

WRF DIGESTER MAINTENANCE AND BOILER UPGRADES PROJECT

November 10th, 2021

Prepared for: City of Elko 1751 College Avenue Elko, NV 89801

CONSISTS OF:

BIDDING REQUIREMENTS PROPOSAL FORMS CONDITIONS OF THE CONTRACT TECHNICAL SPECIFICATIONS

> CITY OF ELKO 1751 COLLEGE AVENUE ELKO, NV 89801



Bid Set No.____



Table of Contents

1.0	INVITATION TO BID	2
2.0	INSTRUCTIONS TO BIDDERS	4
3.0	PUBLIC WORKS CONTRACT	17
	ARTICLE ONE - DESCRIPTION OF WORK	17
	ARTICLE TWO	19
	ARTICLE THREE - STARTING AND COMPLETION DATES	19
	ARTICLE FOUR - CONTRACT DOCUMENTS	20
	ARTICLE FIVE - DUTIES AND AUTHORITY OF THE OWNER	
	ARTICLE SIX - RESPONSIBILITIES OF CONTRACTOR	
	ARTICLE SEVEN - INSURANCE	
	ARTICLE EIGHT - CORRECTING WORK	
	ARTICLE NINE - CONTRACTOR'S WARRANTY	
	ARTICLE TEN - MANUFACTURER'S WARRANTIES	
	ARTICLE ELEVEN - CHANGES IN THE WORK	-
	ARTICLE TWELVE - CHANGE OF CONTRACT PRICE	
	ARTICLE THIRTEEN - CHANGE OF THE CONTRACT TIME	
	ARTICLE FOURTEEN - NOTICES	29
	ARTICLE FIFTEEN - EARLY TERMINATION FOR FAILURE TO	0.0
	ARTICLE SIXTEEN - LIQUIDATED DAMAGES	
	ARTICLE SEVENTEEN - ADDITIONAL PROVISIONS	32
4.0		
	EXHIBIT 1 - BID FORM EXHIBIT 2 - BID PROPOSAL GUARANTEE	
	EXHIBIT 2 - BID FROFOSAE GOARANTEE	
	EXHIBIT 5 - AFFIDAVIT OF NON-COLLUSION	
	EXHIBIT 6 - CERTIFICATION OF BIDDER REGARDING PENALTIES FOR NON-COMPLIANCE	47
	WITH NEVADA PREVAILING WAGE REQUIREMENTS EXHIBIT 7 - FRINGE BENEFIT PLAN, FUND OR PROGRAM DISBURSEMENT INFORMATION	47 48
	EXHIBIT 8 - DRAWINGS	50
	EXHIBIT 9 - PERFORMANCE BOND	
	EXHIBIT 10 - PAYMENT BOND	
	EXHIBIT 11 - NOTICE OF AWARD EXHIBIT 12 - NOTICE TO PROCEED	
	EXHIBIT 13- STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS	
	CONSTRUCTION (ORANGE BOOK), 2016 REVISED EDITION	
	EXHIBIT 14 - GENERAL PROVISIONS	
	EXHIBIT 15 - SPECIAL OR SUPPLEMENTAL PROVISIONS EXHIBIT 16 - TECHNICAL SPECIFICATIONS	
	EXHIBIT 10 - PREVAILING WAGE RATES – ELKO COUNTY OR DAVIS-BACON	
	EXHIBIT 18 – PREFERENTIAL BIDDER STATUS AFFIDAVIT.	



1.0 INVITATION TO BID

Sealed bid proposals will be accepted until **3:00 P.M. December 9th, Local Time, Elko, Nevada,** at the office of the Elko City Clerk; 1751 College Avenue; Elko, Nevada 89801, for the following:

WRF DIGESTER MAINTENANCE AND BOILER UPGRADES

Bid proposals received by the City Clerk after the above-stated time will not be accepted. **Bidders mailing their bids assume the risk of late delivery**.

Bidding documents, plans, specifications and contract documents can be obtained free of charge electronically from the City of Elko's website at the following web address: <u>https://www.elkocity.com/government/bidding_opportunities/index.php</u>. All bidders shall be registered with the Elko City Clerk's Office on the official plan holder's list for this project prior to submitting bids for this project. All bidders shall attend the mandatory Pre-Bid Conference for the Project at the time and location stated below to be eligible to submit a construction bid.

Bid proposals must be submitted on the prescribed forms and accompanied by security in the amount, form and subject to the conditions listed in the Instructions to Bidders. Bid proposals will be opened at City Hall immediately after the above deadline, with the bid amounts submitted being read aloud by City Staff to the interested parties present, if any. All interested parties are invited to be in attendance at the bid opening. Contractors will be required to have a current Elko City business license prior to time of contract execution; moreover, a current Nevada State contractor's license of the proper classification to perform the project work is required at the time of the Project bid opening.

All bids must be submitted in a sealed envelope that is legibly marked **DIGESTER MAINTENANCE AND BOIL UPGRADES PROJECT.** City staff shall thoroughly review all bid proposals for conformance with the contract documents prior to making a written recommendation for award to the Elko City Council.

The award will be made to the lowest responsive and responsible bidder to the extent and in the manner required by law, unless all bids are rejected. The lowest responsive and responsible bidder shall be determined on the basis of price, conformance to plans and/or specifications, the bidder's qualifications, conformance to applicable sections of NRS Chapter 338, and the best interest of the public.

The <u>mandatory</u> Pre-Bid Conference will be held at Elko WRF (1600 STP Rd. Elko, Nevada), on November 19th, 2021 at 10:00 A.M., Local Time.



The City Council may formally award the contract to the successful bidder at its regularly scheduled meeting at City Hall on **December 14th**, after **5:00 P.M, Local Time.** The City Council may, in its sole discretion, reject all bids.

LABOR COMMISSIONER: The Nevada Labor Commissioner's identifying project number is **EL-2022-081** for this project. NRS 338.013(1) requires the Labor Commissioner's identifying number to be included in any bid or other document submitted in response to the advertisement or other type of solicitation.

The City of Elko reserves the right to accept or reject any and/or all items specified in the bid proposal and further reserves the right to waive any minor technicalities in the bidding documents.

Dated this 12th day of November 2021.

City of Elko Elko City Council

Mike Haddenham BY:

City of Elko – Water Reclamation Facility, Superintendent.

Publish: Elko Daily Free Press –



2.0 INSTRUCTIONS TO BIDDERS

Bids are requested for a general construction contract, or work described in general, as follows:

- The City of Elko (City) will receive sealed bids from Bidders until 3:00 P.M; Local Time, on December, 9th, 2021. Bids received after this time will not be opened or accepted and will be returned unopened.
- 2) The site visit and <u>mandatory</u> Pre-Bid Conference will be held at the WRF Offices(16000 STP Rd. Elko, Nevada), on November, 19th, 2021, at 10:00 A.M. Local Time. The City or an authorized representative will transmit to all prospective Bidders of record such Addenda as the City or its authorized representative in his discretion considers necessary in response to questions arising at the Pre-bid Conference. Oral statements by City representatives may not be relied upon and will not be binding upon the City. Minutes of the Pre-bid Conference issued by the City or authorized representative, if any, and Addenda issued as a result of the Pre-bid Conference, if any, shall constitute the sole and exclusive record and statement of the results of the Pre-bid Conference.
- 3) The apparent Low Bid will be based solely on the total amount of all bid items and any additive or deductive alternates selected for award by the City. All Bidders are required to submit Bids on all bid items, including all additive and deductive alternates. Additive and deductive alternates will be awarded at the sole discretion of the City. If Alternate Bids are requested on this Project, the following applies: The priority of Alternate Bids will be announced by the City prior to the opening of bids. The City reserves the right to reject all Base Bids and all Alternate Bids. If the City elects not to reject all Bids, it will, prior to the award, first determine which one or more Alternates to accept; then the City will evaluate the lowest responsive and responsible Bidder based upon the Base Bid combined with any Alternates selected. If any Alternates are selected, the fact that a Bidder may have a lower individual Base or Alternate Bid than the individual Bids of the apparent lowest responsive and responsible Bidder is irrelevant, since the successful Bidder will be chosen on the basis of the sum of the Base Bid and the Alternates selected, together with the other relevant factors pursuant to NRS Chapter 338.
- 4) Bidders must submit bids on the Bid Form supplied by the City, fully completed with all blanks filled in, and signed by an authorized representative of the Bidder. Bids not submitted on the required form, and/or not fully completed and/or not signed by an authorized representative of the Bidder, shall be deemed nonresponsive and shall not be considered, subject to the right of the City to waive minor technical defects that do not give the Bidder an advantage over other Bidders, at its sole discretion.



- 5) The Nevada Labor Commissioner's identifying number for this project is EL-2022-081. NRS 338.013(1) requires that the project identifying number must be included in any bid or other document submitted in response to the advertisement or other type of solicitation.
- 6) All Bidders must submit a Bid Bond in the form of a cashier's check, a certified check, or a corporate surety bond of not less than ten percent (10.0 %) of the amount of the bid, including additive and/or deductive alternates, payable to "The City of Elko," with their Bids. The Bid Bond will be forfeited to the City should the bidder to whom the contract is awarded fail to enter into the Contract in accordance with its Bid and the Contract Documents, and/or fail to furnish any other required bonds or certificates of insurance. The Bid Bond is a penalty, as opposed to liquidated damages, and the Bidder will be liable for all damages in excess of the Bid Bond. The Bid Bond will be returned upon signing of the Contract. The Bidder must use the form of Bid Bond required by the City. A Bid submitted without a Bid Bond that complies with all applicable City requirements will be deemed nonresponsive and not considered.
- 7) NRS 338.141 provides:
 - 1) Except as otherwise provided in subsection (2) next below, each bid submitted must include:
 - (a) If the City provides a list of the labor or portions of the public work which are estimated by the City to exceed 3 percent of the estimated cost of the public work, the name of each first tier subcontractor who will provide such labor or portion of the work on the public work which is estimated to exceed 3 percent of the estimated cost of the public work; or
 - (b) If the City does not provide a list of the labor or portions of the public work which are estimated by the City to exceed 3 percent of the estimated cost of the public work, the name of each first tier subcontractor who will provide labor or a portion of the work on the public work to the prime contractor for which the first tier subcontractor will be paid an amount exceeding 5 percent of the prime contractor's total bid. If the bid is submitted pursuant to this paragraph, within 2 hours after the completion of the opening of the bids, the contractors who submitted the three lowest bids must submit a list containing:

(1) The name of each first tier subcontractor who will provide labor or a portion of the work on the public work to the prime contractor for which the first tier subcontractor will be paid an amount exceeding \$250,000.



(2) If any one of the contractors who submitted one of the three lowest bids will employ a first tier subcontractor who will provide labor or a portion of the work on the public work to the prime contractor for which the first tier subcontractor will not be paid an amount exceeding \$250,000, the name of each first tier subcontractor who will provide labor or a portion of the work on the public work to the prime contractor for which the first tier subcontractor will be paid 1 percent of the prime contractor's total bid or \$50,000, whichever is greater.

(3) For each first tier subcontractor whose name is listed pursuant to subparagraph (7)(1)(b)(1) or (7)(1)(b)(2) above, the number of the license issued to the first tier subcontractor pursuant to chapter 624 of NRS.

Forms for the Subcontractors List are provided for Bidder's use, to include a 5% List and a 1% List.

- (2) The lists required by subsection 1 must include a description of the labor or portion of the work which each first tier subcontractor named in the list will provide to the prime contractor.
- (3) A prime contractor shall include its name on a list required by paragraph (a) of subsection 1 if it will perform any of the work required to be listed pursuant to paragraph (a) of subsection 1.
- (4) Except as otherwise provided in this subsection, if a contractor:
 - (a) Fails to submit a required Subcontractors List within the required time; or
 - (b) Submits a Subcontractors List that includes the name of a subcontractor who, at the time of the submission of the list, is on disqualified status with the State Public Works Board pursuant to NRS 338.1376, the contractor's bid shall be deemed not responsive. A contractor's bid shall not be deemed not responsive on the grounds that the contractor submitted a list that includes the name of a subcontractor who, at the time of the submission of the list, is on disqualified status with the State Public Works Board pursuant to NRS 338.1376 if the contractor, before the award of the contract, provides an acceptable replacement subcontractor in the manner set forth in subsection 1 of NRS 338.13895.



- (5) A contractor whose bid is accepted shall not substitute a subcontractor for any subcontractor who is named in the bid, unless:
 - (a) The City or its authorized representative objects to the subcontractor, requests in writing a change in the subcontractor and pays any increase in costs resulting from the change.
 - (b) The substitution is approved by the City or its authorized representative. The substitution must be approved if the City or its authorized representative determines that:
 - (1) The named subcontractor, after having a reasonable opportunity, fails or refuses to execute a written contract with the contractor which was offered to the named subcontractor with the same general terms that all other subcontractors on the project were offered;
 - (2) The named subcontractor files for bankruptcy or becomes insolvent;
 - (3) The named subcontractor fails or refuses to perform his subcontract within a reasonable time or is unable to furnish a performance bond and payment bond pursuant to NRS 339.025; or
 - (4) The named subcontractor is not properly licensed to provide that labor or portion of the work.
 - (c) The City or its authorized representative, in awarding the contract pursuant to NRS 338.1375 to 338.139, inclusive:
 - (1) Applies such criteria set forth in NRS 338.1377 as are appropriate for subcontractors and determines that the subcontractor does not meet that criteria; and
 - (2) Requests in writing a substitution of the subcontractor.
- (6) If a contractor indicates pursuant to subsection 1 that it will perform a portion of work on the public work and thereafter requests to substitute a subcontractor to perform such work, the contractor shall provide to the City a written explanation in the form required by the City which contains the reasons that:
 - (a) A subcontractor was not originally contemplated to be used on that portion of the public work; and



- (b) The substitution is in the best interest of the City.
- (7) As used in this section, "general terms" means the terms and conditions of a contract that set the basic requirements for a public work and apply without regard to the particular trade or specialty of a subcontractor, but does not include any provision that controls or relates to the specific portion of the public work that will be completed by a subcontractor, including, without limitation, the materials to be used by the subcontractor or other details of the work to be performed by the subcontractor.
- 8) All Bids must include a printout from the Nevada State Contractor's Board internet website (http://www.nscb.nv.gov), dated no more than 90 calendar days prior to the date for receipt of Bids, showing that the Bidder has a Nevada Contractor's license in good standing, and that the license is of the type and the monetary limit is sufficiently high to permit the Bidder to perform the work as a general contractor. (Must Accompany Bid)
- 9) A Bid by a corporation, limited liability company, or limited partnership, must include either: (A) for a foreign entity, a Certificate issued by the Nevada Secretary of State within 90 calendar days prior to the date for receipt of Bids, certifying that the Bidder is qualified to do business in the State of Nevada (i.e., a Good Standing Certificate); or (B) for both foreign and domestic entities, a printout from a Business Entity Search on the Nevada Secretary of State Website within 30 calendar days prior to the date for receipt of Bids showing that the Bidder is an active entity registered in that office, together with any other information about the entity contained on the web page. (Must Accompany Bid)
- 10) Bidders must supply all information required by the Bid documents, and specifications. Bids must be full and complete. The City Council reserves the right in its sole discretion to reject any Bid as nonresponsive as a result of any error or omission in the Bid.
- 11) Bids must be clearly written without erasure or deletions. The City Council reserves the right to reject any Bid containing erasures or deletions.
- 12) Bidders may not modify the Bid Form or qualify their Bids.
- 13) Submission of a Bid signifies careful examination of the Contract Documents and complete understanding of the nature, extent and location of Work to be performed. The Bidder must complete the tasks listed in subsections "a" through "e" below, as a condition to bidding, and submission of a Bid shall constitute the Bidder's express representation to the City that the Bidder has fully completed the following:



- The Bidder has visited and investigated the site where the Work will be a) performed prior to bidding and is satisfied with all conditions affecting the Work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electrical power, roads and uncertainties of weather, or similar physical conditions at the Project site, and the character of equipment and facilities needed prior to and during prosecution of the Work. The Bidder is satisfied as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from inspection of the Project site, including all exploratory work done by the City, as well as from information presented by the Contract Documents, or any other information made available to the Bidder prior to receipt of bids. Any failure by the Bidder to become acquainted with the available information shall not relieve the Bidder from the responsibility for estimating properly the difficulty or cost of successfully performing the Work.
- b) The Bidder shall be entitled to rely upon all information furnished to the Bidder in writing by the City with respect to the Project site and to make all inferences from it that would reasonably be made by a contractor having knowledge and experience with similar work; however, the Bidder shall not be entitled to infer from City-supplied information any fact or condition which would not be inferred by a bidder having knowledge and experience with similar work and, if the City-supplied information is inadequate or insufficient in any respect, the Bidder shall be required to obtain independently such other information as a knowledgeable and experienced contractor would prudently obtain in order to evaluate any such condition.
- c) The Bidder specifically acknowledges familiarity with all Federal, State, and local laws, ordinances, rules, and regulations which may in any manner affect those engaged or employed in the Work, or the materials or equipment in or about the Work, or in any way affect the conduct of the Work.
- d) Bidder has correlated its knowledge and the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents; and
- e) Bidder has given City or authorized representative prompt written notice of all conflicts, errors, ambiguities or discrepancies that it has discovered in or among the Contract Documents; provided, the City reserves the sole and exclusive right, in its discretion, to revise the Contract Documents to the extent permitted by law.
- 14) Bidders may examine any available "as-built" drawings of previous work by giving City or authorized representative upon reasonable request, so long as the disclosure



of the as-built drawings does not violate the intellectual property rights of a third party. The City will not be responsible for accuracy of "as-built" drawings.

- 15) All questions about the meaning or intent of the Contract Documents are to be directed to the City or its authorized representative. Interpretations or clarifications considered necessary by the City or its authorized representative in response to such questions will be issued by Addendum mailed or delivered to all persons who were previously supplied the Bidding Documents. Questions received less than seven (7) business days prior to the date for opening Bids may not be answered. Only questions answered by a formal written Addendum will be binding upon the City. Questions answered in a written format other than an Addendum, or verbal or other unwritten interpretations or clarifications will not be binding upon the City.
- 16) Addenda may also be issued to modify the Bidding Documents at the discretion of the City.
- 17) Addenda must be acknowledged by the Bidder in the Bid Form by number. Addenda are Contract Documents. A complete list of Addenda may be obtained from the City or its authorized representative.
- 18) For contracts of \$100,000.00 or more, subject to certain limited exceptions, NRS 338.020 requires the contractor and all subcontractors to pay at least the prevailing wage set by the Nevada Labor Commissioner in effect at the time of contract award, even if the prevailing wage rates are changed between the time of preparation of the specifications and the time of contract award. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by the Nevada Labor Commissioner and in effect at the time of the printing of the specifications, are included in the specifications. All Bidders are responsible for confirming whether any applicable prevailing wage rates are changed between the time of preparation of the specifications and the time of are changed between the time of preparation of the specifications and the time of are changed between the time of preparation of the specifications and the time of are changed between the time of preparation of the specifications and the time of are changed between the time of preparation of the specifications and the time of are changed between the time of preparation of the specifications and the time of attachment at the end of the Contract Technical Specifications for the Project.
- 19) Pursuant to NRS 338.140(1)(b), the City is prohibited from drafting or causing to be drafted specifications for bids, except in those instances where the product is designated to match others in use on a particular public improvement either completed or in the course of completion, calling for a designated material, product, thing or service by specific brand or trade name unless the specification lists at least two brands or trade names of comparable quality or utility and is followed by the words "or equal" so that bidders may furnish any equal material, product, thing or service. In the event equals are identified in the specifications, bids must be based on products and systems specified, or listed by name, in the Contract Documents or listed by name in Addenda. In the event the term "or equal" is used in the specifications, the following procedure must be followed for the approval of an equal:



- a) Any Bidder may request the City or its authorized representative to approve an equal prior to Bid opening, and each Bidder is encouraged to do so as soon as possible if its Bid will include an equal. However, no Bidder is required to make such a request.
- b) If an equal item is approved prior to Bid opening, it must be listed on an Addenda to all prospective Bidders.
- c) Requests for approval of an equal must contain sufficient information to permit the City or its representative to assess its suitability and impact on the Project. Insufficient information regarding the suitability of the equal shall be grounds for disapproval.
- d) Nevada law permits the Contractor to submit data substantiating a request for approval of an equal up to seven (7) business days after the award.
- e) If the request for approval of an "equal" is not given, the Bidder's Bid must be deemed nonresponsive (and the award rescinded if it has been made).
- f) Substitutions may be requested after the Contract has been signed, but only in accordance with requirements specified in the General Conditions and Specifications, and Nevada law.
- 20) Bids will be received at the City Clerk's Office at **1751 College Avenue, Elko**, **Nevada**. Bids will be opened in a conference room at the City offices.
 - a. Envelopes or boxes containing Bids must be sealed, and marked with name and address of the Bidder, and addressed to:

City of Elko 1751 College Avenue Elko, Nevada 89801

- b. Mark envelopes or boxes BID FOR: DIGESTER MAINTENANCE AND BOILER UPGRADES PROJECT FOR: City of Elko, Elko, Nevada
- 21) By 12:00 p.m. of the **twentieth** business day following acceptance of Bids by the City Council, the bidder must deliver to the City proof that Bidder has taken out for the entire period covered by the proposed contract all insurance policies that would be required to perform the Contract. Proof of insurance may, without limitation, include a declaration page(s) and any other documents reasonably necessary to prove that all required insurance coverages are in effect at the time bids are submitted.,



Failure to properly and timely submit proof of insurance entitles the City Council to **reject the bid as non-responsive**, not issue a Notice to Proceed, and award the Contract to another Bidder.

- a. Any bid protest must be submitted in writing to **the City Attorney, David M. Stanton, at the law offices of Goicoechea, Di Grazia, Coyle & Stanton, Ltd., 530 Idaho Street, Elko, Nevada 89801** within five (5) business days after the date the recommendation to award a contract is issued by the City Council or its authorized representative. The notice of protest must include a written statement setting forth with specificity the reasons the person filing the notice believes the applicable provisions of law were violated. The protest must refer to the specific portions of all documents which form the basis for the protest. The protest must include the name, address and telephone number of the person representing the protesting party. The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other Bidders with a direct financial interest which may be adversely affected by the outcome of the protest and/or who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.
- b. The City, to include the City Attorney, may investigate the protest.
- c. A person filing a notice of protest may be required by the City at the time the notice of protest is filed, to post a bond with a good and solvent surety authorized to do business in the State of Nevada or submit other security, in a form approved by the City, to the City who shall hold the bond or other security until a determination is made on the protest. A bond posted or other security submitted with a notice of protest must be in an amount equal to the lesser of: (a) Twenty-five percent of the total value of the bid submitted by the person filing the notice of protest; or (b) Two hundred fifty thousand dollars.
- d. A notice of protest filed in accordance with the provisions of this section operates as a stay of action in relation to the awarding of any contract until a determination is made by the City on the protest.
- e. A person who makes an unsuccessful bid may not seek any type of judicial intervention until the City has made a determination on the protest and awarded the contract.



- f. Neither the City, nor any authorized representative of the City, is liable for any costs, expenses, attorney's fees, loss of income or other damages sustained by a person who makes a bid, whether or not the person files a notice of protest pursuant to this section.
- g. If the protest is upheld, the bond posted or other security submitted with the notice of protest must be returned to the person who posted the bond or submitted the security. If the protest is rejected, a claim may be made against the bond or other security by the City in an amount equal to the expenses incurred by the City because of the unsuccessful protest. Any money remaining after the claim has been satisfied must be returned to the person who posted the bond or submitted the security.
- h. Bidders are advised to consult Nevada Revised Statutes 338.142 for requirements applicable to protests of awards of public works contracts.
- 22) Prior to award, the City Council reserves the right to reject any or all bids to the extent permitted by law including, without limitation, the right to reject any or all responsive bids or bids submitted by bidders determined to be not responsible. Bidders are advised that any bid may be rejected if the public interest would be served by such a rejection.
- 23) The City Council also reserves the right to waive technical defects to the extent such defects are minor and the waiver does not provide any bidder with a competitive advantage over any other bidder.
- 24) Unbalanced bids and conditional bids are nonresponsive. For purposes of this paragraph, an "unbalanced bid" is one having nominal prices for some work items and enhanced prices for other work items. A "conditional bid" is one in which one or more specified prices may change after a bid is submitted.
- 25) Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between written words and figures, or words and numerals, will be resolved in favor of the words.
- 26) In evaluating bids to determine the best bid (where required), the City Council will consider the qualifications of bidders; whether the bids are responsive (to include whether the bids comply with the prescribed requirements, and such alternates, unit prices and other data, as are requested in the Bid Form or prior to the Notice of Award); whether the bidder is responsible; whether the quality of the services, materials, equipment or labor offered conforms to the approved plans or specifications; and whether the public interest would be served by such a rejection.



The City may conduct such investigations as the City Council deems necessary to assist in this evaluation.

- 27) As a requisite to bidding on the work, bidders and their subcontractors must be properly licensed at the time of bid opening to perform all work bid under Chapter 624 of the Nevada Revised Statutes and Chapter 624 of the Nevada Administrative Code.
- 28) Unless all bids are rejected and except as otherwise provided under Nevada law, the contract will be awarded to the lowest responsive, responsible bidder.
- 29) For public works contracts of \$250,000 or more, NRS 338.147 requires the City to award the contract to the contractor who submits the best bid. Bidders are directed to NRS 338.147 for the criteria used to determine the best bid, which includes criteria for determining the lowest bid.
- 30) Bids may not be withdrawn (1) within sixty (60) calendar days following the date of bid opening or (2) after the contract has been awarded.
- 31) Bidders are advised that Senate Bill 207 (2019), known as the "Apprenticeship Utilization Act, provides as follows:
 - a) A contractor or subcontractor engaged in vertical construction who employs a worker on a public work pursuant to NRS 338.040 shall use one or more apprentices for at least 10 percent of the total hours of labor worked for each apprenticed craft or type of work to be performed on the public work for which more than three workers are employed.
 - b) A contractor or subcontractor engaged in horizontal construction who employs a worker on a public work pursuant to NRS 338.040 shall use one or more apprentices for at least 3 percent of the total hours of labor worked for each apprenticed craft or type of work to be performed on the public work for which more than three workers are employed.
 - c) On or after January 1, 2021, the Labor Commissioner, in collaboration with the State Apprenticeship Council, may adopt regulations to increase the percentage of total hours of labor required to be performed by an apprentice pursuant to subsection 1 or 2 of Senate Bill 207 by not more than 2 percentage points.
 - d) A contractor or subcontractor engaged on a public work is not required to use an apprentice in a craft or type of work performed in a jurisdiction recognized by the State Apprenticeship Council as not having apprentices in that craft or type of work.



- e) The City may, upon the request of a contractor or subcontractor, submit a request to the Labor Commissioner to modify or waive the percentage of hours of labor provided by one or more apprentices required pursuant to subsection 1 or 2 for good cause. The City must submit such a request, before an advertisement for bids has been placed, the opening of bids or the award of a contract for a public work or after the public body has commenced work on the public work. Such a request must include any supporting documentation, including, without limitation, proof of denial of or failure to approve a request for apprentices pursuant to subparagraph (3) of paragraph (d) of subsection 10 of Senate Bill 207.
- f) The Labor Commissioner shall issue a determination of whether to grant a modification or waiver requested by the City within 15 days after the receipt of such request. The Labor Commissioner may grant such a request if he or she makes a finding that there is good cause to modify or waive the percentage of hours of labor provided by one or more apprentices required pursuant to subsection 1 or 2 of Senate Bill 207.
- g) The City, a contractor or a subcontractor may request a hearing on the determination of the Labor Commissioner within 10 days after receipt of the determination of the Labor Commissioner. The hearing must be conducted in accordance with regulations adopted by the Labor Commissioner. If the Labor Commissioner does not receive a request for a hearing pursuant to subsection 8 of Senate Bill 207, the determination of the Labor Commissioner is a final decision for the purposes of judicial review pursuant to chapter 233B of NRS.
- h) A contractor or subcontractor engaged on a public work shall enter into an apprenticeship agreement for all apprentices required to be used in the construction of a public work. If the Labor Commissioner granted a modification or waiver pursuant to subsection 7 of Senate Bill 207 because the Labor Commissioner finds that a request for apprentices was denied or the request was not approved within 5 business days as described in subparagraph (3) of paragraph (d) of subsection 10 of Senate Bill 207 and apprentices are later provided, then the contractor or subcontractor shall enter into an apprenticeship agreement for all apprentices later provided.
- i) As used in Senate Bill 207:

(1) "Apprentice" means a person enrolled in an apprenticeship program recognized by the State Apprenticeship Council.

(2) "Apprenticed craft or type of work" means a craft or type of work for which there is an existing apprenticeship program recognized by the State Apprenticeship Council.

(3) "Apprenticeship program" means an apprenticeship program recognized



by the State Apprenticeship Council.

(4) "Good cause" means:

(A) There are no apprentices available from an apprenticeship program within the jurisdiction where the public work is to be completed as recognized by the State Apprenticeship Council;

(B) The contractor or subcontractor is required to perform uniquely complex or hazardous tasks on the public work that require the skill and expertise of a greater percentage of journeymen; or

(C) The contractor or subcontractor has requested apprentices from an apprenticeship program and the request has been denied or the request has not been approved within 5 business days.

The term "good cause" does not include the refusal of a contractor or subcontractor to enter into an apprenticeship agreement pursuant to subsection 9 of Senate Bill 207.

(5) "Journeyman" has the meaning ascribed to it in NRS 624.260.

(6) "State Apprenticeship Council" means the State Apprenticeship Council created by NRS 610.030.

END OF DOCUMENT



3.0 PUBLIC WORKS CONTRACT

(NEVADA REVISED STATUTES CHAPTER 338)

This Contract is made and entered into on this ___ day of

_____, 20___ (hereinafter the "Effective Date") between the City of Elko, Nevada, a municipal corporation and political subdivision of the State of Nevada (hereinafter the "Owner") and:

which party is a

(name and describe individual and/or type of business entity, including state of formation or incorporation, where applicable) hereinafter "Contractor."

RECITALS

WHEREAS, Owner intends to award a contract for the performance of a public works project known as the **DIGESTER MAINTENANCE AND BOILER UPGRADES**

(hereinafter the "Project");

WHEREAS, the Project is generally described as follows: Supply and replace new digester mixer tube, supply and replace boiler, replace buried hot water line, other maintenance works as described in bid table.

WHEREAS, Contractor was selected to perform the Project in accordance with Chapter 338 of the Nevada Revised Statutes and to complete the work in accordance with the Contract Documents (defined below) (hereinafter the "Work");

NOW, THEREFORE, for and in consideration of the above recitals and for good and valuable consideration as further described herein, the parties agree as follows:

ARTICLE ONE - DESCRIPTION OF WORK

Contractor shall perform all Work needed to complete the Project in accordance with this Contract and the documents attached hereto and incorporated herein as



Exhibits 1 through 19, as follows:

Exhibit 1	Bid Form	
Exhibit 2	Bid Proposal Guarantee (including Bid Bond, if applicable)	
Exhibit 3	Bidder Experience Qualifications	
Exhibit 4	Designation of Subcontractors with 1% & 5% Subcontractor Lists	
Exhibit 5	Affidavit of Non-Collusion	
Exhibit 6 Certification of Bidder Regarding Penalties for Non-Complian		
	with Nevada Prevailing Wage Requirements	
Exhibit 7	Fringe Benefit Plan, Fund or Program Disbursement Information	
Exhibit 8	Drawings (including plans, maps, plats and blueprints)	
Exhibit 9	Performance Bond	
Exhibit 10	Payment Bond	
Exhibit 11	Notice of Award	
Exhibit 12	Notice to Proceed	
Exhibit 13	Standard Specifications and Details for Public Works Construction	
	(Orange Book) 2016 Revised Edition (see the following URL:	
	http://rtcwashoe.wpengine.com/wp-content/uploads/2018/01/2016-Version-	
	Revision-No9.pdf) (hard copy not attached to Contract)	
Exhibit 14	General Provisions (depending upon applicable requirements)	
Exhibit 15	Special or Supplemental Provisions	
Exhibit 16	Technical Specifications	
Exhibit 17	Prevailing Wage Rates - Elko County or Davis-Bacon Wage Rates	
	https://labor.nv.gov/uploadedFiles/labornvgov/content/PrevailingWage/4.%20	
	<u>Northern%20Nevada%20Rural%20Region%202022.pdf</u> . (hard copy not attached to Contract)	
	,	
Exhibit 18	Preferential Bidders Status Affidavit	

Exhibit 19 Certification Not to Engage in Boycott of Israel

This Contract and **Exhibits 1 through 19** are herein referred to collectively as the "Contract Documents." The Work shall include all items identified as Additive Alternates in the Notice of Award. Unless otherwise indicated in the Contract Documents, the Work shall not include design work, which Owner shall procure through a separate contract or contracts with design professionals, nor shall the Work include work performed by Owner or items identified as Deductive Alternates in the Notice of Award.



In the event of an inconsistency between the terms of this Contract and any of the Contract Documents attached hereto as **Exhibits 1 through 19**, the terms of this Contract shall prevail.

ARTICLE TWO CONTRACT PRICE

Owner agrees to pay Contractor for the Work the total price of:

\$_____

(hereinafter the "Contract Price"), which includes all labor, materials, and (where applicable) architectural and engineering plans necessary for the erection and completion of the Work as described in the Plans and Specifications and in accordance with the Contract Documents. Payment of the Contract Price is subject to approved additions or approved deductions in accordance with the provisions of this Contract.

ARTICLE THREE - STARTING AND COMPLETION DATES

Construction under this Contract shall begin no later than the date indicated on the "Notice to Proceed" to be issued by Owner after execution of this Contract. Subject to written extensions of time or delays authorized by Owner or stoppage of Work as permitted in this Contract, the Work shall be substantially completed no later than **270 calendar days** after the Commencement Date indicated on the Notice to Proceed document which will be issued by the Owner on or after the Effective Date (hereinafter the "Contract Time"). In the event the Work has not been completed in accordance with the terms of this Contract, or in the event the Contractor abandons the Work, the Owner may contract with a third party for completion of the Work, in which event the Contractor shall pay to Owner the additional cost for the portion of the Work completed by the third party. The foregoing is in addition to any other remedies provided under this Contract.



ARTICLE FOUR - CONTRACT DOCUMENTS

The Contract Documents on which the Contract between Owner and Contractor is based and which contain the Plans and Specifications in accordance with which the Work is to be done are as follows:

A. This Contract, with any supplementary contracts and conditions attached hereto which are signed by both parties;

B. **Exhibits 1 through 19**, which have been incorporated by reference herein; and

C. Written Work Change Orders properly issued.

The Contract Documents together form the contract for the Work herein described. The parties intend that the Contract Documents include provisions for all labor, materials, equipment, supplies, and other items necessary for the execution and completion of the Work, and all items and conditions of payment. The documents also include all work and procedures not expressly indicated therein necessary for proper execution of this Project.

ARTICLE FIVE - DUTIES AND AUTHORITY OF THE OWNER

The duties and authority of the Owner are as follows:

A. <u>General Administration of Contract.</u> General administration of the contract to ensure compliance with design plans.

B. <u>Access to Work Site for Inspections.</u> Owner, or Owner's agents, shall be given free access to the Work at all time during its preparation and progress.

- C. Payment and Acceptance of Work.
 - (1) <u>Application for Progress Payment.</u> As a prerequisite to Contractor's



entitlement to a progress payment, Contractor shall first submit to Owner for review an Application for Progress Payment filled out and signed by Contractor covering the Work completed to that date, and accompanied by such supporting documentation as is required by the Contract documents. If payment is requested on the basis of materials and equipment not yet incorporated into the Work, but delivered and suitably stored at the site or at another location designated by Contractor, the Application for Progress Payment shall also be accompanied by a bill of sale, invoice or other documentation warranting that Owner has received the materials and equipment free and clear of all liens (to include lien waivers, if appropriate), charges, security interests and encumbrances, and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect Owner's interests therein, all of which will be satisfactory to Owner.

(2) <u>Progress Payments.</u> Except as otherwise provided herein, Owner shall pay to Contractor the amount indicated on each Application for Progress Payment within thirty (30) calendar days of the date it is submitted to the Owner. All Progress Payments are subject to the requirements of NRS 338.515 (Time for making payments; amounts paid; amounts withheld as retainage; rate of interest paid on amounts withheld; powers of Labor Commissioner when worker is owed wages), as amended.

(3) Payment Upon Final Completion. Payment of any outstanding balance shall be paid in accordance with NRS 338.520 upon occupancy, use or recording of notice of completion, less amounts previously paid for the Work or amounts which Owner is required to withhold by order of the Nevada Labor Commissioner pursuant to NRS 338.515. In the event any liens are filed on the Project, those sums shall be withheld from the final retention payment, until such liens are resolved and removed. Upon final acceptance of the completed Work, Owner may publish a Notice of Completion. Contractor acknowledges and agrees that "substantial completion" is not equivalent to final completion.

D. <u>Work Performed by Owner.</u> This Contract specifically allows Work to be performed by Owner. Contractor assumes no responsibility for work performed by Owner and Owner shall release and hold harmless Contractor for any deficiencies in such work, and shall indemnify and defend Contractor from and against any and all claims arising from or in any manner related to Work performed by Owner. Owner shall, upon



Contractor's request, identify in writing all work performed by Owner which is included within the scope of the Work and the Contract Price shall thereafter be reduced by the amount Contractor would have otherwise charged for the work pursuant to the Contract.

ARTICLE SIX - RESPONSIBILITIES OF CONTRACTOR

Contractor's duties and rights in connection with the project herein are as follows:

A. <u>Responsibility for and Supervision of Construction</u>. Contractor shall be solely responsible for all construction under this Contract, including the techniques, sequences, procedures, and means, and for coordination of all Work. Contractor shall supervise and direct the Work to the best of its ability, and give the Work all attention necessary for such proper supervision and direction.

B. <u>Furnishing of Labor, Materials.</u> Contractor shall provide and pay, if necessary, for all labor, materials, and equipment, including tools, construction equipment, and machinery, utilities, transportation, and all other facilities and services necessary for the proper completion of Work on the project in accordance with the Contract Documents.

C. <u>Compliance with Construction Laws and Regulations.</u> The Contractor and any subcontractor or other person who provides labor, equipment, materials, supplies or services for the Work shall comply with the requirements of all applicable state and local laws, including, without limitation, any applicable licensing and registration requirements and requirements for the payment of sales and use taxes on equipment, materials and supplies provided for the Work. If any of the Contract Documents are at variance therewith, Contractor shall notify Owner promptly on discovery of such variance.

D. <u>Responsibility for Negligence of Employees and Subcontractors.</u> Contractor assumes full responsibility for acts, negligence, or omissions of all its employees on this project, for those of its subcontractors and their employees, and for those of all other persons doing Work under a contract with Contractor.

E. <u>Materials Warranty.</u> In addition to any other warranties set forth herein,



Contractor represents and warrants to Owner that the materials used in the Work, and made a part of the structure on the Property or placed permanently in connection therewith, will be new unless otherwise specified in the Contract Documents, of good quality, free of defects, and in conformity with the Contract Documents. It is understood between the parties hereto that materials not so in conformity are defective.

F. <u>Clean-up.</u> Contractor agrees to remove all such waste material and rubbish on termination of the project, together with all its tools, equipment, machinery and surplus materials. Contractor agrees, on terminating its Work at the site, to conduct general clean-up operations.

G. <u>Indemnity and Hold Harmless Contract.</u> Contractor agrees to indemnify and hold harmless Owner, and its agents, and employees, from and against all claims, damages, losses, and expenses, including reasonable attorneys' fees in case it shall be necessary to file an action, arising out of performance of the Work herein, which is (1) for bodily injury, illness, or death, or for property damages including loss of use, and (2) caused in whole or in part by Contractor's intentional or negligent act or omission. Owner agrees to indemnify and hold harmless Contractor, and its agents, and employees, from and against all claims, damages, losses, and expenses, including reasonable attorneys' fees in case it shall be necessary to file an action, arising out of performance of the work herein (to include work performed by Owner), which is (1) for bodily injury, illness, or death, or for property damages including loss of use, and (2) caused in whole or in part by Owner's intentional or negligent act or onission.

H. <u>Safety Precautions and Programs.</u> Contractor has the duty of providing for and overseeing all safety orders, precautions, and programs necessary for the reasonable safety of the Work. In this connection, Contractor shall take reasonable precautions for the safety of all Work employees and other persons whom the Work might affect, all labor and materials incorporated in the project, and all property and improvements on the construction site and adjacent thereto, complying with all applicable laws, ordinances, rules, regulations and orders.

I. <u>Subcontractors.</u> Contractor acknowledges that it has provided Owner with a list or lists of all subcontractors which Contractor shall use for the Work to be performed herein in compliance with NRS 338.141(1)(b).



J. <u>Payment of Materialmen.</u> Contractor shall promptly pay all materialmen, subcontractors and other persons furnishing labor, material, goods or services to the Work, and shall indemnify and hold Owner harmless from any liens filed by such persons or entities including reasonable attorney fees and court costs incurred in connection herewith.

K. <u>Sales Taxes.</u> Contractor shall be responsible for the payment of all sales, use, gross receipts or other taxes related to Contractor's Work under this Contract.

L. <u>Worker's Compensation</u>. Contractor shall, at its sole cost and expense, be responsible for providing or assuring that worker's compensation coverage is provided to or by, all persons or entities providing labor in connection with the Work as required under the laws of the State of Nevada.

M. <u>Employee Benefits.</u> Contractor shall be responsible at its sole cost and expense for payment of any or all employee benefits taxes, including but not limited to unemployment, social security, retirement, health, welfare or any other fringe benefit in connection with any Work performed by Contractor.

N. <u>Fees, licenses and Permits.</u> Contractor shall be responsible for fees (to include inspection fees), licenses and permits required by a governmental entity, to include, without limitation, the City of Elko.

O. <u>No Assignment of Payments.</u> Contractor shall not assign the right to receive any payments due under this Contract except with the prior written consent of the Owner.

P. <u>Capacity of Contractor</u>. Contractor has the financial capacity to pay all debts incurred in the performance of the Work, and possesses or shall prior to performance acquire all knowledge, equipment, materials, supplies and other means necessary to finally complete the Work within the Contract Time, to include the retention of appropriate subcontractors.

Q. <u>Financial Capacity of Subcontractors</u>. Contractor will ensure that all subcontractors it retains will have the financial capacity to pay all debts incurred in the



performance of the portion of the Work for which they are subcontracted, and will possess or shall prior to performance acquire all knowledge, equipment, materials, supplies and other means necessary to finally complete the portion of the Work for which they are subcontracted within the Contract Time.

R. <u>Licensing</u>. Contractor is authorized to do business in the State of Nevada, is licensed for the type of work to be performed herein and holds Nevada Contractor's License Number(s):

S. <u>Site Inspection and Research</u>. Contractor has visited the Property and has performed sufficient research necessary to familiarize itself with the Property and any special or local conditions, to include climate, topography and geographic location that have the potential to materially impact its ability to perform the Work within the Contract Time. Contractor has also reviewed all reasonably available reports (including geotechnical reports), test results, drilling logs and studies pertaining to subsurface conditions at the Property. Based upon the foregoing, Contractor has determined that it can perform the Work within the Contract Time.

ARTICLE SEVEN - INSURANCE

A. <u>Contractor's Liability Insurance.</u> Contractor agrees to keep in force at his own expense during the entire period of construction of the project such liability insurance as will protect it from claims, under worker's compensation and other employee benefit laws, for bodily injury and death, and for property damage, that may arise out of work under this Contract, whether directly or indirectly by Contractor, or directly or indirectly by a subcontractor. The minimum liability limit for bodily injury on such insurance shall not be less than Two Million Dollars (\$2,000,000.00). Such insurance shall include contractual liability insurance applicable to Contractor's obligations under this contract.



Unless previously provided, proof of such insurance shall be filed by Contractor with Owner within five (5) calendar days after execution of this contract.

B. <u>Owner's Liability Insurance.</u> Owner shall maintain premises liability in the amount of Two Million Dollars (\$2,000,000.00).

C. <u>Property Damage Insurance.</u> Contractor shall be solely responsible for any losses to his own equipment through fire, vandalism or other perils.

D. <u>Fire and Perils Waiver.</u> Owner and Contractor waive all rights against each other for damages caused by fire or other perils to the extent covered by insurance provided herein.

ARTICLE EIGHT - CORRECTING WORK

When it appears to Contractor during the course of construction that any Work does not conform to the provision of the Contract Documents, Contractor shall make necessary corrections so that such Work will so conform, and in addition will correct any defects caused by faulty materials, equipment, or workmanship in Work supervised by Contractor or by a subcontractor.

ARTICLE NINE - CONTRACTOR'S WARRANTY

Contractor further represents and warrants that the Work will be performed in a good and workmanlike manner, in conformance with the Contract Documents and free from any and all defects. For a period of one (1) year after final acceptance by the Owner or within such longer period as may be prescribed by law, Contractor shall, at its own expense, promptly repair, replace, rebuild or restore any portion of the Work that is determined by the Owner to be defective or not in conformance with the Contract Documents.

ARTICLE TEN - MANUFACTURER'S WARRANTIES

To the extent available to Contractor, Contractor shall deliver to Owner guarantees or warranties provided by the manufacturers of specific products utilized in the performance of the Work and installed or constructed on the Property.



ARTICLE ELEVEN - CHANGES IN THE WORK

A. <u>Owner's Change Orders.</u> Without invalidating the Contract, Owner may at any time, from time-to-time, order additions, deletions, or revisions in the Work that do not result in a material change to the scope of Work. These will only be authorized by written Change Orders. Change Orders are to be negotiated solely with Contractor or its authorized representative and not with subcontractors or materialmen. Upon receipt of a written Change Order, Contractor will proceed with the Work involved. All such Work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment will be made as provided in ARTICLE TWELVE or ARTICLE THIRTEEN.

B. <u>Owner's Field Orders.</u> Owner may authorize minor changes or alterations in the Work not involving extra cost and not inconsistent with the overall intent of the Contract Documents. These may be accomplished by a written Field Order. If Contractor believes that any minor changes or alterations by Owner entitle it to an increase in the Contract Price, Contractor may suspend Work until the Owner and Contractor agree upon the increased price.

C. <u>Unauthorized Additional Work.</u> Additional Work performed by Contractor without authorization of a Change Order will not entitle Contractor to an increase in the Contract Price or an extension of the Contract Time.

D. <u>Execution of Change Orders.</u> Owner will, upon approval, execute appropriate Change Orders prepared by Contractor covering changes in the Work to be performed and any other claim of Contractor for a change in the Contract Time or the Contract Price that is reasonable.

E. <u>Writing Required.</u> All Change Orders of whatever type or nature must be in writing and signed by an authorized representative of the Owner. Accordingly, wherever the context of this Contract indicates that Owner approval is required, such approval must be as described in this ARTICLE ELEVEN, E, herein.



F. <u>Suspension of Work.</u> Notwithstanding any other provision herein, Contractor may not suspend Work based on a written Change Order affecting price or adding time unless the change requested materially affects Contractor's ability to perform the remainder of the Work within the price or time frames of the original Contract.

G. <u>No Material Changes to Scope.</u> In no event shall a Change Order cause a material change to the scope of the Work.

ARTICLE TWELVE - CHANGE OF CONTRACT PRICE

A. <u>Total Compensation</u>. The Contract Price constitutes the total compensation payable to Contractor for performing the Work. All duties, responsibilities, and obligations assigned to or undertaken by Contractor shall be at its expense without change in the Contract Price.

B. <u>Necessity of Change Order.</u> The Contract Price may only be changed by a Change Order approved by the Owner and the Contractor. Any claim for an increase in the Contract Price shall be in writing and delivered to Owner. All claims for adjustments in the Contract Price resulting from any such claim shall be incorporated in a written Change Order. Subject to the limitations in ARTICLE ELEVEN, F, the Contractor may suspend Work until the Owner and Contractor agree upon the Change Order changing the Contract Price.

C. <u>Determination of Value of Change Order Work.</u> The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined by multiplying the applicable quantity by the unit price indicated in the bid form, except as otherwise agreed between Owner and Contractor in a written Change Order. In such case, Contractor will submit an itemized cost breakdown together with supporting data.

D. <u>Amount of Credit to Owner.</u> The amount of credit to be allowed by Contractor to Owner for any such change that results in a net decrease in costs, will be determined by multiplying the applicable quantity by the unit price indicated in the bid



form, except as otherwise agreed between Owner and Contractor in a written Change Order. When both additions and credits are involved in any one change, the combined overhead and profit shall be figured on the basis of the net increase, if any.

ARTICLE THIRTEEN - CHANGE OF THE CONTRACT TIME

A. <u>Necessity of Change Order.</u> The Contract Time may only be changed by a Change Order. Any claim for an extension in the Contract Time shall be in writing delivered to Owner by Contractor within five (5) calendar days of the occurrence of the event giving rise to the claim. All claims for adjustment in the Contract Time shall be agreed upon in writing by the Owner and Contractor. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order. Subject to the limitations of ARTICLE ELEVEN, F, the Contractor may suspend Work until the Owner and Contractor agree upon the change in Contract Time.

B. <u>Delays Beyond Contractor's Control.</u> The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of Contractor if Contractor makes a claim for such extension(s) as provided in Section A of this ARTICLE THIRTEEN. Such delays shall include, but not be restricted to, acts or neglect by any separate contractor employed by Owner, fires, flood, labor disputes, epidemics, abnormal weather conditions, unanticipated site conditions or Acts of God, suspension of Work by Contractor resulting from Owner and Contractor failing to agree on Change Orders and work stoppage as set forth in Section C, below. Notwithstanding all provisions herein to the contrary, delays beyond sixty (60) calendar days, for any reason, permit the Owner to terminate this Contract on ten (10) calendar days' prior written notice. In such instance, Owner shall be liable to Contractor for all Work performed to the date of termination.

ARTICLE FOURTEEN - NOTICES

Any and all notices, demands, requests, and other communications required or permitted to be served on or given to either party by the other shall be delivered personally or by United States Mail, first class postage prepaid, certified or registered mail, return receipt requested, by facsimile or by e-mail, read receipt, as follows:



Contractor:	Name: Attention:	
	Address:	
	Facsimile:	
	E-Mail:	
<u>Owner:</u>	Name:	City of Elko
	Attention:	Kelly Wooldridge City Clerk
	Address:	1751 College Avenue,
		Elko, Nevada 89801
	Facsimile:	775-777-7126
	E-Mail:	cityclerk@elkocitynv.gov

Such addresses may be changed by the party entitled to receive notice any time upon this notice to the other party of designation of a new address. If delivered personally, such notice shall be effective upon delivery. If mailed, such notice shall be effective upon the date of receipt indicated on the return receipt.

ARTICLE FIFTEEN - EARLY TERMINATION FOR FAILURE TO REMEDY DEFAULT

A. <u>Failure to Remedy Default; Early Termination</u>. If Contractor defaults in **performance**[SP1] of any material provision herein and Contractor fails to commence reasonable efforts to remedy such default after thirty (30) calendar days' written notice from the Owner specifying the default, Owner may then terminate this Contract before the completion date hereof without prejudice to any other remedy Owner may have.

B. <u>Cost to Complete Project to be Reimbursed</u>. If Owner terminates the Contract due to a breach in the terms of the Contract by Contractor, and is thereby required to retain a different contractor to complete the Project, any related increase in the total cost of the Project will be at Owner's sole discretion, will be withheld from any retention held by Owner, will be obtained from the proceeds of any applicable bond(s) posted by the Contractor and/or will be reimbursed by the Contractor to the Owner immediately upon demand.



ARTICLE SIXTEEN - LIQUIDATED DAMAGES

Α. Liquidated Damages for Failure to Timely Achieve Substantial Completion. It is acknowledged that the Contractor's failure to achieve substantial completion of the Work within the Contract Time provided by the Contract Documents will cause the Owner to incur substantial economic damages and losses of types and in amounts which are impossible to compute and ascertain with certainty as a basis for recovery by the Owner of actual damages, and that liquidated damages represent a fair, reasonable and appropriate estimate thereof. Accordingly, in lieu of actual damages for such delay, the Contractor agrees that liquidated damages may be assessed and recovered by the Owner as against Contractor and its Surety, in the event of delayed completion and without the Owner being required to present any evidence of the amount or character of actual damages sustained by reason thereof; therefore Contractor shall be liable to the Owner for payment of liquidated damages in the amount of **One Thousand Dollars** (\$1,000.00) for each calendar day that Substantial Completion is delayed beyond the Contract Time as adjusted for time extensions provided in accordance with the Contract Documents.

B. <u>Interest</u>. Interest shall accrue on all unpaid liquidated damages at a rate equal to the prime rate at the largest bank in Nevada as ascertained by the Commissioner of Financial Institutions on January 1 or July 1, as the case may be, immediately preceding the date of the liquidated damages accrue, plus 2 percent. The rate shall be adjusted accordingly on each January 1 and July 1 thereafter until the liquidated damages are paid in full.

C. <u>Owner's Right of Offset.</u> In the event there are sums due to Contractor from Owner subsequent to the date upon which liquidated damages begin to accrue, Owner may thereafter offset and deduct from such sums the amount of any liquidated damages then accrued and Contractor shall not thereafter be entitled to recover the difference from Owner.

D. <u>Remedy not Exclusive</u>. Liquidated damages are intended to represent estimated actual damages and are not intended as a penalty. Contractor shall pay liquidated damages to Owner without limiting Owner's right to terminate this Contract for default as provided elsewhere herein. Liquidated damages only represent damages for



administrative costs, overhead and loss of public use caused by Contractor's delay. The imposition or recovery of liquidated damages by Owner shall in no manner affect Owner's ability to recover any other damages caused by Contractor's default to include, without limitation, the cost of completion.

ARTICLE SEVENTEEN - ADDITIONAL PROVISIONS

A. <u>Integration</u>. This Contract and the exhibits hereto constitute the entire contract between the parties with respect to the Work and supersede all prior agreements, offers and negotiations (to include, without limitation, the Invitation to Bid and Instructions to Bidders, unless otherwise specifically stated herein) and may not be amended except by a contract in writing signed by the parties.

B. <u>Binding on Assigns and Successors</u>. This Contract shall inure to the benefit of and be binding upon the parties hereto and their respective heirs and assigns and successors.

C. <u>Choice of Law; Jurisdiction and Venue.</u> This Contract and the provisions hereof shall be construed, given effect and governed by the laws of the State of Nevada, and in the event of a breach of this contract by any of the parties, the other party shall have all remedies at law or equity provided by the laws of the State of Nevada. Irrespective of any statutory provision to the contrary, jurisdiction and venue for any action shall be in the Fourth Judicial District Court of the State of Nevada, in and for the County of Elko. The parties understand that statutory provisions may permit venue in locations other than the County of Elko; however, the parties hereby voluntarily waive any such statutory provisions.

D. <u>Captions and Headings</u>. The captions and headings of the sections hereof are for convenience only and shall not control or affect the meaning or construction of any of the terms or provisions of the Contract.

E. <u>Attorney Fees and Costs to Prevailing Party</u>. Should either party be required to seek legal action to enforce or interpret the terms and conditions of this contract, the prevailing party shall be entitled to reasonable attorney fees and costs.



F. <u>Ambiguities</u>. Each party has reviewed this Contract with counsel; accordingly, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Contract.

G. <u>Unenforceability of Provisions</u>. In the event that one or more of the provisions, or portions thereof, of the Contract is determined to be illegal and unenforceable, the remainder of the Contract shall not be affected thereby and each remaining provision or portion thereof shall continue to be valid and effective and shall be enforceable to the fullest extent permitted by law.

H. <u>Further Documents</u>. Contractor and Owner agree to execute all documents necessary to complete the Contract described herein.

I. <u>Waiver</u>. Any waiver of one or more defaults or breach of any term of this Contract shall not be construed to constitute a waiver of future defaults or breaches of the terms of this Contract.

J. <u>Signatures</u>. The parties agree that this Contract may be executed by electronic or facsimile signatures, which shall have the same effect as original signatures of the parties. Also, this Contract may be executed in counterparts, all of which shall be deemed originals and with the same effect as if all parties had signed the original. The signatories to this Contract are authorized to execute this instrument on behalf of the respective parties.

K. <u>Mediation</u>. The parties recognize that differences sometimes arise in the course of a relationship and wish to avoid litigation. Accordingly, all claims, disputes and other matters in question between Contractor and Owner arising out of or relating to this Contract or the breach thereof, the Project, or the Work ("disputes") shall first be submitted to negotiation. Disputes claimed by either party must be made by written notice promptly upon the recognition of the event giving rise to such claim. If after thirty (30) calendar days from the date the dispute arose negotiations prove unsuccessful in whole or in part, any remaining disputes shall be submitted to a mediator and the mediation shall be performed expeditiously by a mediator located in Elko County, Nevada. In the event a



mediator cannot be located in Elko County, Nevada, the parties agree to split the cost for a mediator to travel to Elko County, Nevada to mediate such claims.

Pending final resolution of any dispute, including mediation in accordance with this Section, Contractor shall proceed diligently with performance of the Work to the extent it is unrelated to the dispute and the subject matter of the dispute does not inhibit the progress of the Work generally and Owner shall continue to make payments to Contractor in accordance with this Agreement to the extent unrelated to the dispute. To the extent necessary in light of the circumstances, the Contract Time shall be extended by the period of time necessary to resolve any dispute. Such performance by Contractor and payment by Owner shall not operate to waive or estop either party from pursuing the claim which gave rise to the dispute.

If the mediation does not occur within ninety (90) calendar days of such dispute, or if the mediation is conducted and all disputes are not therein resolved, then either party may file an action in the Fourth Judicial District Court, Elko, County, Nevada. All applicable statutes of limitations and the like shall be tolled while the requirements of this provision are pending, but only as to the disputes hereby submitted for negotiation or mediation.

L. <u>Approval by City Council and Execution by City Official (s)</u>. Notwithstanding any other provision herein contained, this Contract shall not be binding on the Owner until it has been approved by the City Council and executed by its authorized official(s).

[Remainder of page intentionally left blank. Signature Page Immediately Follows]



IN WITNESS WHEREOF, the parties have executed this Contract as of the day and year first hereinabove written.

OWNER:

CITY OF ELKO

Ву:_____

MAYOR

CONTRACTOR (Company Name) :

Ву:_____

Title:_____

ATTEST:

KELLY WOOLDRIDGE, City Clerk



4.0 EXHIBITS

EXHIBIT 1 - BID FORM

(To Accompany Bid)

THIS FORM, FULLY COMPLETED, MUST BE USED FOR ALL BIDS

TO THE CITY OF ELKO, NEVADA:

The undersigned bidder hereby offers, in the amount stated in Exhibit 1 – Bid Form, to furnish all labor, materials, tools, equipment, apparatus, facilities, transportation, incidental items and permits (except as otherwise stated in the Contract Documents) for the construction of the Project, described as follows:

THE CITY OF ELKO DIGESTER MAINTENANCE AND BOILER UPGRADES PROJECT

The bidder agrees that the work will be performed in accordance with the Contract Documents together with incidental items necessary to complete the work to be constructed in accordance with the Contract, any and all Exhibits to the Contract, Exhibit 16 – Technical Specifications, Exhibit 8 – Project Construction Plans and also in accordance with the *"Standard Specifications and Details for Public Works Construction", 2016 Revised Edition*, and amendments (Orange Book) as adopted by the City of Elko, Nevada.

	Description	Unit	Unit Price	Quantity	Total Cost
1)	Mobilization/Demobilization	LS	\$	1	\$
2)	Remove existing digester tube	LS	\$	2	\$
3)	Supply new digester tube	LS	\$	2	\$
4)	Install new digester tube	LS	\$	2	\$
5)	Apply new UV coating on existing digester lid	LS	\$	1	\$

DIGESTER MAINTENANCE AND BOILER UPGRADES PROJECT BASE BID FORM



6)	Replace existing buried hot water pipeline from boiler to digester	LS	\$ 1	\$
7)	Remove and dispose of existing boiler assembly	LS	\$ 1	\$
8)	Supply new boiler assembly	LS	\$ 1	\$
9)	Install new boiler assembly	LS	\$ 1	\$
10)	Refurbish existing access port door assemblies	LS	\$ 2	\$
<u>To</u>	<u>tal</u>			\$

TOTAL BASE BID AMOUNT (BID ITEMS NO. 1 – NO. 10) IN NUMBERS =

TOTAL BASE BID AMOUNT (BID ITEMS NO. 1 – NO. 10) IN WRITTEN FORM =

BASE BID INSTRUCTIONS: The Base Bid amount is to be stated in legible figures only and is the total amount bid for the entire contract work, including all applicable taxes. Any alteration, erasure or change must be clearly indicated and initialed by the bidder. The bidder agrees that the following, without limitation, may, in the City's discretion, constitute grounds for rejecting this bid as non-responsive: (1) one or more blanks are not filled in; (2) the bid form is not signed by an authorized representative of the bidder; (3) any words or figures are not legible; (4) there are discrepancies in the figures (to include arithmetical errors); (5) the bid is not submitted with a compliant bid bond; (6) the bidder supplies false information on this bid form; or (7) the bidder fails to provide information required by this bid form or Nevada law.

COMMUNICATIONS WITH CITY: All communications with the City regarding this Project until the time a contract is executed by the City shall be directed to the Office of the Elko City Clerk. In the event the City determines that a bidder has attempted to communicate with any City official or employee in violation of the preceding sentence, the City may, in its discretion, reject that bid (even after a Notice of Award has been issued) on the ground that rejection of the bid serves the public interest.



<u>CERTIFICATION OF FAMILIARITY WITH PROJECT AND CONTRACT</u> <u>REQUIREMENTS</u>: The bidder certifies that it has inspected the location where the Project will be performed, has read and is thoroughly familiar with the Project and the Contract documents, and has received and thoroughly reviewed the following Addenda and/or other documents from the City in relation to this Project: _____

BIDDER ACKNOWLEDGES RECEIPT OF THE ADDENDA AND OTHER DOCUMENTS REFERENCED ABOVE!

BID BOND: As a condition of the privilege to bid on this Project, the bidder shall submit with its bid a bid bond, executed by a surety company authorized to do business in the State of Nevada, in an amount equal to TEN PERCENT (10%) of the amount of the Base Bid plus all additive alternates. Should the bidder be awarded the contract and thereafter fail to enter into a written contract for the Project upon request by the City, the bidder shall thereupon forfeit and the City shall retain the full amount of the bid bond, which shall be a penalty and not damages.

<u>CONTRACTOR'S LICENSE</u>: The bidder certifies that it holds a valid Nevada State Contractor's license, as follows:

LICENSE CLASSIFICATION: _____

LICENSE NUMBER: _____

<u>**CITY OF ELKO BUSINESS LICENSE:</u>** The bidder certifies that it holds a valid City of Elko Business License, as follows, or will obtain one prior to the time of Contract execution:</u>

LICENSE TYPE: _____

LICENSE NUMBER: _____

RESOLUTION: If the bidder is a limited liability company or corporation, the bidder must include with its bid an appropriate resolution authorizing the signatory to this document to sign and submit this bid, and execute a contract for performance of the Project on behalf



of the Limited Liability Company or Corporation.

EFFECT OF AWARD: An award constitutes conditional acceptance of a bid, subject to the City of Elko executing and delivering to the winning bidder a fully executed copy of the Public Works Contract. Prior to the delivery of a fully executed copy of the Public Works Contract, the Elko City Council may, in its discretion, decide to reject all bids and perform the work itself, rebid the Project or not proceed with the Project.

WINNING BIDDER: The winning bidder will be determined accordance with Chapter 338 of the Nevada Revised Statutes. The City reserves the right, in its sole discretion, to waive minor technical defects or irregularities in bids provided the waiver does not give a competitive advantage to one bidder over another.

PROTEST RIGHTS: Under Nevada law, a person who bids on a public works contract may file a notice of protest regarding the awarding of the contract with the authorized representative designated by the public body within five (5) business days after the date the recommendation to award a contract is issued by the public body or its authorized representative. Bidders are advised to consult Nevada Revised Statutes 338.142 for requirements applicable to protests of awards of public works contracts.

BIDDER INFORMATION AND SIGNATURE:

DATED this _____ day of ______, 20_____.

NAME OF BIDDER: _____

TYPE OF ENTITY (e.g., partnership, corporation):

COMPLETE ADDRESS AS SHOWN ON THE OFFICIAL WEBSITE OF THE NEVADA STATE CONTRACTOR'S BOARD (THIS ADDRESS WILL BE USED FOR ALL WRITTEN CORRESPONDENCE WITH THE BIDDER UNLESS OTHERWISE AUTHORIZED BY THE CITY):

AUTHORIZED SIGNATURE:



PRINT OR TYPE NAME:	
OFFICIAL TITLE OR CAPACITY:	

EXHIBIT 2 - BID PROPOSAL GUARANTEE (To Accompany Bid Form)

KNOW ALL MEN BY THESE PRESENTS, THAT WE, THE UNDERSIGNED,

_____, as PRINCIPAL,

and ______, as SURETY,

are hereby held and firmly bound unto the CITY OF ELKO, NEVADA, as OWNER in the penal sum of at least **ten (10%) percent** of the total amount of bid equal to:

(Written Form)

(Numbers) \$______ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of the above obligation is such that whereas the Principal is herewith submitting to the CITY OF ELKO, NEVADA, a certain Bid for the:

THE CITY OF ELKO

DIGESTER MAINTENANCE AND BOILER UPGRADES PROJECT

NOW, THEREFORE,

(a) If the Principal shall not withdraw said Bid within thirty (30) calendar days after the opening of the same, or



(b) If said Bid shall be rejected, or in the alternate,

(c) If said Bid shall be accepted and the Principal shall within **twenty (20) calendar days** after receipt of Notice of Award, execute and deliver a contract in the form of Contract specified in the Contract Documents (properly completed in accordance with said Bid) and shall furnish a bond with good and sufficient surety or sureties for his faithful performance of said Contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, then this obligation shall be void, otherwise the same shall remain in force and effect and the Principal and Surety will pay unto the Owner the penal sum hereof; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such Bid; and said Surety does not hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers this _____ day of , 20____;

PRINCIPAL:

SURETY:

BY:_____

(SEAL)



EXHIBIT 3 - EXPERIENCE QUALIFICATIONS

(To Accompany Bid Form)

By signing this form, the Bidder verifies that he/she has been engaged in the contracting business under the present business name for the previous five (5) years.

The Bidder must have previous experience in work similar to the Project. In order to demonstrate this to the City, the Bidder must provide references and contract amounts for previous projects of similar type and complexity to the Project. These references and contract amounts must have been parties to the same contracts as Bidder with respect to projects of this type.

Similar Projects

YEAR	CONTRACT AMOUNT	TYPE OF WORK	LOCATION & FOR WHOM PERFORMED	CONTACT NAME	PHONE #

In addition to the above references (unless the same), the Bidder must list references and contract amounts for recent projects that have been satisfactorily completed, together with the corresponding information requested in the following table:

Recent Projects

YEAR	CONTRACT AMOUNT	TYPE OF WORK	LOCATION & FOR WHOM PERFORMED	CONTACT NAME	PHONE #



CITY OF ELKO 1751 College Avenue, Elko, NV 89801

(775) 777-7100 * www.elkocity.com

By signing this form, the Bidder verifies that he/she has never failed to satisfactorily complete a contract to which he/she was a party, except as follows (attached additional sheets if required):

The following is a list of property, plant and equipment owned by the Bidder which is definitely available for use on the proposed work if needed:

Attach additional sheets if required.

SIGNED:_____

DATE:_____



EXHIBIT 4 - DESIGNATION OF SUBCONTRACTORS

FIVE PERCENT LIST NRS 338.141(1)(b) (To Accompany Bid)

State law requires that the prime contractor on this project submit a "5% List" with his or her bid. The 5% List must include the name of the prime contractor <u>and</u> the name of each first tier subcontractor who will provide labor or a portion of the work for which the prime contractor and (if applicable) the first tier subcontractor will be paid an amount exceeding 5 percent of the prime contractor's total bid.

A PRIME CONTRACTOR BIDDING ON A PUBLIC WORK <u>MUST</u> INCLUDE HIS OR HER NAME ON THE 5% LIST!

IMPORTANT: A BID WITHOUT A TIMELY, COMPLETE AND CORRECT 5% LIST THAT COMPLIES WITH NRS 338.141 WILL BE AUTOMATICALLY DEEMED NOT RESPONSIVE!

The 5% List must also contain a description of the labor or portion of the work which the prime contractor will perform and which each first tier subcontract will provide to the prime contractor. In order to help you complete the 5% List, the City is providing you with this form.

IMPORTANT: THE PRIME CONTRACTOR MUST BE INCLUDED ON THIS LIST OR THE BID WILL BE REJECTED!

Name of Prime Contractor/First Tier Subcontractor(s)	Contractor's License Number	Description of Labor or Work	Percentage of Work Done

IMPORTANT: IN ACCORDANCE WITH THE ORANGE BOOK, THE PRIME CONTRACTOR MUST PERFORM AT LEAST 50% OF THE WORK!

(Use additional sheets if necessary)



ONE PERCENT LIST NRS 338.141(1)(b)(2) (To Accompany Bid)

State law requires that if a prime contractor's bid is one of the three lowest bids, within 2 hours after bid opening the prime contractor must submit a "1% List" if the prime contractor is employing a first tier subcontractor who will provide labor or a portion of the work who will <u>not</u> be paid an amount exceeding \$100,000.

IMPORTANT: A BID WITHOUT A TIMELY, COMPLETE AND CORRECT 1% LIST THAT COMPLIES WITH NRS 338.141 WILL BE AUTOMATICALLY DEEMED NOT RESPONSIVE!

The 1% List must contain the name and contractor's license number of each first tier subcontractor who will provide labor or a portion of the work for which the first tier subcontractor will be paid 1 percent of the prime contractor's total bid or \$50,000, whichever is greater.

A prime contractor must include his or her name on the 1% List, together with:

- (1) a description of the labor or portion of the work that the prime contractor will perform; or
- (2) a statement that the prime contractor will perform all work other than that being performed by a subcontractor listed on the 5% List or the 1% List.

The 1% List must contain a description of the labor or portion of the work which each first tier subcontract will provide to the prime contractor. In order to help you complete the 1% List, the City is providing you with this form.

IMPORTANT: THE PRIME CONTRACTOR MUST BE INCLUDED ON THIS LIST!

IMPORTANT: IN ACCORDANCE WITH THE ORANGE BOOK, THE PRIME CONTRACTOR MUST PERFORM AT LEAST 50% OF THE WORK!

Name of Prime Contractor/First Tier Subcontractor(s)	Contractor's License Number	Description of Labor or Work	Percentage of Work Done

(Use additional sheets if necessary)



EXHIBIT 5 - AFFIDAVIT OF NON-COLLUSION

(To Accompany Bid)

STATE OF)	
)SS. COUNTY OF)	
I, affidavit and the	(Name of party signing this
Proposal Form) depose and say:	(Title), being duly sworn to
That	(Name of person, firm, indirectly, entered into agreement, ction in restraint of free competitive
Signature:	-
Title:	-
Sworn to before me this day of	, 20
Signature:	-
Title:	-
(SEAL)	



EXHIBIT 6 - CERTIFICATION OF BIDDER REGARDING PENALTIES FOR NON-COMPLIANCE WITH NEVADA PREVAILING WAGE REQUIREMENTS

(To Accompany Bid)

The undersigned bidder, proposed contractor or subcontractor certifies and acknowledges that:

- 1. This contract is for a public work project as set forth in Nevada Revised Statutes Chapter 338.
- 2. Pursuant to NRS 338.060, a contractor engaged on public works shall forfeit, as a penalty to the public body in behalf of which the contract has been made and awarded to the contractor, not less than \$20 nor more than \$50 for each calendar day or portion thereof that each workman employed on the public work:
 - (a) Is paid less than the designated rate for any work done under the contract, by the contractor or any subcontractor under him.
 - (b) Is not reported to the City of Elko as required pursuant to NRS 338.070.
- 3. If a penalty is imposed pursuant to this section, the costs of the proceeding, including investigative costs and attorney's fees, may be recovered by the labor commissioner.

This project is estimated to be at or above the \$100,000 threshold and therefore requires that prevailing wages to be paid.

Name of Bidder

Name and Title of Authorized Representative

Signature

Date



EXHIBIT 7 - FRINGE BENEFIT PLAN, FUND OR PROGRAM DISBURSEMENT INFORMATION

CONTRACTOR:	
CONTACT:	PHONE:
Classification	Name, Address and Telephone Number
\$Vacation	of Fund Manager
\$ Health and Welfare	
\$Pension	
\$Apprentice/training	
\$Other	
Classification Paid per hour Name, Address and Telephor	ne <u>Number of Fund Manager</u>
\$Vacation	
\$Health and Welfare	

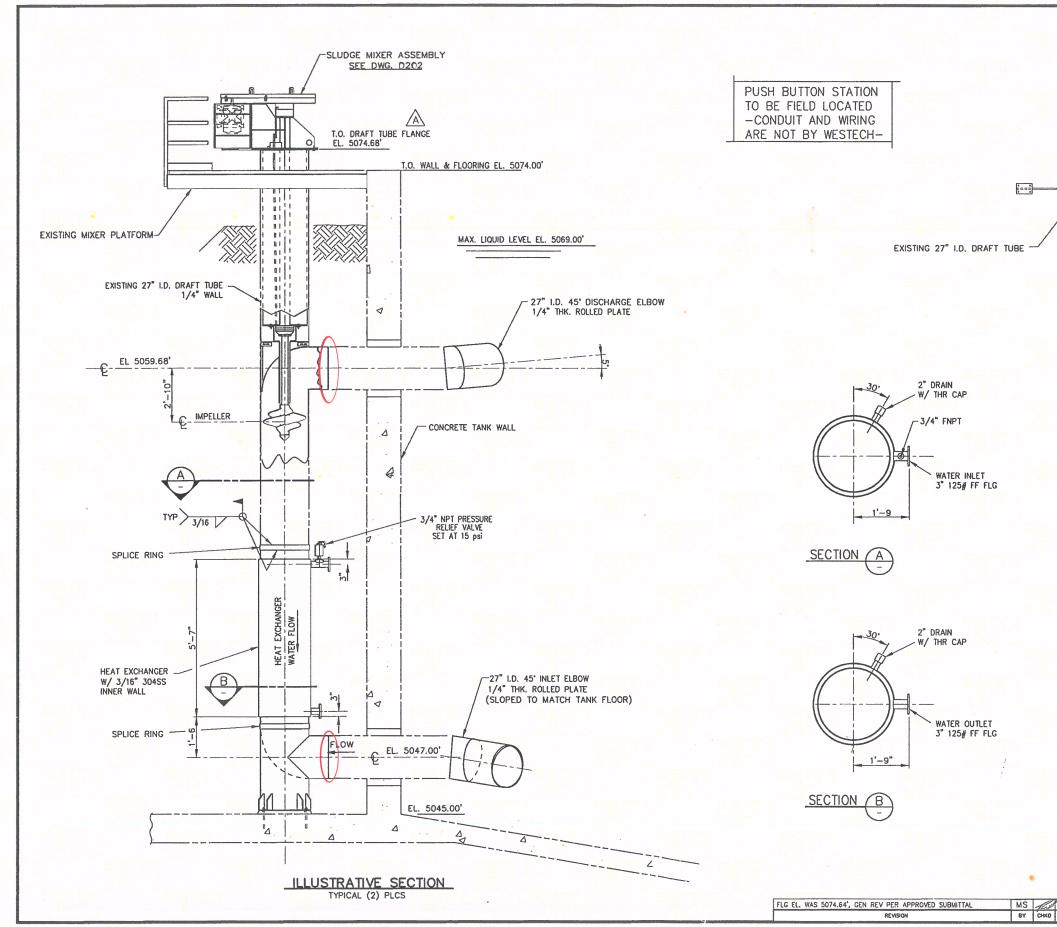


\$ _Pension	
\$ _Apprentice/training	
\$ _Other	

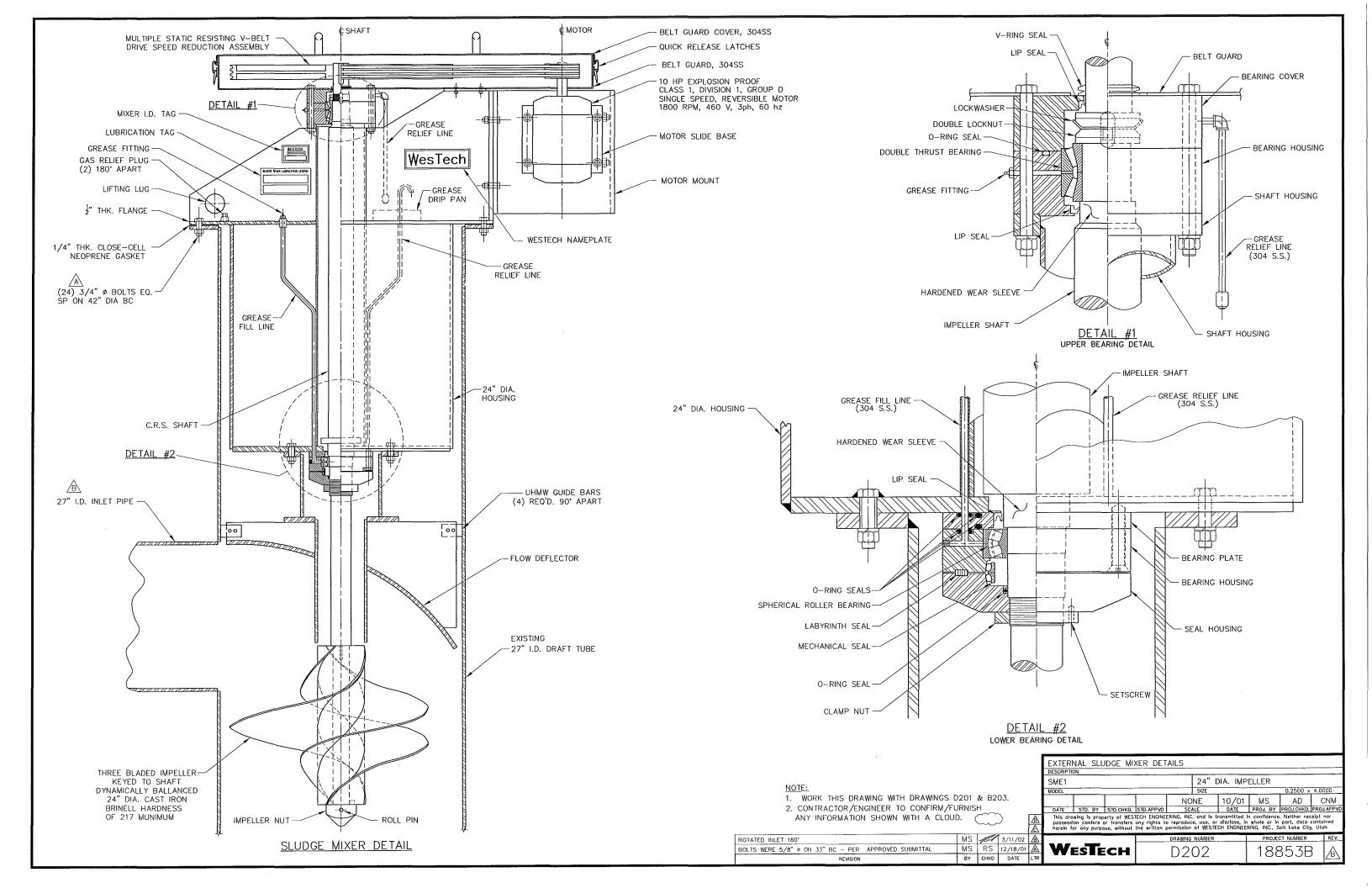


EXHIBIT 8 - DRAWINGS (PROJECT CONSTRUCTION DRAWINGS)

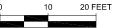
Drawing D201-External Sludge Mixer-General Arrangement Drawing D202-External Sludge Mixer Details Figure 1-Hot Water Pipeline Replacement Figure 2-Project Photos Figure 2-1 Current System Layout LIQUID STREAM (existing buried utilities)

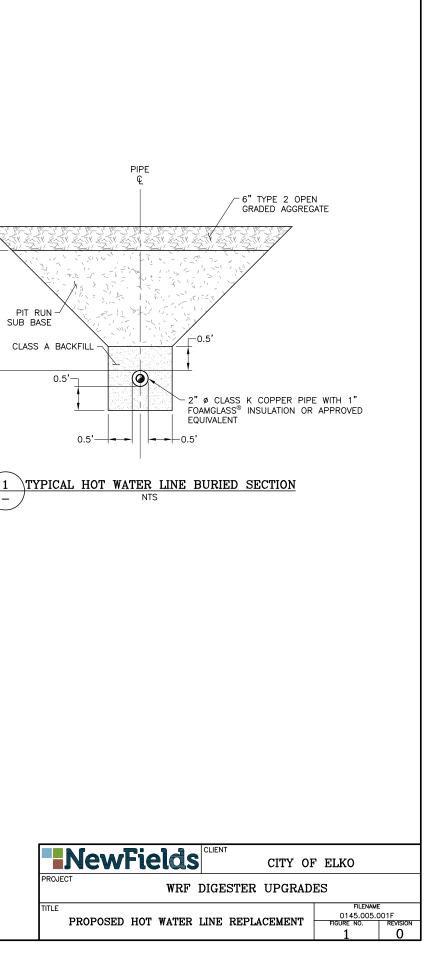


He fe	
5'-0" APPROX.	/ EXISTING 27" I.D.
I TH	- INLET & OUTLET
	27" I.D. DISCHARGE ELBOW
L	27" I.D. INLET ELBOW
LAN VIEW	
AIXER ASSEMBLY &	
	and a second and a second second
	i ha Balandar Harris II. Harris II. Harris II. Harris II.
NOTES	manual holds of managers in Re-
2. WORK THIS DRAWING 3. MINIMUM MIXER CAP. 4. CONTRACTOR/ENGINE ANY INFORMATION 5 5. ANY REQ'D INSULATI 6. HEAT EXCHANGER C	E MILD STEEL UNLESS NOTED. WITH DRAWINGS D202, AND B203. ACITY = 10,000 GPM PUMPING UP OR DOWN. EER TO CONFIRM/FURNISH HOWN WITH A CLOUD. HOWN WITH A CLOUD. HON IS NOT BY WESTECH. APACITY 300,000 BTU/HR WITH 160'F & 15 (MAX.) PSI.
ALL MATERIAL TO BE WORK THIS DRAWING MINIMUM MIXER CAP CONTRACTOR/ENGINE ANY INFORMATION SF ANY REQ'D INSULATI HEAT EXCHANGER C 100 GPM WATER PREPARED FOR: C	WITH DRAWINGS D202, AND B203. ACITY = 10,000 GPM PUMPING UP OR DOWN. EER TO CONFIRM/FURNISH HOWN WITH A CLOUD. ION IS NOT BY WESTECH. APACITY 300,000 BTU/HR WITH
ALL MATERIAL TO BE WORK THIS DRAWING MINIMUM MIXER CAP. CONTRACTOR/ENGINE ANY INFORMATION SF ANY REQ'D INSULATI HEAT EXCHANGER C 100 GPM WATER PREPARED FOR: C EI ENGINEER: ROTHBEI	WITH DRAWINGS D202, AND B203. ACITY = 10,000 GPM PUMPING UP OR DOWN. EER TO CONFIRM/FURNISH HOWN WITH A CLOUD. ION IS NOT BY WESTECH. APACITY 300,000 BTU/HR WITH 160'F & 15 (MAX.) PSI. WITY OF ELKO WATER RECLAMATION FACILITY
 ALL MATERIAL TO BE WORK THIS DRAWING MINIMUM MIXER CAP. CONTRACTOR/ENGINE ANY INFORMATION SF ANY REQ'D INSULATI HEAT EXCHANGER C 100 GPM WATER (P) PREPARED FOR: C ENGINEER: ROTHBEI DENVER, CONTRACTOR: W.R.	G WITH DRAWINGS D202, AND B203. ACITY = 10,000 GPM PUMPING UP OR DOWN. EER TO CONFIRM/FURNISH HOWN WITH A CLOUD. ION IS NOT BY WESTECH. APACITY 300,000 BTU/HR WITH 160F & 15 (MAX.) PSI. HITY OF ELKO WATER RECLAMATION FACILITY LKO, NEVADA RG, TAMBURINI & WINSOR, INC.
 ALL MATERIAL TO BE WORK THIS DRAWING MINIMUM MIXER CAP. CONTRACTOR/ENGINE ANY INFORMATION SF ANY REQ'D INSULATI HEAT EXCHANGER C 100 GPM WATER (P) PREPARED FOR: C ENGINEER: ROTHBEI DENVER, CONTRACTOR: W.R. REXE CUSTOMER P.O. NO 	G WITH DRAWINGS D202, AND B203. ACITY = 10,000 GPM PUMPING UP OR DOWN. EER TO CONFIRM/FURNISH HOWN WITH A CLOUD. ION IS NOT BY WESTECH. CAPACITY 300,000 BTU/HR WITH 160F & 15 (MAX.) PSI. HITY OF ELKO WATER RECLAMATION FACILITY LKO, NEVADA RG, TAMBURINI & WINSOR, INC. , COLORADO HENDERSON CONSTRUCTION, INC. BURG, IDAHO). ED002
ALL MATERIAL TO BE WORK THIS DRAWING MINIMUM MIXER CAP. CONTRACTOR/ENGINE ANY INFORMATION SH ANY INFORMATION SH ANY REQ'D INSULATI HEAT EXCHANGER C 100 GPM WATER PREPARED FOR: C ENGINEER: ROTHBEI DENVER, CONTRACTOR: W.R. REXE CUSTOMER P.O. NO EXTERNAL SLUDGE MIX DESCRIPTION	G WITH DRAWINGS D202, AND B203. ACITY = 10,000 GPM PUMPING UP OR DOWN. EER TO CONFIRM/FURNISH HOWN WITH A CLOUD. ION IS NOT BY WESTECH. APACITY 300,000 BTU/HR WITH 160'F & 15 (MAX.) PSI. HITY OF ELKO WATER RECLAMATION FACILITY LKO, NEVADA RG, TAMBURINI & WINSOR, INC. , COLORADO HENDERSON CONSTRUCTION, INC. BURG, IDAHO D. ED002 KER ~ GENERAL ARRANGEMENT
 ALL MATERIAL TO BE WORK THIS DRAWING MINIMUM MIXER CAP. CONTRACTOR/ENGINI ANY INFORMATION SF ANY REQ'D INSULATI HEAT EXCHANGER C 100 GPM WATER @ PREPARED FOR: C ENGINEER: ROTHBEI DENVER, CONTRACTOR: W.R. REXE CUSTOMER P.O. NO EXTERNAL SLUDGE MIX	G WITH DRAWINGS D202, AND B203. ACITY = 10,000 GPM PUMPING UP OR DOWN. EER TO CONFIRM/FURNISH HOWN WITH A CLOUD. ION IS NOT BY WESTECH. APACITY 300,000 BTU/HR WITH 160F & 15 (MAX.) PSI. HITY OF ELKO WATER RECLAMATION FACILITY LKO, NEVADA RG, TAMBURINI & WINSOR, INC. , COLORADO HENDERSON CONSTRUCTION, INC. BURG, IDAHO D. ED002 KER ~ GENERAL ARRANGEMENT 24" DIAMETER IMPELLER 920
1. ALL MATERIAL TO BE 2. WORK THIS DRAWING 3. MINIMUM MIXER CAP. 4. CONTRACTOR/ENGINE ANY INFORMATION SH 5. ANY REQ'D INSULATI 6. HEAT EXCHANGER C 100 GPM WATER PREPARED FOR: C ENGINEER: ROTHBEI DENVER, CONTRACTOR: W.R. REXE CUSTOMER P.O. NO EXTERNAL SLUDGE MIX DESORPTION SME1 MODEL DATE SID BY STECKED	G WITH DRAWINGS D202, AND B203. ACITY = 10,000 GPM PUMPING UP OR DOWN. EER TO CONFIRM/FURNISH HOWN WITH A CLOUD. ION IS NOT BY WESTECH. APACITY 300,000 BTU/HR WITH 160F & 15 (MAX.) PSI. WITY OF ELKO WATER RECLAMATION FACILITY LKO, NEVADA RG, TAMBURINI & WINSOR, INC. , COLORADO HENDERSON CONSTRUCTION, INC. BURG, IDAHO D. ED002 KER ~ GENERAL ARRANGEMENT 24" DIAMETER IMPELLER SZE NONE 10/01 MS AD CNM









30" [']MIN.

1

_



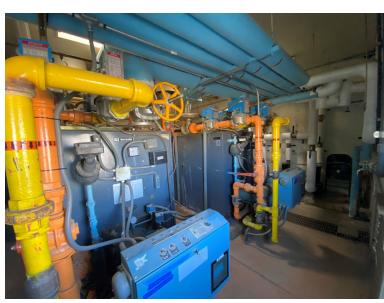
WEST SIDE MIXER TUBE ASSEMBLY



EAST SIDE MIXER TUBE ASSEMBLY



WEST SIDE ACCES



BOILER ROOM WITH TWO BOILERS TO BE REMOVED



BOILER ROOM WITH TWO BOILERS TO BE REMOVED



HOT W ENTERING/EX

ITING BOILER BUILDING INEWFIELDS CLIENT CITY OF ELKO	F PORT DOOR ASSEMBLY
PROJECT CITY OF ELKO	WATER PIPELINES TITING BOILER BUILDING
	PROJECT CITY OF ELKO
TITLE PROJECT PHOTOS	TITLE FILENAME PROJECT PHOTOS FIGURE NO. REVISION

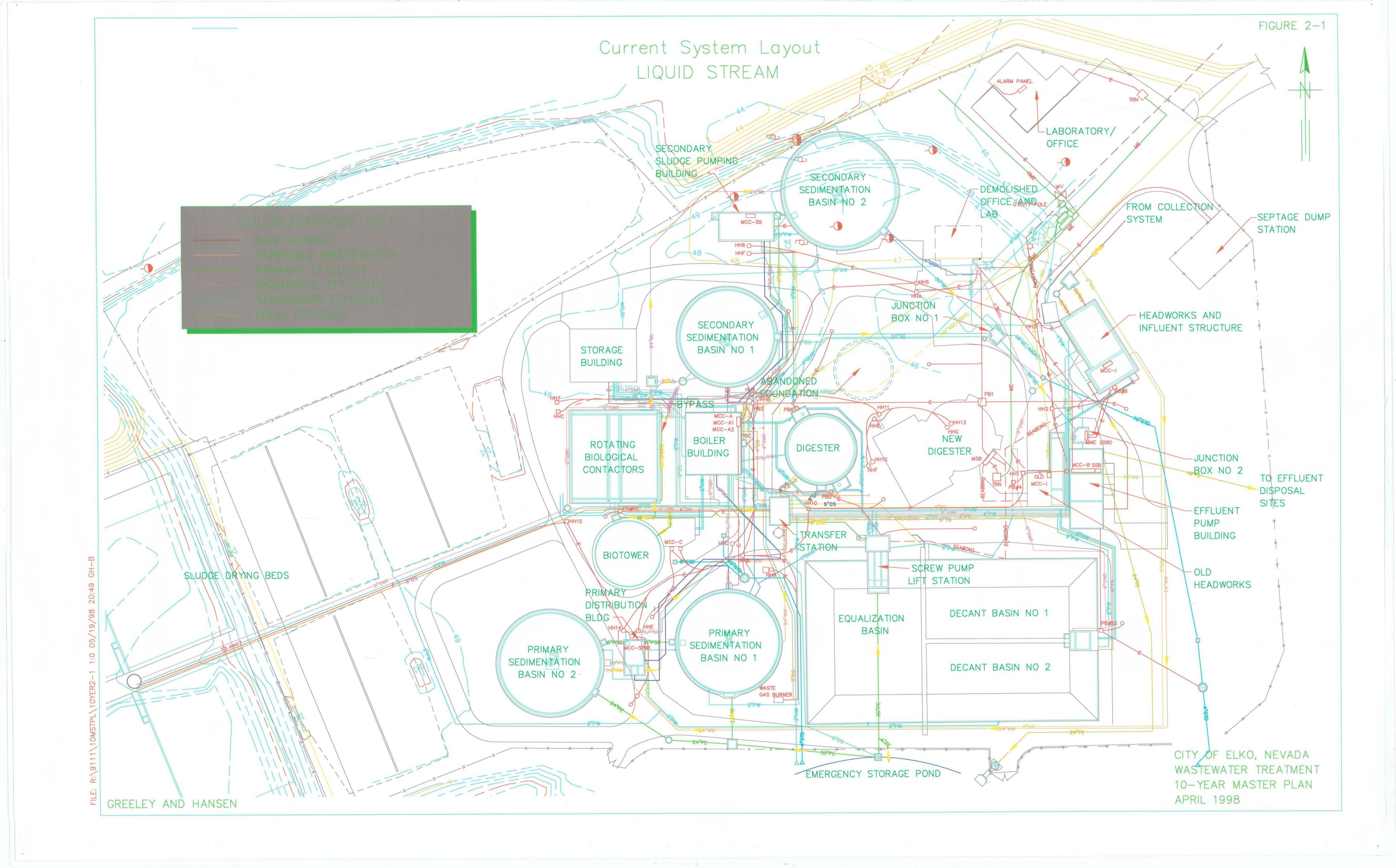




EXHIBIT 9 - PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:
hat we
(name of contractor)
ire a
re a (corporation, partnership or individual)
ereinafter called "Principal" and
(Surety)
of, State of,
nereinafter called the "Surety", are held and firmly bound unto the CITY OF ELKO, of ELKO COUNTY, NEVADA, hereinafter called "Owner" in the penal sum of:
Dollars
(Written Form)
(Numbers) \$ in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents for the faithful performance of a certain written Contract entered into between the Principal and the Owner, dated thisday of, 20, a copy of which is incorporated herein by reference, and made a part hereof as if fully copied herein, for the construction of the DIGESTER MAINTENANCE AND BOILER UPGRADES PROJECT .
NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH, that, if the Principal shall in all respects, well, truly and faithfully perform such contract and the Principals duties all the undertakings covenants terms conditions and agreements of

Principal shall in all respects, well, truly and faithfully perform such contract and the Principals, duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety, and if the Principal shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner



may incur in making good any default, and if their Principal shall save, indemnify and keep harmless the Owner against all loss, damages, claims, liabilities, judgments, costs and expenses which may accrue against the Owner in consequence of the awarding of said Contract, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, the _____ day of _____, 20___.

PRINCIPAL:_____

BY:			
RY			
DI.			

ADDRESS:		

CITY, STATE & ZIP CODE:

ATTEST:

PRINCIPAL SECRETARY:

(SEAL)

WITNESS AS TO PRINCIPAL:



CITY, STATE & ZIP CODE:	

SURETY:_____

BY:______ATTORNEY-IN-FACT

ADDRESS:

CITY, STATE & ZIP CODE:

ATTEST:

SURETY SECRETARY:

(SEAL)

WITNESS AS TO SURETY:

ADDRESS:_____

CITY, STATE & ZIP CODE:

NOTE: Date of Bond must not be prior to date of Contract.

- (1) Correct Name of Contractor.
- A Corporation, a Partnership or an Individual, as case may be. (2)
- Correct Name of Surety. (3)

If Contractor in Partnership, all partners should execute bond.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Nevada.



EXHIBIT 10 - PAYMENT BOND

KNOW ALL MEN BY	THESE PRESENTS:	
That we		
	(name of co	ontractor)
are a		
	(corporation, partnership of	or individual)
hereinafter called "P	rincipal" and	
		(Surety)
of	, State of	,
	e "Surety", are held and firn , hereinafter called "Owne	nly bound unto the CITY OF ELKO, of ELKO er" in the penal sum of:
		Dollars
well and truly to be n		nited States, for the payment of which sum our heirs, executors, administrators and se presents.

THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into a certain contract with the Owner, dated the _____ day of ______, 20, a copy of which is incorporated hereby by reference, and made a part hereof as if fully copied herein for the construction of the **DIGESTER MAINTENANCE AND BOILER UPGRADES PROJECT.**

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors, and corporations supplying or furnishing labor or materials to the Principal, or to any of the Principals' subcontractors in the prosecution of the work provided for in said Contract, and any authorized extension or modification thereof, including but not limited to any amounts due for materials, supplies, lubricants, oil, gasoline, fuels, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for all labor, performed in such work whether by, to, or for Principal or subcontractor or subcontractors of the Principal, then this obligation shall be void; otherwise to remain in full force and effect.

The Principal and Surety hereby further bind themselves, their successors, heirs, executors, administrators, and assigns, jointly and severally, to repay the owner any sum



which the owner may be compelled to pay as a result of non-payment for labor or material furnished for the work embraced by said Contract.

The Principal and Surety hereby further agree that not only said Owner may sue on this bond, but that subject to the provisions hereinafter set out, any individual, firm, partnership, association or corporation, (hereinafter called claimant), who has performed labor or furnished materials to or for the Principal or its subcontractor or subcontractors in the prosecution of the work provided for in the Contract for which this bond is given, and who has not been paid in full before the expiration of ninety (90) calendar days after the date on which the claimant performs the last of such labor or furnished the last of such materials for which the claimant claims payment, may bring an action on this bond in the claimant's own name to recover any amount due the claimant for such labor or materials, and may prosecute such action to final judgment and have execution on the judgment.

Provided, however, that any claimant who has a direct contractual relationship with any subcontractor of the Principal, but no contractual relationship, express or implied, with such Principal, may bring an action on this bond only:

- A. If the claimant has within thirty (30) calendar days after furnishing the first of such materials or performing the first of such labor, served on the Principal a written notice which shall inform the Principal of the nature of the materials being furnished or to be furnished, or the labor performed or to be performed, and identifying the person contracting for such labor or materials and the site for the performance of such labor or furnishing such materials; and
- B. After giving written notice to such principal within ninety (90) calendar days from the date on which the claimant performed the last of the labor or furnished the list of such materials for which the claimant claims payment.

Each written notice shall state with substantial accuracy the amount claimed and the name of the person for whom the work was performed or the material supplied, and shall be served by being sent by registered mail, postage prepaid, in an envelope addressed to such Principal at any place in which the Principal maintains an office or conducts business, or at the Principal's residence.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Principal shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.



of which shall be deemed an original, on this the	day of	, 20
PRINCIPAL: BY: ADDRESS:		
CITY, STATE & ZIP CODE:		
<u>ATTEST</u> :		(SEAL)
PRINCIPAL SECRETARY:		(SLAL)
WITNESS AS TO PRINCIPAL:		
ADDRESS:		
CITY, STATE & ZIP CODE:		
SURETY:		

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one

BY:_____ ATTORNEY-IN-FACT

CITY,	STATE	& ZIP	CODE:	
•				

ATTEST:

SURETY SECRETARY:_____



(SEAL)

WITNESS AS TO SURETY:

ADDRESS:_____

CITY, STATE & ZIP CODE:_____

NOTE: Date of Bond must not be prior to date of Contract.

- (1) Correct Name of Contractor.
- (2) A Corporation, a Partnership or an Individual, as case may be.
- (3) Correct Name of Surety.

If Contractor in Partnership, all partners should execute bond.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Nevada.



EXHIBIT 11 - NOTICE OF AWARD

TO:	 DATE:
	 PROJECT:

YOU ARE HEREBY NOTIFIED that the City of Elko has accepted your bid for the above Project in the amount of \$______, which amount includes the Additive Alternates identified in this Notice of Award.

Within **TWENTY (20)** calendar days of receipt this Notice of Award, you must complete, sign and deliver to the City of Elko: (1) this Notice of Award with the fully executed Acceptance of Notice; (2) the Public Works Contract, executed by a person authorized to sign on your behalf; (3) the Performance Bond; (4) the Payment Bond; and (5) evidence of all insurance required to perform the Project. If you fail to meet any of these requirements, the City of Elko will be entitled, in its discretion, to consider all of your rights arising out of its acceptance of your bid as abandoned and as a forfeiture of your Bid Bond, entitling the City of Elko to the full amount of the Bid Bond. The City of Elko will also be entitled to such other rights as may be allowed by law.

You are further advised that this Award constitutes conditional acceptance of your bid, subject to the City of Elko executing and delivering to you a fully executed copy of the Public Works Contract. Prior to the delivery of a fully executed copy of the Public Works Contract, the Elko City Council may, in its discretion, decide to reject all bids (including your bid) and perform the work itself, rebid the Project or not proceed with the Project.

If indicated below, the scope of this Project is subject to the following Additive Alternates (attach additional sheets if necessary):



ALTERNATE NUMBER	DESCRIPTION	AMOUNT



All communications with the City regarding this Project through the time a contract is executed by the City shall be directed to the Office of the Elko City Clerk. In the event the City determines that a bidder has attempted to communicate with any City official or employee in violation of the preceding sentence, the City may, in its discretion, reject that bid (even after a Notice of Award has been issued) on the ground that rejection of the bid serves the public interest.

DATED this day of	, 20
	CITY OF ELKO
Ву:	
Title:	
ACCEPTANCE OF NOTICE	
Receipt of this Notice of Award is here 20	by acknowledged this day of

CONTRACTOR (BIDDER):_____

AUTHORIZED SIGNATURE: _____

PRINTED NAME OF SIGNATORY: _____

TITLE OF SIGNATORY: _____



EXHIBIT 12 - NOTICE TO PROCEED

To: _____ DATE:_____

PROJECT: DIGESTER MAINTENANCE AND BOILER UPGRADES

You are hereby notified to commence work in accordance with the Agreement dated the _____ day of ______, 20____, on or before the ______ day of ______, 20____, and you are to complete construction <u>270</u> calendar days from the written notification to proceed.

Contractor:_____

By:_____ Authorized Company Representative

Title:_____

Owner: CITY OF ELKO, NEVADA

By:_____

Title:

DATE:_____

DATE:

RETURN SIGNED COPY TO:

City of Elko Clerk's Office 1751 College Avenue Elko, Nevada 89801

along with aforementioned document(s) requested.



EXHIBIT 13- STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION (ORANGE BOOK), 2016 REVISED EDITION

A hard copy of this document is not attached to the Contract. The complete document can be viewed at the following URL:

http://rtcwashoe.wpengine.com/wp-content/uploads/2018/01/2016-Version-Revision-No.-9.pdf



EXHIBIT 14 - GENERAL PROVISIONS

PROJECT SPECIFICATIONS:

The "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", 2016 Revised Edition, (Orange Book) as amended by the City of Elko shall be the Project Specifications. All sections shall apply except as specifically deleted or modified by these Supplementary Conditions or the Technical Specifications. Wherever these specifications refer to the agency, this reference shall mean the CITY OF ELKO and wherever these specifications refer to the Engineer, this reference shall mean **the City or authorized representative**.

LAWS, RULES, REGULATIONS, HEALTH, SAFETY AND OSHA TRAINING REQUIREMENTS:

Laws, Rules and Regulations

All workmanship and materials shall comply with all applicable laws, codes, rules and regulations, and the Contractor shall comply with all safety regulations which are applicable to his work, and particular attention for applicability shall be given to the United States Department of Labor Occupational Safety and Health Administration (OSHA) Standards, and the regulations of the State of Nevada in which the job is located. The responsibility for complying with all such laws, codes, rules and regulations, and safety standards shall be the responsibility of the Contractor. If the City is fined for any Contractor violations, these costs will be fully reimbursed by the Contractor.

<u>Safety</u>

In accordance with all OSHA safety regulations (29 CRF Part 1910 - 1926 inclusive) and the City of Elko's Safety and Confined Space programs, the Contractor shall be solely and completely responsible for conditions of the job site, including safety of all personnel and property during the performance of the work: to include supplying their personnel with proper personnel protective equipment (PPE), first aid kit, fire extinguishers, confined space equipment and air monitors, underground metal utility detectors, tools, necessary equipment and materials. This requirement will apply continuously and not be limited to normal working hours on City of Elko property.

<u>The City will require of all Contractors the 30-hour supervisor and 10-hour employee</u> <u>OSHA certification training in CFR 1926 Construction Safety and Health before the work</u> <u>begins.</u> All Contractors shall be responsible for the required certified training on equipment, tools, confined space and safety training, PPE, etc. The Contractor will produce these training documents as requested by the City.

Health and Safety in Employment

All applicable provisions in NRS Chapter 618 shall be incorporated in the construction practices for all employees directly engaged in the completion of any City of Elko project(s).



Apprenticeship Utilization Act (Senate Bill 207 (2019)).

The following statutory provisions pertaining to the use of apprentices apply to public works contracts:

1. A contractor or subcontractor engaged in vertical construction who employs a worker on a public work pursuant to NRS 338.040 shall use one or more apprentices for at least 10 percent of the total hours of labor worked for each apprenticed craft or type of work to be performed on the public work for which more than three workers are employed.

2. A contractor or subcontractor engaged in horizontal construction who employs a worker on a public work pursuant to NRS 338.040 shall use one or more apprentices for at least 3 percent of the total hours of labor worked for each apprenticed craft or type of work to be performed on the public work for which more than three workers are employed.

3. On or after January 1, 2021, the Labor Commissioner, in collaboration with the State Apprenticeship Council, may adopt regulations to increase the percentage of total hours of labor required to be performed by an apprentice pursuant to subsection 1 or 2 of Senate Bill 207 by not more than 2 percentage points.

4. A contractor or subcontractor engaged on a public work is not required to use an apprentice in a craft or type of work performed in a jurisdiction recognized by the State Apprenticeship Council as not having apprentices in that craft or type of work.

5. The City may, upon the request of a contractor or subcontractor, submit a request to the Labor Commissioner to modify or waive the percentage of hours of labor provided by one or more apprentices required pursuant to subsection 1 or 2 for good cause. The City must submit such a request, before an advertisement for bids has been placed, the opening of bids or the award of a contract for a public work or after the public body has commenced work on the public work. Such a request must include any supporting documentation, including, without limitation, proof of denial of or failure to approve a request for apprentices pursuant to subparagraph (3) of paragraph (d) of subsection 10 of Senate Bill 207.

6. The Labor Commissioner shall issue a determination of whether to grant a modification or waiver requested by the City within 15 days after the receipt of such request. The Labor Commissioner may grant such a request if he or she makes a finding that there is good cause to modify or waive the percentage of hours of labor provided by one or more apprentices required pursuant to subsection 1 or 2 of Senate Bill 207.

7. The City, a contractor or a subcontractor may request a hearing on the determination of the Labor Commissioner within 10 days after receipt of the determination of the Labor Commissioner. The hearing must be conducted in accordance with



regulations adopted by the Labor Commissioner. If the Labor Commissioner does not receive a request for a hearing pursuant to subsection 8 of Senate Bill 207, the determination of the Labor Commissioner is a final decision for the purposes of judicial review pursuant to chapter 233B of NRS.

8. A contractor or subcontractor engaged on a public work shall enter into an apprenticeship agreement for all apprentices required to be used in the construction of a public work. If the Labor Commissioner granted a modification or waiver pursuant to subsection 7 of Senate Bill 207 because the Labor Commissioner finds that a request for apprentices was denied or the request was not approved within 5 business days as described in subparagraph (3) of paragraph (d) of subsection 10 of Senate Bill 207 and apprentices are later provided, then the contractor or subcontractor shall enter into an apprenticeship agreement for all apprentices later provided.

9. As used in Senate Bill 207:

(a) "Apprentice" means a person enrolled in an apprenticeship program recognized by the State Apprenticeship Council.

(b) "Apprenticed craft or type of work" means a craft or type of work for which there is an existing apprenticeship program recognized by the State Apprenticeship Council.

(c) "Apprenticeship program" means an apprenticeship program recognized by the State Apprenticeship Council.

(d) "Good cause" means:

(1) There are no apprentices available from an apprenticeship program within the jurisdiction where the public work is to be completed as recognized by the State Apprenticeship Council;

(2) The contractor or subcontractor is required to perform uniquely complex or hazardous tasks on the public work that require the skill and expertise of a greater percentage of journeymen; or

(3) The contractor or subcontractor has requested apprentices from an apprenticeship program and the request has been denied or the request has not been approved within 5 business days.

The term "good cause" does not include the refusal of a contractor or subcontractor to enter into an apprenticeship agreement pursuant to subsection 9 of Senate Bill 207.

(e) "Journeyman" has the meaning ascribed to it in NRS 624.260.



(f) "State Apprenticeship Council" means the State Apprenticeship Council created by NRS 610.030.



EXHIBIT 15 - SPECIAL OR SUPPLEMENTAL PROVISIONS

MEASUREMENT AND PAYMENT:

The basis of the contract is Unit Pricing and payment will made based on the following:

1) *Mobilization/Demobilization*. Mobilization and Demobilization are stand-alone unit price cost items and are not to be distributed to any other activities. The total cost of mobilization and demobilization shall not exceed 20 percent of the total bid.

Mobilization costs are to include, but not necessarily limited to, transportation to the site and establishment of all plant, temporary buildings, construction equipment, and supplies. This includes field staff and the installation of all such office, shops, toilets, warehouses, power, water, safety, security, first aid, laydown yards for equipment and material storage and other accommodations as required to perform the work.

Demobilization costs are to include, but not limited to, dismantling and removal from site all plant, temporary building, construction equipment, supplies, offices, shops, toilets, warehouses, safety equipment, first aid, and other accommodations. This includes all water and power connections not required by the Owner. This includes offices, work sites, warehouses, and storage areas. Demobilization costs also include issuance of all QC data and as-built drawings in executable electronic format to the Owner. All areas used for completion of work shall be cleaned up.

Reimbursement for the mobilization/demobilization shall be made on a lump sum basis as part of the final progress payment provided demobilization has been completed to the satisfaction of the Owner, and Owner has all received all QC and as-built data from the Contractor.

- 2) Remove and dispose of existing digester mixer tube. The Contractor will be responsible for removing the existing digester tube and disposing of the removed materials offsite. The Contractor will be responsible for removing any hardware, fittings, or accessories from the existing tube assembly that are required to be reinstalled on the new assembly. Removal will include required electrical disconnects, and preparing the tie-in points for installation of the new digester tube. Removal will also include remove the sludge mixer assembly complete and stage at project site for others to service. The discharge and inlet pipes will remain in place and not be removed. Payment for this item will include reimbursement for all equipment, labor and incidentals associated with removing the digester tube. Payment will be made based on single lump sum reimbursement after removal work is completed and accepted by the Owner's representative.
- 3) **Supply new digester mixer tube**. The Contractor will be responsible for ordering, shipping, receiving, and staging of the new tube assembly from an approved vendor. Payment for this activity will include reimbursement for all



purchase, materials, shipping, unloading, receiving, and incidentals related to supplying the mixer assembly. Payment will be made based on single lump sum reimbursement after all materials are received and accepted by the Owner's representative.

- 4) Install new digester mixer tube. The Contractor will be responsible for full installation of the new tube assembly its entirety, including installation of refurbished mixer assembly, installation of new aluminum jacketed insulation and all hook ups required for operation. Payment will be made based on single lump sum reimbursement after installation work is completed and accepted by the Owner's representative.
- 5) Apply new UV coating on existing digester lid. The contractor will be responsible for material supply and installation of the new coating of polyurethane elastomer UV protectant coating over the existing insulation on the digester lid. Payment will be made based on single lump sum reimbursement after work is completed and accepted by the Owner's representative
- 6) Replace existing buried hot water pipeline from boiler to digester. The contractor will excavate, remove, and replace using new materials the hot water pipeline between the boiler building and the digester. Contractor to supply all materials for the new pipeline segment. All materials removed from existing pipeline to be disposed of offsite by Contractor. Payment will be made based on a lump sum basis after work is completed and accepted by Owner's representative. Lump sum payment will include reimbursement for all labor and materials required for removal and replacement of the pipeline.
- 7) Remove and dispose of existing boiler assembly. The Contractor will be responsible for removing the existing boiler assembly and disposing of the removed materials offsite or in onsite recyclable material receptacles. All recyclable materials are expected to be disposed of in onsite recyclable material receptacles. The Contractor will be responsible for removing any hardware, fittings, or accessories from the existing boiler assembly that are required to be reinstalled on the new assembly. Removal will include required electrical disconnects, and preparing the tie-in points for installation of the boiler assembly. Payment for this item will include reimbursement for all equipment, labor and incidentals associated with removing the boiler. Payment will be made based on single lump sum reimbursement after removal work is completed and accepted by the Owner's representative.
- 8) Supply new boiler assembly. The Contractor will be responsible for ordering, shipping, receiving, and staging of the new boiler assembly from an approved vendor. Payment for this activity will include reimbursement for all purchase, materials, shipping, unloading, receiving, and incidentals related to supplying the boiler assembly. Payment will be made based on single lump sum reimbursement after all materials are received and accepted by the Owner's representative.
- 9) Install new boiler assembly. The Contractor will be responsible for full



installation of the boiler assembly its entirety. Payment will be made based on single lump sum reimbursement after installation work is completed and accepted by the Owner's representative.

10) Refurbish existing access port door assemblies. The contractor will be responsible for material supply and installation of the new coating coal-tar epoxy coating over the access port door assemblies, both interior and exterior surfaces. Payment will be made based on single lump sum reimbursement after work is completed and accepted by the Owner's representative

Submittals:

The following items require submittal approval prior to installation or use on the project.

- 1) Digester Tube Assembly-shop drawings and manufacturer specifications
- 2) UV-Coating-manufacture's specifications and application instructions for material to be used for coating digester lid insulation
- 3) Boiler Assembly-manufactures specifications for unit to be installed, warranty statement from manufacturer.
- 4) Coal-Tar Epoxy- manufacture's specifications and application instructions for material to be used for coating digester doors

Weather Delays:

In the event of inclement weather conditions that will affect project safety or quality, the Owner will order the Contractor to suspend work. Inclement weather would include high winds, temperature extremes, or heavy precipitation. Time lost from Suspend Work Order directed cessations will be added to the overall contract time. If the Contractor suspends work without written approval from the Owner, no extension of contract time will be required.

Resume of Site Representative:

Resume of the Site Representative to be submitted with the bid package.

Electrical Supply:

50 amps of electrical supply is available at the project site. The contractor is responsible for supplying portable generators as needed to power welders.

Written Documented Safety Plan:

Bidder's Company Written Documented Safety Plan to be submitted with contract.

Trash Disposal:

All waste, scrap, and other trash generated by the contractor on the project to be disposed of off-site. No dumpsters or trash receptacles available at the project site.



Site Training:

Site safety training will be provided by the Owner to the successful bidder prior to beginning work the project site. Site training will take about 1 hour. Sample site training program and forms are on following pages:



EXHIBIT 16 - TECHNICAL SPECIFICATIONS

The following Technical Specifications are also included or specifically referenced as part of the project documents.

- Columbia Boiler Company MPH Series-MPH-150
- AWWA C203 Standard for Coal-Tar Protective Coatings and Linings for Steel Water Pipelines-Enamel and Tape-Hot Applied (not attached)
- Spray Polyurethane Foam Alliance-A Guide for Selection of Elastomeric Protective Coatings Over Sprayed Polyurethane Foam-Recommended Design Considerations and Guide Specifications-Section IV, Subsection F.

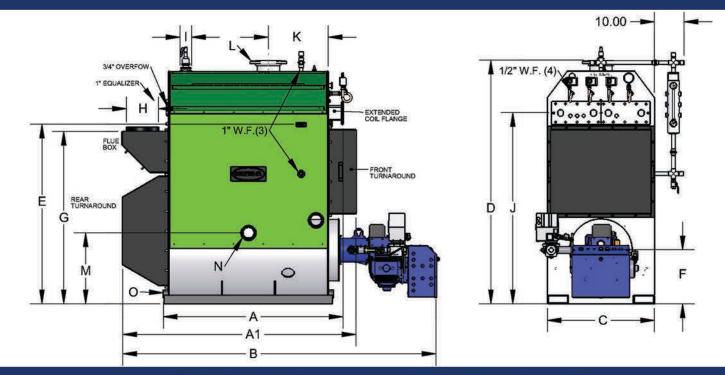
In the event of a conflict between the Standard Specifications and the Supplementary Specifications, the Owner will direct the Contractor as to which specification prevails.

COLUMBIA MPH SERIES

MPH FEATURES

- Trim for 15 psi steam or 30 psi water
- Natural gas, propane, methane, biogas, oil, or dual fuel firing
- Low/High/Low standard burner operation MPH 30-125
- Modulating, high turn down and low NOx burners available
- 32-1/2" Compact width permits installation through narrow doors and passageways MPH 5-80
- Inverted skid base for forklift handling with low profile
- Lifting holes for rigging into tough spots
- Bottom hand holes for thorough cleanout
- Top hand hole for tube inspection
- Cleanout door on flue box

- Optional hot water coils 300 to 2460 G.P.H.
- Overflow and surface blowdown tappings for steam unit
- Individual tappings for steam controls
- Up to 87% Efficient
- Wet base design
- Three pass, firetube construction
- 13 Gauge rolled tubes for steam applications
- Schedule 40 Welded pipes for Hydronic applications
- Fully packaged or knocked down
- Forced draft firing, no special vent requirements
- Constructed in accordance with requirements of Section IV of the Boiler Code
- All MPH Boilers meet CSD-1 safety requirements.



E	1	MPH SP	ECIFIC	ATION	S AND D	DATA (15	5 PSI ST	EAM /	30 PSI	WATER)			
Model #	MPH-S	MPH-10	MPH-15	MPH-20	MPH-30	MPH-40	MPH-50	MPH-60	MPH-70	MPH-80	MPH-90	MPH-100	MPH-125	MPH-150
Horsepower	5	9.5	15	20	30	40	50	60	70	80	90	100	125	150
Gas Input (BTU/hr)	210,000	399,000	630,000	840,000	1,260,000	1,680,000	2,100,000	2,520,000	2,940,000	3,360,000	3,780,000	4,200,000	5,250,000	6,300,000
Dil Input (Gals./hr)	1.5	2.85	4.5	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	38.0	46.0
Gross Output (BTU/hr)	172,000	331,170	516,600	688,800	1,033,200	1,377,600	1,722,000	2,066,400	2,410,800	2,755,200	3,099,600	3,444,000	4,305,000	5,166,000
Gross Output Steam (Lbs./hr)	173	320	518	690	1,035	1,380	1,725	2,070	2,415	2,760	3,105	3,450	4,312	5,174
Heating Surface - Pipe (Sq.Ft.)	29.3	45.6	61.3	88.5	120.6	159	205.4	255.0	299.9	341.7	439.9	439.9	590.0	590.0
Heating Surface - Tube (Sq.Ft.)	N/A	N/A	N/A	78.5	105.7	138.8	178.4	221.0	260.0	295.8	379.4	379.4	508.0	508.0
Furnace Volume (Cu.Ft.)	1.6	1.9	2.5	4.1	5.6	7.5	7.5	9.3	13.4	15.3	15.3	15.3	20.9	20.9
Water Capacity Steam (Gal.)	45	53	70	126	121	161	190	238	291	333	559	559	602	602
Steam Volume (Cu.Ft.)	1.8	3.0	4.0	6.1	6.7	8.9	8.9	11.2	13.0	14.9	10.9	10.9	17.9	17.9
Water Capacity Flooded (Gal.)	59	75	100	172	171	227	257	321	388	444	640	640	683	683
Qty. & Length of 2"-13ga. Tubes	(22) 25-1/8"	(30) 30-1/8"	(30) 40-1/8"	(42) 34-1/8"	(54) 37-1/4"	(54) 49-1/4"	(72) 49-1/4"	(72) 61-1/4"	(72) 71-1/4"	(72) 81-1/4"	(95) 81-1/4"	(95) 81-1/4"	(129) 81-1/4"	(129) 81-1/4"
Hand Hole Qty. and Size	N/A	N/A	N/A	(3) 3x3-3/4"	(5) 3x3-3/4"	(5) 3x3-3/4"								
Standard Burner Electrical (V/Ф)	115/1	115/1	115/1	115/1	115/1	115/1	230/1†	230/1†	230/3 †	230/3 †	230/3†	230/3 †	230/3 †	230/3 †
					WATE	R COIL	DATA							
Coil Model # (I-1/4" Outlet)	N7	N7	N7	N2	N3	N4	N4	N5	N5	N5	N/A	N/A	N/A	N/A
GPM Single Coil - 100º Rise	5.0	5.0	5.0	6.5	10.0	15.0	15.0	21.0	21.0	21.0	N/A	N/A	N/A	N/A
GPM Twin Cail - 100° Rise	N/A	N/A	N/A	13	20	30	30	41	41	41	N/A	N/A	N/A	N/A
				BOI	LER DIM	IENSIO	NS (Inc	hes)						
"A" Length - Bare Boiler (Coil Plate to Drain)	28.3	33.3	33.3	39.3	42.6	54.6	54.6	66.6	76.6	86.6	83.6**	83.6**	95.1***	95.1***
Burner Plate to Rear T/A	39.0	45.7	55.7	51.2	54.0	66.0	66.8	78.0	90.0	99.3	101.3	101.3	101.5	101.5
"AI" Length - Turnaround to Turnaround	41.4	46.4	56.4	56.0	59.0	71.0	71.0	83.0	94.0	104.0	105.3	105.3	110.5	110.5
"B" Length - Turnaround to Burner	52.3	58.5	69.0	69.0	80.0	92.0	99.9	111.9	128.5	136.8	137.8	137.8	147.0	160.0
"C" Boiler Width	21.6	21.6	21.6	32.5	32.5	32.5	32.5	32.5	32.5	32.5	40.5	40.5	51.0	51.0
"D" Supply Dutlet Height	53.7	56.5	56.5	63.3	65.5	65.5	73.9	73.9	77.9	77.9	81.9	81.9	88.5	88.5
"E" Minimum Safe Water Level	41.5	42.1	42.1	47.1	48.6	48.6	54.6	54.6	58.1	58.1	64.0	64.0	67.5	67.5
"F" Burner Opening to Floor	12.9	12.9	12.9	15.4	16.4	16.4	16.4	16.4	17.4	17.4	17.4	17.4	19.8	19.8
"G" Flue Box Height	36.0	39.6	39.6	45.6	47.5	47.5	52.5	52.5	56.1	56.1	62	62	66.8	66.8
"H" Flue Outlet Diameter	8	8	8	10	10	10	10	10	12	12	14	14	14	14
"I" Safety Valve Opening (NPT)	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.5	2.5	2.5	2.5
"J" Coil Connections to Floor	43.3	46.2	46.2	50.6	52.1	52.1	58.1	58.1	61.1	61.1	N/A	N/A	N/A	N/A
"K" Supply Outlet Location	9.6	14.8	19.8	11.3	14.3	15.3	18.3	18.3	20.3	23.3	23.3	23.3	23.4	23.4
"L" Supply Dutlet Size	3 NPT	3 NPT	3 NPT	4 NPT	4 NPT	4 NPT	6 Flange	6 Flange	6 Flange	6 Flange	8 Flange	8 Flange	8 Flange	8 Flange
"M" Return Inlet Height	15.1	15.3	15.3	21.6	21.6	21.6	21.6	22.4	23.9	21.6	26.6	26.6	27.8	27.8
"N" Return Inlet Size (NPT)	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0
"D" Drain Size (NPT)	1.25	1.25	1.25	1,5	1.5	1.5	1.5	1.5	1.5	1,5	1.5	1.5	1.5	1.5
Boiler Dry Weight (Lbs.)	733	1,035	1,283	1,915	2,159	2,666	3,158	3,790	4,326	4,851	6,230	6,230	7,900	7,900

* measured from drain outlet to burner mount **measured from stripped down boiler † control circuit requires 115/1 electrical

All length, width and height dimensions are approximate





Manufactured in the USA by COLUMBIA BOILER COMPANY P.O. Box 1070, Pottstown, PA 19464 (610) 323-2700 • FAX (610) 323-7292 www.columbiaboiler.com







A Guide for Selection of Elastomeric Protective Coatings Over Sprayed Polyurethane Foam

RECOMMENDED DESIGN CONSIDERATIONS AND GUIDE SPECIFICATIONS

Spray Polyurethane Foam Alliance

Copyright 1998, Revised 1994-Re-issued May 2004

To order copies of this publication, call 800-523-6154 and request Stock Number AY 102

MISSION STATEMENT

The mission of the Technical Committee is to provide a wide range of technical service to the Spray Polyurethane Foam industry such as, but not limited to:

- 1. Review existing documents and serve as a clearing house to ensure the "Continuity of Value" of technical information published by SPFA and others concerning the products and services to our industry;
- 2. Review, research, develop and issue documents concerning new products, systems and services AND
- 3. To identify, explore, develop, and communicate an understanding of technical issues facing our industry.

TECHNICAL COMMITTEE MEMBERS

Roger Morrison, Chairman North Carolina Foam Industries

Jim Calkins Dow Chemical

John Hatfield Penta Engineering Group, Inc.

Tim Leonard ERSystems

Mary Bogdan Honeywell

Larry Smiley Poly-Tek

Dennis Vandewater Sadler Coatings Systems

AD HOC MEMBER Laverne Dalgleish CUFCA Brad Beauchamp Stepan Co.

John Courier Equipment & Coating Technology

John Ewell Dallas/Ft. Worth Urethane, Inc.

Jack Moore West Roofing Systems, Inc.

Bruce Schenke BASF

Robert Smith KoSa

John Stahl Preferred Solutions, Inc.

This brochure was developed to aid specifiers in choosing elastomeric protective coatings for use over spray-applied polyurethane foam. The information provided herein, based on current customs and practices of the trade, is offered in good faith and believed to be true, but is made WITHOUT WARRANTY, EITHER EXPRESS OR IMPLIED, AS TO FITNESS, MERCHANTABILITY, OR ANY OTHER MATTER. SPFA DISCLAIMS ALL LIABILITY FOR ANY LOSS OR DAMAGE ARISING OUT OF ITS USE. Individual manufacturers and contractors should be consulted for specific information. Nominal values which may be provided herein are believed to be representative, but are not to be used as specifications nor assumed to be identical to finished products. SPFA does not endorse the proprietary products or processes of any individual manufacturer, or the services of any individual contractor.

Table of Contents

Section I	Why Protective Coatings are Required	.4
Section II	Coating Classification and Definitions	.4
Section III	Theoretical Film Coverage vs. Actual Film Coverage	.5
Section IV	Generic Types of Elastomeric Coatings	.8
Section V	Flammability and Code Requirements	14
Section VI	Design Considerations for Selection of a Protective Coating	15
Section VII	Quality Control and Physical Testing	16
Section VIII	Physical Property Tests	17

SECTION I-WHY PROTECTIVE COATINGS ARE REQUIRED

Sprayed polyurethane foam has a closed cell structure and is water resistant. It must, however, be protected with a covering to prevent surface degradation caused by UV exposure. Elastomeric coatings correctly specified and applied will protect polyurethane foam from this surface degradation. Elastomeric coatings can also be used for other purposes:

To inhibit moisture vapor transmission. To enhance the aesthetics of the system. To increase the impact and abrasion resistance of the system. To achieve flammability and code requirements.

SECTION II—COATING CLASSIFICATIONS AND DEFINITIONS

- **Elastomeric Coatings:** For the purpose of this document an **"elastomeric"** coating is one which is capable of elongating at least 100% and recovering its original dimensions.
- Water Vapor Transmission: Water vapor tends to migrate or diffuse from regions of high absolute humidity to regions of low absolute humidity. Protective coatings form films or membranes which retard, to varying degrees, the transmission of water vapor. The rate of water vapor transmission across or through a protective coating is dependent upon (1) the chemical makeup of the coating, (2) the thickness of the coating, and (3) the absolute humidity difference on either side of the coating.

ASTM E-96, "Standard Test Method for Water Vapor Transmission of Materials," is used to determine the water vapor transmission rates of protective coatings. The resulting value may be expressed in either of two ways:

Value	Coating thickness	<u>Units</u>
1. Permeability	Common Thickness	$ng/(Pa\cdot s\cdot m^2)$ (Perm-inch)
2. Permeance	Specific Thickness such as 0.5 mm (20 mils)	ng/(Pa·s·m) (Perm)

Coatings having higher permeability's or permeances are more "breathable" than coatings with low values. Coatings may be relative "breathers" or "vapor retarders." Thickness is as important as coating chemistry: a thickly applied breathable coating could perform as a relative vapor retarder (and vice versa).

For design calculations, the in-place water vapor transmission must be determined by converting the reported permeability or permeance values to the application thickness of the specific coating. The permeance of the protective coating at its application thickness is termed the "perm rating."

Water vapor transmission, per se, is harmless. However, when the diffusing water vapor chills to its dew point, it condenses to liquid water resulting in potential loss of insulation value or deterioration of building components. Selection of protective coatings, thickness, and placement will influence the likelihood of condensation.

Packaging of Elastomeric Coatings: Coatings are packaged as single or plural component materials. Single component coatings are packaged in one container. Plural component coatings may be packaged in two or more containers. Some plural component coatings must be sprayed through plural component equipment.

SECTION III—THEORETICAL FILM COVERAGE VS ACTUAL FILM COVERAGE

(A) Theoretical Coverage:

- 1. METRIC (SI) UNITS: The theoretical coverage rate of a coating is the number of square meters covered by one liter of a coating material spread over a flat smooth surface area at a thickness of 1 millimeter. One liter of a coating material that has roofs solid content by volume will cover 1 square meter, 1 dry millimeter thick (1 mm.m²/L). This definition is used to calculate theoretical coverage rates for coatings containing less than 100% solids. For example a coating with a 60% (0.60) solid content by volume (SCV) to be applied at 0.8 millimeter dry film thickness (DFT) will be used in the formulas listed to arrive at various theoretical coverages. (NOTE: These calculations use solids content by volume, NOT solids content by weight.)
 - a. TO FIND THE THEORETICAL THICKNESS FOR ONE (1) LITER OF COATING,:

Theoretical Thickness per Liter = % Solids X 1 mm²/L = 1 x 0.60

 $= 0.60 \text{ mm.m}^2/\text{L}$

- b. TO FIND THE THEORETICAL NUMBER OF LITERS REQUIRED AT A SPECIFIED THICKNESS: Theoretical Thickness per Liter = DFT / Theoretical Thickness per Liter = $0.8 \text{ mm.m}^2/\text{L}$ = 1.3 L/m^2
- 2. **TRADITIONAL U.S. UNITS:** The theoretical coverage rate of a coating is the number of roofing squares covered by one gallon of a coating material spread over a flat smooth surface area at a thickness of 1/1000 of an inch (0.001" or 1 mil). One gallon of a coating material that has 100% solid content by volume will cover an area 16 roofing squares (\mathbb{R}^{\Box}), 1 dry mil thick (16 \mathbb{R}^{\Box} ·mil/gal). This definition is used to calculate theoretical coverage rates for coatings containing less than 100%. solids. For example a coating with a 60% (0.60) solid content by volume (SCV) to be applied at 30 mil dry film thickness (DFT) will be used in the formulas listed to arrive at various theoretical coverages. (NOTE: These calculations use solids content by volume, NOT solids content by weight.)
 - a. TO FIND THE THEORETICAL THICKNESS FOR ONE (1) GALLON OF COATING:

Theoretical Thickness per gallon	= 16 \mathbb{R}^{\Box} ·mil/gal x % Solids
	= 16 x 0.6
	= 9.6 \mathbb{R}^{\Box} ·mil/gal

b. TO FIND THE THEORETICAL NUMBER OF GALLONS REQUIRED AT A SPECIFIED THICKNESS:

Theoretical Thickness per gallon = DFT / Theoretical Thickness per gallon

= 30 mil /9.6 R[□]·mil/gal
= 3.1 gal/R[□]
(R[□] = Roofing Square = 100 square feet)

NOTE: For conversion between Traditional U.S. Units and Metric (SI) Units, refer to *Spray Polyurethane Foam Estimating Reference Guide* Stock No. AY-121.

(B) Actual Coverage Requirements:

When coatings are applied over sprayed polyurethane foam, many factors, such as the polyurethane surface texture, overspray loss, container residue, equipment characteristics, applicator technique, etc. will directly affect the amount of coating material required to meet the designed in-place minimum dry film thickness (DFT). Therefore, it is very important that additional material be added to the theoretical quantities to ensure that the proper minimum coating thickness is applied.

Consideration must be given to the following factors:

- 1. Minimum dry film thickness (DFT): In order to perform the functions required of the elastomeric coating, the coating material should form a cured film of a prescribed thickness. The surface of sprayed polyurethane foam is somewhat uneven—never completely smooth like a piece of glass. Therefore, peaks and valleys exist and the film thickness over the peaks can be considerably less than in valleys. In order to overcome this potential problem, the minimum dry film thickness (DFT) of any given coating is defined as the in-place dry film thickness (DFT) at its thinnest point on the coated surface.
- 2. Polyurethane foam surface textures: The surface texture of sprayed polyurethane foam influences the extra material needed to achieve the minimum in-place dry film thickness (DFT). Smoother surfaces require less coating material than rougher surfaces. It is also important to note that excessively rough surface textures must not be coated

due to the inability of the coating material to provide complete coverage without voids, pinholes, etc. The photographs below show various polyurethane foam textures that have been established as industry reference standards. An elastomeric coating should **not be applied over a surface** texture rougher than verge of popcorn.

a. Smooth Surface Texture

Description: The surface exhibits spray undulation and is ideal for receiving a protective coating. Even though the surface texture is classified as smooth, this surface requires at least 5% additional material to the theoretical amount.

b. Orange Peel Surface Texture

Description: The surface exhibits a fine texture and is compared to the exterior skin of an orange. This surface is considered acceptable for receiving a protective coating. This surface requires at least 10% additional material to the theoretical amount.

c. Coarse Orange Peel Surface Texture

Description: The surface exhibits a texture where nodules and valleys are approximately the same size and shape. This surface is acceptable for receiving a protective coating because of the roundness of the nodules and valleys. This surface requires at least 25% additional material to the theoretical amount.

d. Verge of Popcorn Texture

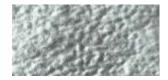
Description: The verge of popcorn surface is the roughest texture suitable for receiving the protective coating. The surface shows a texture where nodules are larger than valleys, with the valleys relatively curved. The surface is considered undesirable due to the additional amount of coating required to protect the surface. This surface requires at least 50% additional material to the theoretical amount.

e. Popcorn Surface Texture or Tree bark

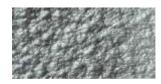
Description: The surface exhibits texture where valleys form sharp angles. This surface is unacceptable for coating application.

f. Oversprayed Surface Texture

Description: The surface exhibits a coarse textured pattern and/or a pebbled surface. This surface is typically found downwind from the spray polyurethane foam path and can vary from mild to severe. This surface requires 25% to 50% additional material to the theoretical amount. Severe oversprayed surfaces are not acceptable for coating applications.











- **3.** Wind Loss: In spray applications, up to 30% of the coating may be lost due to wind. Consider using wind screens and add wind loss to your coating calculations.
- 4. Miscellaneous Loss: A miscellaneous factor must be added to the theoretical coverage rate to cover losses due to material left in containers, equipment problems, etc. Use a percentage factor of between 3% to 10%, depending on the contractor's experience and efficiency.
- (C) Summary: Taking into consideration minimum dry film thickness, polyurethane foam surface textures, wind loss and miscellaneous loss, a total percentage can be arrived at and added to theoretical coverage formulas found in Section 111, Paragraphs (1) Metric SI or (2) Traditional U.S. To compare theoretical overages with actual coverage requirements, the formula to find the theoretical amount of liters (gallons) needed to cover one square meter (one roofing square) at a specified dry film thickness will be used.

The example coating is 60% solid content by volume (SCV) to be applied at 0.8 millimeters (30 mils) dry film thickness (DFT). The additional material percentages (AMP) are as follows:

Orange Peel Texture	_	10%
Wind Loss	_	12%
Miscellaneous		5%
Total (AMP)		27%

Metric (SI)

Actual Coverage = Theoretical Coverage x AMP = $1.3 \text{ L/m}^2 1.27$ = 1.7 actual liters/square meter Traditional U.S. Actual Coverage = Theoretical Coverage x AMP = $3.1 \text{ gal/R}^{\Box} x 1.27$ = 3.9 actual gallons/roofing square

SECTION IV—GENERIC TYPES OF ELASTOMERIC COATINGS

This section contains a review of the elastomeric coating materials most frequently used over sprayed polyurethane foam. As generic types— rather than specific coatings—are discussed, the information presented is very general. Manufacture's data should be used for comparing particular coatings and for specifying dry film thickness, application procedures, etc.

Elastomeric Coatings:

- 1. Acrylic
- 2. Butyl Rubber
- 3. Hypalon®
- 4. Neoprene®
- 5. Silicone
- 6. Polyurethane Elastomer
- 7. Modified Asphalt

A. ACRYLICS:

- 1. **General Description:** Acrylic coatings are single component coatings based on acrylic polymers. They are water based, which allows for easy clean up. Acrylic coatings have good resistance to weathering, and have a high moisture vapor transmission rate or permeability.
- 2. Color Availability: Acrylics are generally available in white, tan, or grey. Other colors may also be obtained.

- 3. **Compatibility with other Elastomeric Coatings:** Acrylics have been used in conjunction with other elastomeric coatings, however, manufacturers should be consulted to ensure compatibility.
- 4. **Minimum Dry Film Thickness:** A dry film thickness (DFT) of 0.6 0.8 mm (25-30 mils), applied in a minimum of two coats, is generally recommended. The specified thickness is dependent on existing project conditions and manufacturers recommendations.
- 5. **Application Recommendations:** It is important that the application of the acrylic coatings be done in strict accordance with the manufacturer's recommendations. A few of the more common requirements are:

SURFACE PREPARATION: The spray polyurethane foam substrate should have positive slope to drains, and be clean, dry and free of UV degradation.

MINIMUM NUMBER OF COATS: The coating should be applied in two separate contrasting color coats. After the first coat is cured, the second coat should be applied at right angles to the first. Heavy coats may cause the coating to blister or mud crack as it dries.

AMBIENT TEMPERATURE CONDITIONS: Acrylic coatings should not be applied below 10°C (50°F) or above 49°C (120°F). Do not allow material to freeze.

FILM CURE TIME: 4 to 12 hours at 24°C (75°F).

EQUIPMENT REQUIREMENTS: Airless spray equipment is recommended. Acrylic coatings may also be brush or roller applied.

6. Limitations:

- a. Do not apply when inclement weather is imminent. Curing is necessary prior to precipitation to avoid washing off the coating or affecting adhesion or physical properties.
- b. Do not apply if temperature will drop below 10°C (50°F) within 4-6 hours.
- c. Keep material from freezing.
- d. Do not apply when the relative humidity is in excess of 85%. Avoid applying late in the day when conditions for dew and condensation are imminent.
- e. Acrylic coatings have a high permeability and should not be used when a vapor retarder is required.

B. BUTYL RUBBERS:

- 1. **General Description:** Butyl rubber is an elastomer which has extremely low water vapor permeability. Having the lowest permeability in comparison to other elastomers, it is especially recommended in situations which have relatively high vapor drives such as low temperature applications (coolers, freezers, and cryogenic storage) or water immersion (water storage and ponding water). When exposed to exterior weathering or in areas where mechanical damage may occur, butyl rubber should be top coated with tougher or more weather resistant coatings (consult with coating manufacturers for specific recommendations.) While most butyl rubbers are two-component materials, some single-component versions are available .
- 2. Color Availability: Black and gray.
- 3. **Compatibility With Other Coatings:** Other elastomeric coatings can be used as a top coat over butyl rubbers. Consult the coatings manufacturers for specific recommendations.
- 4. **Minimum Dry Film Thickness (DFT):** A dry film thickness (DFT) of 0.5mm (20 mils) is generally recommended. When butyl rubbers are used as vapor retarders in cooler and freezer construction or low temperature vessels, additional DFT is recommended for optimum performance. Total system DFT will be determined by the type of top coating used and manufacturer's recommendation.

5. Application Recommendations:

SURFACE PREPARATION: The spray polyurethane foam substrate should be clean, dry and free of UV degradation.

MINIMUM NUMBER OF COATS: The coating should be applied in two (2) separate contrasting color coats. After the first coat is cured, the second coat should be applied at right angles to the first.

FILM CURE TIME: 8 to 12 hours at 24°C (75°F) (faster curing butyls are available). Note: Cure time will vary depending upon ambient temperature and humidity.

AMBIENT TEMPERATURE REQUIREMENTS: Should be applied between 7°C (45°F) and 38°C (100°F).

EQUIPMENT REQUIREMENTS: Consult with the coating manufacturer for equipment requirements.

<u>IMPORTANT</u>: When butyls are to be used as vapor retarders, particular care must be taken in applying the butyl to produce a pinhole-free membrane. Furthermore, butyl rubbers should always be applied to the correct side in applications involving vapor drives (see Moisture Vapor Transmission, Stock No. AY-118.)

6. Limitations:

- a. Plural component butyl rubbers have a limited working life due to a material pot life of 1 1/2 hours (or less) depending upon ambient temperature conditions.
- b. Butyl rubbers have limited impact (hail or mechanical) and traffic resistance.
- c. Butyls are subject to more rapid weathering and chalking than some coatings and should be top coated with other compatible coatings for optimum performance.

C. HYPALONS:

- 1. **General Description:** Hypalons® (a registered trademark of E. I. DuPont de Nemours Co.) are chlorosulfonated polyethylene rubbers. They are fast-drying single-component materials that have exceptional fire retardancy, chemical resistance, weathering properties, and moisture vapor transmission resistance. They may be used as an entire coating system or as a topcoat over other elastomeric coatings in roofing, tank and cooler applications.
- 2. Color Availability: Hypalons® are available in white and gray. Other colors may be obtained.
- 3. **Compatibility With Other Coatings:** Hypalons® are used as topcoats for Butyl Rubber, Neoprene®, and some Polyurethanes. Consult the coating manufacturer for specific recommendations.
- 4. **Minimum Dry Film Thickness:** As a total system, a minimum dry film thickness (DFT) of 0.8mm (30 mils) applied in at least two coats is generally recommended. As a topcoat for other elastomeric coatings, a minimum of 0.2mm (8 mils) is generally recommended.

5. Application Recommendations:

SURFACE PREPARATION: The polyurethane foam substrate should be clean, dry and free of UV degradation.

MINIMUM NUMBER OF COATS: Multiple coats are required to reduce possible sagging and pinholing. Each coat should be applied at right angles to the previous coat once the previous coat has cured.

FILM CURE TIME: 3/4 to 2 hours at 24°C (75°F). Note: Cure time will vary depending upon ambient temperature, humidity and color.

AMBIENT TEMPERATURE REQUIREMENTS: Can be applied between 2°C (35°F) and 38°C (100°F.)

EQUIPMENT REQUIREMENTS: Airless spray equipment is recommended for optimum results. It can also be roller or brush applied.

6. Limitations:

- a. Hypalon® coatings have limited impact resistance and elasticity at temperatures below -18°C (0 °F)
- b. Hypalon® coatings continue to polymerize with age and exterior exposure, which results in reduced elasticity and flexibility.
- c. Shelf life is limited. Significant increases in viscosity may occur over time.
- d. Due to a variety of formulations and physical properties, recommended dry film thicknesses vary widely. Consult specific system manufacturer's data for comparisons.

D. <u>NEOPRENES®</u>:

1. **General Description:** Neoprenes® (a registered trademark of E. I. DuPont de Nemours & Co.) are polychloroprene rubbers. They are low solids, fast-drying, single-component coatings used as vapor retarders and as primers for other coatings. They should be topcoated for exterior exposure.

2. Color Availability: Black.

- 3. **Compatibility with other Elastomeric Coatings:** Various coatings can be used as a top coat over Neoprene, such as polyurethane elastomers and Hypalons. Consult the coating manufacturer for specific requirements.
- 4. **Minimum Dry Film Thickness:** A dry film thickness (DFT) of 0.5mm (20 mils) is generally recommended. The total system DFT will be determined by the top coating used and manufacturer's recommendations.

5. Application Recommendations:

SURFACE PREPARATION: The polyurethane foam substrate should be clean, dry and free of UV degradation.

MINIMUM NUMBER OF COATS: Multiple coats are required to reduce possible sagging and pinholing. Each coat should be applied at right angles to the previous coat once the previous coat has cured.

FILM CURE TIME: 3/4 to 2 hours at 24°C (75°F). Note: Cure time will vary depending upon temperature and humidity.

EQUIPMENT REQUIREMENTS: Consult with the coating manufacturer for equipment requirements.

6. Limitations:

- a. Neoprene® coatings have limited impact resistance and elasticity at temperatures below -18°C (0°F).
- b. Neoprene® coatings continue to polymerize with age and exterior exposure, which results in reduced elasticity and flexibility.
- c. Neoprenes® tend to degrade under UV exposure and should be topcoated with a more UV resistant material.

E. SILICONES:

- 1. **General Description:** Silicone coatings are silicone polymer elastomeric coatings. They are available in single or plural component materials. They are characterized by their exceptional weatherability, their ability to withstand temperature extremes and retain physical properties. Silicone coatings have a high moisture vapor permeability and are classified as breathable coatings.
- 2. **Color Availability:** Single component silicone coatings are available in white, gray, tan and dark gray. Two component silicone coatings are available in light and medium gray.
- 3. **Compatibility With Other Coatings:** Other coatings will generally not adhere to silicone. Silicone may be used as a top coat over other elastomeric coatings. The manufacturer should be consulted to ensure compatibility.

4. **Minimum Dry Film Thickness:** A dry film thickness (DFT) of 0.5 mm (20 mils) applied in two coats is generally required.

5. Application Recommendations:

SURFACE PREPARATION: The Polyurethane Foam substrate should have a positive slope to drain and be clean, dry and free of UV degradation.

MINIMUM NUMBER OF COATS: The coating should be applied in two separate contrasting color coats. After the first coat has cured, the second coat should be applied at right angles to the first.

FILM CURE TIME:

Single component—2 to 8 hours at 24°C (75°F). Plural component—10 to 30 minutes (with fast catalyst); 1 to 8 hours (with slow catalyst).

TEMPERATURE REQUIREMENTS: Silicones can be applied between 2°C (35°F) and 49°C (120°F)

EQUIPMENT REQUIREMENTS: Consult with the coating manufacturer for equipment requirements.

6. Limitations:

- a. Silicone Coatings are breathable type coatings and should not be used alone when a vapor retarder is required.
- b. Other materials may not adhere well to silicones.
- c. Granules are often imbedded into the wet topcoat to enhance mechanical resistance and traction.

F. POLYURETHANE ELASTOMERS:

- 1. **General Description:** Polyurethane is a general term describing a polymer based on an isocyanate and polyol or amine reaction. There are a number of different types of polyurethane elastomers and they typically are classified as follows:
 - a. Aromatic or Aliphatic Polyurethanes: Aromatic polyurethanes are polymers based on unsaturated aromatic backbones. This unsaturation accounts for the slight to moderate darkening and chalking characteristics in exterior exposure. The degree to which the discoloration and chalking occur depends on the particular formulation. Aromatic polyurethanes are mostly used as a base coat for the aliphatic polyurethane, however, some may be used as a finish coat with only mild chalking and discoloration. Aliphatic polyurethanes have similar physical properties to aromatics but in contrast to aromatic polyurethanes have no unsaturation and are characterized by their exceptional color and gloss retention. They are recommended in applications where a highly aesthetic finish coat is required.
 - b. **Modified Polyurethanes:** These are polyurethanes which have been modified with non-reactive resins such as phosphate or phthalate plasticizers, synthetic hydrocarbons, refined oils, tar or asphalt. Due to the wide variety of modifying resins there is a great variance in physical properties.
 - c. **Single-Component or Plural-Component:** Aromatic, aliphatic, and modified polyurethanes are available as single-component and plural-component materials. A wide range of properties are found in this broad family of coatings.

Moisture-cure polyurethanes are single component and cure from reaction with moisture in the air, which allows the polyurethane to polymerize.

Plural-component polyurethanes polymerize by the reaction of the isocyanate (Component A) with polyols (Component B). These polyurethanes are normally available in two versions: standard cure and fast set.

2. Color Availability:

Aliphatics are generally available in white. Other colors are available.

Aromatics are generally available in aluminum, gray, and tan. Other colors are available.

- 3. Compatibility With Other Coatings: Aliphatic and aromatic polyurethanes may be used as base or topcoats for other coatings. Consult the manufacturer for specific recommendations.
- 4. Minimum Dry Film Thickness: Dry film thickness will range from 0.5 to 0.8 mm (20 to 30 mils) depending on the system used.

5. Application Recommendations:

SURFACE PREPARATION: The polyurethane foam substrate should be clean, dry, and free of UV degradation.

NUMBER OF COATS: The coating should be applied in a minimum of two (2) separate contrasting color coats. After the coating is cured, each coat should be applied at right angles to the previous coat.

CURE TIME*	
Type	

Туре	Dry To Touch	<u>Cure</u>
Aliphatic Aromatic:	4-6 hours	10-24 hours
Standard	4-6 hours	10-24 hours
Fast Set	3 sec to 20 min	10-24 hours
Moisture Cure	6-8 hours	10-24 hours

*Cure times may vary depending upon temperature, humidity and coating thickness.

AMBIENT TEMPERATURE REQUIREMENTS: Apply between 2°C (35°F) and 43 °C (110°F).

EQUIPMENT REQUIREMENTS: Varies with specific system. Spray fast-set polyurethane with plural component equipment as recommended by the coating manufacturer.

6. Limitations:

- 1. Plural-component materials have a limited working pot life. Some may only be sprayed through plural equipment.
- 2. Polyurethanes are sensitive to moisture or water on the substrate.

G. MODIFIED ASPHALTS:

1. General Description: The modified asphalts are coatings that are made elastomeric by the addition of rubber-like polymers to asphalts. Most cure by chemical reaction, rather than solvent evaporation, and are available as single or plural component products. All are considered vapor retarders.

2. Color Availability: Black.

- 3. Compatibility With Other Coatings: Modified asphalts will not adhere well to other asphalts; but will adhere well to other coating systems. Consult the manufacturer for specific recommendations.
- 4. Minimum Dry Film Thickness (DFT): 1.3 to 1.5 mm (50 to 60 mils).

5. Application Recommendations:

SURFACE PREPARATION: Surfaces should be clean, dry, free of grease, oil, etc.

NUMBER OF COATS: Recommended thickness could be applied in one (1) coat; however, two (2) coats are recommended.

FILM CURE TIME: 24 to 48 hours, time varies according to temperature and humidity.

TEMPERATURE REQUIREMENTS: Substrate temperatures can be below freezing so long as the surfaces are free of frost. condensation, etc. Material temperatures should be at 16°C (60°F) or above for spray application.

EQUIPMENT REQUIREMENTS: May be applied by brush, spray or trowel.

6. Limitations:

- a. Modified asphalts are subject to softening and deterioration by petroleum solvents, oils, greases, etc.
- b. Some modified asphalts may be subject to UV degradation and should be protected with a top coating.

SECTION V—FLAMMABILITY AND CODE REQUIREMENTS

Coatings based on organic compounds are subject to combustion and exhibit characteristics similar to all other combustibles under fire conditions. emitting heat, smoke and toxic gases. Additives are formulated into coating compositions, inhibiting ignition and/or reducing fuel contribution to a fire.

Users of spray-applied rigid polyurethane foam insulation materials should be familiar with the various applicable test procedures, codes and laws—national, state, and local. In addition, insurance companies may have specific requirements of fire performance.

Polyurethane foam used in interior spaces must be protected by an ignition or thermal barrier and/or smoke detectors or sprinkler systems as required by local building code or insurance requirements.

The risks involved with combustible roof coverings include exterior flame spread across the surface of the roof and interior flame spread resulting from combustible vapors and liquids entering the building through seams, joints, and openings in the roof's substrate. The tests and standards described below have been developed over the years and are designed to evaluate fire propagation for both exterior and interior areas.

(A) Underwriters Laboratory (UL)

To be classified, both the coating and polyurethane foam must meet standards and inspections of Underwriters Laboratories. The system classification denotes a specific foam with a specific coating at a specified slope. For re-cover over an existing roof with a non-combustible deck, spray-applied foam systems with minimum 3.8 cm (1 inch) thick foam will assume the foam system's construction rating. For combustible decks, the lesser of the existing roof or the foam roof rating, will prevail.

- 1. **UL-790 (ASTM E-108):** UL-790 is the UL test for resistance to fire originating front sources outside a building. The tests include the intermittent-flame test, the spread-of-flame test, and the burning-brand test. Systems are rated Class A (best), Class B, and Class C.
- 2. UL-723 (ASTM E-85) Steiner Tunnel Test: This test is valuable for comparing the flame spread and smoke development of polyurethane foams. It utilizes a 25-foot tunnel and compares the performance of foam with that of red oak planking.
- 3. **UL-1256:** This tests roof deck constructions and membranes for their resistance to interior fires Construction Numbers 136. 181. and 206 in the UL Roofing Materials and Systems Directory are spray-applied polyurethane foam systems
- 4. UL-263 Fire Resistance (P Rating): Measures the ability of the roof, ceiling and structural members to withstand interior fires for specified time periods, i.e., 1 hour, 2 hours. and 3 hours. New construction designs for SPF are provided in the UL Fire Resistance Directory, under Design No. P733.

(B) Factory Mutual (FM)

The Factory Mutual Engineering and Research Corporation tests the flame spread potential of building materials and assemblies related to their end-use application. The fire tests include ASTM E-84 Standard Test Method for Surface Burning Characteristics of Building Materials (25-foot tunnel test), ASTM E-119 Standard Test Methods of Fire Tests of Building Construction and Materials, ASTM E-108 Standard Methods of Fire Tests of Roof Coverings, the FM building corner test. and the FM heat release rate calorimeter. Ratings are Class 1(A) (best), Class I(B), and Class

l(C).

FM approved systems (Class 1) are listed in FM's Approval Guide. Additionally FM publishes Loss Prevention Delta sheets. such as 1-57 Rigid Plastic Building Materials, which discuss acceptable uses of various materials and components.

(C) Summary of Code Approvals

Although Model Building Codes do not have the force of law, they are good references since most state and local codes (which do have the force of law) are based on their provisions.

Three major organizations, the Building Official and Code Administrators (BOCA), the International Conference of Building Officials (ICBO), and the Southern Building Code Congress International (SBCCI), and a central organization, the Council of American Building Officials (CABO), evaluate each coating system through data submitted by coatings manufacturers.

These data are comprised of literature, UL and FM approvals. and independent testing results. Acceptance of the coating system allows the system to be used in areas that must comply with specific building and safety codes.

SECTION VI-DESIGN CONSIDERATIONS FOR SELECTION OF A PROTECTIVE COATING

The specter should consider a number of factors on each specific project when making the selection of a suitable protective coating.

- (A) Environmental Conditions: An elastomeric coating system must be able cure to under the expected climatic conditions in the area of application. High tensile strength or abrasion resistance will be required in areas where hail or blowing abrasives are expected. If unusual atmospheric conditions are present, such as chemical attack or pollutants, the coating's resistance to these contaminants must be assessed prior to use.
- (B) Code and Flammability Requirements: Any system specified should meet all local code and insurance requirements. Independent documentation of ratings should be provided by the appropriate agencies.
- (C) Mechanical Damage and Foot Traffic: A coating must be able to resist anticipated mechanical damage and foot traffic. Key physical properties for a coating system to inhibit mechanical damage are tensile strength, elongation, Shore A hardness, and dry film thickness (DFT). Damage resulting from punctures and other surface stresses can be reduced through the use of high tensile strength and high elongation coatings. Increasing dry film thickness in potential damage areas will also reduce the possibility for mechanical damage. Granules and reinforcements in walkway areas are also helpful.
- (D) Moisture Vapor Transmission: Protective coatings, in con junction with spray-applied polyurethane foam, can reduce the likelihood of condensation within the foam or other building components. Install building materials, including foam and coatings, such that relative vapor retardance increases toward the side with the higher absolute humidity (usually the warm side). When this practice cannot be followed, install a vapor retarder such that:
 - 1. The vapor retarder is positioned as close as possible to the side with the higher absolute humidity (usually the warm side), and
 - 2 The vapor retarder has an installed perm rating substantially less than that of the next lowest component
- (E) **Ponding Water:** The accumulation of water in low-lying areas that exceeds the manufacturer's specification and/ or contact documents.
- (F) Maintenance: Recommendations for temporary repair and preventive maintenance procedures for use with coating system should be provided by the manufacturer.
- (G) Aesthetics: Many elastomeric coatings can be colored or tinted various shades to comply with job requirements. The use of colored granules may create a more uniform appearance on the coated surface. Various colored granules are also available to meet job requirements.
- (H) Other Factors: Once the selection process has narrowed to a particular type of coating or the systems of a particular manufacturer, the specifier should weigh these factors:

- 1. Field Experience,
- 2. Manufacturer Quality Control,
- 3. Warranty, and
- 4. Applicator Experience.

Careful consideration of these factors in the selection process should help insure a successful, long lasting application.

SECTION VII—QUALITY CONTROL AND PHYSICAL TESTING

- (A) **Manufacturer's Responsibility:** It is the manufacturer's responsibility to provide a product that conforms to its claims relative to basic product description and uses, physical properties, and in-place performance. In order to assure that the end user actually receives a product comparable to the manufacturer's claims, manufacturers should provide the following:
 - 1. **Literature:** Literature published to provide information about a particular product should include the following: Product description, basic uses, wet physical properties, cured physical properties, performance characteristics, fire rating and approvals, building code and insurance acceptance, application instructions and techniques, limitations, and precautions.
 - 2. **Plant Quality Control:** Coating manufacturers should provide strict quality assurance to produce a product that will comply with their advertising and literature claims. All products manufactured should be tested to insure batch-to-batch uniformity and to determine that product quality is indeed within the established parameters. Manufacturers should also retain liquid samples for a specified time. These samples should be taken from each batch produced.
 - 3. **Shipping and Handling:** Coatings should be properly and expediently shipped to the contractor job site, or distributor. The product should be packaged in clean, properly sealed and labeled containers according to ICC regulations and other pertinent laws. Coatings that are beyond their advertised shelf life should not be sold by manufacturers or distributors.
 - 4. **Applicator Training and Approval:** Most manufacturers will help the contractor train personnel to handle and apply their products. This training can be undertaken in formal seminar-type programs or as an in-field exercise, depending on the complexity of the product and/or the equipment necessary for its application.

With the advent of more complex product and equipment, manufacturers may require formal training prior to sale of products or issue of license or approval on a specific application.

- 5. Job Inspection: For warranted applications, many manufacturers require various inspections.
 - a. **Techniques and Procedures:** The job should be visually inspected to determine that the following areas are in compliance with the manufacturers printed instructions: Surface texture, uniformity of coating coverage, minimum coating thickness, existence of pinholes, evidence of uncoated polyurethane foam and overall appearance. Where deficiencies exist, these should be brought to the attention of the contractor for correction.

Coating dry film thickness (DFT) is usually measured from a slit sample using an optical comparator

b. **Inspection Accessories:** The following is a list of devices used for testing during the application of a polyurethane foam and coating installation:

Moisture Meter: To measure degree of moisture within or on the surface or a particular substance.

Sling Psychrometer: Measures ambient temperature and humidity.

Surface Thermometer: Reads temperature of a particular surface.

Optical Comparator: Provides scale, in millimeters or inches (or mils) to read dry film thickness (DFT) of a coating.

Lighted Magnifying Glass: Allows for close-up inspection of surface film.

Razor Knife: To cut slit samples from the installed roof system.

Wet Film Thickness Gauge: Used to read wet coating thickness and through use of coverage formulas determine thickness of the film when dry.

Caulking Gun with Compatible Caulking Material: To repair areas where dry film was removed for inspection or where other coating deficiencies exist.

Coating: Small amount of coating to touch-up areas or test areas after installation of caulking.

(B) **Contractor's Responsibility:** The contractor should assume responsibility for product use, handling, and proper application.

1. Knowledge of Product:

- a. Contractors and their crews should be aware of all the parameters regarding the proper application of a particular product, including uses, packaging, mixing, storage, and all application requirements.
- b. Field personnel should be provided with the proper training and knowledge by both the contractor and supplier to successfully apply the particular system.

2. Equipment

- a. Applicators must have a complete understanding of their equipment and its use with the particular material being applied. Of particular importance are mix ratios, solvents, pressures, output, filters, spray tip size, and operating temperatures.
- b. Proper maintenance, repair and clean-up of equipment will also provide for minimum downtime, increased production, and better crew and product performance.

3. Job Inspection:

- a. Spot checks of product ratios, output, wet and dry film thickness, and cured film properties are good measures for quality control.
- b. Monitoring specific output measured in liters (gallons), film thickness, and areas covered will provide material yields and more uniform coverage.

The quality control of a coated polyurethane foam system is the responsibility of everyone involved; from the selection and testing of raw materials to the inspections of project slit samples. It is incumbent on all those involved to have the knowledge, equipment, and personnel to provide the most successful application possible in this most important aspect of our industry.

SECTION VIII—PHYSICAL PROPERTY TESTS

(A) **Tensile Strength (ASTM D-412):** The maximum tensile stress applied during stretching of a specimen to its rupture point. The type of die used, temperature and speed at which the sample is tested should be reported.

Tensile strength relates to the membrane's resistance to rupturing when subjected to forces such as the impact by hail or falling objects.

(B) Elongation, Ultimate (ASTM D-412): The maximum extension or stretching of the membrane at the time of rupture. The type of die used, temperature and speed at which the sample is tested should be reported.

The elongation relates to the membrane's ability to stretch with thermal movement or with various indentations and compressions to the foam.

- (C) Tear Strength (ASTM D-624): The measurement of the force required to propagate a tear in the membrane. Two methods are used to test the membrane:
 - 1. A die produces a circular cut; or
 - 2. A die produces a 90° angle cut.

The angle cut (#2) is a harsher test and will produce lower results.

The tear strength relates to the resistance of a membrane to tearing or to the migration of a tear.

- (D) Hardness (ASTM D-2240): A measurement of a membrane's inherent resistance to compression and indentation. In many instances, a coating with a greater degree of hardness (in the Shore A range of 40-90) will have better abrasion resistance as well as resistance to cutting and tearing. Also, some harder coatings have better dirt release properties than softer coatings.
- (E) Abrasion Resistance (ASTM D-4060): The measurement of the amount (by weight) of coating lost when subjected to an abrasive wheel of a Taber Abraser. The test is normally performed with a 1,000 gram weight and the weight lost is reported after 1.000 revolutions. The abrasive wheels used for elastomers membranes are either the CS-17 or CS-10 (the CS-17 wheel is more abrasive than the CS-10 and will produce higher weight lost figures. The type of wheel used should be reported.)

The abrasion resistance is related to the wear resistance of a membrane when subjected to repeated traffic or abrasive materials.

- (F) Impact Resistance (ASTM D-2794): This test involves a procedure for rapidly deforming, by impact, a coating film and its substrate (usually a metal panel) and for evaluating the effect of such deformation. The apparatus for this test is a cylindrical weight which is raised and dropped within a quite tube onto the coating film from various heights. Failure is indicated by cracks in the film.
- (G) Adhesion-In-Peel of Elastomeric Joint Sealants (ASTM C-794): This test method covers a procedure for determining the adhesion-in-peel of single or multi-component joint sealants used in building construction.

Peel or Stripping Strength of Adhesive Bonds (ASTM D-903): This test method covers the determination of the comparative peel or stripping characteristics of adhesive bonds.

(H) Moisture Vapor Transmission (ASTM E-96): The measurement of the amount of moisture vapor transferred through a membrane.

ASTM E-96 uses perm cups which are either filled with water or desiccant, depending on the test method. The amount of moisture which passes through the membrane is measured by weighing the cups at periodic intervals. There are two methods normally used:

- Procedure B—water is placed inside the cup and the cup is placed in an environment of 50% humidity @ 23°C (73°F).
- 2. Procedure E—a desiccant is placed inside the cups and the cups are placed in an environment of 90% humidity @ 38°C (100 °F). (Procedure E produces a greater vapor drive and will produce a higher value.)
- (I) Water Absorption (ASTM D-471): The amount of water absorbed by a membrane when totally immersed in water at a given temperature.

This is related to a membrane's resistance to swelling and temporary or permanent degradation of physical properties due to the influence of retained water.

(J) Low Temperature Flexibility: The following two methods can be used (in both methods an unsupported free film of the membrane is used for testing):

- 1. ASTM D-2137: determines the lowest temperature at which flexible elastomeric materials will not exhibit fractures or cracks when subjected to impact.
- 2. ASTM D-2136: determines the ability of rubber-like materials to resist the effect of low temperature when subjected to bending at specified temperatures.

This factor is particularly relevant to coating performance during the winter season. It is an indication of the coating's ability to flex and elongate with stress, impact, or building movement at lower temperatures.

- (K) High Temperature Resistance (ASTM D-573): The maximum temperature a membrane can be exposed to without permanent deterioration. This information is necessary in applications where a coating may be exposed to abnormally high temperatures.
- (L) Heat Aging (ASTM D-573): The resistance of a membrane to degradation when subjected to various specified elevated temperatures. A typical temperature for a elastomer designed for roofing is 70°C (160°F) for a minimum of 30 days.

This property is pertinent to the membrane's retention of physical properties over an extended period of time and therefore may related to expected life. It is also correlated to sun loads across various parts of the country.

- (M) Chemical Resistance (ASTM D-471): The ability of a membrane to retain physical properties when subjected to spill, splash, or immersion conditions in various chemical solutions.
- (N) Accelerated Weathering: Accelerated weathering can be simulated when membranes are subjected to an intense concentrated ultraviolet light, high humidity, or condensation, and elevated temperatures.

ASTM G151-97 Standard for Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources: This practice provides general procedures to be used when exposing nonmetallic materials in accelerated test devices that use laboratory light sources. Detailed information regarding procedures to be used for specific devices is found in standards describing the particular device being used. For example, detailed information covering exposures in devices that use carbon-arc, senon-arc, and fluorescent UV light sources are found in Practices G 23, G 26 and G 53 respectively.

Signs of film deterioration and retention of physical properties are recorded at various intervals. These tests are generally used to screen coatings for comparison purposes.

The following tests are used to predict the long term properties of a coating:

- (O) Ozone Resistance (ASTM D-1149): The resistance of a atmosphere containing a high concentration of ozone.
- (P) Mold and Mildew Resistance (ASTM D-3273): The resistance of a membrane to mold and mildew growth and the resulting deterioration of film integrity. In addition, the growth also causes an unsightly appearance of the finish.
- (Q) Modulus (ASTM D-412): The amount of stress of tensile strength required to stretch a membrane to a given elongation, such as 100%, 200%, 300%, etc.

For physical property test procedures related to flammability and building code requirements (see Section V).

OTHER PROGRAMS AND SERVICES OFFERED BY SPFA

Professional Training

The Accreditation Program offers individual and company accreditation in five areas: Contractor, Distributor, Elastomeric Coating Supplier, Foam Supplier and Independent Inspector. The objectives of the program are to **PROVIDE** an established set of criteria; to **IDENTIFY AND RECOGNIZE** individuals and companies; and to **ENCOURAGE** responsibility for the quality of their work through self-education.

Association Newsletter published quarterly with "Special Show Edition" for the annual conference offers articles, alerts and technical information affecting the industry.

The SPFA Web Site is a direct communication to all member suppliers and contractors with web access. Up to date information is offered... And as a member you may link into the web site (www.sprayfoam.org)

A "*HOT-LINE*" **800 number** is available for your use to answer those technical questions (800-523-6154). The SPFA sponsors research and development and product testing that allows approval for generic types of spray foams, covering and related products.



Spray Polyurethane Foam Alliance 4400 Fair Lakes Court, Suite 105 Fairfax, VA 22033 800-523-6154



EXHIBIT 17 - PREVAILING WAGE RATES – ELKO COUNTY OR DAVIS-BACON

<u>https://labor.nv.gov/uploadedFiles/labornvgov/content/PrevailingWage/4.%20Northern%20Ne</u>vada%20Rural%20Region%202022.pdf.

STATE OF NEVADA

STEVE SISOLAK Governor

TERRY REYNOLDS Director

SHANNON M. CHAMBERS LABOR COMMISSIONER



OFFICE OF THE LABOR COMMISSIONER 3300 WEST SAHARA AVENUE, SUITE 225 LAS VEGAS, NEVADA 89102 PHONE: (702) 486-2650 FAX (702) 486-2660

OFFICE OF THE LABOR COMMISSIONER 1818 COLLEGE PARKWAY, SUITE 102 CARSON CITY, NV 89706 PHONE: (775) 684-1890 FAX (775) 687-6409

2022 PREVAILING WAGE RATES NORTHERN NEVADA RURAL COUNTIES

(Carson City, Churchill, Douglas, Elko, Eureka, Humboldt, Lander, Lyon, Mineral, Pershing, Storey and White Pine)

DATE OF DETERMINATION: October 1, 2021

APPLICABLE FOR PUBLIC WORKS PROJECTS OVER \$100,000 BID/AWARDED OCTOBER 1, 2021 THROUGH SEPTEMBER 30, 2022

Pursuant to Nevada Revised Statutes (NRS) section 338.030(9)(a), "If the contract for a public work: (a) Is to be awarded pursuant to a competitive bidding process, the prevailing wages in effect at the time of the opening of the bids for a contract for a public work must be paid until the completion or termination of the contract or for the 36 months immediately following the date on which the bids were opened, whichever is earlier." For contracts not awarded pursuant to competitive bidding, please see NRS section 338.030(9)(b). However, if a project exceeds 36 months new wage rates may apply pursuant to NRS section 338.030(9)(10). Prevailing Wage Rates may be adjusted based on Collective Bargaining Agreements (CBA's) and adjustments to those agreements. (See NRS 338.030)

PREVAILING WAGE DETERMINATIONS - NRS 338.030 subsection 7, the wages so determined must be:

(a) Issued by the Labor Commissioner on October 1 of the odd-numbered year in which the survey was conducted and, except as otherwise provided in subsection 8, remain effective for 2 years after that date; and(b) Made available by the Labor Commissioner to any public body which awards a contract for any public work.

Senate Bill 243 passed during the 80th Nevada Legislative Session (2019) and set forth in NRS section 338.025, now requires the Labor Commissioner to calculate the Prevailing Wage Rates by region. NRS section 338.025 Prevailing wage regions. For the purpose of determining the prevailing rate of wages pursuant to NRS section 338.030, four prevailing wage regions are hereby established in this State as follows:

- 1. The Washoe Prevailing Wage Region consisting of Washoe County;
- 2. The Northern Rural Prevailing Wage Region consisting of Carson City and the counties of Churchill, Douglas, Elko Eureka, Humboldt, Lander, Lyon, Mineral, Storey, Pershing and White Pine;
- 3. The Clark Prevailing Wage Region consisting of Clark County; and
- 4. The Southern Rural Prevailing Wage Region consisting of the counties of Esmeralda, Lincoln and Nye.

OBJECTIONS TO PREVAILING WAGE DETERMINATIONS – NRS section 338.030 subsection 2. Objections to the Prevailing Wage Determinations must be submitted within 30 days after the Prevailing Wage Determinations are issued.

Pursuant to NRS section 338.030 subsection 8, the Labor Commissioner will review the prevailing wage rates in each even-numbered year to determine if adjustments should be made.

As <u>Amendments/Revisions</u> 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	
Boilermaker	6
Bricklayer	7
Carpenter	9
Cement Mason	10
Electrician – Communication Technician	11
Electrician - Lineman	13
Electrician – Neon Sign	
Electrician - Wireman	
Elevator Constructor	
Fence Erector	
Flagperson	20
Floorcoverer	
Glazier	
Highway Striper	
Hod Carrier-Brick Mason	
Hod Carrier – Plasterer Tender	25
Hod Carrier – Plasterer Tender Ironworker	27
Laborer	
Lubrication And Service Engineer (Mobile And Grease Rack)	30
Mechanical Insulator	32
Millwright	33
Operating Engineer	
Operating Engineer – Steel Fabricator & Erector	35
Operating Engineer – Piledriver	
Painter	38
Piledriver (Non-Equipment)	40
Plasterer	
Plumber/Pipefitter	43
Refrigeration	44
Roofer	45
Sheet Metal Worker	
Soils and Material Tester	47
Sprinkler Fitter	47
Surveyor	
Taper	
Tile/Terrazzo Worker/Marble Mason Finisher	
Tile/Terrazzo Worker/Marble Mason	<u>50</u>
Traffic Barrier Erector	
Truck Driver	53
Well Driller	<u>55</u>
Group Classifications	
Labor Group Classifications	<u>56</u>
Operating Engineers	

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	
Air Balance Technician-Foreman	
Air Balance Technician-General Foreman	76.47

ADD ZONE RATE

In addition to AIR BALANCE rates add the applicable amounts per hour, calculated based on a road from the courthouse in Reno, Nevada:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 100 miles	\$5.00
Zone 3	Over 100 miles	\$10.00 the employee shall be provided reasonable lodging and meal expenses.

ADD PREMIUM PAY

All hourly rates are subject to Over Time (One and one half 1 ½) of the Regular rate:

- 1. For all hours worked over Eight (8) Hours in one day or shift.
- 2. For the first Eight (8) Hours work on Saturday.

All hourly rates are subject to Double Time of the Regular Rate:

- 1. For all hours worked over Ten (10) Hours in one day or shift.
- 2. For all hours worked over Eight (8) Hours on Saturday.

3. For all hours worked on Sunday, New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Nevada Day, Thanksgiving Day, Day after Thanksgiving, Day before Christmas, and Christmas Day.

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Nevada Day, Thanksgiving Day, Day after Thanksgiving, Day before Christmas, and Christmas Day

JOB DESCRIPTION: Excerpt from Sheet Metal Local 26 Collective Bargaining Agreement

(a) manufacture, fabrication, assembling, handling, erection, installation, dismantling, conditioning, adjustment, alteration, repairing and servicing of all ferrous or nonferrous metal work and all other materials used in lieu thereof and of all HVAC systems, air veyor systems, exhaust systems, and air-handling systems regardless of material used including the setting of all equipment and all reinforcements in connection therewith; (b) all lagging over insulation and all duct lining; (c) testing and balancing of all air-handling equipment and duct work; (d) the preparation of all shop and field sketches whether manually drawn or computer assisted used in fabrication and erection, including those taken from original architectural and engineering drawings or sketches; (e) metal roofing; and (f) all other work included in the jurisdictional claims of International Association of Sheet Metal, Air, Rail and Transportation Workers.

Craft: ALARM INSTALLER (Non-Union Rate)

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

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 Journeyman47.	88
Bricklayer Foreman	13

Zone 1	0 to 34 miles	\$0.00
Zone 2	35 to 75 miles	\$2.50
Zone 3	Over 75 miles	\$8.12

ADD PREMIUM PAY

Section A. Hours. The standard workday shall consist of eight (8) continuous hours of work between the hours of 5:30 a.m. and 4:30 p.m.,

Section B. Overtime All work in excess forty (40) hours during the established work week shall be paid at the rate of one and one half (1-1/2) times the hourly base wage rate in effect. Employees will be paid one and one-half (1-1/2) times the hourly wage rate for all hours worked over eight (8) in a single day, and double time (2x) after ten (10) hours in a single day.

1. Employees will be paid double time for hours worked on Union recognized Holidays.

2. Employees will be paid double time on Sundays.

3. Work performed on Saturday will be paid at one and one-half (1-1/2) times the regular wage rate, in accordance with Article XVII, Section D. Work performed on Saturdays in excess of eight (8) hours shall be paid at double the applicable hourly rate.

Section C.

1. The first shift shall be the regular day shift insofar as computing wage payments is concerned, and the first day shift shall work a regular eight-hour shift, with a one half-hour unpaid lunch period midway through the shift. The normal starting time for the first shift shall be between 5:30-10:00 a.m.

2. If two work shifts are established, the second shift shall consist of eight (8) hours of continuous work, with a one half-hour unpaid lunch period midway through the shift. Employees working on the second shift shall receive eight hours times the basic straight time rate plus an additional fifty cents (\$.50) per hour for each of those eight hours.

3. If three work shifts are established, the third shift shall consist of seven hours of continuous work, plus one half-hour unpaid lunch period midway through the shift. Employees working on the third shift shall receive the basic straight time rate plus three dollars and twenty-five cents (\$3.25) for each of those seven hours.

4. Time worked in excess of seven hours on the third shift shall be paid at the appropriate overtime rate.

RECOGNIZED HOLIDAYS

Holidays. The Employer agrees to recognize the following holidays: New Year's Day, Presidents' Day, Memorial Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day, Friday following Thanksgiving Day, and Christmas Day. Any holiday falling on a Sunday will be observed on the Monday following, and any holiday falling on a Saturday will be observed on the preceding Friday.

<u>Job Descriptions</u> Excerpt from Bricklayer and Allied Craftworkers Local Union No. 13 Collective Bargaining Agreement

1. BRICK MASONRY: Brick Masonry shall consist of, but not be limited to, the following work procedures and installation of the following materials: A. The laying of brick made from any material in, under or upon any structure or form of work where bricks are used, whether in the ground, or over its surface, or beneath water; in commercial and residential buildings, rolling mills, iron works, blast or smelter furnaces, lime or brick kilns; in mines or fortifications, and in all underground work, such as sewers, telegraph, electric and telephone conduits; including the installation of substitutes for brick such as all carbon materials, Karbate, Impervite or mixtures, all acid resistant materials, all terra cotta and porcelain materials, except where the foregoing materials are manufactured to substitute for tile as provided for under the category of Section 8, C, of this Code. B. All cutting of joints, pointing, cleaning and cutting of brick walls, fireproofing, blockarching, terra cotta cutting and setting, the laving and cutting of all tile plaster, mineral-wool, cork blocks and glass masonry, or any substitute for above materials, the laying of all pipe sewers or water mains and the filling of all joints on the same when such sewers or conduits are of any vitreous material, burnt clay or cement, or any substitute material used for the above purpose, the cutting, rubbing and grinding of all kinds of brick and the setting of all cut stone trimmings on brick buildings, and the preparation and erection of plastic, castables or any refractory materials. C. Cleaning, grouting, pointing, and other work necessary to achieve and complete the work under the foregoing categories; all waterproofing and black mastic waterproofing, silicone and/or substitutes sandwiched between masonry units in the interior of the wall. D. All terra cotta called unit tile in sizes over 6"x12" regardless of method of installation; all guarry tile over 9"x9"x1 1/4" in size; split brick or quarry tile or similar material if bedded and jointed with one operation. The bedding, jointing, and pointing of the above materials shall be the work of the craft installing same. E. All burnt clay extruded cellular products regardless of trade name or method of installation when used as a veneer on structures; all clav products known as terra cotta tile, unit tile, ceramic veneer and machinemade terra cotta and like materials in sizes larger than 6"x12", regardless of the method of installation. Where the preponderance of material to be installed is of the above size, and when material of lesser sizes is to be used in connection therewith, the bricklayers shall install all such materials. Brick paying comes under bricklayers' trade classification. F. The preparation, setup, calibration, operation, cleaning, and routine maintenance of any mechanical devices or robotics used to install masonry units and materials, or that otherwise assist the mason in performing any of the work described in Article II and Code 1 of the IU Constitution, as well as the preparation and ongoing maintenance of the work area to allow proper installation of masonry units and materials.

Craft: CARPENTER (Union Rate)

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

Carpenter	53.16
Carpenter Foreman	56.52
Carpenter General Foreman	60.22

ADD ZONE RATE

(Building and Heavy Highway and Dam Construction)

In addition to CARPENTER rates add the applicable amounts per hour, calculated from the Washoe County Courthouse:

Zone 1	0 to 75 miles	\$0.00 (Road miles from the Washoe County Courthouse)
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	Over 300 miles	\$6.00

ADD PREMIUM PAY

Any work performed over eight (8) hours per day and on Saturdays shall be compensated at time and one-half (1-1/2x) the appropriate hourly rate. All work performed on Sundays, holidays and over twelve (12) hours in one (1) day shall be compensated at two times (2x) the appropriate hourly rate. In the event a day's work is lost because of severe weather conditions or major mechanical breakdown, work may be performed on a voluntary basis on a Saturday at the straight time hourly rate for eight (8) hours provided the straight time.

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, 4th of July, Labor Day, Admission's Day, Thanksgiving Day, the Friday after Thanksgiving, Christmas Day hours worked in one (1) week do not exceed forty (40) hours.

JOB DESCRIPTION Excerpt from Southwest Regional Council of Carpenters and Affiliated Local Unions Master Labor Agreement

(1) All building construction, including but not limited to the construction, erection, alteration, repair, modification, demolition, addition, or improvement in whole or in part of any building structure. All rigging of Carpenters', and Piledrivers' materials.

(2) All heavy, highway and engineering construction, including but not limited to the construction, improvement, modification and demolition of all or any part of the streets, highways, bridges, viaducts, railroads, tunnels, airports, water supply, irrigation, flood control and draining systems, sewers and sanitation projects, dams, power houses, refineries, aqueducts, canals, river and harbor projects, wharves, docks, breakwaters, jetties, quarrying of breakwaters or rip rap stone or operations incidental to such heavy construction work and whether such work is above or below the water line level.

(3) The character of such work covered by this Agreement shall include but not be limited to all carpenter, concrete form work, shoring, drywall, metal stud, drywall finishing, plaster, scaffold, modular furniture, trade show work, insulation, acoustical, and lathing work on such construction.

(4) All interior and/or exterior wall finish work, including EIFS and other wet wall finish work.

Craft: CEMENT MASON (Union Rate)

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

Cement Mason47.1	2
Cement Mason – Foreman	7

ADD ZONE RATE

In addition to CEMENT MASON rates add the applicable amounts per hour, calculated from the Reno Post Office, 50 So. Virginia St., Reno, Nevada:

Zone 1	0 to 90 miles	\$0.00
Zone 2	over 90 miles	\$6.00

ADD PREMIUM PAY

OVERTIME – Any worked performed over eight (8) hours per day shall be compensated at time and one half the hourly rate. All work performed after twelve (12) consecutive hours shall be paid at double the hourly rate. All worked performed on Saturdays shall be compensated at time and one half the hourly rate. All Sunday and Holiday work shall be paid for at double time.

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, Independence Day, Labor Day, Admissions Day, Thanksgiving Day and the following Friday following Thanksgiving Day, and Christmas

JOB DESCRIPTIONS

1. All building construction, including but not limited to the construction, erection, alteration, repair, modification, demolition, addition, or improvement in whole or in part of any building structure.

2. All heavy, highway and engineering construction, including but not limited to construction, improvement, modification, demolition, of all or any part of streets and highways (including sidewalks, curbs and gutters), bridges, viaducts, rail roads, tunnels, airports, water supply, irrigation, flood control and drainage systems, sewers and sanitation projects, dams, power houses, refineries, aqueducts, canals, river and harbor projects, wharves, docks, breakwaters, jetties, quarrying of breakwater or rip-rap stone, or operation incidental to such heavy construction work.

3. The work to be performed by Cement Masons shall include but not be limited to the following, when tools of the Cement Masons trade are used or required:

Setting screeds, screed pins, curb forms and curb and gutter forms, rodding, spreading and tamping concrete, hand application of curing compounds, applying topping (wet or dry) colors or grits; using Darby and push floats, hand troweling or hand floating; marking edging, brooming or brushing, using base cove or step tools; chipping, and stoning, patching or sacking; dry packing; spreading and finishing gypsum, operating mechanical finishers (concrete) such as Clary, Jackson, Bidwell Bridge Deck Paver or similar types; grinding machines; troweling machines, floating machines powered concrete saws; finishing of epoxy and resin materials, bush hammering and exposed finishes for architectural work.

Operation of skill saw, chain saw, Laser Screed, Laser Level, Curb and Slipform machines, Epoxy Type Injection pumps, stamps or other means of texturing, any new devices, which are beneficial to the construction of or with concrete or related products.

Craft: ELECTRICIAN COMMUNICATION TECHNICIAN (Union Rate)

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

Communication Installer	41.15
Communication Technician	45.78
Senior Technician	48.87

ADD ZONE RATE

In addition to Electrician Communication Tech rates add the applicable amounts per hour, calculated from the Washoe County Courthouse:

Zone 1	0 to 70 miles	\$0.00
Zone 2	70 to 90 miles	\$8.00
Zone 3	90 miles and over	\$10.00

ADD PREMIUM PAY

One and one half $(1 \frac{1}{2})$ 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	
Lineman-Journeyman	81.13
Lineman-Foreman	
Lineman-General Foreman	
Lineman-Equipment Man	67.81

ADD ZONE RATE

Electrician Lineman/Groundman/Heavy Equipment Operator, rates, add the applicable amounts per Day, Road Miles from the Employee's Residence to the Reporting Location:

ADD PREMIUM PAY

Premium pay for hours worked in excess of a shift of 8 hours or 12 hours or such other time increment set forth in the Collective Bargaining Agreement or on a weekend or holiday.

RECOGNIZED HOLIDAYS

New Year's Day, Martin Luther King Holiday, President's Day, Memorial Day, Independence Day, Labor Day, Nevada Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION:

Outside, overhead and underground construction and maintenance work on electrical transmission lines, switch yards, substations and distribution systems which shall include:

1. Pole line work (whether built of wood, metal or other material): the digging and back-filling of holes for poles or anchors (by hand or mechanical equipment): the loading or unloading, handling, sorting and moving of materials; the assembly or erection of all materials including the guying, stringing of conductors and fiber optics or other work necessary on through to the ultimate completion of such pole work.

2. Steel or metal structures used for the purpose of carrying electrical wire, conductors, or equipment (this includes transmission towers, outdoor substations, switch racks, or similar electrical structures); the moving of men, tools or equipment; the loading or unloading, handling, sorting and moving of materials; the assembly and erection of all materials used on the job site, including the assembly of the grillage and foundations, on through to the ultimate completion of such structures. Work covered shall include the grounding of all such structures except the bonding of stub-angle to rebar cage; the stringing and installation of wires, cables and insulators or other electrical equipment suspended from structure; also the handling and placing of transformers or O.C.B.'s and other related electrical equipment.

The moving of men, tools or equipment; the loading or unloading, handling, sorting and moving of materials; the assembly of all electrical materials on race-ways such as ducts, shall be performed by workmen under the Agreement. This shall also include CIC (cable in conduit), CC (coiliable 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, includes but is not limited to:

- 1. Installing, servicing and repairing plastic, neon and illuminated signs;
- 2. Ascending ladders or operating hydraulic or electric hoist to install, service, or examine sign to determine cause of malfunction;
- 3. Wiring, rewiring or removing defective parts and installing new parts using electrician's tools;
- 4. Removing sign or part of sign for repairs, such as structural fabrication, scroll repair, or transformer repair;

Craft: ELECTRICIAN WIREMAN (Union Rate)

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

Wireman	63.45
Wireman-Cable Splicer	
Wireman Forman	67.82
Wireman General Foreman	72.20

ADD ZONE RATE

In addition to ELECTRICIAN-Wireman, rates, add the applicable amounts per hour, calculated from Washoe County Courthouse, Reno Nevada:

Zone 1	0 to 70 miles	\$0.00
Zone 2	70 to 90 miles	\$8.00
Zone 3	90 miles and over	\$10.00

ADD PREMIUM PAY

Premium pay for hours worked in excess of a shift of 8 hours or 12 hours or such other time increment One and one half $(1 \frac{1}{2})$ 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 and geothermal power generating systems. Further all salvage of electrical work shall be included.

Craft: ELEVATOR CONSTRUCTOR (Union Rate)

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

Elevator Constructor-Journeyman Mechanic	113.70
Elevator Constructor-Journeyman Mechanic In Charge	123.43

ADD PREMIUM PAY

Work performed on Construction Work on Saturdays, Sundays and before and after 30 the regular working day on Monday to Friday, inclusive, shall be classed as overtime, and paid for at double the rate of single time.

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, Independence Day, Labor Day, Nevada Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from Agreement of International Union of Elevator Constructors

The handling and unloading of all equipment coming under the jurisdiction of the Elevator Constructor, from the time such equipment arrives at or near the building site, shall be handled and unloaded by the Elevator Constructors. Mechanical equipment such as a forklift or truck mounted swing boom may be used by the Elevator Constructors. A derrick, crane or material hoist can be used under the supervision of Elevator Constructors to handle and unload the heavy material described in Par. 5(a). Where unusual conditions are expected to exist prior to delivery of equipment at or near the building site in regard to handling and unloading of equipment in the primary or secondary jurisdiction of the local union, the Company shall contact the Local's Business Representative to make appropriate arrangements for the handling and unloading of such equipment. In areas outside the jurisdiction of the local union, the Company shall contact the Regional Director.

(b) The erecting and assembling of all elevator equipment to wit: electric, hydraulic, steam, belt, dumbwaiters, residence elevators, parking garage elevators (such as Bowser, Pigeon Hole, or similar types of elevators), shuttles, compressed air and handpower, automatic people movers, monorails, airport shuttles and like-named devices used in the transportation of people for short distances of travel (less than 5 miles), as well as vertical reciprocating conveyor systems.

(c) It is understood and agreed that the preassembly of all escalators, moving stairways and link belt carriers that may be done in the factory shall include the following:

1. Truss or truss sections with tracks, drive units, machines, handrail drive sheaves, drive chains, skirts on the incline sections but not curved sections, step chains and steps installed and permanently aligned.

- 2. Balustrade brackets may be shipped attached but not aligned.
- 3. Setting of all controllers and all wiring and conduit from the controller.

All other work on escalators, moving stairways and link belt carriers shall be performed in the field before or after the truss or truss sections are joined and/or hoisted and placed in permanent position. This includes any and all work not done in the factory. The erecting and assembly of all theater stage and curtain elevator equipment and guides and rigging thereto, organ consoles and orchestra elevators

(d) All wiring, conduit, and raceways from main line feeder terminals on the controller to other elevator apparatus and operating circuits. Controllers are not to be shipped from the factory with extended wiring attached thereto.

(e) The erecting of all guide rails.

(f) The installation of all grating under the control of the Company. The installation of all counterweight screens, overhead work, either wood or iron, and all material used for mounting of elevator apparatus in machine room, overhead or below.

(g) The drilling of overhead beams for attaching machines, sheaves, kick angles, and all other elevator equipment.

(h) The setting of all templates.

(i) All foundations, either of wood or metal, that should take the place of masonry.

(j) The assembly of all cabs complete.

(k) The installation of all indicators.

(1) 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

ADD ZONE RATE

In addition to FENCE ERECTOR rates add the applicable amounts per hour, calculated based on a <u>road</u> 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 ¹/₂) the regular straight time hourly rate shall be paid:

- 1. For all hours worked over eight (8) hours in one day or shift.
- 2. For any hours worked on Saturday from midnight to midnight.

Double the regular straight time hourly rate shall be paid for all time:

- 1. For all hours worked over twelve (12) hours in one day or shift.
- 2. For any hours worked on Sunday from midnight to midnight.
- 3. For any hours worked on holidays from midnight to midnight.

RECOGNIZED HOLIDAYS

If any of these holidays fall on Sunday, the Monday following shall be considered a Holiday. New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION:

Includes but is not limited to:

- 1. Erecting or repairing chain link, wooden, tortoise, wire/wire mesh, or temporary fencing;
- Mixing and pouring concrete around bases of posts and tamping soil into post hole to embed post;
- 3. Digging post holes with a spade, post hole digger or power-driven auger;
- 4. Aligning posts through the use of lines or by sighting;
- 5. Verifying vertical alignment of posts with a plumb bob or spirit level;

Craft: FLAG PERSON (Union Rate)

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

Flag Person......40.86

ADD ZONE RATE

In addition to FLAG PERSON rates add the applicable amounts per hour, calculated based on a road miles from either the Carson City Courthouse or the Washoe County Courthouse:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	300 miles or over	\$6.00

ADD PREMIUM PAY

One and one half $(1 \frac{1}{2})$ the regular straight time hourly rate shall be paid:

- 1. For all hours worked over eight (8) hours in one day or shift.
- 2. For any hours worked on Saturday from midnight to midnight.

Double the regular straight time hourly rate shall be paid for all time:

- 1. For all hours worked over twelve (12) hours in one day or shift.
- 2. For any hours worked on Sunday from midnight to midnight.
- 3. For any hours worked on holidays from midnight to midnight.

RECOGNIZED HOLIDAYS

If any of these holidays fall on Sunday, the Monday following shall be considered a Holiday. New Year's Day, Memorial Day, 4th of July, Labor Day, Admission Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day

JOB DESCRIPTION

FLAG PERSON, includes but is not limited to:

- 1. Directing movement of vehicular traffic through construction projects;
- 2. Distributing traffic control signs and markers along site in designated pattern;
- 3. Informing drivers of detour routes through construction sites;

Craft: FLOOR COVERER (Union Rate)

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

 Floor Coverer Journeyman.
 49.19

 Floor Coverer Foreman.
 51.46

ADD PREMIUM PAY

Shift work

1. \$2.00 per hour will be added to the taxable net wage to shift schedule of hours worked between 6:00 p.m. and 6:00 a.m.

One and one half $(1 \frac{1}{2})$ 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

JOB DESCRIPTION:

Includes but is not limited to:

- 1. Installing, setting, cutting, preparing, or removal of glass, or materials used in lieu thereof, including, without limitation, in windows, doorways, showers, bathtubs, skylights and display cases;
- 2. Installing glass on surfaces, including, without limitation, fronts of buildings, interior walls and ceilings;
- 3. Installing pre-assembled framework for windows and doors designed to be fitted with glass panels, including stained glass windows by using hand tools;
- 4. Loading and arranging of glass on trucks at the site of the public work;

Craft: Highway Striper (Union Rate)

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

Highway Striper Journeyman	46.48
Highway Striper Foreman	46.98

ADD ZONE RATE

In addition to HIGHWAY STRIPER add the applicable amounts per hour, calculated based on a road miles from either the Carson City Courthouse or the Washoe County Courthouse:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	300 miles or over	\$6.00

ADD PREMIUM PAY

One and one half $(1 \frac{1}{2})$ 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 Mason44	1.23
Brick Mason Foreman44	.63

ADD ZONE RATE

In addition to Hod Carrier Brick Mason Tender rates add the applicable amounts per hour, calculated based on road miles from the Washoe County Courthouse:

Zone	75 miles and Over	\$8.13

ADD PREMIUM PAY

One and one half $(1 \frac{1}{2})$ 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: Excerpt from Agreement between No, NV Masonry Contractors and LIUNA Local 169

Conveying of all materials used by the Brick and Stone Masons from the first point of delivery to the Mechanic whether done manually or by a piece of machinery or equipment devised to replace the wheelbarrow or buggy, including but not limited to the forklift. The handling of Bricks, Blocks, mortar, or any other material to serve the bricklayer in any capacity building and dismantling scaffolds of any kind or type used by Bricklayers for masonry work including but not limited to tower scaffolds, access scaffolds, or other specialty scaffolds, mixing and tempering mortar by hand and/or machine, mixing grout and cleaning up after the bricklayer, the repairing and maintenance of all equipment, either on the job or in the yard.

Craft: Hod Carrier-Plasterer Tender (Union Rate)

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

Plasterer Tender-Journeyman	44.57
Plasterer Tender- Gun Tender	45.57
Plasterer Tender-Foreman	45.93

ADD ZONE RATE

In addition to: HOD CARRIER-PLASTERER TENDER rates add the applicable amounts per hour, calculated based on road miles from So. Virginia St., Reno, Nevada:

Zone 1	0 to 70 miles	\$0.00
Zone 2	70 miles and Over	\$8.00

ADD PREMIUM PAY

One and one half $(1 \frac{1}{2})$ 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, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from Agreement between Plasterers Contractors and LIUANA Local Union 169

Any Employee within the scope of this division tending or serving any other worker performing plasterers work, any plasterer, plasterers, or apprentices in any capacity performing plasterers work including but not limited to, handling and conveying of all materials after delivery used by plasters, including but not limited to, inside finish coat, outside finish coat, brown coat, scratch coat, sprayed or trawled 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, tusky hoist, and rigging and signaling for cranes to the point or points of application or installation, making mixing and preparing after delivery all materials used by plasters, whether by hand or machine including but not limited to mixers, pumps for plaster or fire proofing, plaster, finish coats, fireproofing, including Monocoat, Cafco or other materials for the same or similar use, moving any rolling scaffolding, building and handling all necessary trestle, scaffolding and planking of scaffolding for plasterers and lathers, building mortar boxes, mortar boards and stands, and the repairing and maintenance of all equipment either on the job or in the yard, the spreading of all temporary protective drop cloths, building paper or plastic covers and taping of same (in a composite crew with the plasterers when necessary), the cleaning of all floors, and debris, behind the plasterers or any other worker performing plasterers work in connection with the work performed all work necessary for cold weather protection and cure including but not limited to handling installing or tending to blankets, visqueen, and space heaters, and running putty.

Tending to plasterers or any other worker performing plasterers work on EFIS system work shall include all work after the wallboard is installed including but not limited to any preparatory sealing or leveling, placing foam, mesh, and plaster including any rough, finish, and color coats.

For sprayed on fire proofing work only, including Monocoat, Cafco or other materials for the same or similar use an Employer signatory to this Agreement and the Local 169, Laborers Master Agreement may employ Laborers at the Group 1 wage rate to perform overspray protection, the spreading of all temporary protective drop cloths, building paper or plastic covers and taping of same, the cleaning of all floors, and debris, cold weather protection and cure including but not limited to handling installing or tending to blankets, visqueen, and space heaters and moving rolling scaffolding.

Craft: Ironworker (Union Rate)

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

SEE AMENDMENT 1a

Ironworker-Journeyman	
Ironworker - Foreman	
Ironworker -General Foreman	

ADD ZONE RATE

SEE AMENDMENT 1

In addition to Iron Worker rates add the applicable amounts per day, calculated based on a road mile from the Reno City Hall.

Zone 1	60 to 75 miles	\$25.00
Zone 2	75 to 100 miles	\$50.00
Zone 3	100 miles and over	\$60.00

ADD PREMIUM PAY

One and one half (1X) the regular straight time hourly rate shall be paid:

1. For the first two (2) hours worked in excess of eight (8) on a regular workday Monday-Friday

2. For the first eight (8) hours on Saturday

Double the regular straight time hourly rate shall be paid for all time:

- 1. For all hours worked over ten (10) hours in one day or shift.
- 2. For any hours worked on Sunday.
- 3. For all hours worked over eight (8) on Saturday
- 4. For all hours worked on Holidays

Shift Pay

- 1. 2nd shift add 6% of hourly wage
- 2. 3rd shift add 13% of hourly wage
- 3. Dedicated shift add 6% of hourly wage

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB CLASSIFICATION: Excerpt from Agreement between NV AGC and DC of Ironworkers

Field fabrication and/or erection or deconstruction of structural, ornamental and reinforcing steel, including but not limited to the fabrication, rigging and signaling, erection and construction of all iron and steel, ornamental lead, bronze, brass, copper and aluminum, plastics and all other substitute materials, including, but not limited to, composites, carbon fiber and fiberglass, all barrier railings, handrail, aluminum, steel, glass and plastic, reinforced concrete structures or parts thereof; bridges, viaducts, inclines, dams, docks, dredges, vessels, locks, gates, guides, aqueducts, reservoirs, spillways, flumes, caissons, cofferdams, subways, tunnels, cableways, tramways, monorails, blast furnaces, stoves, kilns, coolers, crushers, agitators, pulverizers, mixers, concentrators, ovens, cupolas, roof decking such as but not limited to "Cofar", "Trusdeck", Mahon "M"; smoke conveyors, penstocks, flag poles, drums, shafting, shoring, fur and storage rooms, fans and hot rooms, stacks, bunkers, conveyors, dumpers, elevators, vats, tanks, enamel tanks, enamel vats, towers, pans, hoppers, plates, anchors, caps, corbels, lintels, Howe and combination trusses, grillage and foundation work, grating, bucks, partitions, hanging ceilings, hangers, clips, brackets, flooring, floor construction and domes, rolling shutters, curtains, frames; aluminum, rolling fire, won and iron doors, including supports; cast

tiling, air ducts, duct and trench frames and plates; wire work, railings, wire cable including pipe, guards. fencing, grill work, sidewalk and vault lights, skylights, roofs, canopies, light steel framing, marquees, awnings and other related equipment elevator and dumb waiter enclosures, elevator cars, tracks, fascias, aprons, operating devices, steel and aluminum sash, hardware and screens, frames, fronts, lockers, racks, book stacks, tables, shelving, metal furniture, seats, chutes, escalators, stairways including pre-engineered stairs, ventilators, boxes, fire escapes, signs, jail and cell work, safes, vaults, vault doors, safe deposit boxes, corrugated sheets when attached to steel frames, including insulation; frames in support of boilers; materials altered in field such as framing, cutting, bending, drilling, burning and welding including by acetylene gas and electric machines; metal forms and false work pertaining to concrete construction; seismic isolation systems and dampening systems including base isolators, sectional water tube and tubular boilers and stokers; traveling sheaves, vertical hydraulic elevators, bulkheads, skip hoists, making and installation of articles made of wire and fibrous rope, rigging in connection with pumps, compressors, forced and induced draft fans, air meters, Bailey meters, agitators, oxygen converters, cindering 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 Furniture Mover	
Group 1	43 73
Group 1A Group 2 Group 3 Group 3A Group 4 Group 4A Group 5	40.86
Group 2	43.83
Group 3	43.98
Group 3A	47.41
Group 4	
Group 4A	46.73
Group 5	
Group 6	
Nozzlemen, Rodmen	43.53
Gunmen, Materialmen	
Reboundmen	43.88
Gunite Foreman	44.93

ADD ZONE RATE

In addition to LABORER rates add the applicable amounts per hour, calculated based on a <u>road</u> 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 $(1 \frac{1}{2})$ the regular straight time hourly rate shall be paid:

- 1. For all hours worked over eight (8) hours in one day or shift.
- 2. For any hours worked on Saturday from midnight to midnight.

Double the regular straight time hourly rate shall be paid for all time:

- 1. For all hours worked over twelve (12) hours in one day or shift.
- 2. For any hours worked on Sunday from midnight to midnight.
- 3. For any hours worked on holidays from midnight to midnight.

RECOGNIZED HOLIDAYS

If any of these holidays fall on Sunday, the Monday following shall be considered a Holiday. New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: 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

ADD ZONE RATE

In addition to: **LUBRICATION AND SERVICE ENGINEER (MOBILE AND GREASE RACK)** rates add the applicable amounts per hour calculated based on a road miles from the Carson City Courthouse or Washoe County Courthouse.

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	300 miles and over	\$6.00

ADD PREMIUM PAY

1. One and one-half (1-1/2) times the applicable straight-time rate for the day, shift, work, equipment and classification shall be paid for all work (including repair work and field survey work) performed on Saturday and before a shift begins and after it ends, except when operating equipment servicing a craft that is receiving double time on commercial building construction, in which case double time shall be paid.

2. Overtime. The following rates shall apply on Sundays and holidays and all work before a shift begins and after it ends:

RECOGNIZED HOLIDAYS

Holidays. Double the applicable straight-time rate shall be paid for all work (including repair, maintenance and field survey work) performed on Sundays and the following holidays: New Year's Day (January 1); Memorial Day (last Monday in May); Independence Day (July 4); Labor Day (1st Monday in September); Nevada Admission Day (last Friday in October); Thanksgiving Day (4th Thursday in November); the day after Thanksgiving Day; and Christmas Day (December 25). Holidays falling on Sunday shall be observed on the following Monday. Holiday hours shall be reckoned on the same basis as Sunday hours.

Saturday Shift Period. On any shift, Saturday shall be the twenty-four-hour period commencing at 12:00 midnight Friday.

Sunday Shift Period. On any shift, Sunday shall be the twenty-four-hour period commencing at 12:00 midnight Saturday.

3. For hours worked in excess of 12) on any such workday, an Employee shall be paid two (2) times the regular straight-time rate of pay for each hour so worked.

Craft: Mechanical Insulator (Union Rate)

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

Mechanical Insulator-Mechanic	69.11
Mechanical Insulator-Foreman	73.11
Mechanical Insulator-General Foreman	75.11

ADD ZONE RATE

In addition to MECHANICAL INSULATOR rates add the applicable amounts per hour, calculated based on a radius figured from Reno City Hall:

Zone 1	0 to 20 miles	\$11.00
Zone 2	21 to 40 miles	\$21.00
Zone 3	41 to 60 miles	\$31.00
Zone 4	Over 60 miles	\$85.00

ADD PREMIUM PAY

One and one half times the minimum hourly wage rate shall be paid for the first two (2) hours of overtime work, directly following eight (8) hours Monday through Friday, and for the first ten (10) hours worked on Saturdays. Double the minimum hourly wage rate shall be paid for all other overtime worked Monday through Friday and in excess of ten (10) hours on Saturdays.

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from the Int'l Assoc. of Heat and Frost Insulators and Allied Workers Local 16 and the No. CA Chapter. Western Insulation Contractors Assoc.

65. Lining of all mechanical room surfaces and air handling shafts.

66.The filling and damming of fire stops and penetrations including, but not limited to, electrical and mechanical systems.

67. All foam applications for the purpose of thermal, acoustical, or fire protective purposes, including RTV foams or equivalents, applied to mechanical or electrical systems.

68. All duct lining, and duct wrapping, done on the job site, direct application and installation of fire protection of grease ducts, exhaust systems, or any other ductwork for acoustical or thermal purposes. 69. The insulation of all field joints on pre-insulated underground piping, and the pouring of Gilsilite or its equivalent.

70. Any finish material which is contiguous to the thermal or acoustical application.

71. The preparation, distribution of materials on job sites, assembling, molding, spraying, pouring, mixing, hanging, adjusting, repairing, dismantling, reconditioning, maintaining, finishing, and weather proofing of hot or cold thermal or acoustical insulation with such materials as may be specified.

72. The application of any material, including metal and PVC jacketing, Alumaguard or equivalent, on piping, fittings, valves, flanges, boilers, ducts, plenums, flues, tanks, vats, equipment and any other hot or cold surface for the purpose of thermal control.

73. The Agreement shall cover all other work of a specialty nature.

Craft: Millwright (Union Rate)

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

Millwright Journeyman	
Millwright Welder	
Millwright Foreman	72.67
Millwright General Foreman	77.14

ADD ZONE RATE

In addition to MILLWRIGHT rates, add the applicable amounts per hour, calculated on road miles from the Washoe County Courthouse:

Zone 1	0 to 15 Miles	\$0.00
Zone 2	15 to 35 Miles	\$2.50
Zone 3	Over 35 Miles	\$4.25

ADD PREMIUM PAY

First two (2) hours outside the regular constituted shift shall be at the rate of time and one-half (1¹/₂X).

Saturdays up to the first ten (10) hours shall be at the rate of time and one-half ($1\frac{1}{2}X$). All additional hours and Sundays and holidays shall be the rate of double time (2X). When working on Sundays and holidays, there will be one dollar and fifty cents (\$1.50) per hour additional paid to Pension Annuity.

RECOGNIZED HOLIDAYS

New Year's Day, Washington's Birthday (President's Day), Memorial Day, 4th of July, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving, Christmas Day. Admission Day is a recognized holiday in lieu of Veterans' Day.

JOB DESCRIPTION Excerpt from Southwest Regional Council of Carpenters and Affiliated Local Unions Master Labor Agreement

5006.18

The work of the millwrights, as spelled out in the Jurisdictional Claims Handbook referenced in Paragraph 5006.17 above, is as follows: The term "MILLWRIGHTS AND MACHINE ERECTORS" shall mean the, unloading, hoisting, rigging, skidding, moving, dismantling, aligning, erecting, assembling, repairing, maintaining and adjusting of all machinery and equipment installed either in buildings, factories, structures, or processing areas, either undercover, underground or elsewhere required to process material, handle, manufacture or service, be it powered or receiving power manually, by steam, gas, electric, gasoline, diesel, nuclear, solar, water, air or chemically; and in industries such as and including but not limited to the following (which are identified for the purpose of description: woodworking plants, canning industries, steel, coffee roasting plants, paper and pulp, cellophane, stone crushing, gravel and sand washing and handling, refineries, grain storage and handling, asphalt plants, sewage disposal and water plants, laundry, bakery, mixing plants, can, bottle and bag packing plants, textile mills, paint mills, breweries and milk processing plants, power plants, aluminum processing or manufacturing plants, and the amusement or entertainment field.

5006.19

Also included are installation of mechanical equipment in atomic energy plants, installation of reactors in power plants, installation of control rods and equipment in reactors, installation of mechanical

equipment in rocket missile bases, launchers, launching gantry, floating bases, hydraulic escape doors and any and all component parts thereto either assembled, semi-assembled or disassembled.

5006.20

Further included is the installation of, but not limited to the following: setting of all engines, motors, generators, air compressors and fans, pumps, scales, hoppers, conveyors of all types and sizes and their supports, escalators, man lifts, moving machinery, mechanical operator and/or automatic doors, roll-up doors, mechanical stage equipment, amusement devices, mechanical pin setters and spotters in bowling alleys, refrigeration equipment and installation of all types of equipment necessary and required to process material either in manufacturing or servicing, the handling and installation of pulleys, gears, sheaves, fly wheels, air and vacuum drives, worm drives and gear drives directly or indirectly coupled to motors, belts, chains, screws, legs, boots, guards, boot tanks, all bin valves, turn heads and indicators, shafting, bearing, cable sprockets, cutting all key seats in new and old work, troughs, chippers, filters, calendars, rolls, winders, reminders, slitters, cutters and wrapping machines; blowers, forging machines, rams, hydraulic or otherwise, planing, extruder, ball, dust collectors, equipment in meat packing plants and splicing of ropes and cables.

5006.21

Additionally included are the laying out, fabrication and installation of protection equipment, including machinery guards, the making and setting of templates for machinery, fabrication of bolts, nuts, pins and drilling of holes for any equipment which the millwrights install regardless of materials; all welding and burning regardless of type; fabrication of all lines, hose or tubing used in lubricating machinery installed by millwrights; grinding, cleaning, servicing and machine work necessary for any part of any equipment installed by the millwrights; and the breaking in and trial run, of any equipment or machinery installed by the millwrights

5006.22

When requested in writing by the Millwright Union, individual Employers who are parties to this Agreement shall furnish signed letters promptly on a date mutually agreed upon by both parties, but in no case more than thirty (30) days, on the letterhead of the individual Employer stating he is employing or had employed millwrights on a specific type of work and a specific job and paid the negotiated scale of wages and fringe benefits for such work.

5006.23

The individual Employer and the Local Union will cooperate promptly in attempting to resolve jurisdictional disputes that may arise on any job or project.

Craft: OPERATING ENGINEER (Union Rate) Prevailing wage rates include the base rate as well as all applicable fringes

Operating Engineers	(SEE GROUP CLASSIFICATIONS)
Group 1	
Group 1A	
Group 2	
Group 3	
Group 4	
Group 5	64.66
Group 6	
Group 7	
Group 8	
Group 9	
Group 10	
Group 10A	
Group 11	
Group 11A	
Group 11B	
Foreman	
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	
Group 1 Truck Crane Oiler	
Group 1 Oiler	67.23
Group 2	
Group 2 Truck Crane Oiler	
Group 2 Oiler Group 3	
Group 3 Truck Crane Oiler Group 3 Oiler	
Group 3 Hydraulic	
Group 4	
Group 5	
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	
Group 1 Truck Crane Oiler	
Group 1 Oiler	
Group 2	
Group 2 Truck Crane Oiler	
Group 2 Oiler	
Group 3	
Group 3 Truck Crane Oiler	
Group 3 Truck Crane Oiler Group 3 Oiler	
Group 4	
Group 5	
Group 6	
Group 7	
Group 8	
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	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	300 miles over	\$6.00

ADD PREMIUM PAY

1. One and one-half (1-1/2) times the applicable straight-time rate for the day, shift, work, equipment and classification shall be paid for all work (including repair work and field survey work) performed on Saturday and before a shift begins and after it ends, except when operating equipment servicing a craft that is receiving double time on commercial building construction, in which case double time shall be paid.

2. Overtime. The following rates shall apply on Sundays and holidays and all work before a shift begins and after it ends:

RECOGNIZED HOLIDAYS

Holidays. Double the applicable straight-time rate shall be paid for all work (including repair, maintenance and field survey work) performed on Sundays and the following holidays: New Year's Day (January 1); Memorial Day (last Monday in May); Independence Day (July 4); Labor Day (1st Monday in September); Nevada Admission Day (last Friday in October); Thanksgiving Day (4th Thursday in November); the day after Thanksgiving Day; and Christmas Day (December 25). Holidays falling on Sunday shall be observed on the following Monday. Holiday hours shall be reckoned on the same basis as Sunday hours.

Saturday Shift Period. On any shift, Saturday shall be the twenty-four-hour period commencing at 12:00 midnight Friday.

Sunday Shift Period. On any shift, Sunday shall be the twenty-four-hour period commencing at 12:00 midnight Saturday.

3. For hours worked in excess of 12) on any such workday, an Employee shall be paid two (2) times the regular straight-time rate of pay for each hour so worked.

JOB DESCRIPTION, includes but is not limited to:

Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement.

Craft: PAINTER (Union Rate)

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

Brush/Roller Painter	
Spray Painter/Paperhanger	
Sandblaster	
Structural Steel & Steeplejack	
Swing Stage	
Special Coating Application-Brush	
Special Coating Application-Spray	
Special Coating Application-Spray Steel	
Foreman	

ADD PREMIUM PAY

One and one half $(1 \frac{1}{2})$ the regular straight time hourly rate shall be paid:

1. For all hours worked over eight (8) hours in one day or shift unless the Union is notified when four (4) tens (10's) are instituted.

- 2. For any hours worked on Saturday from midnight to midnight
- 3. For any work performed in excess of the regular work week of forty (40) hours.

Double the regular straight time hourly rate shall be paid for all time:

- 1. For any hours worked on Sunday from midnight to midnight
- 2. For any hours worked on holidays from midnight to midnight

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: Excerpt from Agreement between Painters and Allied Trades DC 16 and Independent Flooring Contractors of No Nevada

a. All painting of residences, buildings, structures, industrial plants, tanks, vats, pipes, vessels, bridges, light poles, high tension poles, traffic and parking lines on highways, parking lots, playgrounds, factories, and air line strips; all sign, pictorial, coach, car automobile, carriage, aircraft machinery, ship and railroad equipment, mural and scenic painting; spackling of all surfaces where adhesive materials are used; and all drywall pointing, taping and finishing.

b. All decorators, paperhangers, hard wood finishers, grainers, glaziers, varnishers, enamellers

1. Paperhangers work shall be all material of whatever kind or quality applied to walls or ceilings with paste or adhesive; all tacking on the muslin or other materials which is used as wall or ceiling coverings or covered with material pasted on.

2. The scraping off of old paper, preparing of walls, etc., for paper hangers work.

3. The application of relief, stucco, plaster or decorative work shall not be considered paperhanger's work exclusively.

(c) All men engaged in applying or removing paints, pigments, extenders, metal primers and metal pigments, clear pigments, binders, thinners and dryers, primers and sealers, oil paints and enamels,

water colors and emulsions, clear coatings, waxes, stains, mastics, cement enamels and other special coatings, plastics, adhesives, coatings and sheet rubber and other linings, oils, varnishes, water colors, wall paper, wall coverings or other materials used in the various branches of the trade, and the cleaning and bleaching of all interior and exterior walls and surfaces with liquid, steam, sandblast or any other process and all work incidental thereto.

Craft: PILEDRIVER (Union Rate)

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

See Amendment 3

Piledriver-Journeyman	
Piledriver-Welder.	53.46
Piledriver-Foreman	
Piledriver-General Foreman	
Tender	
Stand-By Diver	
Diver-Diving (Wet Pay)	

ADD ZONE RATE

In addition to PILEDRIVER rates add the applicable amounts per hour, calculated from the Washoe County Courthouse:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 150 miles	\$4.00
Zone 3	150 to 300 miles	\$5.00
Zone 4	Over 300 miles	\$6.00

ADD PREMIUM PAY

First two (2) hours outside the regular constituted shift shall be at the rate of time and one-half (1¹/₂X).

Saturdays up to the first ten (10) hours shall be at the rate of time and one-half $(1\frac{1}{2}X)$. All additional hours and Sundays and holidays shall be the rate of double time (2X). When working on Sundays and holidays, there will be one dollar and fifty cents (\$1.50) per hour additional paid to Pension Annuity.

RECOGNIZED HOLIDAYS

New Year's Day, Memorial Day, 4th of July, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving, Christmas Day.

JOB DESCRIPTION Excerpt from Southwest Regional Council of Carpenters and Affiliated Local Unions Master Labor Agreement

104.1 The Carpenters claim the layout, rigging, tagging, signaling, cutting, burning, welding, chain sawing, driving, setting and pulling of all soldier piles and soldier beams together with all necessary waling, shoring, underpinning, struts, bracing, capping and lagging necessary for construction of subterranean structures of all types to include, but not limited to subways, subway stations, buildings, storm drains, sewers, pipelines and all open cut and cover construction projects. The Carpenters further claim construction of all covers and access mats to include all necessary rigging for setting and removing, whether intermittently or regularly and installation and removal of timber decking. (a) In addition to the work identified in Article I, the Pile Divers claim the operation of the following types of equipment when the operation of same is incidental to that work which falls under the jurisdiction of the United Brotherhood of Carpenters and Joiners of America or Pile Drivers Local Union No. 2375; mechanical forklifts of all types, boom trucks and any other mobile equipment as assigned by the employer necessary to complete the work. In addition, the operation of the power pack and vibratory hammer controls when driving or pulling, sheet pile, pile, soldier beams, cassinos or casing.

(1) In the construction of waterfront and marine facilities, such as docks, piers, wharves, bulkheads, jetties, and similar structures, the pile driver classification should continue to apply, up to and including the decking thereof.

(2) On all pile driving and caisson work on both land and water, the Pile Driver classification should apply.

(3) In the construction of wooden bridges whether over land or over water, when composed of heavy timber, the Pile Driver classification should apply.

(4) In the construction of concrete or steel bridges over land, the Pile Driver classification shall apply to the driving of piles and/or caisson work including the forms required for the capping of the piles or caissons immediately top of the piles or caissons. The capping of the piles is herein interpreted as being that concrete, wood, or other material resting on the top of the piles where driven or placed and does not include any further form work above the capping. In many instances it has been found that the capping is called the girder. The above shall apply on such concrete or steel bridges constructed over land, highways, railroads, overpasses and include cloverleafs, interchanges, etc.

(5) In the construction of concrete or steel bridges over water, the Pile Driver classification shall apply up to and including all of the form work to the top of the column, piers, or abutments supporting the steel and/or any other superstructures.

(6) In the erection of false work, when necessary for the support of work under the Pile Driver classification, then such false work shall fall within their classification. False work necessary for the support of work under the Carpenter classification shall be done within such Carpenter classification, with the exception that where pile driving or power equipment is used for heavy timber false work, then such work shall come under the Pile Driver classification. This would include all rigging, signaling and tagging incidental to the placing of the heavy timber.

(7) In the construction of open-cut sewers, the Pile Driver classification shall apply on all piling including wood, steel or concrete sheet piling, all bracing timber and form work incidental to the construction thereof.

Craft: PLASTERER (Union Rate)

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

Plasterer-Journeyman	48.82
Plasterer-Foreman	.52.13

ADD ZONE RATE

In addition to PLASTERER rates add the applicable amounts per hour, calculated from the South Virginia and Mill Street, Reno, Nevada:

Zone 1	0 to 70 miles	\$0.00
Zone 2	70 miles and over	\$8.00

ADD PREMIUM PAY

<u>OVERTIME</u> 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

New Year's Day, Memorial Day, 4th of July, Labor Day, Admissions Day, Thanksgiving Day, the Friday after Thanksgiving, Christmas Day.

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	63.95
Plumber/Pipefitter-Foreman	
Plumber/Pipefitter-General Foreman	

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 hearing 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	
U U	

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 hearing 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

Includes but is not limited to:

- Installing and covering roofs and structures with slate, asphalt, wood and other related materials, other than sheet metal, by using brushes, knives, punches, hammers and other tools;
- 2. Spraying roofs, sidings and walls with material to bind, seal, insulate or soundproof sections of a structure;
- 3. Installation of all plastic, slate, slag, gravel, asphalt and composition roofing, and rock asphalt mastic when used for damp and waterproofing;
- 4. Installation of all damp resisting preparations when applied on roofs with mop, three-knot brush, roller, swab or spray system;
- 5. All types of preformed panels used in waterproofing;
- 6. Handling, hoisting and storing of all roofing, damp and waterproofing materials;
- 7. The tear-off and/or removal of roofing and roofing materials;

Craft: SHEET METAL WORKERS (Union Rate)

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

Sheet Metal Worker Journeyman	68.43
Sheet Metal Worker -Foreman	
Sheet Metal Worker -General Foreman	76.47

ADD ZONE RATE

In addition to SHEET METAL rates add the applicable amounts per hour, calculated based on a road from the courthouse in Reno, Nevada:

Zone 1	0 to 75 miles	\$0.00
Zone 2	75 to 100 miles	\$5.00
Zone 3	Over 100 miles	\$10.00 the employee shall be provided reasonable lodging and meal expenses.

ADD PREMIUM PAY

All hourly rates are subject to Over Time (One and one half 1 ½) of the Regular rate:

- 1. For all hours worked over Eight (8) Hours in one day or shift.
- 2. For the first Eight (8) Hours work on Saturday.

All hourly rates are subject to Double Time of the Regular Rate:

1. For all hours worked over Ten (10) Hours in one day or shift.

2. For all hours worked over Eight (8) Hours on Saturday.

3. For all hours worked on Sunday, New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Nevada Day, Thanksgiving Day, Day after Thanksgiving, Day before Christmas, and Christmas Day.

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Nevada Day, Thanksgiving Day, Day after Thanksgiving, Day before Christmas, and Christmas Day

JOB DESCRIPTION: Excerpt from Sheet Metal Local 26 Collective Bargaining Agreement

(a) manufacture, fabrication, assembling, handling, erection, installation, dismantling, conditioning, adjustment, alteration, repairing and servicing of all ferrous or nonferrous metal work and all other materials used in lieu thereof and of all HVAC systems, air veyor systems, exhaust systems, and air-handling systems regardless of material used including the setting of all equipment and all reinforcements in connection therewith; (b) all lagging over insulation and all duct lining; (c) testing and balancing of all air-handling equipment and duct work; (d) the preparation of all shop and field sketches whether manually drawn or computer assisted used in fabrication and erection, including those taken from original architectural and engineering drawings or sketches; (e) metal roofing; and (f) all other work included in the jurisdictional claims of International Association of Sheet Metal, Air, Rail and Transportation Workers.

Craft: SPRINKLER FITTER (Non-Union Rate)

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

JOB DESCRIPTION

Installing, dismantling, maintenance, repairs, adjustments and corrections of all fire protection and fire control systems Including the unloading, handling by hand, power equipment and installation of all piping or tubing, appurtenances and equipment pertaining thereto, including both overhead and underground water mains, fire hydrants and hydrant mains, standpipes, and hose connections to sprinkler systems, sprinkler tank heaters, air lines and thermal systems used in connection with sprinkler and alarms systems, also all tanks and pumps connected thereto. Also including shall be CO2 and Cardox Systems, Dry Chemical Systems, Foam Systems and all other fire protection systems, but excluding steam fire protection systems.

Craft: SOILS and MATERIAL TESTER (Non-Union Rate)

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

Soil Tester (Certified)	42.84
Soils and Materials Tester	42.84

Craft: SURVEYOR (Non-Union Rate)

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

SURVEYOR, includes but is not limited to:

- 1. Planning ground surveys designed to establish base lines, elevation and other geodetic measurements;
- 2. Compiling data relevant to the shape, contour, gravitation, location, elevation and dimension of land and land features on or near the surface of the Earth for engineering, map making, mining, land evaluation, construction and other purposes;
- 3. Surveying bodies of water to determine navigable channels and to secure data for construction of breakwaters, piers and other marine structures;
- 4. Computing data necessary for driving and connecting underground passages, underground storage and volume of underground deposits.

Craft: TAPER (Union Rate)

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

Taper-Journeyman	51.36
Taper-Foreman	
Taper-General Foreman	53.86

ADD ZONE RATE

In addition to: TAPER rates add the applicable amounts per hour Zone Pay shall commence from Maryland Parkway and Charleston Boulevard and shall be paid as follows:

Zone 1	0 to 40 miles	\$0.00
Zone 2	40 to 60 miles	\$2.50
Zone 3	over 60 miles	\$4.25

RECOGNIZED HOLIDAYS

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

ADD PREMIUM PAY

All overtime, except Sundays and holidays, will be time and one-half (1 1/2).

Sundays and holidays will be paid double time (2X). Any and all work performed in excess of the regular workday of eight (8) hours, or ten (10) hours if mutually agreed to, and the regular workweek of forty (40) hours shall be considered overtime and shall be paid for at one and one-half (1 1/2) times the regular hourly rate.

JOB DESCRIPTION: Excerpt from Agreement between DC 16 and the independent Drywall Contractors of Northern Nevada

SECTION 1 -- The scope of work covered by this Agreement shall include (but not be limited to) all work operations, including distribution to the point of application, as follows:

(a) Work or services pertaining to the preparation, spotting, pointing, detailing, flushing, sanding and finishing of interior and/or exterior gypsum, drywall, thin wall, concrete, steel, wood and plaster surfaces, spackling of all surfaces where adhesive materials are used; and all drywall pointing, taping and finishing.

(b) Work or services pertaining to the application of all finish or flushing materials regardless of method of application or type of surface on which materials are applied, including but not limited to texture and simulated acoustic materials of all types and the application of radiant heat fill and steel fireproofing materials.

(c) Work or services pertaining to the installation of protective coverings and masking prior to the application of finish materials.

(d) The operation and care of all taping tools and texturing equipment used in the finishing and texturing of drywall and other surfaces including brushes, rollers, spray texturing equipment, miscellaneous hand, mechanical, and power tools, and the operation and maintenance of compressors required in the finishing and texturing of such surfaces.

(e) No limitation shall be placed on the work covered by this Agreement by reason of the surface, type of material or purpose for which the materials used are designed or intended.

(f) The cleanup of all materials and debris occasioned by any job operation at the site of construction, alteration, or repair undertaken whether such operation occurs on the interior or exterior of a building structure.

Craft: TILE SETTER/TERRAZZO WORKER/MARBLE MASON FINISHER (Union Rate)

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

Tile Setter/Terrazzo Worker/Marble Mason- Finisher36.32Tile Setter/Terrazzo Worker/Marble Mason- Finisher Foreman37.57Tile Setter/Terrazzo Worker/Marble Mason Finisher- General Foremen39.32

ADD PREMIUM PAY

All work in excess of forty (40) hours during the established work week shall be paid at the rate of one and one-half (1-1/2) times the hourly base wage rate in effect.

Employees shall be paid one and one-half (1-1/2) times the hourly wage rate for al 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 Tile Setter Foreman Tile Setter General Foreman	47.37
Terrazzo/Marble Mason-Journeyman Terrazzo/Marble Mason-Foreman Terrazzo/Marble Mason-General Foreman	48.32

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

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 $(1 \frac{1}{2})$ the regular straight time hourly rate shall be paid:

- 1. For all hours worked over eight (8) hours in one day or shift.
- 2. For any hours worked on Saturday from midnight to midnight.

Double the regular straight time hourly rate shall be paid for all time:

- 1. For all hours worked over twelve (12) hours in one day or shift.
- 2. For any hours worked on Sunday from midnight to midnight.
- 3. For any hours worked on holidays from midnight to midnight.

RECOGNIZED HOLIDAYS

If any of these holidays fall on Sunday, the Monday following shall be considered a Holiday. New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, Christmas Day.

JOB DESCRIPTION: 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

and Bulk Cement Spreader)	
Under 4 yds. (water level)	
4 yds. & under 8 yds. (water level)	
3 yds. & under 18 yds. (water level)	
18 yds. & under 25 yds. (water level))	
25 yds. & under 60 yds. (water level)	
60 yds. & under 75 yds. (water level))	
75 yds. & under 100 yds. (water level))	
100 yds. & under 150 yds. (water level))	
150 yds. & under 250 yds. (water level))	
250 yds. & under 350 yds. (water level))	
350 yds. & over (water level)	
Transit Mix	
Under 8 yrds	
Under 8 yrds & including 12 yrds	
Over 12 yrds	
<u>Fransit Mix (Using Boom)</u>	
Fransit mix with boom shall receive 16 cents per hour above the appropriate	ate vardage
classification rate of pay when such boom is used	
Nater & Jetting Trucks	
Jp to 2,500 gallons	33.0
Jp to 2,500 gallons & over	
DW 20's & 21's & other similar Cat type, Terry Cobra LeTourneau pulls, To	
ype equipment when pulling Aqua/Pak, Water Tank Trailers, & Fuel, an other miscellaneous Trailers, (except as defined under "Dump Trucks") Heavy Duty Transport (High Bed)	
Heavy Duty Transport (Gooseneck low bed)	33.0
Filtbed or Flatbed Pull Trailers.	
Bootman, Comb. Bootman & Road Oiler	
Flat Rack (2 or 3 axle unit)	
Bus & Manhaul Drivers	
Jp to 18,000 lbs. (single unit)	22.0
18,000 lbs. and over	
Narehousemen Spotter	
Ninch Truck & "A" Frame Drivers	
Jp to 18,000 lbs.	
18,000 lbs. and over	
Varehousemen Spotter	
Varehouse Clerk	
Tire Repairmen	
Truck Repairmen	
Pick Up Truck & Pilot Cars (Jobsite)	
Pick Up Truck & Pilot Cars (Over the road)	
Truck Oil Greaser	
Truck Oil Greaser Fuel Truck Driver Fuel Man & Fuel Island Man	

Oil Tanker with Pup	
Foreman	33.94

TRUCK DRIVER

Includes but is not limited to:

Driving a tractor trailer combination or a truck to transport goods or materials at the site of a public work or between sites of a public work. (Also, see descriptions listed with Truck Driver rates, if any.)

Craft: WELL DRILLER (Non-Union Rate)

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

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

<u>Group 1</u>

- 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 whether/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 stablilization compenents

- 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 preformed 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.

- Gunite Foremen, Nozzlemen, Rodmen, Gunmen, Materialmen, Reboundmen
- Tunnel and shaft workers/miners and use of customary tools and equipment for tunnel and mine work All worked performed in a compressed air tunnel shaft or chamber including the use of hand, power tools or equipment as necessary in connection with compressed air work

OPERATING ENGINEER, includes but is not limited to:

Group 1

Engineer Assistant

Group 1A

- Heavy Duty Repairman Helper
- Oiler
- Parts man

Group 2

- Compressor Operator
- Material Loader and/or Conveyor Operator (handling building materials)
- Pump Operator

Group 3

- Bobcat or similar loader, 1/4 cu. yd. or less
- Concrete Curing Machines (streets, highways, airports, canals)
- Conveyor Belt Operator (tunnel)
- Forklift (under 20)
- Engineer Generating Plant (500 K.W.)
- Mixer Box Operator (concrete plant)
- Motorman
- Rotomist Operator
- Oiler (truck crane)

Group 4

- Concrete Mixer Operator, Skip type
- Dinky Operator
- Forklift (20' or over) or Lumber Stacker
- Ross Carrier
- Skip Loader Operator (under one (1) cu. yd.)
- Tie Spacer

Group 5

- Concrete Mixers (over one (1) cu. yd.)
- Concrete Pumps or Pumpcrete Guns
- Elevator and Material Hoist (one (1) drum)
- Groundman for Asphalt Milling and similar

- Auger type drilling equipment up to and including 30 ft. depth digging capacity M.R.C.
- Boom Truck or Dual-Purpose a-Frame Truck
- B.L.H. Lima Road Pactor or similar
- Chip Box Spreader (Flaherty type or similar)
- Concrete Batch Plant (wet or dry)
- Concrete Saws (highways, streets, airports, canals)
- Locomotives (over thirty (30) tons)
- Maginnis International Full Slab Vibrator (airports, highways, canals and warehouses)
- Mechanical Finishers (concrete) (Clary, Johnson, Bidwell Bridge Deck or similar types)

- Mechanical Burn, Curb and/or Curb and Gutter Machine (concrete or asphalt)
- Pavement Breaker, Truck Mounted, with compressor combination
- Pavement Breaker or Tamper (with or without compressor combination)
- Power Jumbo Operator (setting slip-forms, etc., in tunnels)
- Roller Operator (except asphalt)
- Self-Propelled Tape Machine
- Self-Propelled Compactor (single engine)
- Self-Propelled Power Sweeper Operator
- Slip-Form Pump (power-driven by hydraulic, electric, air, gas, etc. lifting device for concrete forms)
- Small Rubber-Tired Tractors
- Snooper Crane, Paxton-Mitchell or similar
- Stationary Pipe Wrapping, Cleaning and Bending Machine Operator

Group 7

- Auger type drilling equipment over 30 ft. depth digging capacity M.R.C.
- Compressor (over 2)
- Concrete Conveyor or Concrete Pump, truck or equipment mounted (any assistance required shall be performed by an Assistant to Engineer) Boom length to apply Concrete Conveyor, Building Site
- Drilling and Boring Machine, vertical and horizontal (not to apply to waterliners, wagon drills or jack hammers)
- Crusher Plant Engineer
- Generators
- Kolman Loader
- Material Hoist (two (2) or more drums)
- Mine or Shaft Hoist
- Pipe Bending Machines (pipeline only)
- Pipe Cleaning Machines (tractor-propelled and supported)
- Pipe Wrapping Machines (tractor-propelled and supported)
- Portable Crushing and Screening Plants
- Post Driller And/Or Driver
- Pumps (over 2)
- Screedman (except asphaltic or concrete paving)
- Self-Propelled Boom-Type Lifting Device (center mount) (on ten (10) ton capacity or less)
- Slusher Operator
- Surface Heater and Planer Operator
- Trenching Machine (maximum digging capacity three (3) ft. depth) (Any assistance in the operation, if needed, shall be performed by an Assistant to Engineer)
- Truck-Type Loader
- Welding Machines (gasoline or diesel)

- Asphalt Plant Engineer
- Asphalt Milling Machine
- Cast-In-Place Pipe-Laying Machine
- Combination Slusher and Motor Operator
- Concrete Batch Plant (multiple units)
- Dozer Operator

- Drill Doctor
- Elevating Grader Operator
- Grooving and Grinding Machine (highways)
- Ken Seal Operator
- Loader (up to and including two and one-half (2 1/2) cu. yds)
- Mechanical Trench Shield
- Mechanical Finishers or Spreader Machine (asphalt, Barber-Greene or similar)
- Mixermobile
- Push Cats
- Road Oil Mixing Machine Operator Wood-Mixer (and other similar Pugmill equipment)
- Roller Operator (asphalt)
- Rubber-Tired Earthmoving Equipment (up to and including thirty-five (35) cu. yds. "struck " M.R.C., Euclids, T-Pulls, DW10, 20, 21 and similar)
- Screedman (Barber-Greene and similar) (asphaltic or concrete paving)
- Self-Propelled Compactors with Dozer; Hyster 450, Cat 825 or similar
- Sheepfoot
- Small Tractor (with boom)
- Soil Stabilizer (P & H or equal)
- Timber Skidder (rubber-tired) or similar equipment
- Tractor-Drawn Scraper
- Tractor Operator
- Tractor-Mounted Compressor Drill Combination
- Trenching Machine Operator (over three (3) feet depth)
- Tri-Batch Paver
- Tunnel Badger or Tunnel Boring Machine Operator
- Tunnel Mole Boring Machine
- Vermeer T-600b Rock Cutter

Group 9

- Chicago Boom
- Combination Backhoe and Loader (up to and including 3/8 cu. yd.)
- Combination Mixer and Compressor (gunite)
- Heavy Duty Repairman and/or Welder
- Lull Hi-Lift (twenty (20) feet or over)
- Mucking Machine
- Sub-Grader (Gurries or other types)
- Tractor (with Boom) (D6 or larger)
- Track-Laying-Type Earthmoving Machine (single engine with tandem scrapers)

- Boom-Type Backfilling Machine
- Bridge Crane
- Cary-Lift or similar
- Chemical Grouting Machine
- Derricks (two (2) Group 10 Operators required when swing engine remote from hoist)
- Derrick Barges (except excavation work)
- Euclid Loader and similar types
- Heavy Duty Rotary Drill Rigs
- Lift-Slab (Vagtborg and similar types)

- Loader (over two and one-half (2 1/2 cu. yds. up to and including four (4) cu. yds.)
- Locomotive (over one hundred (100) tons, single or multiple units)
- Multiple-Engine Earthmoving Machines (Euclid Dozers, etc.)
- Pre-Stress Wire Wrapping Machine
- Rubber-Tired Scraper, Self-Loading
- Single-Engine Scraper (over thirty-five (35) cu. yds.)
- Shuttle Car (Reclaim Station)
- Train Loading Station
- Trenching Machine multi-engine with sloping attachments (Jefco or similar)
- Vacuum Cooling Plant
- Whirley Crane (up to and including twenty-five (25) tons)

Group 10A

- Backhoe-Hydraulic (up to and including one (1) cu. yd.)
- Backhoe (up to and including one (1) cu. yd.) (Cable)
- CMI Dual Lane Auto-Grader SP30 or similar type
- Cranes (not over twenty-five (25) tons) (hammerhead and gantry)
- Finish Blade
- Gradalls (up to and including one (1) cu. yd.)
- Motor Patrol Operator
- Power Shovels, Clamshells, Draglines, Cranes (up to and including one (1) cu. yd.)
- Rubber-Tired Scraper, Self-Loading (twin engine)
- Self-Propelled Boom-Type Lifting Device, center mount (over 10 tons up to and including 25 tons)

- Automatic Asphalt or Concrete Slip-Form Paver
- Automatic Railroad Car Dumper
- Canal Trimmer
- Cary Lift, Campbell or similar type
- Cranes (over twenty-five (25) tons)
- Euclid Loader when controlled from the Pullcat
- Gradesetter, Grade Checker
- Highline Cableway Operator
- Loader (over four (4) cu. yds. up to and including twelve (12) cu. yds.)
- Multi-Engine Earthmoving Equipment (up to and including seventy-five (75) cu. yds. struck m.r.c.)
- Multi-Engine Scrapers (when used to Push Pull)
- Power Shovels, Clamshells, Draglines, Backhoes Gradalls (over one (1) cu. yd. and up to and including seven (7) cu. yds. m.r.c.)
- Self-Propelled Boom-Type Lifting Device (center mount) (over 25 tons m.r.c.)
- Self-Propelled Compactor (with multiple-propulsion power units)
- Single-Engine Rubber-Tired Earthmoving Machine, with Tandem Scraper
- Slip-Form Paver (concrete or asphalt)
- Tandem Cats and Scraper
- Tower Crane Mobile (including Rail Mount)
- Truck Mounted Hydraulic Crane when remote control equipped (over 10 tons up to and including 25 tons)
- Universal Liebher 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

- 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

- Deckhand
- Fireman



EXHIBIT 18 – PREFERENTIAL BIDDER STATUS AFFIDAVIT

(To Accompany Bid)

<u>PREFERENTIAL BIDDER STATUS AFFIDAVIT FOR BIDS SUBMITTED IN</u> <u>ACCORDANCE WITH NRS 338.0117 VALUED IN EXCESS OF \$250,000.00, ,</u> <u>CONTRACTS INVOLVING CONSTRUCTION MANAGERS AT RISK, AND DESIGN-</u> <u>BUILD CONTRACTS</u>

Although the City of Elko prefers this form is submitted with the bid response, this form may be submitted within two (2) hours of the bid opening.

Note: The Certificate of Eligibility for Preferential Bidder Status issued by the State Contractor's Board <u>must be</u> submitted with the bid response.

I,	("Affiant"), on
behalf of	("Contractor"), swear and
affirm that in order to be in compliance with NRS 338.01	17, and be eligible to receive a preference in
bidding for Project No, Project Nat	me
	("Project"),

certify that for the duration of the project, collectively, and not on any specific day:

- a) At least 50 percent of the workers employed on the public work, including, without limitation, any employees of the contractor, applicant or design-build team and of any subcontractor engaged on the public work, will hold a valid driver's license or identification card issued by the Department of Motor Vehicles of the State of Nevada;
- b) All vehicles used primarily for the public work will be:
 - 1. Registered and partially apportioned to Nevada pursuant to the International Registration Plan, as adopted by the Department of Motor Vehicles pursuant to NRS 706.826; or,
 - 2. Registered in this State;
- c) If applying to receive a preference in bidding pursuant to subsection 3 of NRS 338.1727 or subsection 2 of NRS 408.3886, at least 50 percent of the design professionals working on the public work, including, without limitation, employees of the design-build team and of any subcontractor or consultant engaged in the design of the public work, will have a valid driver's license or identification card issued by the Department of Motor Vehicles of the State of Nevada; and,
- d) The contractor, applicant or design-build team and any subcontractor engaged on the public work will maintain and make available for inspection within this State his or her records concerning payroll relating to the public work.

If the Contractor fails to comply with any requirement of this Affidavit, a public body may recover, by civil action against the party responsible for a failure to comply with a requirement of this affidavit, a penalty as described below for a failure to comply with a requirement of this affidavit. If a public body recovers a penalty pursuant to this subsection, the public body shall report to the State Contractors' Board the date of the failure to comply, the name of each entity which failed to comply and the cost of



the contract to which the entity that failed to comply was a party. The Board shall maintain this information for not less than 6 years. Upon request, the Board shall provide this information to any public body or its authorized representative.

If a contractor, applicant or design-build team submits this affidavit, receives a preference in bidding described in this affidavit and is awarded the contract as a result of that preference, the contract between the contractor, applicant or design-build team and the public body, each contract between the contractor, applicant or design-build team and a subcontractor and each contract between a subcontractor and a lower tier subcontractor must provide that:

- a) If a party to the contract causes the contractor, applicant or design-build team to fail to comply with a requirement of this affidavit, the party is liable to the public body for a penalty in the amount of 1 percent of the cost of the largest contract to which he or she is a party;
- b) The right to recover the amount determined pursuant to paragraph (a) by the public body pursuant to this affidavit may be enforced by the public body directly against the party that caused the failure to comply with a requirement of this affidavit; and,
- c) No other party to the contract is liable to the public body for a penalty.

By:		Title:	
(Print name of A	ffiant)		
Signature of Affiant:		D	Date:
Signed and sworn to (or affir by	,	thisday of (name of Affiant).	, 20,
State of)		
County of)ss.)	Notary Signature STAMP & SEAL	

Proof of Authorization to Sign Affidavit

The person must establish his/her actual authority to act on behalf of the business organization. The individual must be the person indicated in the table below and provide written documentation clearly indicating the person's position within that business organization. If the individual signing the Affidavit is an employee of the business organization, written documentation, on organization letterhead, clearly indicating the person's authority to act on behalf of the business organization must be provided. The written documentation must be signed by the authorized person identified on the table.

If the individual making application for the business organization is not one of the persons identified in the table or an authorized employee, a valid power of attorney executed by an authorized person on behalf of the business organization must be provided. The power of attorney must be made not more than 90 days before the Affidavit is signed.



BUSINESS ENTITY	PERSON WHO HAS AUTHORITY TO COMPLETE AFFIDAVIT
Sole Proprietorship	Sole Proprietor
Partnership	A Partner
Corporation	1. Director, if authorized
	2. Executive Officer as indicated in the Article of Incorporation
Limited Liability Company	1. Member, if Member-Managed LLC
	2. Manager, if Manager-Managed LLC



EXHIBIT 19 - CERTIFICATION NOT TO ENGAGE IN BOYCOTT OF ISRAEL

(NRS 332.065) (Must Accompany Contract Documents)

The undersigned contractor hereby certifies that he/she/it is not currently engaged in, and agrees for the duration of the contract not to engage in, a boycott of Israel.

1. "Boycott of Israel" means, except as otherwise provided in subsection 2, refusing to deal or conduct business with, abstaining from dealing or conducting business with, terminating business or business activities with or performing any other action that is intended to limit commercial relations with:

(a) Israel; or

(b) A person or entity doing business in Israel or in territories controlled by Israel,

if such an action is taken in a manner that discriminates on the basis of nationality, national origin or religion.

2. The term "boycott of Israel" does not include an action that is described in subsection 1 if the action:

(a) Is based on a bona fide business or economic reason;

(b) Is taken pursuant to a boycott against a public entity of Israel if the boycott is applied in a nondiscriminatory manner; or

(c) Is taken in compliance with or adherence to calls for a boycott of Israel if that action is authorized in 50 U.S.C. § 4607 or any other federal or state law.

CONTRACTOR:

By:_____

Title: _____

Date: