Limits of Insurance. Consultant shall maintain limits no less than: (1) *General Liability:* A minimum of \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit; (2) *Automobile Liability:* a minimum of \$1,000,000 combined single limit (each accident) for bodily injury and property damage; and (3) *Industrial Insurance:* Workers' Compensation limits as required by the Labor Code of the State of Nevada. Employer's Liability limits of \$1,000,000 per accident for bodily injury or disease; and (4) *Professional Liability/Errors and Omissions:* Consultant shall procure and maintain, and require its sub-consultants to procure and maintain, for a period of five (5) years following completion of the Services, professional liability/errors and omissions liability insurance appropriate to their profession. Such insurance shall be in an amount not less than \$1,000,000 per claim, and shall be endorsed to include contractual liability. "Covered Professional Services" as designated in the Professional Liability/Errors and Omissions policy must specifically include work performed under this Agreement.

Requirements of specific coverage or limits contained in this section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. Any available coverage shall be provided to the parties required to be named as additional insured pursuant to this Agreement. Defense costs shall be payable in addition to the limits.

3.2.10.3 Insurance Endorsements. The insurance policies shall contain the following provisions, or Consultant shall provide endorsements on forms supplied or approved by the District to add the following provisions to the insurance policies:

(A) Commercial General Liability. The commercial general liability policy shall be endorsed to provide the following: (1) the District, its directors, officials, officers, employees, agents and volunteers shall be covered as additional insureds; (2) the insurance coverage shall be primary insurance as respects the District, its directors, officials, officers, employees, agents and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, its directors, officials, officers, employees, agents and volunteers shall be excess of the Consultant's insurance and shall not be called upon to contribute with it in any way; and (3) the insurance coverage shall contain or be endorsed to provide waiver of subrogation in favor of the District, its directors, officials, officers, employees, agents and volunteers or shall specifically allow Consultant to waive its right of recovery prior to a loss. Consultant hereby waives its own right of recovery against District, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

(B) Automobile Liability. The automobile liability policy shall be endorsed to provide the following: (1) the District, its directors, officials, officers, employees, agents and volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Consultant or for which the Consultant is responsible; (2) the insurance coverage shall be primary insurance as respects the District, its directors, officials, officers, employees, agents and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, its directors, officials, officers, employees, agents and volunteers shall be excess of the Consultant's insurance and shall not be called upon to contribute with it in any way; and (3) the insurance coverage shall contain or be endorsed to provide waiver of subrogation in favor of the District, its directors, officials, officers, employees, agents and volunteers or shall specifically allow Consultant to waive its right of recovery prior to a loss. Consultant hereby waives its own right of recovery against District, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

(C) Industrial (Workers' Compensation and Employers Liability) Insurance. The insurer shall agree to waive all rights of subrogation against the District, its directors, officials, officers, employees, agents and volunteers for losses paid under the terms of the insurance policy which arise from work performed by the Consultant.

(D) All Coverages. Each insurance policy required by this Agreement shall be endorsed to state that: (A) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the District; and (B) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the District, its directors, officials, officers, employees, agents and volunteers.

3.2.10.4 Separation of Insureds; No Special Limitations. All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the District, its directors, officials, officers, employees, agents and volunteers.

3.2.10.5 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the District. Consultant shall guarantee that, at the option of the District, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, its directors, officials, officers, employees, agents and volunteers; or (2) the Consultant shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

3.2.10.6 Acceptability of Insurers. Insurance is to be placed with insurers duly licensed or authorized to do business in the state of Nevada and with an "A.M. Best" rating of not less than A-VII. The District in no way warrants that the above-required minimum insurer rating is sufficient to protect the Consultant from potential insurer insolvency.

3.2.10.7 Verification of Coverage. Consultant shall furnish the District with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to the District. The certificates and endorsements for each insurance policy shall be

signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms provided by the District if requested. All certificates and endorsements must be received and approved by the District before work commences. The District reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.2.10.8 Subconsultants. Consultant shall not allow any subcontractors or subconsultants to commence work on any subcontract until they have provided evidence satisfactory to the District that they have secured all insurance required under this section. Policies of commercial general liability insurance provided by such subcontractors or subconsultants shall be endorsed to name the District as an additional insured using ISO form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, District may approve different scopes or minimum limits of insurance for particular subcontractors or subconsultants.

3.2.10.9 Compliance with Coverage Requirements. If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, District has the right but not the duty to obtain the insurance it deems necessary and any premium paid by District will be promptly reimbursed by Consultant or District will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, District may terminate this Agreement for cause.

3.2.11 Safety. Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed.

3.3 Fees and Payments.

3.3.1 Compensation. Consultant shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement in accordance with the Schedule of Charges set forth in Exhibit B, attached hereto and incorporated herein by reference. The total compensation to be provided under this Agreement shall not exceed **Nine Thousand Six Hundred Dollars (\$9,600.00)** without written approval of District's Engineering Manager. Extra Work may be authorized, as described below; and if authorized, said Extra Work will be compensated at the rates and manner set forth in this Agreement.

3.3.2 Payment of Compensation. Consultant shall submit to District a monthly itemized invoice which indicates work completed and hours of Services rendered by Consultant. The invoice shall describe the amount of Services and supplies provided since the initial commencement date of Services under this Agreement, and since the start of the subsequent billing periods, through the date of the invoice. Invoices shall be sent to invoices@ivgid.org with a copy to rlr@ivgid.org. Consultant shall include a Project Task Tracking Sheet with each invoice submitted. District shall, within forty-five (45) days of receiving such invoice and Project Task Tracking Sheet, review the invoice and pay all approved charges thereon.

3.3.3 Reimbursement for Expenses. Consultant shall not be reimbursed for any expenses unless authorized under Exhibit B, or otherwise in writing by the District.

3.3.4 Extra Work. At any time during the term of this Agreement, the District may request that Consultant perform Extra Work. As used herein, "Extra Work" means any work which is determined by the District to be necessary for the proper completion of the Project, but which the Parties did not reasonably anticipate would be necessary at the execution of this Agreement. Consultant shall not perform, nor be compensated for, Extra Work without written authorization from the District's Representative. Where Extra Work is deemed merited by the District, an amendment to the Agreement shall be prepared by the District and executed by both Parties before performance of such Extra Work, or the District will not be required to pay for the changes in the scope of work. Such amendment shall include the change in fee and/or time schedule associated with the Extra Work. Amendments for Extra Work shall not render ineffective or invalidate unaffected portions of this Agreement.

3.4 Accounting Records.

3.4.1 Maintenance and Inspection. Consultant shall maintain accurate and complete books, documents, accounting records and other records pertaining to the Services for six (6) years (or longer as required by applicable law) from the date of final payment under this Agreement. Consultant shall make such records available to the District for inspection, audit, examination, reproduction, and copying at Consultant's offices at all reasonable times. However, if requested, Consultant shall furnish copies of said records at its expense to the District, within seven (7) business days of the request.

3.5 General Provisions.

3.5.1 Termination of Agreement.

3.5.1.1 Grounds for Termination. The District may, by written notice to Consultant, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Consultant of such termination, and specifying the effective date thereof, at least seven (7) days before the effective date of such termination. Upon termination, Consultant shall be compensated only for those services which have been adequately rendered to the District, and Consultant shall be entitled to no further compensation. Consultant may not terminate this Agreement except for cause. Consultant shall not be entitled to payment for unperformed Services, and shall not be entitled to damages or compensation for termination of this Agreement by District except for the amounts authorized herein.

3.5.1.2 Effect of Termination. If this Agreement is terminated as provided herein, the District may require Consultant to provide all finished or unfinished Documents and Data (defined below) and other information of any kind prepared by Consultant in connection with the performance of Services under this Agreement. Consultant shall be required to provide such documents and other information within fifteen (15) days of the request.

3.5.1.3 Additional Services. In the event this Agreement is terminated in whole or in part as provided herein, the District may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

3.5.2 Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective Parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

District

Incline Village General Improvement District
1220 Sweetwater Road
Incline Village, NV 89451
Attn: Ronnie Rector

Consultant

Shaw Engineering, Ltd.
20 Vine Street
Reno, NV 89503
Attn: Cody Black

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.5.3 Ownership of Materials and Confidentiality.

3.5.3.1 Documents & Data. All source code, reports, programs, manuals, disks, tapes, and any other material prepared by or worked upon by Consultant for the Services shall be the exclusive property of the District, and the District shall have the right to obtain from Consultant and to hold in District's name copyrights, trademark registrations, patents, or whatever protection Consultant may appropriate to the subject matter. Consultant shall provide District with all assistance reasonably required to perfect the rights in this subsection.

3.5.3.2 Confidentiality. All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other Documents and Data either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant. Such materials shall not, without the prior written consent of the District, be used by Consultant for any purposes other than the performance of the Services. Nor shall such materials be disclosed to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant which is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use the District's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of the District.

3.5.4 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.

3.5.5 Attorney's Fees. If either Party commences an action against the other Party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing party in such litigation shall be entitled to have and recover from the losing party reasonable attorney's fees and all other costs of such action.

3.5.6 Indemnification. To the fullest extent permitted by law, Consultant shall defend, indemnify and hold the District, its officials, officers, employees, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or relating to any negligence or willful misconduct of Consultant, its officials, officers, employees, agents, consultants, and contractors arising out of or in connection with the performance of the Services, the Project, or this Agreement, including without limitation the payment of all consequential damages, expert witness fees, and attorney's fees and other related costs and expenses. Consultant shall defend, at Consultant's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against District, its directors, officials, officers, employees, agents, or volunteers. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against District or its directors, officials, officers, employees, agents, or volunteers, in any such suit, action or other legal proceeding. Consultant shall reimburse District and its directors, officials, officers, employees, agents, and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided, including correction of errors and omissions. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the District, its directors, officials, officers, employees, agents or volunteers.

3.5.6.1 Design Professional. To the extent required by NRS 338.155, Consultant's obligation to defend, indemnify, and hold District, its officials, officers, employees, volunteers, and agents free and harmless shall not include any liability, damage, loss, claim, action or proceeding caused by the negligence, errors, omissions, recklessness or intentional misconduct of the employees, officers or agents of the District. Moreover, Consultant's obligation to defend, indemnify, and hold District, its officials, officers, employees, volunteers, and agents free and harmless from any liability, damage, loss, claim, action or proceeding caused by the negligence, errors, omissions, recklessness or intentional misconduct of the Consultant or the employees or agents of the Consultant which are based upon or arising out of the professional services of the Consultant. If the Consultant is adjudicated to be liable by a trier of fact, the trier of fact shall award reasonable attorney's fees and costs to be paid to the District, as reimbursement for the attorney's fees and costs incurred by the District in defending the action, by the Consultant in an amount which is proportionate to the liability of the Consultant. This Section shall only apply to the extent required by NRS 338.155 and shall not otherwise limit Consultant's obligation to defend, indemnify and hold the District harmless as required under Section 3.5.6.

3.5.7 Entire Agreement. This Agreement contains the entire Agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a writing signed by both Parties.

3.5.8 Governing Law. This Agreement shall be governed by the laws of the State of Nevada. Venue shall be in Washoe County.

3.5.9 Time of Essence. Time is of the essence for each and every provision of this Agreement.

3.5.10 District's Right to Employ Other Consultants. The District reserves right to employ other consultants in connection with this Project.

3.5.11 Successors and Assigns. This Agreement shall be binding on and shall inure to the benefit of the successors in interest, executors, administrators and assigns of each Party.

3.5.12 Assignment or Transfer. Consultant shall not assign, hypothecate, or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of the District. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

3.5.13 Subcontracting. Consultant shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval of District. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

3.5.14 Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Consultant include all personnel, employees, agents, and subcontractors of Consultant, except as otherwise specified in this Agreement. All references to the District include its officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content, or intent of this Agreement.

3.5.15 Amendment; Modification. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

3.5.16 Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel, or otherwise.

3.5.17 No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

3.5.18 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.5.22 Authority to Enter Agreement. Consultant has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

3.5.23 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

3.5.24 Limitation of Liability. The District does not and will not waive and expressly reserves all available defenses and limitations contained in Chapter 41 of the Nevada Revised Statutes. Contract liability of both parties shall not be subject to punitive damages.

3.5.25 Non-Appropriations. The District may terminate this Agreement, effective immediately upon receipt of written notice on any date specified if for any reason the District's funding source is not appropriated or is withdrawn, limited, or impaired.

3.5.26 Compliance with Laws. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services. Consultant shall not discriminate against any person on the grounds of race, color, creed, religion, sex, sexual orientation, gender identity or gender expression, age, disability, national origin or any other status protected under any applicable law. Consultant is not currently engaged in, and during the duration of the Agreement shall not engage in, a Boycott of Israel. The term "Boycott of Israel" has the meaning ascribed to that term in NRS 332.065. Consultant shall be responsible for all fines, penalties, and repayment of any State of Nevada or federal funds (including those that the District pays, becomes liable to pay, or becomes liable to repay) that may arise as a direct result of the Consultant's non-compliance with this subsection.

3.5.27 Prohibited Interests. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, District shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, officer or employee of District, during the term of his or her service with District, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

OWNER:
INCLINE VILLAGE G. I. D.
Agreed to:

By: _____
Brad B. Underwood, P. E.
Director of Public Works

Date

Reviewed as to Form:

Joshua Nelson
District General Counsel

Date

CONTRACTOR:
SHAW ENGINEERING, LTD.
Agreed to:

By: _____
Signature of Authorized Agent

Print or Type Name and Title

Date

If Consultant is a corporation, attach evidence of authority to sign.

EXHIBIT A
CONSULTANT'S PROPOSAL DATED FEBRUARY 16, 2023



February 16, 2023

Mr. Hudson Klein, P.E.
Incline Village General Improvement District
1220 Sweetwater Road
Incline Village, NV 89451

**RE: Proposal for Construction Phase Services
Crystal Peak Distribution Watermain Project-Amendment 1**

Dear Hudson:

Shaw Engineering appreciates this opportunity to provide limited construction administration support to the Incline Village General Improvement District (IVGID) for the above referenced Project.

The following scope of work is envisioned.

1. Submittals: Review contractor submittals.
2. Preconstruction Meeting: Attend preconstruction conference.
3. Administration Support: Respond to any RFI's or other questions that may arise during construction and attend construction related meetings as needed and other project administration as required. Assistance to IVGID when requested in the preparation of work change directives, field orders and change orders.
4. Periodic Construction Observation: Perform periodic engineering observation during construction.
5. Substantial Completion and Project Completion: Perform a substantial completion walkthrough and provide punch list comments. Perform project completion requirements with NDEP-BSDW and provide record drawings to NDEP and IVGID.

Our estimated fee to complete the work is **\$9,600**.

Shaw reserves the right to alter fees between work items but to not exceed the total amount shown without prior written authorization. The estimated total is a lump sum not to exceed amount and Shaw will invoice for our services monthly as a percentage of project completion.

If you have any questions or comments, please feel free to call me.

Sincerely,
SHAW ENGINEERING

A handwritten signature in blue ink, appearing to read "Nick O'Connor".

Nicholas O'Connor, P.E.
Project Engineer

20 Vine Street
Reno, Nevada
89503

Telephone:
775.
329.5559

Facsimile:
775.
5406

Email:
mail@
shawengineering
com

**ATTACHMENT B
CONSULTANT'S 2023 FEE SCHEDULE**



2023 FEE SCHEDULE

PROFESSIONAL

Senior Principal	\$200.00/hr
Principal	\$180.00/hr
Project Manager	\$160.00/hr
Senior Engineer	\$150.00/hr
Professional Engineer II	\$140.00/hr
Professional Engineer I	\$120.00/hr
Staff Engineer II	\$110.00/hr
Staff Engineer I	\$100.00/hr
Expert Testimony	
Consultations	\$250.00/hr
Reports/Preparations	\$500.00/hr
Trial/Depositions	\$750.00/hr (4 hr.Min.)

TECHNICAL

Engineering Technician	\$ 95.00/hr
Planning Technician	\$ 85.00/hr
Drafting/Technician II	\$ 85.00/hr
Drafting/Technician I	\$ 75.00/hr
Construction Inspector II	\$100.00/hr
Construction Inspector I	\$ 90.00/hr

ADMINISTRATIVE

Office Administrator	\$ 75.00/hr
Administrative Assistant II	\$ 65.00/hr
Administrative Assistant I	\$ 55.00/hr

OTHER

Subconsultants	Cost + 15%
Mileage	\$0.75/mile
Per Diem	\$150.00/day
Expenses	At Cost

The cost for office equipment, office supplies, hardware and software utilized during a Project is included in the fee schedule. Per Diem applies to Construction Inspectors that are required to spend one night or more on the Project.

**INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT
PROFESSIONAL SERVICES AGREEMENT**

1. PARTIES AND DATE.

This Agreement is made and entered into as of **Date**, by and between the Incline Village General Improvement District, a Nevada general improvement district (“District”) and **Construction Materials Engineers, Inc.**, a domestic corporation, with its principal place of business at 300 Sierra Manor Drive, Suite 1, Reno, Nevada (“Consultant”). The District and Consultant are sometimes individually referred to as “Party” and collectively as “Parties.”

2. RECITALS.

2.1 District. District is a general improvement district organized under the laws of the State of Nevada, with power to contract for services necessary to achieve its purpose.

2.2 Consultant. Consultant desires to perform and assume responsibility for the provision of certain professional services required by the District on the terms and conditions set forth in this Agreement. Consultant represents that it is experienced in providing materials testing services to public clients, is licensed in the State of Nevada, and is familiar with the plans of District.

2.3 Project. District desires to engage Consultant to provide periodic on-site and laboratory material testing when required per ACI and 2012 Standard Specification for Public Works Construction (SSPWC) Revision No. 8 for the District’s Crystal Peak Watermain Replacement Project (“Project”). On-site testing will be compaction testing of soils, utility backfill, aggregate base, as well as concrete and asphalt testing (if required). All laboratory testing will be performed in an AASHTO-accredited laboratory located in Reno. Daily written summaries of the inspection dialogues and materials testing results will be provided weekly.

3. TERMS.

3.1 Scope of Services and Term.

3.1.1 General Scope of Services. Consultant promises and agrees to furnish to the District, all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the Project design services necessary for the Project (“Services”). The types of services to be provided are more particularly described in Exhibit A attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations. As described in Section 3.3, the District shall pay for such services in accordance with the Schedule of Charges set forth in Exhibit B.

3.1.2 Term. The term of this Agreement shall be from April 29, 2023 to October 15, 2023, unless earlier terminated as provided herein. The Parties may, by mutual, written consent, extend the term of this Agreement if necessary to complete the Project.

3.2 Responsibilities of Consultant.

3.2.1 Control and Payment of Subordinates; Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement and such directions and amendments from District as herein provided. The District retains Consultant on an independent contractor basis and not as an employee. No employee or agent of Consultant shall become an employee of District. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall also not be employees of the District and shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Consultant shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

3.2.2 Schedule of Services. Consultant shall perform its services in a prompt and timely manner within the term of this Agreement and shall commence performance upon receipt of written notice from the District to proceed ("Notice to Proceed"). The Notice to Proceed shall set forth the date of commencement of work.

3.2.3 Conformance to Applicable Requirements. All work prepared by Consultant shall be subject to the District's approval.

3.2.4 Substitution of Key Personnel. Consultant has represented to the District that certain key personnel will perform and coordinate the Services under this Agreement. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence subject to the District's written approval. In the event that the District and Consultant cannot agree as to the substitution of key personnel, the District shall be entitled to terminate this Agreement for cause. As discussed below, any personnel who fail or refuse to perform the Services in a manner acceptable to the District, or who are determined by the District to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project or a threat to the safety of persons or property, shall be promptly removed from the Project by the Consultant at the request of the District. The key personnel for performance of this Agreement are as follows: John del Santo, P.E.

3.2.5 District's Representative. The District hereby designates Kate Nelson, P.E., IVGID Engineering Manager, or her designee, to act as its representative for the performance of this Agreement ("District's Representative"). The District's Representative shall have the power to act on behalf of the District for all purposes under this Contract. Consultant shall not accept direction or orders from any person other than the District's Representative or his or her designee.

3.2.6 Consultant's Representative. Consultant hereby designates Jon Del Santo, P.E., Principal Engineer, or his designee, to act as its representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to represent and act on behalf of the Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Services under this Agreement.

3.2.7 Coordination of Services. Consultant agrees to work closely with the District staff in the performance of Services and shall be available to the District's staff, consultants and other staff at all reasonable times.

3.2.8 Standard of Care; Performance of Employees. Consultant shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of Nevada. Consultant represents and maintains that it is skilled in the professional calling necessary to perform the Services. Consultant warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Finally, Consultant represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, including a Washoe County Business License, and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Consultant shall perform, at its own cost and expense and without reimbursement from the District, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein. Any employee of the Consultant or its sub-consultants who is determined by the District to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the District, shall be promptly removed from the Project by the Consultant and shall not be re-employed to perform any of the Services or to work on the Project.

3.2.9 Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, and shall give all notices required by law. If required, Consultant shall assist District, as requested, in obtaining and maintaining all permits required of Consultant by federal, state and local regulatory agencies. Consultant shall be liable for all violations of local, state and federal laws, rules and regulations in connection with the Project and the Services. If the Consultant performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the District, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold the District, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.2.10 Insurance.

3.2.10.1 Time for Compliance. Consultant shall not commence the Services under this Agreement until it has provided evidence satisfactory to the District that it has secured all insurance required under this section. In addition, Consultant shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the District that the subcontractor has secured all insurance required under this section.

3.2.10.2 Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance meeting the requirements set forth herein. Consultant shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(A) Minimum Limits of Insurance. Consultant shall maintain limits no less than: (1) *General Liability:* A minimum of \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit; (2) *Automobile Liability:* a minimum of \$1,000,000 combined single limit (each accident) for bodily injury and property damage; and (3) *Industrial Insurance:* Workers' Compensation limits as required by the Labor Code of the State of Nevada. Employer's Liability limits of \$1,000,000 per accident for bodily injury or disease; and (4) *Professional Liability/Errors and Omissions:* Consultant shall procure and maintain, and require its sub-consultants to procure and maintain, for a period of five (5) years following completion of the Services, professional liability/errors and omissions liability insurance appropriate to their profession. Such insurance shall be in an amount not less than \$1,000,000 per claim, and shall be endorsed to include contractual liability. "Covered Professional Services" as designated in the Professional Liability/Errors and Omissions policy must specifically include work performed under this Agreement.

Requirements of specific coverage or limits contained in this section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. Any available coverage shall be provided to the parties required to be named as additional insured pursuant to this Agreement. Defense costs shall be payable in addition to the limits.

3.2.10.3 Insurance Endorsements. The insurance policies shall contain the following provisions, or Consultant shall provide endorsements on forms supplied or approved by the District to add the following provisions to the insurance policies:

(A) Commercial General Liability. The commercial general liability policy shall be endorsed to provide the following: (1) the District, its directors, officials, officers, employees, agents and volunteers shall be covered as additional insureds; (2) the insurance coverage shall be primary insurance as respects the District, its directors, officials, officers, employees, agents and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, its directors, officials, officers, employees, agents and volunteers shall be excess of the Consultant's

insurance and shall not be called upon to contribute with it in any way; and (3) the insurance coverage shall contain or be endorsed to provide waiver of subrogation in favor of the District, its directors, officials, officers, employees, agents and volunteers or shall specifically allow Consultant to waive its right of recovery prior to a loss. Consultant hereby waives its own right of recovery against District, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

(B) Automobile Liability. The automobile liability policy shall be endorsed to provide the following: (1) the District, its directors, officials, officers, employees, agents and volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Consultant or for which the Consultant is responsible; (2) the insurance coverage shall be primary insurance as respects the District, its directors, officials, officers, employees, agents and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, its directors, officials, officers, employees, agents and volunteers shall be excess of the Consultant's insurance and shall not be called upon to contribute with it in any way; and (3) the insurance coverage shall contain or be endorsed to provide waiver of subrogation in favor of the District, its directors, officials, officers, employees, agents and volunteers or shall specifically allow Consultant to waive its right of recovery prior to a loss. Consultant hereby waives its own right of recovery against District, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

(C) Industrial (Workers' Compensation and Employers Liability) Insurance. The insurer shall agree to waive all rights of subrogation against the District, its directors, officials, officers, employees, agents and volunteers for losses paid under the terms of the insurance policy which arise from work performed by the Consultant.

(D) All Coverages. Each insurance policy required by this Agreement shall be endorsed to state that: (A) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the District; and (B) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the District, its directors, officials, officers, employees, agents and volunteers.

3.2.10.4 Separation of Insureds; No Special Limitations. All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the District, its directors, officials, officers, employees, agents and volunteers.

3.2.10.5 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the District. Consultant shall guarantee that, at the option of the District, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, its directors, officials, officers, employees, agents and volunteers; or (2) the Consultant shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

3.2.10.6 Acceptability of Insurers. Insurance is to be placed with insurers duly licensed or authorized to do business in the state of Nevada and with an "A.M. Best" rating of not less than A-VII. The District in no way warrants that the above-required minimum insurer rating is sufficient to protect the Consultant from potential insurer insolvency.

3.2.10.7 Verification of Coverage. Consultant shall furnish the District with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to the District. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms provided by the District if requested. All certificates and endorsements must be received and approved by the District before work commences. The District reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.2.10.8 Subconsultants. Consultant shall not allow any subcontractors or subconsultants to commence work on any subcontract until they have provided evidence satisfactory to the District that they have secured all insurance required under this section. Policies of commercial general liability insurance provided by such subcontractors or subconsultants shall be endorsed to name the District as an additional insured using ISO form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, District may approve different scopes or minimum limits of insurance for particular subcontractors or subconsultants.

3.2.10.9 Compliance with Coverage Requirements. If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, District has the right but not the duty to obtain the insurance it deems necessary and any premium paid by District will be promptly reimbursed by Consultant or District will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, District may terminate this Agreement for cause.

3.2.11 Safety. Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed.

3.3 Fees and Payments.

3.3.1 Compensation. Consultant shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement in accordance with the Schedule of Charges set forth in Exhibit B, attached hereto and incorporated herein by reference. The total compensation to be provided under this Agreement shall not exceed **Eighteen Thousand Eight Hundred Dollars (\$18,800.00)** without written approval of District's Engineering Manager. Extra Work may be authorized, as described below; and if authorized, said Extra Work will be compensated at the rates and manner set forth in this Agreement.

3.3.2 Payment of Compensation. Consultant shall submit to District a monthly itemized invoice which indicates work completed and hours of Services rendered by Consultant. The invoice shall describe the amount of Services and supplies provided since the initial commencement date of

Services under this Agreement, and since the start of the subsequent billing periods, through the date of the invoice. Invoices shall be sent to invoices@ivgid.org with a copy to rlr@ivgid.org. Consultant shall include a Project Task Tracking Sheet with each invoice submitted. District shall, within forty-five (45) days of receiving such invoice and Project Task Tracking Sheet, review the invoice and pay all approved charges thereon.

3.3.3 Reimbursement for Expenses. Consultant shall not be reimbursed for any expenses unless authorized under Exhibit B, or otherwise in writing by the District.

3.3.4 Extra Work. At any time during the term of this Agreement, the District may request that Consultant perform Extra Work. As used herein, "Extra Work" means any work which is determined by the District to be necessary for the proper completion of the Project, but which the Parties did not reasonably anticipate would be necessary at the execution of this Agreement. Consultant shall not perform, nor be compensated for, Extra Work without written authorization from the District's Representative. Where Extra Work is deemed merited by the District, an amendment to the Agreement shall be prepared by the District and executed by both Parties before performance of such Extra Work, or the District will not be required to pay for the changes in the scope of work. Such amendment shall include the change in fee and/or time schedule associated with the Extra Work. Amendments for Extra Work shall not render ineffective or invalidate unaffected portions of this Agreement.

3.4 Accounting Records.

3.4.1 Maintenance and Inspection. Consultant shall maintain accurate and complete books, documents, accounting records and other records pertaining to the Services for six (6) years (or longer as required by applicable law) from the date of final payment under this Agreement. Consultant shall make such records available to the District for inspection, audit, examination, reproduction, and copying at Consultant's offices at all reasonable times. However, if requested, Consultant shall furnish copies of said records at its expense to the District, within seven (7) business days of the request.

3.5 General Provisions.

3.5.1 Termination of Agreement.

3.5.1.1 Grounds for Termination. The District may, by written notice to Consultant, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Consultant of such termination, and specifying the effective date thereof, at least seven (7) days before the effective date of such termination. Upon termination, Consultant shall be compensated only for those services which have been adequately rendered to the District, and Consultant shall be entitled to no further compensation. Consultant may not terminate this Agreement except for cause. Consultant shall not be entitled to payment for unperformed Services, and shall not be entitled to damages or compensation for termination of this Agreement by District except for the amounts authorized herein.

3.5.1.2 Effect of Termination. If this Agreement is terminated as provided herein, the District may require Consultant to provide all finished or unfinished Documents and Data (defined below) and

other information of any kind prepared by Consultant in connection with the performance of Services under this Agreement. Consultant shall be required to provide such documents and other information within fifteen (15) days of the request.

3.5.1.3 Additional Services. In the event this Agreement is terminated in whole or in part as provided herein, the District may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

3.5.2 Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective Parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

District

Incline Village General Improvement District
1220 Sweetwater Road
Incline Village, NV 89451
Attn: Ronnie Rector

Consultant

CME
300 Sierra Manor Drive, Ste. 1
Reno, NV 89511
Attn: Jon Del Santo

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.5.3 Ownership of Materials and Confidentiality.

3.5.3.1 Documents & Data. All source code, reports, programs, manuals, disks, tapes, and any other material prepared by or worked upon by Consultant for the Services shall be the exclusive property of the District, and the District shall have the right to obtain from Consultant and to hold in District's name copyrights, trademark registrations, patents, or whatever protection Consultant may appropriate to the subject matter. Consultant shall provide District with all assistance reasonably required to perfect the rights in this subsection.

3.5.3.2 Confidentiality. All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other Documents and Data either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant. Such materials shall not, without the prior written consent of the District, be used by Consultant for any purposes other than the performance of the Services. Nor shall such materials be disclosed to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant which is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use the District's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of the District.

3.5.4 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.

3.5.5 Attorney's Fees. If either Party commences an action against the other Party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing party in such litigation shall be entitled to have and recover from the losing party reasonable attorney's fees and all other costs of such action.

3.5.6 Indemnification. To the fullest extent permitted by law, Consultant shall defend, indemnify and hold the District, its officials, officers, employees, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or relating to any negligence or willful misconduct of Consultant, its officials, officers, employees, agents, consultants, and contractors arising out of or in connection with the performance of the Services, the Project, or this Agreement, including without limitation the payment of all consequential damages, expert witness fees, and attorney's fees and other related costs and expenses. Consultant shall defend, at Consultant's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against District, its directors, officials, officers, employees, agents, or volunteers. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against District or its directors, officials, officers, employees, agents, or volunteers, in any such suit, action or other legal proceeding. Consultant shall reimburse District and its directors, officials, officers, employees, agents, and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided, including correction of errors and omissions. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the District, its directors, officials, officers, employees, agents or volunteers.

3.5.6.1 Design Professional. To the extent required by NRS 338.155, Consultant's obligation to defend, indemnify, and hold District, its officials, officers, employees, volunteers, and agents free and harmless shall not include any liability, damage, loss, claim, action or proceeding caused by the negligence, errors, omissions, recklessness or intentional misconduct of the employees, officers or agents of the District. Moreover, Consultant's obligation to defend, indemnify, and hold District, its officials, officers, employees, volunteers, and agents free and harmless from any liability, damage, loss, claim, action or proceeding caused by the negligence, errors, omissions, recklessness or intentional misconduct of the Consultant or the employees or agents of the Consultant which are based upon or arising out of the professional services of the Consultant. If the Consultant is adjudicated to be liable by a trier of fact, the trier of fact shall award reasonable attorney's fees and costs to be paid to the District, as reimbursement for the attorney's fees and costs incurred by the District in defending the action, by the Consultant in an amount which is proportionate to the liability of the Consultant. This Section shall only apply to the extent required by NRS 338.155 and shall not otherwise limit Consultant's obligation to defend, indemnify and hold the District harmless as required under Section 3.5.6.

3.5.7 Entire Agreement. This Agreement contains the entire Agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a writing signed by both Parties.

3.5.8 Governing Law. This Agreement shall be governed by the laws of the State of Nevada. Venue shall be in Washoe County.

3.5.9 Time of Essence. Time is of the essence for each and every provision of this Agreement.

3.5.10 District's Right to Employ Other Consultants. The District reserves right to employ other consultants in connection with this Project.

3.5.11 Successors and Assigns. This Agreement shall be binding on and shall inure to the benefit of the successors in interest, executors, administrators and assigns of each Party.

3.5.12 Assignment or Transfer. Consultant shall not assign, hypothecate, or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of the District. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

3.5.13 Subcontracting. Consultant shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval of District. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

3.5.14 Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Consultant include all personnel, employees, agents, and subcontractors of Consultant, except as otherwise specified in this Agreement. All references to the District include its officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content, or intent of this Agreement.

3.5.15 Amendment; Modification. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

3.5.16 Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel, or otherwise.

3.5.17 No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

3.5.18 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.5.22 Authority to Enter Agreement. Consultant has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

3.5.23 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

3.5.24 Limitation of Liability. The District does not and will not waive and expressly reserves all available defenses and limitations contained in Chapter 41 of the Nevada Revised Statutes. Contract liability of both parties shall not be subject to punitive damages.

3.5.25 Non-Appropriations. The District may terminate this Agreement, effective immediately upon receipt of written notice on any date specified if for any reason the District's funding source is not appropriated or is withdrawn, limited, or impaired.

3.5.26 Compliance with Laws. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services. Consultant shall not discriminate against any person on the grounds of race, color, creed, religion, sex, sexual orientation, gender identity or gender expression, age, disability, national origin or any other status protected under any applicable law. Consultant is not currently engaged in, and during the duration of the Agreement shall not engage in, a Boycott of Israel. The term "Boycott of Israel" has the meaning ascribed to that term in NRS 332.065. Consultant shall be responsible for all fines, penalties, and repayment of any State of Nevada or federal funds (including those that the District pays, becomes liable to pay, or becomes liable to repay) that may arise as a direct result of the Consultant's non-compliance with this subsection.

3.5.27 Prohibited Interests. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, District shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, officer or employee of District, during the term of his or her service with District, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

**OWNER:
INCLINE VILLAGE G. I. D.**

Agreed to:

By: _____
Brad B. Underwood, P. E.
Director of Public Works

Date

Reviewed as to Form:

Joshua Nelson
District General Counsel

Date

**CONSULTANT:
CONSTRUCTION MATERIALS
ENGINEERS, INC.**

Agreed to:

By: _____
Signature of Authorized Agent

Print or Type Name and Title

Date

If Consultant is a corporation, attach evidence of authority to sign.

EXHIBIT A
CONSULTANT'S PROPOSAL AND SCOPE OF WORK

February 22, 2023

Kate S. Nelson, PE & WRS
Incline Village General Improvement District
1220 Sweetwater Road
Incline Village, NV 89451

**RE: IVGID Crystal Peak Distribution Water Main Improvements
Incline Village, Washoe County, Nevada
Materials Testing Proposal**

Dear Ms. Nelson:

CME, Inc. is pleased to provide this cost proposal for materials testing services on the referenced project.

It is understood that our scope of work is to provide periodic on-site and laboratory material testing when required. We propose to provide one technician to perform the periodic materials testing required per the ACI, 2012 Standard Specification for Public Works Construction (SSPWC) Revision No. 8, the approved project civil plans, and contract documents. Our technician will provide the on-site compaction testing of soils, utility backfill, aggregate base, as well as concrete testing which includes slump, air content, concrete temperature, maximum/minimum curing temperature and compressive strength cylinders. Asphalt paving inspection and testing will be provided upon request. All laboratory testing will be performed in our AASHTO accredited Reno laboratory.

Based upon a review of the provided civil plans and contract documents, we will provide the following services which will require materials testing:

- *Utility Bedding and Backfill*
- *Concrete Placement – Upon Request*
- *Laboratory Testing*
- *Asphalt Concrete Placement and Testing – Upon Request*

The attached scope of work will include daily field reports describing construction and materials testing activities with transmittals to the project administrator. Individual test results for compaction testing and concrete testing will be provided verbally at the completion of each test. Daily written summaries of the inspection dialogues and materials testing results will be provided weekly.

A detailed outline including total trips, hours per trip and associated fees is attached for your review. Based on the documents provided and our assumed construction schedule, we will provide our services on a time and expense basis not to exceed \$18,800.00. At the request of the Incline Village General Improvement District, our fee estimate is based upon CME paying prevailing wages listed in the October 1, 2022 Washoe County 2022-2023 Prevailing Wage Determination of \$44.17 per hour for soils and materials testers.

Our services are dependent on your future construction schedule and the scope of work provided. Any changes due to your schedule or the anticipated scope may result in a change in cost. All services outside the attached estimate will be provided on a time and expense basis in accordance with our current standard fee schedule.

Kate S. Nelson, PE & WRS
Incline Village General Improvement District
February 22, 2023
Page 2

We appreciate the opportunity to provide our materials testing services. Please do not hesitate to call if you have any questions or comments.

Sincerely,

CONSTRUCTION MATERIALS ENGINEERS, INC.



Jon A. Del Santo, PE
Principal
jdelsanto@cmenv.com
Direct: 775-737-7564
Mobile: 775-846-4399

JAD:lr

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EXHIBIT B
CONSULTANT'S FEE PROPOSAL

**IVGID - CRYSTAL PEAK DISTRIBUTION WATER MAIN IMPROVEMENTS
MATERIAL TESTING ESTIMATE
INCLINE VILLAGE, WASHOE COUNTY, NEVADA**

IVGID

DATE :

2/22/2023

TASK 1 - MATERIAL TESTING

ACTIVITY	QTY/DAYS	HRS/DAY	RATE	TOTAL	COMMENTS
PROJECT MANAGEMENT					110 CALANDER DAYS
PROJECT MANAGER	12	1	\$ 180.00	\$ 2,160.00	COORDINATION, CONSULTATION AND REPORTS
PROJECT MANAGER	2	2	\$ 175.00	\$ 700.00	PRE-CON/PROJECT MEETINGS
VEHICLE	4		\$ 10.00	\$ 40.00	PRE-CON/PROJECT MEETINGS

FIELD

UTILITIES

TECHNICIAN REG	15	5	\$ 110.00	\$ 8,250.00	APPROX 2,380 LFT NATIVE/AGG BASE
VEHICLE	75		\$ 10.00	\$ 750.00	
NUCLEAR GAUGE	75		\$ 10.00	\$ 750.00	

*ASSUME 150 LF/DAY PLACEMENT

LAB

SOILS

MOISTURE DENSITY CURVE - BACKFILL	2		\$ 300.00	\$ 600.00	NATIVE / AGG BASE
SIEVE ANALYSIS / PI	2		\$ 240.00	\$ 480.00	BACKFILL - SUBMITTAL CONFIRMATION

ESTIMATED TASK 1 TOTAL FEE: \$ 13,730.00

TASK 2 - ALTERNATE - ASPHALT AND CONCRETE TESTING (UPON REQUEST)

CONCRETE* (UPON REQUEST)

TECHNICIAN REG.	4	5	\$ 110.00	\$ 2,200.00	COLLARS/BOLLARDS/PERMENANT CONCRETE PATCH
VEHICLE	20		\$ 10.00	\$ 200.00	

* INCLUDES CYLINDER PICKUP THE NEXT DAY

CONCRETE

CYLINDERS	4		\$ 175.00	\$ 700.00	SETS OF FIVE
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ASPHALT PAVING - FIELD

TECHNICIAN REG.	2	4	\$ 110.00	\$ 880.00	SAMPLING AND DENSITYAC THIN LIFT MONITORING INCLUDED - APPROX 350 TONS
CORING EQUIPMENT	1	3	\$ 60.00	\$ 180.00	1 SET OF 3

ASPHALT PAVING - LAB

FULL MARSHALL SERIES	1		\$ 640.00	\$ 640.00	1 PER LOT
AC CORES - SET OF 3	1		\$ 270.00	\$ 270.00	1 SET OF 3

ESTIMATED TASK 2 TOTAL FEE: \$ 5,070.00

ESTIMATED TOTAL FEE: \$ 18,800.00

1. BASED UPON AN ASSUMED CONSTRUCTION SCHEDULE AND NUMBER OF TRIPS
2. TECHNICIAN REGULAR RATE BASED UPON CME PAYING PREVAILING WAGES AT \$44.17 / HR