Project Manual
Including Specifications for
the Construction of

SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS

Las Vegas Municipal Airport
910 Airport Rd., Las Vegas, NM 87701

OWNER: City of Las Vegas
1700 North Grand Avenue
Las Vegas, New Mexico 87701

ARCHITECT Molzen Corbin
2701 Miles Rd SE
Albuquerque, New Mexico 87106

ARCHITECT'S PROJECT NUMBER LVG180-14

July 2019

MOLZENCORBIN

ENGINEERS | ARCHITECTS | PLANNERS

CERTIFICATIONS PAGE

MOLZEN CORBIN
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505.242.5700

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MECHANICAL ENGINEER:	Paul M. Romero, PE
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The technical material and data contained in the specifications under the supervision and direction of the undersigned, whose seal as a Professional Architect, licensed to practice in the State of New Mexico, is affixed below.

STATE OF NEW MEXICO
JOHN QUINN
PATE
NO. 1784
REGISTERED ARCHITECT

ARCHITECT: John Quinn Pate, License No. 1784 — DATE 7/16/19

All questions about the meaning or intent of these documents shall be submitted only to the Architect/Engineer of Record, stated above, in writing. Refer to paragraph 3.2 of the Instructions to Bidders as to interpretations.

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REQUEST FOR BIDS

The City of Las Vegas, New Mexico will open Sealed Bids at 2:00 p.m., Sept 12 2019, at the City Council Chambers, 1700 North Grand Avenue, Las Vegas, New Mexico, or other designated area at the City Offices; ON THE FOLLOWING:

Las Vegas Municipal Airport Snow Removal Equipment Building Modifications

The BIDDING FORMS AND TECHNICAL SPECIFICATIONS may be examined at the following location: *City Clerk's Office at 1700 North Grand Avenue, Las Vegas, NM 87701*

Copies of the BIDDING FORMS AND TECHNICAL SPECIFICATIONS may be obtained at the following location: *Molzen/Corbin, 2701 Miles Rd SE, Albuquerque, NM 87106; phone 505-242-5700*

Mailed bids should be addressed to the City Clerk, 1700 N. Grand Ave., Las Vegas, New Mexico 87701; with the envelope marked: Las Vegas Municipal Airport Snow Removal Equipment Building Modifications, Opening No. 2020-2; on the lower left-hand corner of the submitted envelope. It shall be the responsibility of the Offeror to see that their bid is delivered to the **City Clerk** by the date and time set for the bid request. If the mail or delivery of bid request is delayed beyond the opening date and time, bid thus delayed will not be considered. A public opening will be held and any bidder or their authorized representative is invited to attend.

The City of Las Vegas reserves the right to reject any/or all bids submitted.

CITY OF LAS VEGAS,

Ann M. Gallegos

ANN-MARIE GALLEGOS, INTERIM CITY MANAGER

ESTHER GARDUNO MONTOYA, CITY ATTORNEY

Casandra Fresquez by AS

CASANDRA FRESQUEZ, CITY CLERK

TANA VEGA, INTERIM FINANCE DIRECTOR

HELEN VIGIL, PURCHASING OFFICER

Opening No. 2020-2 Date Issued: 8/13/2019

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	LAS VEGAS OPTIC	Aug. 16	.2019
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	www.lasvegasnm.gov	Aug. 16	2019

STANDARD BID CLAUSES

AWARDED BID
Awarding of bid shall be made to the responsible Bidder whose Bid best meets the required specifications. The City of Las Vegas (City) reserves the right to reject or accept any of all Bid specifications and to waive any insubstantial irregularity in the form of the Bid.

TIMETABLE
Bid pursuant to this request must be received at the City Clerk's Office at 1700 North Grand Avenue, Las Vegas, New Mexico, on or before: Sept 12, 2019; 2:00 p.m.; at which time all bids received will be opened. An opening will occur at the City's Council Chambers or other designated area at the City Offices. Awarding of Bid is projected for _____ , 20__. The successful Bidder will be notified by mail.

ENVELOPES
Sealed Bid envelopes shall be clearly marked on the lower left-hand corner, identified by the Bid Name and Opening Number. Failure to comply with this requirement may result in the rejection of the submitted Bid.

BRIBERY AND KICKBACK
The Procurement Code of New Mexico (Section 13-1-28 through 13-1-199 N.M.S.A. 1978) imposes a third degree felony penalty for bribery of a public official or public employee. In addition, the New Mexico Criminal Statutes (Section 30-4-1, N.M.S.A. 1978) states that it is a third degree felony to commit the offense of demanding or receiving a bribe by a public official or public employee. And (Section30-24-2 N.M.S.A. 1978): it is a fourth degree felony to commit the offense of soliciting or receiving illegal kickbacks. Also (Section 30-41-1 through 30-413, N.M.S.A. 1978): states that it is a fourth degree felony to commit the offense of offering or paying illegal kickbacks.

NON-COLLUSION
In signing their Bid and Affidavit, the Bidder certifies that he/she has not, either directly or indirectly entered into action of restraint of free competition, in connection with the submitted bid.

RESPONSIBILITY OF BIDDER
At all times it shall be the responsibility of the Bidder to see that their bid is delivered to the City Clerk by the Date and Time scheduled for opening. If the mail or delivery of said Bid is delayed beyond the scheduled opening date and time set, this bid will not be considered.

CLARIFICATION OF BID
Bidder requiring clarification or interpretation of Bid specifications shall make a written request to the Department involved in this bid request at least five (5) days prior to the scheduled bid opening date; with a copy forwarded to the Finance Department. Any interpretation, corrections, or changes of said Bid Specifications, Opening Date, or Time Change will be made by Addendum only. Interpretations, Corrections or changes of said bid made in any other manner will not be binding and the Bidder shall not rely upon such interpretation, corrections and changes.

MODIFICATION OF BID
Bids may be withdrawn upon receipt of written request prior to the scheduled bid opening for the purpose of making any corrections or changes. Such corrections must be properly identified and signed or initialed by the Bidder. Resubmission must be prior to the scheduled bid opening time in

order to be considered. After bid opening, no price modifications of submitted bids or other provisions shall be permitted.

WITHDRAWAL OF BID

A low Bidder alleging a material mistake of fact, after bids have been opened may request their bid be withdrawn upon receipt of a written request to the Finance Department prior to the scheduled awarding date.

INSPECTION

Final inspection and acceptance will be made at the City's discretion. Products rejected for nonconformance with the specifications shall be removed by the Bidder; at his/her risk and expense promptly after notice of rejection.

FEDERAL TAX IDENTIFICATION NUMBER

Pursuant to IRS requirements, Bidder shall provide their Federal Tax ID Number if Bidder is incorporated. If Bidder is a sole proprietorship or partnership they then shall provide their Social Security Number.

FEDERAL TAX ID NUMBER: _____

SOCIAL SECURITY NUMBER: _____

NEW MEXICO TAX IDENTIFICATION NUMBER

Payment may be withheld under (Section 7-10-5, N.M.S.A. 1978) if you are subject to New Mexico Gross Receipts Tax and have not registered for New Mexico (CRS) Tax Identification Number. Contact the New Mexico Taxation & Revenue Department at (505) 827-0700 for registering instructions.

NEW MEXICO TAX IDENTIFICATION NO. (CRS): _____

INSTRUCTIONS TO BIDDERS

ARTICLE 1 - DEFINITIONS AND TERMS

1.01 Terms used in these Bidding Documents which are defined in the Instructions to Bidders and in the Conditions of the Contract for Construction (General, Supplementary and other Conditions) have the meanings assigned in those documents.

A. **Addendum**: A written or graphic instrument issued prior to the opening of Bids which clarifies, corrects, or changes the Bidding Documents or Contract Documents. Plural: addenda.

B. **Alternate Bid**: Amount stated in the Bid as the sum to be added to or deducted from the amount of the Base Bid, if the corresponding change in the project scope, materials, and/or methods of construction is awarded by the Owner.

C. **Base Bid**: Amount stated in the Bid as the sum for which the Bidder offers to perform the Work, excluding Alternate Bids.

D. **Bid**: The offer of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed in conformance with the Bidding Documents.

E. **Bid Lot**: A major item of Work for which a separate quotation or bid is requested.

F. **Bidder**: One who submits a Bid directly to the Owner, as distinct from a subcontractor, who submits a bid to a contractor.

G. **Bidding Documents**: The Bidding Requirements and the Contract Documents, including drawings.

H. **Bidding Requirements**: Advertisement for Bid, Instructions to Bidders, Information Available for Bidders, the Bid Form, Supplements to the Bid Form, and portions of Addenda relating to any of these.

I. **Responsible Bidder**: A Bidder who submits a Responsive Bid and who has furnished, when required, information and data to prove that his financial resources, production or service facilities, personnel, service reputation, and experience are adequate to make satisfactory delivery of the construction described in the Invitation for Bid (§13-1-82 NMSA 1978).

J. **Responsive Bid**: A bid which conforms in all material respects to the requirements set forth in the Invitation for Bid (§13-1-84 NMSA 1978).

K. **Successful Bidder**: The lowest Responsible Bidder to whom the Owner, on the basis of the Owner's evaluation, makes an award. A Successful Bidder does not become the Contractor until an agreement is signed with the Owner.

ARTICLE 2 - COPIES OF BIDDING DOCUMENTS

2.01 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the Advertisement for Bid may be obtained from the Architect/Engineer (unless another issuing office is otherwise designated). Bidding Documents may also be reviewed at the Plan Rooms designated in the Advertisement for Bid. The deposit will be refunded to Bidders who submit a bona fide Bid and return the Bidding Documents in good and complete condition within 10 calendar days after opening of Bids.

2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither the Owner nor the Architect/Engineer assume responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.03 The Owner and the Architect/Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

ARTICLE 3 - BIDDER'S QUALIFICATION STATEMENT

3.01 Bidders to whom award of a Contract is under consideration shall submit information and data to prove that their financial resources, production or service facilities, personnel, and service reputation and experience are adequate to make satisfactory delivery of the construction described in the Bidding Documents (§13-1-82 NMSA 1978).

ARTICLE 4 - EXAMINATION OF BIDDING DOCUMENTS AND SITE

4.01 Before submitting a Bid, each Bidder must

A. Examine the Bidding Documents thoroughly
B. Visit the site to familiarize himself with local conditions that may in any manner affect cost, progress, or performance of the Work
C. Familiarize himself with federal, state, and local laws, ordinances, rules and regulations that may in any manner affect cost, progress, or performance of the Work, and
D. Study and carefully correlate the Bidder's observations with the Bidding Documents.

4.02 On request, the Owner will provide each Bidder access to the site to conduct such investigations and tests as each Bidder deems necessary for submission of his Bid.

4.03 The lands upon which the Work is to be performed, rights-of-way for access thereto, and other lands designated for use by the Contractor in performing the Work are identified in the Bidding Documents.

4.04 The submission of a Bid will constitute an incontrovertible representation by the Bidder that he has complied with every requirement of this Section and that the Bidding Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

ARTICLE 5 - PRE-BID CONFERENCE

5.01 The Architect/Engineer of Record and Owner shall conduct a Prebid Conference approximately 10 or more calendar days prior to the Bid opening date stated in the Advertisement for Bids.

5.02 The Architect/Engineer of Record and his consultants, as applicable, shall be represented. Prospective Bidders, Subcontractors, and Vendors are encouraged to attend and should be prepared to ask questions regarding substitutions and/or to request clarification of the Bidding Documents. The failure of a Bidder, Subcontractor, or Vendor to attend shall be interpreted to mean that the Bidding Documents are clear and acceptable to all nonparticipants at the Prebid Conference. Such clarity and acceptability shall be presumed with respect to all Bidders.

5.03 Questions and requests for clarification are to be presented in written form. Responses will be written and issued as Addenda. No verbal response shall be binding.

ARTICLE 6 - INTERPRETATIONS AND ADDENDA

6.01 All questions about the meaning or intent of the Bidding Documents shall be submitted to the Architect/Engineer in writing. Replies will be issued by Addenda mailed or delivered to all parties recorded by the Architect/Engineer as having received the Bidding Documents. Questions received less than ten days prior to the date for opening of Bids will not be answered. Only questions

answered by formal written addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

6.02 **Duty to Seek Clarification**: The law establishes the duty of clarification in order to ensure that the Owner will have the opportunity to clarify its requirements and thereby provide a level playing field to all bidders. A contractor proceeds at its own risk if it relies upon its own interpretation of contract terms that it believes to be ambiguous instead of asking for a clarification. Bidders and Subcontractors shall promptly notify the Architect/Engineer of any ambiguity, inconsistency, or error which they may discover upon examination of the Bidding Documents or of the site and local conditions.

6.03 Addenda will be emailed with return receipt requested or otherwise sent to all who are known by the Architect/Engineer to have received a complete set of Bidding Documents.

6.04 Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.

6.05 No Addenda will be issued later than 3 days prior to the date for receipt of Bids, except an Addendum withdrawing the Invitation for Bids or one which includes postponement of the date for receipt of Bids.

6.06 Each Bidder shall ascertain, prior to submitting the Bid, that the Bidder has received all Addenda issued, and shall acknowledge their receipt on the Bid Form.

ARTICLE 7 - BID SECURITY/BID BOND

7.01 Bid security in an amount equal to at least five percent of the amount of the Bid shall be a bond provided by a surety company authorized to do business in this State, or the equivalent in cash, a cashier's check, or otherwise supplied in a form satisfactory to the Owner (§13-1-146 NMSA 1978). All bonds shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies", as published in federal Circular 570 by the Audit Staff Bureau of Accounts, United States Treasury Department (§13-4-18 NMSA 1978).

7.02 The bid security shall be in the amount of 5% of the highest Bid amount submitted, unless otherwise stipulated, pledging that the Bidder will enter into a contract with the Owner on the terms stated herein and will furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty.

7.03 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and bonds have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn, or (c) all Bids have been rejected.

7.04 When the Bidding Documents require bid security, noncompliance by the Bidder requires that the Bid be rejected (§13-1-147A NMSA 1978).

7.05 If a Bidder is permitted to withdraw his Bid before award, no action shall take place against the Bidder or the bid security (§13-1-147B NMSA 1978).

ARTICLE 8 - CONTRACT TIMES

8.01 The number of days within which, or the dates by which the work is to be substantially completed and ready for use are as set forth in the Bid Form

ARTICLE 9 - LIQUIDATED DAMAGES

9.01 Provisions for Liquidated Damages, if any, are set forth in the Bid Form

ARTICLE 10 - SUBSTITUTE MATERIAL AND EQUIPMENT

10.01 The Contract, if awarded, will be on the basis of material and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items.

10.02 If the Contractor bases their Bid on a substitute or an "or-equal" product, they do so at their own risk. In submitting a Bid, the Contractor agrees to furnish materials, equipment, and products that are acceptable to the Architect/Engineer for the price listed in the Bid.

10.03 Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or-equal" item of material or equipment may be furnished or used by the Contractor, if acceptable to the Architect/Engineer, application for such acceptance will not be considered by the Architect/Engineer until after the "effective date of the Contract".

10.04 The procedure for submittal of any such application by the Contractor and consideration by the Architect/Engineer is set forth in the Contract Documents.

ARTICLE 11 - SUBCONTRACTORS

11.01 The bidder shall list the subcontractors or material suppliers he proposes to use for all trades or items on the subcontractor listing form. If awarded the contract, the Bidder shall use the firm listed, or himself if "General Contractor" has been listed, unless a request for a change or substitution is approved by the Architect/Engineer and the Owner for any reason as outlined herein.

11.02 The Architect/Engineer or the Owner shall consider any request for a change in the listed firms, if the Bidder can furnish evidence of being able to perform the Work in a manner more satisfactory and beneficial to both the Owner and the Bidder by not using the listed firm. Satisfactory reasons for a substitution may include the inability to bond or lack of evidence of being able to furnish acceptable materials on schedule. Also, if the Bidder has made a legitimate error in listing a low subcontractor, a request for substitution, made after the Bid opening with the Architect/Engineer and the Owner's approval, will be considered. The proof of error must be conclusive, based upon the approval of said evidence by the listed subcontractor or material supplier and/or any other confirmation satisfactory to the Architect/Engineer or the Owner.

11.03 The Bidder shall not list himself as the supplier or as the subcontractor for any trade unless he has previously performed work of this type or can prove to the Architect/Engineer and the Owner's satisfaction that he actually has, or will obtain, fully adequate facilities and plans to perform the work with his own forces.

11.04 Omission or non-compliance with the intent of the Subcontractor List will be grounds for considering a Bid as **nonresponsive**.

11.05 Prior to the award of the Contract, the Architect/Engineer will notify the Bidder in writing if either the Owner or the Architect/Engineer, after due investigation and written findings of fact, has reasonable and substantial objection to any person or organization on such list. If the Owner or Architect/Engineer has reasonable and substantial objection to any person or organization on such list and refuses in writing to accept such person or organization, the Bidder may, at his option, (1) withdraw his Bid, or (2) submit an acceptable substitute subcontractor with no increase in his Bid Price. In the event of withdrawal under this paragraph, Bid Security **will not** be forfeited.

11.06 The Successful Bidder shall, within 7 calendar days of notice of the award of a Contract for the Work, submit the following information to the Architect/Engineer: (1) A signed list of the proprietary names and the suppliers of principal items or systems of materials and equipment proposed for the Work; and (2) A list signed by all subcontractors proposed for the principal portions of the Work in accordance with the Subcontractors Listing form submitted with the Bid.

11.07 The Successful Bidder will be required to establish to the satisfaction of the Architect/Engineer and the Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

11.08 Persons and organizations proposed by the Bidder and to whom the Owner and the Architect/Engineer have made no reasonable objection under the provisions of paragraph 11.06 must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Architect/Engineer and the Owner.

11.09 No Successful Bidder shall be required to employ any subcontractor, other person, or organization against whom he has reasonable objection.

11.10 The Bidder is specifically advised that any person, for, or other party to whom it is proposed to award a subcontract under this Bid must be acceptable to the Owner after verification by the Funding Agency of the current eligibility status.

ARTICLE 12 - PREPARATION OF BID

12.01 Bids shall be submitted on forms identical to the form included with the Bidding Documents.

12.02 All Blanks on the Bid Form shall be filled in by typewriter or manually in ink.

12.03 Where so indicated by the makeup of the Bid Form, sums shall be expressed in both words and figures, and, in case of discrepancy between the two, the amount written in words shall govern.

12.04 Alterations and erasures must be initialed by the signer of the Bid.

12.05 All requested Additive or Deductive Alternate Bids shall be bid. If no change in the Base Bid is required, enter "**No Change**".

12.06 Where there are two or more major items of Work (identified as "Bid Lots") for which separate quotations are requested, the Bidder shall submit quotations for all items, unless otherwise specified.

12.07 Each copy of the Bid shall include the complete name of the Bidder and a statement that the Bidder is a sole proprietor, a partnership, a corporation, or some other legal entity. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a

corporation shall further give the state of incorporation and have the applicable New Mexico Certificate of Incorporation number or Certificate of Authority number. The Bid shall include the current Contractor's license number and type. A bid submitted by an agent shall have a current Power of Attorney attached certifying the agent's authority to bind the Bidder.

12.08 The Bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.

12.09 The address to which communications regarding the Bid are to be directed must be shown.

ARTICLE 13 - BASIS OF BID

13.01 Lump Sum: Bidders shall submit a bid on a lump sum basis as set forth in the Bid Form

13.02 Unit Price: Bidders shall submit a Bid on a Unit Price basis for each item of Work so listed in the Bid Schedule

13.03 Allowances: See General Requirements Section 01 21 00 for Cash Allowances and Utility Service Allowances

ARTICLE 14 - SUBMITTAL OF BID

14.01 All Bidders who are submitting a Bid on this Project are required to submit the following documents:

- Bid Form
- Bid Bond
- Resident Contractor Certificate issued by the Taxation and Revenue Department if seeking preference
- Resident Veteran Contractor Certificate issued by the Taxation and Revenue Department and the Resident Veteran Preference Certification form, if seeking preference.
- Subcontractor List
- Bidder's Qualifications Form
- Non-Collusion Affidavit of Prime Bidder

14.02 Bids shall be submitted at the time and place indicated in the Advertisement for Bid in an opaque sealed envelope marked with the Project title and name and address of the Bidder and accompanied by the aforementioned documents.

14.03 The envelope shall be addressed to the Owner as addressed on the Bid Form. The following information shall be provided on the front lower left corner of the Bid envelope: Project Title, date of opening, and time of opening. If the Bid is sent by mail, the sealed envelope shall have the notation "**SEALED BIDS ENCLOSED**" on the face thereof.

14.04 Bids received after the date and time for receipt of Bids will be returned unopened.

14.05 The Bidder shall assume full responsibility for timely delivery of Bids including those Bids submitted by mail. Hand-delivered Bids shall be submitted to the Owner or his designee and will be clocked in at the time received, which must be prior to the time specified. Bids will then be held for public opening.

14.06 Oral, telephonic, or electronic bids are invalid and will not receive consideration.

ARTICLE 15 - MODIFICATION AND WITHDRAWAL OF BID

15.01 A Bid containing a mistake discovered before Bid Opening may be modified or withdrawn by a Bidder prior to the time set for Bid Opening by delivering written or telegraphic notice to the location designated in the Advertisement for Bid as the place where Bids are to be received.

15.02 Bid security shall be in an amount sufficient for the Bid as modified or resubmitted in conformance with Section 7.02

15.03 Withdrawn Bids may be resubmitted up to the time and date designated for the receipt of Bids, provided they are then fully in conformance with the Bidding Documents.

15.04 After Bid Opening, no modifications in Bid Prices or other provisions of Bids shall be permitted. A low Bidder alleging a material mistake of fact which makes his Bid nonresponsive may be permitted to withdraw his Bid if:

A. The mistake is clearly evident on the face of the Bid Document; or

B. The Bidder submits evidence which clearly and convincingly demonstrates that a mistake was made.

Any decision by the Owner to permit or deny the withdrawal of a Bid on the basis of a mistake contained therein shall be supported by a determination setting forth the grounds for the decision. If withdrawal is permitted, Bid Security **will not** be forfeited (§13-1-106 NMSA 1978).

ARTICLE 16 - OPENING OF BIDS

16.01 Bids received on time will be opened publicly and will be read aloud, and an abstract of the amounts of the Base Bid(s) and Alternate Bids or Bid Items, if any, will be made available to the Bidders. Each Bid shall be open to public inspection (§13-1-107 NMSA 1978).

ARTICLE 17 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE

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

ARTICLE 18 - BID EVALUATION AND AWARD

18.01 The Owner shall have the right to waive **technical irregularities** in the form of the Bid of the low Bidder which do not alter the price, quality, or quantity of the construction Bid (§13-1-132 NMSA 1978).

18.02 It is the intent of the Owner to award a contract to the lowest responsible Bidder, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents. The unreasonable failure of a Bidder to promptly supply information in connection with an inquiry with respect to responsibility is grounds for a determination that the Bidder is not a responsible Bidder (§13-1-133 NMSA 1978).

18.03 If the Base Bid is within the amount of funds available to finance the construction contract, contract award will be made to the responsible Bidder submitting the low Base Bid; except that, if sufficient funds are available to fund Alternate Bids, the Owner may award the contract to the responsible Bidder submitting the low combined Bid within the amount of funds available (Base Bid plus or minus alternates). If the award is based on alternates, the Owner shall accept them in the numerical

order in which they are listed in the Bid Form, as produces a net amount which is **within** the available funds.

18.04 If the lowest responsible Bid has otherwise qualified, and if there is no change in the original terms and conditions, the lowest bidder may negotiate with the Owner for a lower total bid in order to avoid rejection of all bids for the reason that the lowest bid was up to 10% higher than budgeted project funds. Such negotiation shall not be allowed if the lowest bid was more than 10% over budgeted project funds (§13-1-105 NMSA 1978).

18.05 Discrepancies in the Bid Form between words and figures will be resolved in favor of words. 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 in the multiplication of units of Work and unit prices will be resolved in favor of the correct multiplication sum between the units of work and the unit prices.

18.06 Conditional Bids or Bids with additional terms will not be accepted.

18.07 Contracts solicited by competitive sealed bids require that the bid amount exclude the applicable state gross receipts taxes or applicable local option tax but that the Owner shall be required to pay the applicable tax, including any increase in the applicable tax becoming effective after the date the contract is entered into. The applicable gross receipt tax or applicable local option tax calculated at the rate in effect at the time of payment, shall be shown as a separate amount on each billing or request for payment made under the contract (§13-1-108 NMSA 1978).

ARTICLE 19 - RESIDENT CONTRACTOR AND RESIDENT VETERAN CONTRACTOR PREFERENCES

19.01 Resident Contractor means a person that has a valid resident contractor certificate issued by the Taxation and Revenue Department, but does not include a resident veteran contractor; and resident veteran contractor means a person that has a valid resident veteran contractor certificate issued by the Taxation and Revenue Department. No Contractor shall be treated as a resident contractor or resident veteran contractor in the awarding of public works contracts by the Owner unless the Contractor has qualified with the State Purchasing Agent as a resident contractor or resident veteran contractor pursuant to Section 13-1-22 NMSA 1978 and has been issued a certification number by the State Purchasing Agent.

19.02 For the purposes of awarding a public works contract using a formal bid process, a public body shall deem a bid submitted by: (a) a resident contractor to be five percent lower than the bid actually submitted; (b) a resident veteran contractor with annual gross revenues of up to three million dollars ($3,000,000) in the preceding tax year to be ten percent lower than the bid actually submitted.

19.03 To receive a New Mexico Resident Preference or a New Mexico Resident Veteran Contractor preference advantage, as applicable pursuant to §13-4-2 NMSA, must submit a valid resident contractor certificate or valid resident veteran contractor certificate issued by the taxation and revenue department with their sealed bid.

ARTICLE 20 - IDENTICAL BIDS

20.01 When two or more of the Bids submitted are identical in price and are the low bid, the Purchasing Agent or the Owner may:

A. Award pursuant to the multiple source award provisions of §13-1-153 and §13-1-154 NMSA 1978
B. Award to a resident contractor if the identical low Bids are submitted by a resident contractor and a nonresident contractor
C. Award by lottery to one of the identical low Bidders;
E. Reject all Bids and resolicit Bids for the required construction (§13-1-110 NMSA 1978).

ARTICLE 21 - NOTICE OF CONTRACT REQUIREMENTS BINDING ON BIDDER

21.01 In submitting this Bid, the Bidder represents that he has familiarized himself with the nature and extent of the Conditions of the Construction Contract (General, Supplementary, and other Conditions) dealing with federal, state and local requirements which are a part of these Bidding and Contract Documents.

21.02 Laws and Regulations: The Bidder's attention is directed to all applicable federal and state laws, local ordinances and regulations and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the contract throughout, and will be deemed to be included in the Contract the same as though herein written out in full.

ARTICLE 22 - REJECTION OR CANCELLATION OF BIDS

22.01 An Invitation for Bid may be canceled, or any or all Bids may be rejected in whole or in part, when it is in the best interest of the Owner. A determination containing the reasons therefore shall be made part of the Project file (§13-1-131 NMSA 1978). Bid security for rejected Bids shall be returned to the Bidder.

ARTICLE 23 - PROTESTS

23.01 Any Bidder, Offeror, or Contractor who is aggrieved in connection with this procurement (Bid) may protest to the Owner's Purchasing Agent in accordance with the requirements of the Owner's Procurement Regulations and the State Procurement Code. The protest should be made in writing within 24 hours after the facts or occurrences giving rise thereto, but in no case later than 15 calendar days after the facts or occurrences giving rise thereto (§ 13-1-172 NMSA 1978).

23.02 In the event of a timely protest under the Owner shall not proceed further with the procurement unless the Owner makes a determination that the award of contract is necessary to protect substantial interests of the Owner (§13-1-173 NMSA 1978).

23.03 The Owner or his designee shall have the authority to take any action reasonably necessary to resolve a protest of an aggrieved Bidder, Offeror, or Contractor concerning a procurement. This authority shall be exercised in accordance with adopted regulations, but shall not include the authority to award money damages or attorneys' fees (§13-1-174 NMSA 1978).

23.04 The Owner or his designee shall promptly issue a determination relating to the protest. The determination shall:
A. State the reasons for the action taken; and
B. Inform the protestant of the right to judicial review of the determination pursuant to §13-1-183 NMSA 1978.

23.05 A copy of the determination issued under § 13-1-175 NMSA 1978 shall immediately be mailed to the protestant and other bidders or offerors involved in the procurement (§13-1-176 NMSA 1978).

ARTICLE 24 - NOTICE OF AWARD

24.01 A written Notice of Award shall be issued by the Owner after review and approval of the Bid and related documents by the Owner with reasonable promptness (§13-1-100 and §13-1-108 NMSA 1978).

ARTICLE 25 - CANCELLATION OF AWARD

25.01 When in the best interest of the public, the Owner may cancel the award of any contract at any time before the execution of said contract by all parties without liability against the Owner.

ARTICLE 26 - POST-BID INFORMATION

26.01 Submittals to Architect/Engineer: Within fifteen (15) days after Notice of Award, the successful Bidder shall submit the following to the Architect/Engineer:

A. The required bonds and certificates of insurance
B. The requirements under Paragraph 11.06
C. A brief resume of the successful bidder's Superintendent.

26.02 Return of Bid Security: All Bid Security in the form of checks, except those of the two lowest Bidders, will be returned promptly following the opening and checking of the Bids. The retained Bid Security of the unsuccessful of the two lowest Bidders, if in the form of a check, will be returned within fifteen (15) days following the award of the contract. The retained Bid Security of the Successful Bidder, if in the form of a check, will be returned after a satisfactory contract bond has been furnished and the contract has been executed. Bid Securities in the form of Bid Bonds will be returned only upon the request of the unsuccessful Bidder, but will be released by the Purchasing Agent after the Notice of Award is sent by the Owner.

ARTICLE 27 - EXECUTION AND APPROVAL OF CONTRACT

27.01 The Contract shall be signed by the Successful Bidder and returned, together with both the Contract Bonds and Certificate of Insurance, within fifteen (15) calendar days after the date of the Notice of Award.

ARTICLE 28 - FAILURE TO EXECUTE CONTRACT

28.01 Failure by the Awarded Contractor to return the signed Contract with acceptable Contract Bonds and Certificate of Insurance within fifteen (15) calendar days after the date of the Notice of Award shall be "**just cause**" for the cancellation of the award and the forfeiture of the bid security, which shall become the property of the Owner, not as a penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible Bidder, or the work may be readvertised and constructed under contract or otherwise, as the Owner may decide.

28.02 If the Contract is not executed by the Owner within thirty (30) days following receipt from the Bidder of the signed Contract, with Bonds and Certificates, the Bidder shall have the right to withdraw his bid without penalty. No Contract shall be effective until it has been fully executed by all of the parties thereto.

ARTICLE 29 - NOTICE TO PROCEED

29.01 The Owner will issue a written Notice to Proceed to the Contractor stipulating the date from which Contract Time will be charged and the date Contract Time is to expire, subject to valid modifications of the Contract authorized by Change Order.

ARTICLE 30 - OTHER INSTRUCTIONS TO BIDDERS

30.01 This Project is funded in whole by funds provided by the City of Las Vegas, New Mexico and the New Mexico Department of Transportation and is subject to applicable state procurement and public works statutes and regulations promulgated by the funding agency and the Owner

30.02- CITY OF LAS VEGAS STANDARD BID TERMS AND DEFINITIONS

A. **Awarded Bid:** Awarding of Bid shall be made to the responsible Bidder whose Bid meets the required specifications. The City of Las Vegas (City) reserves the right to reject any of all Bids and to waive any technical irregularity in the form of the Bid

B. **Bid Protests:** If any Bidder is of the opinion that the specifications as written preclude him/her from submitting a bid. His/her opinion should be made known to the Department involved in this bid request at least twelve (12) days prior to the scheduled bid opening date with a copy forwarded to the Finance Department. Bid protests will not be considered from parties which do not also furnish satisfactory documentation with their protest that their proposed system fully meets the functional intent of the TECHNICAL SPECIFICATIONS which accompany a Request for Bids.

C. **Bribery and Kickback:** The Procurement Code of New Mexico; (Section 13-1-28 through 13-1-99 N.M.S.A. 1978), impose a third degree felony penalty for bribery of a public official or public employee. In addition the New Mexico Criminal Statutes (Section 30-4-1, N.M.S.A. 1978): state that it is a third degree felony to commit the offense of demanding or receiving a bribe by a public official of public employee. And (Section 30-24-2, N.M.S.A. 1978): it is a fourth degree felony to commit the offense of soliciting or receiving illegal kickbacks. Also (Section 30-41-1 through 30-41-3, N.M.S.A. 1978): states that it is a fourth degree felony to commit the offense of offering or paying illegal kickbacks.

D. **Campaign Contribution Disclosure Form:** The Bidder shall submit a completed Campaign Contribution Disclosure Form Pursuant to Chapter 81, Laws of 2006.

E. **Clarification of Bid:** Bidder requiring clarification or interpretation of bid specifications shall make a written request to the Department involved in this bid request at least five (5) days prior to the scheduled bid opening date with a copy forwarded to the Finance Department. Any interpretation, corrections or changes of said Bid Specifications, Opening Date, or Time Change will be made by addendum only. Interpretations, corrections or changes of said bid made in any other manner will not be binding and the bidder shall not rely upon such interpretation, corrections and changes.

G. **Envelopes:** Sealed Bid envelopes shall be clearly marked on the lower left-hand corner, identified by the Bid Name and Opening Number. Failure to comply with this requirement may result in the rejection of your submitted Bid.

H. **Federal Tax Identification Number:** Pursuant to IRS requirements, bidder shall provide their Federal Tax ID Number if bidder is incorporated. If bidder is a sole proprietorship or partnership then they shall provide their social security number.

I. **Inspection:** Final inspection and acceptance will be made at the city's destination. Products rejected for nonconformance with the specifications shall be removed by the bidder; at his/her risk and expense promptly after notice of rejection.

J. **Modification of Bid:** Bids may be withdrawn upon receipt of written request prior to the scheduled bid opening for the purpose of making any corrections or changes. Such corrections must be properly identified and signed or initialed by the bidder. Resubmission must be prior to the scheduled bid opening time in order to be considered. After bid opening, no price modifications of submitted Bids or other provisions shall be permitted.

K. **New Mexico Tax Identification Number:** Payment may be withheld under (Section 7-10-5, N.M.S.A. 1978) if you are subject to New Mexico Gross Receipts Tax and have not registered for a New Mexico (CRS) Tax Identification number. Contact the New Mexico Taxation & Revenue Department at (505) 827-0700 for registering instructions.

L. **Non-Collusion:** In signing their Bid and Affidavit, the Bidder certifies that he/she has not, either directly or indirectly entered into action of restraint of free competition, in the connection with the submitted bid.

M. **Non-Exclusion:** Specifications of the bid request are not meant to exclude any Bidder or Manufacturer. Where a brand name or equal is indicated, it is for the purpose of describing the standard of quality, performance and characteristics desired and is not intended to restrict competition. "No Substitute" specifications may be authorized, only if required to match existing equipment. If any Bidder is of the opinion that the specifications as written preclude him/her from submitting a bid. His/her opinion should be made known to the Department involved in this bid request at least five (5) days prior to the scheduled bid opening date; with a copy forwarded to the Finance Department. Brand names and numbers are for reference only and equivalents will be considered. If bidding "EQUIVALENT" Bidder must be prepared to furnish complete data upon request, preferably with the bid to avoid awarding delay.

N. **Responsibility of Bidder:** At all times it shall be the responsibility of the Bidder to see their bid is delivered to the City Clerk by the Date and Time scheduled for opening. If the mail or delivery of said Bid is delayed beyond the scheduled opening date and time set, bid this delayed will not be considered

O. **Special Notice:** To preclude possible errors and/or misinterpretations, bid prices must be affixed in ink or typewritten legibly

P. **Taxes:** Bidder must pay all applicable taxes. Note: If bidder is from outside the City of Las Vegas, the successful bidder must pay Gross Receipts in the City of Las Vegas.

Q. **Withdrawal of Bid:** A low bidder alleging a material mistake of fact, after bids have been opened may request their bid be withdrawn upon receipt of a written request to the finance department prior to the scheduled awarding date.

BID FORM

PROJECT: SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS

THIS BID IS SUBMITTED TO: City of Las Vegas
1700 North Grand Avenue
Las Vegas, New Mexico 87701

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

1.02 The Bidder accepts all of the terms and conditions of the Invitation for Bid and Instructions to Bidders, including without limitation those dealing with the disposition of bid security and other Bidding Documents. This Bid will remain subject to acceptance for 30 days after the day of the Bid opening. The Bidder shall sign and submit the Agreement between Owner and Contractor (hereinafter called Agreement) with the Bonds and other documents required by the Bidding Requirements within fifteen (15) calendar days after the date of the Owner's Notice to Award.

1.03 In submitting this Bid, the Bidder represents, as more fully set forth in the Agreement, that:

A. The Bidder has examined copies of all the Bidding Documents and of the following Addenda (receipt of all which is hereby acknowledged):

No.	Date	No.	Date
No.	Date	No.	Date

B. The Bidder has familiarized himself with the nature and extent of the Bidding Documents, Work, site, locality, and all local conditions, laws, and regulations that in any manner may affect cost, progress, performance, or furnishing of the Work.

C. The Bidder has carefully studied all reports and drawings of subsurface conditions which are identified in the Information Available to Bidders and accepts the determination set forth in the Information Available to Bidders of the extent of the technical data contained in such reports and drawings upon which the Bidder is entitled to rely.

D. The Bidder has correlated the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Bidding Documents.

E. The Bidder has given the Architect/Engineer written notice of all conflicts, errors, or discrepancies that he has discovered in the Bidding Documents, and the written resolution thereof by the Architect/Engineer is acceptable to the Bidder.

F. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association,

organization, or corporation; the Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; the Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and the Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over the Owner.

2.01 A bid must be submitted on all bid items. Segregated bids will not be accepted.
The Bidder will complete the Work for the following price (s) excluding applicable gross receipts taxes:

A. LUMP SUM BID

BASE BID (exclusive of Gross Receipts Tax*)

_____

(use words)

($_____**)**

(use figures)

(***Utility Service Allowances and Cash Allowances included within the Allowances Specification, are included in the amounts set forth above.***)

* Gross Receipts Tax on the Bid amount(s) above at current scheduled rate for project Municipality or County is _____%. Amount shall not be included in Bid

3.01. The Bidder agrees that:

A. The Work to be performed under this Contract shall be commenced not later than ten (10) consecutive days after the date of written Notice to Proceed, and that Substantial Completion shall be achieved not later than thirty (30) calendar days after the date of written Notice to Proceed, except as hereafter extended by valid written Change Order by the Owner.

B. Should the Contractor neglect, refuse, or otherwise fail to complete the Work within the time specified, the Contractor agrees, in partial consideration for the award of this Contract, to pay to the Owner the amount of One Hundred Dollars and 00/100 ($ 100.00) per consecutive calendar day, not as a penalty, but as liquidated damages for such breach of the Contract.

C. The above prices shall include all labor, materials, removal, overhead, profit, insurance, (excluding applicable taxes), etc., to cover the finished work of the several kinds called for. Changes shall be processed in accordance with the Contract Documents.

D. It is understood that the Owner reserves the right to reject any or all bids and to waive any technical irregularities in the bidding.

4.01 The following documents are attached to and made a condition of this Bid:

A. Bid Bond

B. Subcontractor List

C. Bidder's Qualifications Form

D. Non-Collusion Affidavit

E. New Mexico Resident Contractor Preference Certificate, or

F. New Mexico Resident Veteran Contractor Preference Certificate and New Mexico Resident Veteran Contractor Certification Form

G. City of Las Vegas Bidder's Information Form

H. Campaign Contribution Disclosure Form

5.01 The terms used in this Bid and the Bidding and Contract Documents which are defined in the Conditions of the Construction Contract (General, Supplementary, and other Conditions), included as part of the Bidding Documents, have the meanings assigned to them in those conditions.

6.01 This Bid is submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____
(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____

By: _____
(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____
Type (General Business, Professional, Service, Limited Liability):_____

By: _____
(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____
(CORPORATE SEAL)

Attest _____

A Joint Venture

Name of Joint Venture: _____

First Joint Venturer Name: _____ (SEAL)

By: _____
(Signature of first joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name: _____(SEAL)

By: _____
(Signature of second joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Bidder's Business Address _____

_____

Phone No. _____ Fax No. _____

E-mail _____ _____

SUBMITTED on _____, 20____.

6.02 Contractor License Information:

New Mexico Contractor's License Number _____

License Classification(s) _____

New Mexico Department of Workforce Solutions Registration Number _____

Federal Identification Number (FEIN #) _____

BID BOND

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

BIDDER *(Name and Address)*:

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

OWNER *(Name and Address)*:

BID

Bid Due Date:

Description *(Project Name and Include Location)*:

BOND

Bond Number:

Date *(Not earlier than Bid due date)*:

Penal sum _____ (Words) $ _____ (Figures)

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

BIDDER

_____ (Seal)

Bidder's Name and Corporate Seal

By: _____

Signature

_____

Print Name

_____

Title

Attest: _____

Signature

_____

Title

SURETY

_____ (Seal)

Surety's Name and Corporate Seal

By: _____

Signature (Attach Power of Attorney)

_____

Print Name

_____

Title

Attest: _____

Signature

_____

Title

Note: Above addresses are to be used for giving any required notice. Provide execution by any additional parties, such as joint venturers, if necessary.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.

3. This obligation shall be null and void if:
   3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
   3.2 All Bids are rejected by Owner, or
   3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).

4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.

6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.

7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the

provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

NEW MEXICO SUBCONTRACTOR'S FAIR PRACTICE ACT / LISTING OF SUBCONTRACTORS

1. This project is subject to the provisions of the State of New Mexico Subcontractor's Fair Practice Act.

2. Listing Threshold: List Subcontractors for amounts exceeding the listing threshold. The listing threshold is $5,000.00 or one half of one percent of the Architect/Engineers estimate, whichever is greater. For purposes of this Project the threshold is ***$5,000.00.***

3. Portion of project to which requirements apply: Complete Project.

4. For each category of the project, which the BIDDER will be subcontracting for an amount exceeding the listing threshold indicated above, the BIDDER shall define the subcontracting categories and list only one subcontractor for each category. The listing shall be in the format indicated on the following page, and shall be completed and submitted with the Bid.

5. No CONTRACTOR whose Bid is accepted shall sublet or subcontract any portion of the Work of the Project in an amount exceeding the threshold amount given above, where the original bid amount did not designate a subcontractor, unless 1) the CONTRACTOR received no bid for that category (note: the BIDDER must designate on the list of subcontractors that "no bid was received"), or 2) the Work is pursuant to a change order that causes changes or deviations from the original contract.

6. No CONTRACTOR whose Bid is accepted shall substitute any subcontractor in place of the subcontractor listed in the Bid except as provided for in the Subcontractor's Fair Practice Act.

7. Any changes or additions of subcontractors shall be promptly reported to the Architect/Engineer in writing within two (2) calendar days of the known change or addition to the submitted List of Project Subcontractors in the Bid.

8. All subcontractors with work in excess of $60,000 must be registered with the New Mexico Department of Workforce Solutions, Labor Enforcement. Include the total of the subcontracted work and the subcontractor's New Mexico Department of Workforce Solutions Registration Number, if work is in excess of $60,000.

SUBCONTRACTOR LIST

Subcontract Category *
Estimated Value of Work*
Subcontractor's Name*
Business Location *
Phone Number
E-mail Address
Federal Id No. (FEIN #)
NM Contractor's License No.
License Categories
New Mexico Dept. of Workforce Solutions Registration No.**
Subcontract Category *:
Estimated Value of Work*
Subcontractor's Name*
Business Location *
Phone Number
E-mail Address
Federal Id No. (FEIN #)
NM Contractor's License No.
License Categories
New Mexico Dept. of Workforce Solutions Registration No.**
Subcontract Category *:
Estimated Value of Work*
Subcontractor's Name*
Business Location *
Phone Number
E-mail Address
Federal Id No. (FEIN #)
NM Contractor's License No.
License Categories
New Mexico Dept. of Workforce Solutions Registration No.**

* *Information required at time of Bid Submission*

** Required only if value of work is in excess of $60,000

(Use additional pages, as necessary)

SUBCONTRACTOR LIST

Subcontract Category *
Estimated Value of Work*
Subcontractor's Name*
Business Location *
Phone Number
E-mail Address
Federal Id No. (FEIN #)
NM Contractor's License No.
License Categories
New Mexico Dept. of Workforce Solutions Registration No.**
Subcontract Category *:
Estimated Value of Work*
Subcontractor's Name*
Business Location *
Phone Number
E-mail Address
Federal Id No. (FEIN #)
NM Contractor's License No.
License Categories
New Mexico Dept. of Workforce Solutions Registration No.**
Subcontract Category *:
Estimated Value of Work*
Subcontractor's Name*
Business Location *
Phone Number
E-mail Address
Federal Id No. (FEIN #)
NM Contractor's License No.
License Categories
New Mexico Dept. of Workforce Solutions Registration No.**

* *Information required at time of Bid Submission*

** Required only if value of work is in excess of $60,000

(Use additional pages, as necessary)

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered. The data given must be clear and comprehensive. This statement must be notarized.

1. Name of Bidder _____

2. Business Address _____

3. When Organized _____

4. Bidder is a (an) _____
   (Individual - Partnership - Corporation)

   The full name and addresses of all persons interested in this proposal as partners and/or principal(s) are: If business is carried out in any other name(s) than that of the principal(s) or partner(s), also state such name(s) and address(es).

   _____

   _____

   _____

CORPORATION

Corporation is incorporated in the State of: _____

President is: _____

Treasurer is: _____

Place of Business: _____

5. How many years have you been engaged in the contracting business under your present firm or trading name?_____

6. Financial Statement: (Submit upon request after Bid Opening)

7. Credit Available for this Contract $_____

8. Contracts Now on Hand, Gross Amounts $_____

9. Have you ever refused to sign a contract at your original bid?_____

10. Have you ever defaulted on a contract?_____

11. Remarks:

_____

12. Will you, upon request, furnish any other information that the Owner may

    require_____

13. The undersigned hereby authorizes and requests any person to furnish any information requested by the Owner in verification of the recitals comprising this Statement of Bidder's Qualifications.

Date at _____this_____ day of_____20___

Name of Bidder: _____

By: _____

Title: _____

STATE OF_____)

COUNTY OF_____)

_____, being duly sworn, deposes and says that he

is_____of_____

and that the answers to the foregoing questions and all statements therein contained are true and correct.

_____
(Name of Bidder)

Sworn to before me this: _____

Day of _____, 20____

_____
NOTARY PUBLIC

My commission expires: _____

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER/SUBCONTRACTOR

STATE OF NEW MEXICO

COUNTY OF

_____, being first duly sworn, deposes and says that:

1. He/She is _____ of _____,
   (title) (company)
   the bidder that has submitted the attached bid;

2. He is fully informed respecting the preparation and contents of the attached bid and of all pertinent circumstances respecting such bid;

3. Such bid is genuine and is not a collusive or sham bid;

4. Neither the said bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest including this affiant, has in any way colluded, conspired, connived or agreed directly or indirectly with any other Bidder, firm or person to submit a collusive or sham bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communications or conference with any other Bidder, firm or person to fix price or prices in the attached Bid or of any other Bidder, or to fix overhead, profit or cost element of the bid price or the bid price of any other bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement and advantage against the *[owner]* or any person interested in the proposed contract; and

5. The price or prices quoted in the attached bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

I am/The Bidder is not indebted to the *[owner]* in any form or manner.

Signature:_____ Date:_____

Title:_____ Witness:_____

Notary: _____

My commission expires:

RESIDENT VETERANS PREFERENCE CERTIFICATION FORM

_____(NAME OF CONTRACTOR) hereby certifies the following in regard to application of the resident veterans' preference to this procurement:

"I declare under penalty of perjury that my annual gross revenues in the preceding tax year beginning January 1 and ending December 31 is less than three million dollars ($3,000,000) allowing me a 10% preference discount on this solicitation. "

"I agree to submit a report, or reports, to the State Purchasing Division of the General Services Department declaring under penalty of perjury that during the last calendar year starting January 1 and ending on December 31, the following to be true and accurate:

"In conjunction with this procurement and the requirements of this business' application for a Resident Veteran Business Preference/Resident Veteran Contractor Preference under Section 13-4-2 NMSA 1978, when awarded a contract which was on the basis of having such veterans preference, I agree to report to the State Purchasing Division of the General Services Department the awarded amount involved. I will indicate in the report the award amount as a purchase from a public body or as a public works contract from a public body as the case may be.

"I understand that knowingly giving false or misleading information on this report constitutes a crime."

"I declare under penalty of perjury that this statement is true to the best of my knowledge. I understand that giving false or misleading statements about material fact regarding this matter constitutes a crime."

_____ _____

(Signature of Business Representative)* (Date)

*Must be an authorized signatory for the Business.

The representations made in checking the boxes constitutes a material representation by the business that is subject to protest and may result in denial of an award or unaward of the procurement involved if the statements are proven to be incorrect.

To receive this preference, Bidder must also submit a copy of their Resident Veteran Contractor Certificate issued by the Taxation and Revenue Department

CITY OF LAS VEGAS BIDDER'S INFORMATION

BIDDER: _____

AUTHORIZED AGENT: _____

ADDRESS: _____

TELEPHONE NUMBER: (_____) _____

FAX NUMBER: (_____) _____

DELIVERY: _____

STATE PURCHASING RESIDENT CERTIFICATION NO.: _____

NEW MEXICO CONTRACTORS LICENSE NO.: _____

ITEM (S) UNDER THIS BID ARE TO BE F.O.B. LAS VEGAS, NEW MEXICO 87701. THE CITY OF LAS VEGAS RESERVES THE RIGHT REJECT ANY OR ALL BIDS AND TO WAIVE ANY TECHINCAL IRREGULARITY IN THE FORM OF THE BID.

FEDERAL TAX ID NUMBER: _____

SOCIAL SECURITY NUMBER: _____

NEW MEXICO TAX IDENTIFICATION NO. (CRS): _____

CAMPAIGN CONTRIBUTION DISCLOSURE FORM

Pursuant to Chapter 81, Laws of 2006, any prospective contractor seeking to enter into a contract with any state agency or local public body must file this form with that state agency or local public body. The prospective contractor must disclose whether they, a family member or a representative of the prospective contractor has made a campaign contribution to an applicable public official of the state or a local public body during the two years prior to the date on which the contractor submits a bid or, in the case of a sole source or small purchase contract, the two years prior to the date the contractor signs the contract, if the aggregate total of contributions given by the prospective contractor, a family member or a representative of the prospective contractor to the public official exceeds two hundred and fifty dollars ($250) over the two year period.

THIS FORM MUST BE FILED BY ANY PROSPECTIVE CONTRACTOR WHETHER OR NOT THEY, THEIR FAMILY MEMBER, OR THEIR REPRESENTATIVE HAS MADE ANY CONTRIBUTIONS SUBJECT TO DISCLOSURE.

The following definitions apply:

"**Applicable public official**" means a person elected to an office or a person appointed to complete a term of an elected office, who has the authority to award or influence the award of the contract for which the prospective contractor is submitting a competitive sealed bid or who has the authority to negotiate a sole source or small purchase contract that may be awarded without submission of a sealed competitive bid.

"**Campaign Contribution**" means a gift, subscription, loan, advance or deposit of money or other thing of value, including the estimated value of an in-kind contribution, that is made to or received by an applicable public official or any person authorized to raise, collect or expend contributions on that official's behalf for the purpose of electing the official to either statewide or local office. "Campaign Contribution" includes the payment of a debt incurred in an election campaign, but does not include the value of services provided without compensation or unreimbursed travel or other personal expenses of individuals who volunteer a portion or all of their time on behalf of a candidate or political committee, nor does it include the administrative or solicitation expenses of a political committee that are paid by an organization that sponsors the committee.

"**Contract**" means any agreement for the procurement of items of tangible personal property, services, professional services, or construction.

"**Family member**" means spouse, father, mother, child, father-in-law, mother-in-law, daughter-in-law or son-in-law.

"**Pendency of the procurement process**" means the time period commencing with the public notice of the request for proposals and ending with the award of the contract or the cancellation of the request for proposals.

"**Person**" means any corporation, partnership, individual, joint venture, association or any other private legal entity.

"**Prospective contractor**" means a person who is subject to the competitive sealed proposal process set forth in the Procurement Code or is not required to submit a competitive sealed proposal because that person qualifies for a sole source or a small purchase contract.

"Representative of a prospective contractor" means an officer or director of a corporation, a member or manager of a limited liability corporation, a partner of a partnership or a trustee of a trust of the prospective contractor.

DISCLOSURE OF CONTRIBUTIONS:

Contribution Made By: _____

Relation to Prospective Contractor: _____

Name of Applicable Public Official: _____

Date Contribution(s) Made: _____

Amount(s) of Contribution(s) _____

Nature of Contribution(s) _____

Purpose of Contribution(s) _____

(The above fields are unlimited in size) _____

_____ _____
Signature Date

_____
Title (position)

-OR-

NO CONTRIBUTIONS IN THE AGGREGATE TOTAL OVER TWO HUNDRED FIFTY DOLLARS ($250) WERE MADE to an applicable public official by me, a family member or representative.

_____ _____
Signature Date

_____
Title (Position)

NOTICE OF AWARD

TO: DATE:

PROJECT:

Ladies and Gentlemen:

This letter is to advise you that the governing authority at its _____ meeting, approved the construction for the above-referenced project. Pursuant to this approval, the procurement office has determined that your firm is the apparent Successful Bidder. Therefore, your firm has been awarded the construction contract for the above referenced project.

The Contract Price of your contract is as follows:

Base Bid		$
	Alternate Nos. -	$
	Contract Total	$

Five copies of each of the proposed Contract Documents (except Drawings) will be provided to you by the Architect/Engineer of Record for execution. Sets of the Drawings are available for your use; please make arrangements for pick-up from the Architect's Office.

You must comply with the following conditions precedent within fifteen calendar days of the date of this Notice of Award, which shall be _____, 20____.

1. You must deliver to the Architect of Record, five fully executed counterparts of the Agreement including all Contract Documents. Each of the Contract Documents must bear your signature on the appropriate page.

2. You must deliver with the executed agreement the Performance and Payment Bond, Rider to Bonds, Agent's Affidavit and Certificate of Insurance.

3. *

(*List other conditions precedent; if none, write none.)

Please be advised that no contract with the owner is legal and binding upon the Owner until it is executed by the Mayor/County Commission Chairman and other signatures listed in the contract.

Failure to comply with these conditions within the time specified will entitle the Owner to consider your bid abandoned, to annul this Notice of Award, and to declare your bid security forfeited, to the extent of actual damages.

Within thirty days after you comply with these conditions, the Owner will return to you one fully signed counterpart of the Agreement.

(Owner)

(Authorized Signature)

(Title)

Copy: Architect/Engineer of Record
Local Government Division, DFA
Project File

AGREEMENT BETWEEN OWNER AND CONTRACTOR

THIS AGREEMENT is by and between ("Owner")

and

Agreement will be completed after Award of the Contract

("Contractor")

for the following **PROJECT**:

Architect/Engineer of Record

WHEREAS, (funding authority) has funded the above-referenced Project pursuant to (Grant Number); and (Grant Number/chapter and year of legislation or other source of funding);and

WHEREAS, the Owner, through its Mayor, upon approval of the governing body, is authorized to enter into a construction contract for the Project pursuant to §13-1-100 NMSA 1978; and

WHEREAS, the Owner has let this contract according to the established state and local purchasing procedures for contracts of the type and amount let; and

WHEREAS, construction of this Project was approved by the governing body at its meeting of _____, 20___;

The OWNER and the CONTRACTOR agree as set forth below:

ARTICLE 1 - THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, the Conditions of the Contract (General, Supplementary, and other Conditions), the Drawings, the Specifications, all Addenda issued prior to and all Modifications issued after execution of this Agreement. These documents form the Contract, and all are as fully a part of the Contract as if attached to this Agreement or repeated herein. An enumeration of the Contract Documents appears in Article 9 of this Agreement.

ARTICLE 2 - THE WORK

The Contractor shall perform all the Work required by the Contract Documents for
(Here insert the caption descriptive of the Work as used on other contract Documents.)
*

ARTICLE 3 -TIME OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

The work to be performed under this contract shall be commenced not later than ten (10) consecutive calendar days after the date of written notice to proceed. Substantial completion shall be achieved not later than *____ calendar days after the date of written notice to proceed, except as hereafter extended by valid written change order by the owner.

Should the contractor neglect, refuse, or otherwise fail to complete the work within the time specified in this article, the contractor agrees, in partial consideration for the award of this contract, to pay to the owner the amount of *_____ Dollars ($_____) per consecutive calendar day, not as a penalty, but as liquidated damages for such breach of this contract.

ARTICLE 4 -CONTRACT SUM

The Owner shall pay the Contractor in current funds for the performance of the Work, subject to additions and deductions by Change Order as provided in the Contract Documents, the Contract Sum of
*_____

The Contract sum is determined as follows: (State here the base bid or other lump sum amount, accepted alternates, bid lots and unit prices, as applicable) plus applicable Gross Receipts Tax at the scheduled rate at the time each progress payment is made.

ARTICLE 5 -PROGRESS PAYMENTS

Based upon Applications for Payment submitted to the Architect/Engineer by the Contractor and Certificates for Payment issued by the Architect/Engineer, the Owner shall make progress payments on account of the Contract Sum to the Contractor for the period ending the 25th day of the month as stipulated in §13-1-158 and §57-28-5 NMSA 1978.

ARTICLE 6 -FINAL PAYMENT

Unless good cause exists, final payment, constituting the entire unpaid balance of the contract sum, shall be paid by the owner to the contractor within thirty (30) calendar days after notification of the owner by the architect/engineer that all deficiencies to the contract documents that were noted during the substantial completion inspection and listed on the attachment to the certificate of substantial completion have been corrected, and provided the contract has been fully performed and final certificate for payment has been issued by the architect/engineer. In addition, the contractor shall provide to the owner a certified statement of release of liens (AIA Document G706A or other approved form) and consent of surety.

ARTICLE 7 - GENERAL AND SPECIAL PROVISIONS

7.1 This Agreement shall be governed exclusively by the provisions hereof and by the laws of the State of New Mexico as the same from time to time exist.

7.2 Terms used in this agreement which are defined in the Conditions of the Contract shall have the meanings designated in those Conditions.

7.3 As between the parties to this Agreement: as to all acts or failures to act by either party to this Agreement, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in all events not later than the relevant Date of Substantial Completion of Work; and as to any acts or failures to act occurring after the relevant Date of Substantial Completion, not later than the date of the Owner's approval of the Final Certificate of Payment.

7.4 The Contractor shall hold harmless and indemnify the Owner against any and all injury, loss, or damage, including cost of defense - including but not limited to court costs and attorney's fees - arising out of the negligent acts, errors, or omissions of the Contractor.

7.5 This Agreement shall not become effective until: (1) approved by the governing body of the Owner; and (2) signed by all parties required to sign this Agreement and reviewed by the funding agency.

7.6 The Contractor and his agents and employees are Independent Contractors and are not employees of the Owner. The Contractor and his agents and employees shall not accrue leave, retirement, insurance, bonding, use of Owner vehicles, or any other benefits afforded to employees of the Owner as a result of this Agreement.

7.7 The Contractor, upon final payment of the amounts due under this Agreement, releases the Owner, his officers and employees, from his liabilities and obligations arising from or under this Agreement, including but not limited to all damages, losses, costs, liability, and expenses, including but not limited to attorney's fees and costs of litigation that the Contractor may have.

7.8 The Contractor agrees not to purport to bind the Owner to any obligation not assumed herein by the Owner, unless the Contractor has express written authority to do so, and then only within the strict limits of that authority.

7.9 Notices. All notices herein provided to be given, or which may be given, by either party to the other shall be deemed to have been fully given when made in writing and deposited in the United States mail, postage prepaid, in the instance of notice of termination of work also by certified mail, and addressed as shown on the cover page of this Agreement.

7.9.1 Nothing herein contained shall preclude the giving of any such written notice by personal service. The address to which notices shall be mailed to either party may be changed by written notice given by such party to the other as hereinabove provided.

7.10 Gender, Singular/Plural. Words of any gender used in this Contract Agreement shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires.

7.11 Captions and Section Headings. The captions and section headings contained in this Agreement are for convenience of reference only, and in no way limit, define, or enlarge the terms, scope, and conditions of this Agreement.

7.12 This document shall be executed in no less than three (3) counterparts, each of which shall be deemed an original.

7.13 Certificates and Documents Incorporated. All certificates and documentation required by the provisions of the Agreement shall be attached to this Agreement at the time of execution, and are

hereby incorporated by reference as though set forth in full in this Agreement to the extent they are consistent with its conditions and terms.

7.14 Separability. If any clause of provision of this Agreement is illegal, invalid, or unenforceable under present or future laws effective during the term of this Agreement, then and in that event, it is the intention of the parties hereto that the remainder of this Agreement shall not be affected thereby.

7.15 Waiver. No provision of this Agreement shall be deemed to have been waived by either party unless such waiver be in writing signed by the party making the waiver and addressed to the other party; nor shall any custom or practice which may evolve between the parties in the administration of the terms hereof be construed to waive or lessen the right of either party to insist upon the performance by the other party in strict accordance with the terms thereof. Further, the waiver by any party of a breach by the other party or any term, covenant, or condition hereof shall not operate as a waiver of any subsequent breach of the same or any other term, covenant, or condition thereof.

7.16 Entire Agreement. This Agreement represents the entire contract between the parties and, except as otherwise provided herein, may not be amended, changed, modified, or altered without the written consent of the parties hereto. This Agreement incorporates all of the conditions, agreements, and understandings between the parties concerning the subject matter of this Contract, and all such conditions, understandings, and agreements have been merged into this written Agreement. No prior conditions, agreement, or understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this written Agreement.

7.17 Interchangeable Terms. For purposes of all provisions within this Agreement and all attachments hereto, the terms "Agreement" and "Contract" shall have the same meaning and shall be interchangeable.

7.18 Words and Phrases. Words, phrases, and abbreviations which have well-known technical or trade meanings used in the Contract Documents shall be used according to such recognized meanings. In the event of a conflict, the more stringent meaning shall govern.

7.19 Relationship of Contract Documents. The Contract Documents are complementary, and any requirement of one contract document shall be as binding as if required by all.

7.20 Pursuant to §13-1-191 NMSA 1978, reference is hereby made to the criminal laws of New Mexico (including §30-14-1, §30-24-2, and §30-41-1 through §30-41-3 NMSA 1978) which prohibit bribes, kickbacks, and gratuities, violation of which constitutes a felony. Further, the Procurement Code (§13-1-28 through §13-1-199 NMSA 1978) imposes civil and criminal penalties for its violation.

ARTICLE 8 - TERMINATION OR SUSPENSION

8.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of the General Conditions.

8.2 The Work may be suspended by the Owner as provided in Article 14 of the General Conditions.

ARTICLE 9 - ENUMERATION OF CONTRACT DOCUMENTS

9.1 The Contract Documents, except for Modification issued after execution of this Agreement, are enumerated as follows:

9.1.1 The Agreement is this executed Agreement between Owner and Contractor, Section 00 52 00.

9.1.2 The General Conditions are the General Conditions of the Contract For Construction, AIA Document A201, 2007 edition.

9.1.3 The Supplementary and other conditions of the contract are those contained in the Project Manual dated _____, and are as follows:

Document	Title	Pages

9.1.4 The Specifications are those contained in the Project Manual dated as in subparagraph 9.1.3, and are as follows: (either list the specifications here or refer to an exhibit attached to this agreement.)

Section	Title	Pages

9.1.5 The Drawings are as follows, and are dated _____ unless a different date is shown below: (either list the drawings her or refer to an exhibit attached to this agreement)

Number	Title	Date

9.1.6 The Addenda, if any, are as follows:

Number	Date	Pages

Portions of addenda relating to bidding requirements are not part of the contract documents unless the bidding requirements are also enumerated in this article.

9.1.7 Other Documents, if any, forming part of the contract documents are as follows: (list here any additional documents which are intended to form part of the contract documents. The general conditions provide that bidding requirements such as the published invitation for bid. Instructions to bidders, sample forms and the contractor's bid are not part of the contract documents unless enumerated in this agreement. List the documents here only if intended to be part of the contract documents; i.ie, Geotechnical Engineering Services Report.)

THIS AGREEMENT is entered into as of the day and year first written above.

CONTRACTOR: **BY:** _____

(SEAL) **TITLE:**

ATTEST: **BY:**

TITLE:

OWNER:

As to legal sufficiency:
LEGAL COUNSEL **BY:**_____

DATE:

As to budgetary sufficiency:
FINANCE DIRECTOR **BY:**_____

DATE:

Clerk\Mayor\Chairman **BY:** _____

ATTEST: **BY:**

_____

TITLE:

PERFORMANCE AND PAYMENT BOND

The "Performance and Payment Bond" will be AIA Document A312™–2010, a copy of which may be examined at any of the Plan Rooms or purchased from a local AIA office.

AIA Document A312™–2010 incorporates two bonds—one covering the contractor's performance, and the other covering the contractor's obligations to pay subcontractors and others for material and labor.

AIA Document A312–2010 obligates the surety to act responsively to the owner's requests for discussions aimed at anticipating or preventing a contractor's default.

RIDER TO BONDS

Performance and Payment Bond No. _____

Obligee (Owner): _____

Surety _____

Surety's New Mexico Agent:
Name:_____
Address: _____
Telephone No. (_____) _____

The Surety and Principal stipulate as follows:

Whenever, in the judgment of the Owner, the Surety on this bond shall be insolvent, or for any cause is not a proper or sufficient Surety, the Owner may require the Contractor to furnish a new or additional bond or security within ten (10) days; and thereupon, if the Owner shall so order, security shall be furnished. If such new or additional bond or security is not furnished within said time, the Owner may, at its option, take over as Surety, either doing the Work on force account, or letting the same by contract, and shall be entitled to use any equipment, materials and supplies of the delinquent Contractor in completing said Work.

The Surety hereby stipulates and agrees that no properly authorized Change Order altering Contract Time, Contract Sum, Conditions of the Contract, or the scope of nature of the Work to be performed thereunder shall in any way affect its obligation on this bond, and it does hereby waive any notice of such change.

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

_____
(Principal) (Seal)

_____
(Witness)

_____
(Title)

_____
(Witness)

_____
(Surety) (Seal)

_____
(Title)

AGENT'S AFFIDAVIT

STATE OF _____)

COUNTY OF _____)

_____ being first duly sworn deposes and says:

That he/she is the duly appointed agent for _____

_____ and licensed or authorized to do business in the State of New Mexico.

Deponent further states that a certain bond given to indemnify the Owner in connection with the construction of _____ dated the _____ day of_____, 20____, executed by _____ _____ contractor, as principal and _____ as Surety, signed by this deponent; and deponent further states that said bond was written, signed, and delivered by him/her; that the premium on the same has been or will be collected by him; and that the full commission thereon has been or will be retained by him/her.

_____
Agent

Subscribed and sworn to before me this _____ day of _____, 20____.

_____
Notary Public

My Commission expires:

Agent's Address _____

_____

_____

Telephone Number (_____) _____

Power of Attorney for person signing for surety company must be attached to bond

CERTIFICATE OF INSURANCE - CONSTRUCTION

The "Construction Insurance Certificate" will be in accordance with AIA Document G715-1991. A copy of the Instruction Sheet and Attachment for Acord Certificate of Insurance may be examined at any of the plan rooms or purchased from a local AIA office.

ASSIGNMENT OF ANTITRUST CLAIMS

(To be executed by Suppliers, Subcontractors, and Sub-Subcontractors of Contractors)

Project:

Project Number:

agrees that any and all claims which it may have or may inure to it for overcharges resulting from antitrust violations as to goods, services, and materials purchased in connection with the above-referenced project are hereby assigned to the Owner, but only to the extent that such overcharges are passed on to the Owner.

It is agreed that the undersigned retains all rights to any such antitrust claims to the extent of any overcharges not passed on to the Owner, including the right to any treble damages attributable thereto.

FIRM:

BY:
Signed by Individual Empowered to Obligate Supplier, Subcontractor, or Sub-Subcontractor

TITLE:

DATE:

CERTIFICATE OF PROJECT OWNER'S ATTORNEY

To be completed by Project Owner's Attorney

I, the undersigned, _____, the duly authorized and acting legal representative of the (municipality/county) of _____

do hereby certify as follows:

I have examined the attached contract(s) and surety bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligation upon the parties executing the same in accordance with terms, conditions and provisions thereof.

NAME:

DATE:

Address:

Telephone No. ( )

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

The "General Conditions of the Contract for Construction" AIA Document A201-2007 edition, Articles 1 through 15 inclusive, is the basis of the Contract between Owner and the Contractor and is included by reference.

MODIFICATIONS TO GENERAL CONDITIONS

The following supplements modify the "General Conditions of the Contract for Construction", AIA Document A 201, 2007. Where a portion of the General Conditions is modified or deleted by these Supplementary Conditions, the unaltered provisions of the General Conditions shall remain in effect.

1.0 Add the following subparagraph to Paragraph 1.1:

1.1.9 ADDITIONAL DEFINITIONS.
The following definitions shall apply throughout the Bidding Documents or Contract Documents unless otherwise specified:

1.1.9.1 SURETY: The person or entity obligated to provide such performance or payment as set forth in bonds required by the Contract Documents.

1.1.9.2 UNIT PRICES: Amounts stated in the Contract as prices per unit of measurement for materials or services as described in the Contract Documents.

1.1.9.3 USER: The agency or agencies or designated entity for whose use the Project is being constructed.

2.0 Substitute the following for Subparagraph 1.5.1:

1.5.1 All designs, drawings, specifications, notes, and other work developed in the performance of this Contract and copies thereof furnished by the Architect/Engineer shall be the sole property of the Owner. They are to be used only with respect to this Project and are not to be used on any other project.

3.0 Add the following Paragraph 2.5:

2.5 ADMINISTRATION OF THE CONTRACT.

2.5.1 The Owner and his agents shall at all times have access to the work whenever it is in preparation and progress. The Owner, as outlined in the Contract Documents, shall request change orders through the Architect. The final acceptance of the project shall be made by representatives of the Architect, Owner, and Contractor.

4.0 Add the following to Subparagraph 3.4.2:

3.4.2.1 After the Contract has been executed, the Architect will consider a formal request for the substitution of products in place of those specified only under conditions set forth in the General Requirements of the Technical Specifications.

5.0 Add the following Subparagraph 3.6.1:

3.6.1 Contracts solicited by competitive sealed bids shall require that the bid amount exclude the applicable state gross receipts taxes or applicable local option tax but that the Owner shall be

required to pay the applicable tax including any increase in the applicable tax becoming effective after the date the contract is entered into. The applicable gross receipt tax or applicable local option tax shall be shown as a separate amount on each billing or request for payment made under the contract (§13-1-108 NMSA 1978).

6.0 Add the following sentence to Subparagraph 3.7.1:

3.7.1 Included in the above listing is the fee charged by state or local governmental entity for the review of plans prior to issuance of the building permit.

7.0 Add the following subparagraphs to Subparagraph 3.7.1:

3.7.1.1 The Contractor must secure all building permits from the Construction Industries Division, Licensing and Regulation Department of the State of New Mexico or the Authority Having Jurisdiction designated by CID. The Construction Industries Division offices are located in Room 198, 725 St. Michael's Drive, Santa Fe, New Mexico 87503.

3.7.1.2 The Contractor will be responsible for the payment of connection charges or other such fees to cover the capital expense charges of the utility companies when listed in Allowances Specification Section. Included are the utility company's mains, trunks, or materials necessary to reach the point where the tap is made. The Contractor will be responsible for the electrical after the transformer, domestic water after the meter, fire service water at and after the detector check value, and gas after the meter.

8.0 Add the following subparagraph to Subparagraph 3.10.1:

3.10.1.1 The construction schedule shall be submitted no later than fifteen (15) days after receipt of the Notice to Proceed. The schedule shall be revised by the Contractor from time to time to reflect all changes in contract Work and adjustments in time, money, or both that are approved by the Architect/Engineer. The schedule shall show the date of commencement of work on each pertinent phase or item of construction, percentage of scheduled completion at the end of each fifteen (15) days, and the date of completion of each phase or item of work. The progress schedule shall indicate labor, materials, and equipment actually incorporated into the Work (construction in place). No progress shall be indicated for materials and equipment on the site but not incorporated into the Work. The schedule shall be submitted each month with the Pay Request, in duplicate. No payment will be made without the schedule.

9.0 Add the following subparagraph to Paragraph 3.15:

3.15.3 The Contractor shall thoroughly clean the premises at the completion of the work.

10.0 Add the following to Subparagraph 4.2.3:

4.2.3.1 Should the Architect/Engineer determine that any portion of the Work is not in compliance with the requirements of the Contract Documents, the Architect/ Engineer shall promptly notify the Owner and the Contractor of the nature of the non-compliance and the correction of the work required.

11.0 Amend Subparagraph 4.2.9 as follows:

Add the phrase "and the Owner" after the word Architect in the first sentence.

12.0 Substitute the following for "a reasonable amount" stated in line 5 of Subparagraph 7.3.7:

Overhead and profit shall be limited to the amounts as set forth in Subparagraph 7.3.7.6.

13.0 Add new subparagraph to Subparagraph 7.3.7:

7.3.7.6 The maximum allowance for overhead and profit will not exceed the following amounts:
.1 Contractor for Work performed by his own forces: 15%
.2 Subcontractor for Work performed by his own forces: 10%
.3 Contractor for Work performed by Subcontractor; Contractor may mark up the Subcontractor's Labor and Materials costs only and not the Subcontractor's marked-up price: 5%

14.0 Add new Subparagraph 7.3.11:

7.3.11 The quotation of Work under a Change Order shall be binding for sixty (60) days from the date submitted by the contractor.

15.0 Add the following Subparagraph 8.2.4:

8.2.4 If the Contractor shall neglect, fail or refuse to complete the Work within time herein specified or the time established by himself for his scheduled completion, which ever is the earliest then said Contractor does hereby agree, as part consideration for awarding of this Contract, to pay the Owner the amount specified in the contract, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth for each and every calendar day that the Contractor shall be in default after earliest time stipulated in contract for completing work. Provided, that Contractor shall not be charged with liquidated damages or any excess when delay in completion of Work is due;

16.0 Add new Subparagraphs 8.3.1.1, 8.3.1.2, 8.3.1.3:

8.3.1.1 To any performance, priority or allocation order duly issued by the government;

8.3.1.2 To unforeseeable cause beyond control and without fault or negligence of Contractor including but not restricted to, acts of God or public enemy, acts of Owner, acts of another Contractor in performance of a contract with Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather; and

8.3.1.3 To any substantiated delays of Subcontractors and/or material suppliers occasioned by any of the causes specified in subsections 1 and 2 above.

17.0 Add Subparagraph 8.3.4:

8.3.4 Where individual items or designated portions of the Work require changes in completion time, but are not interrelated with items of work governed by the Contract Time, the Architect/

Engineer and the Owner may establish by Change Order separate completion dates with separate Liquidated Damages acceptable to the Contractor and leave the Contract Time unchanged.

18.0 Add Subparagraph 8.3.5:

8.3.5 Requests for and granted extensions of time shall commence on the Contractor's scheduled date of completion unless that date and the date of substantial completion are concurrent, then the extension shall apply to the Contract Time.

19.0 Add a new Subparagraph 9.5.1.8:

9.5.1.8 This contract sum has been reduced by change order.

20.0 Add to Subparagraph 9.6.1 the following sentence:

The Owner for "**good cause**" may refuse to make payment of the full amount requested by the Contractor and recommended by the Architect/Engineer in order to protect itself from loss because of subparagraphs 9.5.1.2 through 9.5.1.8, but the Owner must give the Contractor immediate written notice (with a copy to the Architect/Engineer) stating the reasons for such action.

21.0 Add the following sentence to 9.8.3:

No adjustment in retainage will be made unless approved by the Owner.

22.0 Add the following Paragraph 9.11:

9.11 LIQUIDATED DAMAGES

9.11.1 The Contractor and the Contractor's surety, if any, shall be liable for and shall pay the Owner the sums hereinafter stipulated as liquidated damages for each calendar day of delay until the work is substantially complete. Liquidated damages set forth in the Agreement will be assessed from the Contractor's scheduled completion date, unless that date coincides with the Date of Substantial Completion, then it will be assessed from that date.

23.0 Substitute the following for Subparagraph 11.1.2:

11.1.2 The limits of liability for the insurance required by Subparagraph 11.1.1 shall provide coverage for not less than the following amounts or greater if required by law:

1. Worker's Compensation (including accident and occupational disease coverages):
   a. State: Statutory
   b. Employer's Liability:
      $ 100,000 each accident
      $ 500,000 disease-policy limit
      $ 100,000 disease-each employee
2. Comprehensive General Liability (including Premises Operations; Independent Contractors' Protective; Products and Completed Operations; Board Form Property Damage):
   a. Bodily Injury:
      $ 500,000 Per Person
      $1,000,000 Each Occurrence

b. Property Damage:
   $ 500,000 Each Occurrence
   $ 500,000 Annual Aggregate
c. Property Damage Liability Insurance shall provide X, C or coverage as applicable.

3. Comprehensive Automobile Liability:
   a. Bodily Injury:
      $ 500,000 Per Person
      $1,000,000 Each Occurrence
   b. Property Damage:
      $ 500,000 Each Occurrence
      $ 500,000 Annual Aggregate
4. Umbrella excess liability:
   $1,000,000 over primary insurance.
5. Additional named insureds: The Contractor shall have the Owner, Molzen-Corbin and its Subconsultants added as additional named insureds on the Comprehensive General Liability Form or Commercial Liability Form.

24.0 Substitute the following paragraph for Paragraph 11.3:

11.3 PROPERTY INSURANCE

11.3.1 Contractor shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof. Contractor shall be responsible for any deductible or self-insured retention. This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, Architect/Engineer, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or loss payee;
2. be written on a Builder's Risk "all-risk" policy form that shall at least include insurance for physical loss and damage to the Work, temporary buildings, falsework, and materials and equipment in transit and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage (other than that caused by flood), and such other perils or causes of loss as may be specifically required by these Supplementary Conditions.
3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Architect;
5. allow for partial utilization of the Work by Owner;
6. include testing and startup;
7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Architect with 30 days written notice to each other loss payee to whom a certificate of insurance has been issued; and

11.3.2 Contractor shall purchase and maintain such boiler and machinery insurance and any other additional property insurance required by Laws and Regulations which insurance will include the interest of Owner, Contractor, Subcontractors, Architect and the officers, directors, partners,

employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee.

11.3.3 To the extent permitted under their respective property insurance policies, the Owner and the Contractor hereby waive all rights, each against the other for damages caused by fire or other perils to the extent covered by insurance obtained pursuant to this Article or any other property insurance applicable to the Work, except such rights as they may have to the proceeds of such insurance held by the Owner as trustee. The Owner or the Contractor as appropriate shall require the Architect/Engineer, other Contractors, Subcontractors, and Subsubcontractors to similarly waive rights of subrogation of property insurance.

11.3.4 If the Owner finds it necessary to occupy or use any portion of the work prior to Substantial Completion, such occupancy or use shall not commence prior to the time mutually agreed to by the Owner and the Contractor and, if required by the applicable insurance coverage, not prior to the time the builder's risk property insurer has consented to such occupancy or use. The Contractor's consent to such occupancy or use shall not be unreasonably withheld.

25.0 Substitute the following for Paragraph 11.4:

11.4.1 The Contractor shall post a one hundred percent (100%) Performance Bond and a one hundred percent (100%) Payment Bond, forms attached hereto with amount payable conforming to the terms of the Contract. Surety shall be a company licensed to do business in the State of New Mexico and executed by such sureties as are named in the current list of Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds as published in federal circular 570 by the Audit Staff Bureau of Accounts, U.S. Treasury Department.

11.4.2 Special attention is called to the requirements of §13-4-18 through §13-4-20, NMSA 1978, regarding a Contractor who does not have his principal place of business in the State of New Mexico for all taxes due arising out of construction services rendered under the Contract.

11.4.3 The right to sue on this Bond accrues only to the Owner and the parties to whom §13-4-18 through §13-4-20, NMSA 1978, grant such right; and any such right shall be exercised only in accordance with the provisions and limitations of said statutes.

26.0 Add the following subparagraphs to Paragraph 13.5:

13.5.7 All testing required by the Contract Documents, and retesting required as a result of the failure of the first or subsequent tests, including but not limited to testing for job mix formulae and design mixes, shall be performed by a testing laboratory under the direct supervision of a registered professional engineer licensed to practiced in the State of New Mexico, and shall be paid for by the Contractor.

13.5.8 All sampling, transportation, and storage of samples, testing, and reporting shall be undertaken by representatives of the testing laboratory. No sampling, transportation, and storage of samples, nor testing, nor reporting shall be undertaken by the Architect/Engineer, the Owner, the Contractor, or the Subcontractors.

13.5.9 Two copies of all test reports shall be furnished directly to the Architect/Engineer by the testing laboratory, and one copy directly to the Owner. All test reports shall be numbered sequentially.

27.0 Delete Paragraph 13.6 in its entirety.

28.0 Delete Paragraph 13.7 in its entirety.

29.0 Add the following to paragraph 15.2.1:

15.2.1 Present claims and disputes in the form of a written request accompanied by supporting data to the Architect/Engineer for formal decision, with a copy to the other party.

30.0 In line 3 of Subparagraph 15.3.1, substitute the word "may" before "be subject…"

ADDITIONAL CONDITIONS

TABLE OF CONTENTS

1. Construction Industries Licensing Act
2. Contract Audit
3. Assignment of Antitrust Claims
4. Bribes, Gratuities, and Kickbacks
5. Non-Resident Contractor's Requirements Regarding Gross Receipts Tax Surety Bond
6. Contractor's Gross Receipts Tax Registration
7. Contracts With Nonresident Persons or Partnerships or Unadmitted Foreign Corporations, Agent for Service of Process
8. Safety Standards and Accident Prevention
9. Project Identification Sign
10. Equal Employment Opportunity
11. Debarred or Suspended Contractors
12. Builder's Risk Insurance
13. Stated Allowances
14. Minimum Wage Rates
15. Other Additional Conditions

1. CONSTRUCTION INDUSTRIES LICENSING ACT

1.1 This Contract is subject to the provisions of the New Mexico Construction Industries Licensing Act (§60-13-1 to §60-13-59 NMSA 1978), the rules and regulations of the New Mexico Construction Industries Commission and the rules, regulations and codes of the various trade boards adopted pursuant to the Construction Industries Licensing Act.

2. CONTRACT AUDIT

2.1 The Owner shall be entitled to audit the books and records of a Contractor or any Subcontractor under any negotiated Contract or subcontract other than a firm fixed-price Contract to the extent that such books and records relate to the performance of such Contract or subcontract. Such books

and records shall be maintained by the Contractor for a period of three years from the date of final payment under the prime Contract and by the Subcontractor for a period of three years from the date of final payment under the subcontract unless a shorter period is otherwise authorized by the Owner in writing (§13-1-161 NMSA 1978).

3. ASSIGNMENT OF ANTITRUST CLAIMS

3.1 All contractor, suppliers, subcontractors agree that any and all claims which it may have or may inure to it for overcharges resulting from antitrust violations as to goods, services and materials purchased in connection with this Project are hereby assigned to the Owner and the funding agency, but only to the extent that such overcharges are passed on to the Owner. It is agreed that the contractor, supplier, subcontractor or sub-subcontractor retains all rights to any such antitrust claims to the extent of any overcharges not passed on to the Owner, including the right to any treble damages attributable thereto.

4. BRIBES, GRATUITIES, AND KICKBACKS

4.1 It is illegal in this state for any public employee to solicit or accept anything of value in connection with award of this Contract and for any person to offer or pay anything of value to any such public employee (§30-24-1 through §30-24-2 NMSA 1978).

4.2 Pursuant to §13-1-191 NMSA 1978 reference is hereby made to the criminal laws of New Mexico (including §30-24-1 through §30-24-2, and §30-41-1 through §30-41-3 NMSA 1978), which prohibit bribes, kickbacks, and gratuities and violation of which constitutes a felony. Further, the Procurement Code (§13-1-28 through §13-1-199 NMSA 1978) imposes civil and criminal penalties for its violation.

5. NON-RESIDENT CONTRACTOR'S REQUIREMENTS REGARDING GROSS RECEIPTS TAX SURETY BOND

5.1 §7-1-55A NMSA 1978 provides that any person (as defined in §7-1-3 NMSA 1978) engaged in the construction business who does not have his principal place of business in New Mexico and enters into a prime construction contract to be performed in this state shall, at the time such contract is entered into, furnish the Director of the Revenue Division, Taxation and Revenue Department, or his delegate with a surety bond or other acceptable security in a sum equivalent to the gross receipts tax to be paid under the contract multiplied by the applicable rate of the gross receipts tax imposed by §7-9-4 NMSA 1978 to secure payment of the tax imposed on the gross receipts from the contract, and shall obtain a certificate from the Director of the Revenue Division, Taxation and Revenue Department, or his delegate, that the requirements of this paragraph have been met.

5.2 If the total sum to be paid under the contract is changed by ten percent or more after the date the surety bond or other acceptable security is furnished, to the Director or his delegate, such person shall increase or decrease, as the case may be, the amount of the bond or security within fourteen days after the change (§7-1-55B NMSA 1978).

5.3 In addition to the above requirements, the Contractor will be subject to all the requirements of §7-1-55 NMSA 1978.

6. CONTRACTOR'S GROSS RECEIPTS TAX REGISTRATION

6.1 §7-10-4 NMSA 1978 provides that any person (as defined in §7-10-3 NMSA 1978) performing services for the State or its political subdivisions, as those terms are used in the Gross Receipts and Compensating Tax Act (§7-10-1 through §7-10-5 NMSA 1978) must be registered and be issued an identification number with the Revenue Division of the Taxation and Revenue Department of the state to pay the gross receipts tax.

6.2 For information in obtaining the identification number contact: Revenue Division, Taxation and Revenue Department, Manuel Lujan Sr. Building, 1200 St. Francis Drive, Santa Fe, New Mexico 87503, or call (505) 988-2290.

6.3 If any person who performs services for the state or its political subdivisions is not registered to pay the gross receipts tax, the Owner shall withhold payment of the amount due until the person has presented evidence of registration with the Revenue Division to pay the gross receipts tax.

7. CONTRACTS WITH NONRESIDENT PERSONS OR PARTNERSHIPS OR UNADMITTED FOREIGN CORPORATIONS, AGENT FOR SERVICE OF PROCESS

7.1 Special attention of Contractors is called to the requirements of §13-4-21 through §13-4-24 NMSA 1978, whereby a public works contract with a nonresident person or partnership or foreign corporation not authorized to do business in the State shall contain a specific provision designating an agent resident within the State, and his address, upon whom process and writs in any action or proceeding against such business may be served in any action arising out of such contract.

8. SAFETY STANDARDS AND ACCIDENT PREVENTION

8.1 With respect to all work performed under this contract, the Contractor shall:

A. Comply with the safety standards provisions of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction" published by the **Associated General Contractors of America**, the requirements of the Occupational Safety and Health Act of 1970 (P.L. 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1518 as published in the "Federal Register", Volume 36, No. 75, Saturday, April 17, 1971.

B. Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property.

C. Maintain at his/her office or other well known place at the job site, all articles necessary for giving first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or a doctor's care of persons (including employees), who may be injured on the job site. In no case shall employees be permitted to work at a job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor's care.

9. PROJECT IDENTIFICATION SIGN

9.1 Refer to General Requirements Section 01 50 00 Temporary Facilities and Controls for applicability

10. EQUAL OPPORTUNITY

10.1 The Contractor, subcontractors, and all sub-subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin. The Contractor shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of nondiscrimination.

10.2 The Contractor, all subcontractors, and all subsubcontractors shall, in all solicitation or advertisements for employees placed by them or on their behalf, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, or national origin.

11. DEBARRED OR SUSPENDED CONTRACTORS

11.1 A business (Contractor, Subcontractor, or Supplier) that has either been debarred or suspended pursuant to the requirements of §13-1-177 through §13-1-180, and §13-4-11 through §13-4-17, NMSA 1978, shall not be permitted to do business with the Owner and shall not be considered for award of contract during the period for which it is debarred or suspended.

12. BUILDER'S RISK INSURANCE

12.1. The Contractor will maintain Builder's Risk Insurance (fire and extended coverage) on a 100 percent completed value basis on the insurable portions of the project for the benefit of the Owner, the Contractor, and all subcontractors, as their interests may appear.

13. STATED ALLOWANCES

13.1 The Contractor has included any and all Utility Service Allowances listed in General Requirements Section 01 21 00 in its Bid

13.2 The Contractor has included any and all Cash Allowances in its Bid listed in General Requirements Section 01 21 00 in its Bid:

13.2.1 The Contractor shall purchase the "Allowed Materials" as directed by the Owner through the Architect/Engineer on the basis of the lowest and best bid of at least three competitive bids. If the actual price for purchasing the "Allowed Materials" is more or less than the "Cash Allowance," the Contract Price shall be adjusted accordingly. The adjustment in Contract Price shall be made on the basis of the purchase price without additional charges for overhead, profit, insurance, or any other incidental expenses. The cost of installation of the "Allowed Materials" shall be included in the applicable section of the Specifications covering this work.

14. MINIMUM WAGE RATES

14.1 The Contractor warrants and agrees that he and all subcontractors shall comply with all applicable provisions of the New Mexico Public Works Minimum Wage Act, §13-4-11 NMSA 1978 (if the

project is over $20,000); and other statutes pertaining to public works in New Mexico. The attached Minimum Wage Rate Determinations are declared to be prevailing and apply to the construction.

14.2 Submission of weekly payroll records to the Owner and Labor Commission is mandatory. Include the decision number on Contractor's and subcontractor's payrolls. The scale of wages shall also be posted in a prominent location at the site.

14.3 In the event it is found by the Labor Commission, that any laborer or mechanic employed by the Contractor or Subcontractor on the site of the project covered by this Contract, has been or is being paid as a result of a willful violation, a rate of wages less than the rate of wages required by the Contract, the Owner may, by written notice to the Contractor and his subcontractor, if the violation involves a Subcontractor, terminate their right to proceed with the Work or such part of the Work as to which there has been a willful failure to pay the required wages and the Owner may prosecute the Work to completion by contract or otherwise, and the Contractor shall be liable to the Owner and the State of New Mexico for any excess cost occasioned thereby.

WAGE RATE REQUIREMENTS

Wage Rate Decision(s) which follow are applicable to this project

New Mexico Department of WORKFORCE SOLUTIONS

LABOR RELATIONS DIVISION

121 Tijeras Ave NE, Suite 3000
Albuquerque, NM 87102
Phone: 505-841-4400
Fax: 505-841-4424

226 South Alameda Blvd
Las Cruces, NM 88005
Phone: 575-524-6195
Fax: 575-524-6194

WWW.DWS.STATE.NM.US

1596 Pacheco St, Suite 103
Santa Fe, NM 87505
Phone: 505-827-6817
Fax: 505-827-9676

Wage Decision Approval Summary

1) Project Title: Snow Removal Equipment Bldg Modifications
Requested Date: 07/17/2019
Approved Date: 07/18/2019
Approved Wage Decision Number: SM-19-1331-B

Wage Decision Expiration Date for Bids: 11/15/2019

2) Physical Location of Jobsite for Project:
Job Site Address: Airport Road
Job Site City: Las Vegas
Job Site County: San Miguel

3) Contracting Agency Name (Department or Bureau): City of Las Vegas
Contracting Agency Contact's Name: Maria Gilvarry
Contracting Agency Contact's Phone: (505) 426-3310 Ext.

4) Estimated Bid Opening Date: 08/15/2019

5) Estimated total project cost: $
a. Are any federal funds involved?: No
b. Does this project involve a building?: Yes - 400 square foot pre-engineered metal building (PEMB) addition to the Las Vegas Municipal Airport's Snow Removal Equipment Building.
c. Is this part of a larger plan for construction on or appurtenant to the property that is subject to this project?: No
d. Are there any other Public Works Wage Decisions related to this project?: No
e. What is the ultimate purpose or functional use of the construction once it is completed?: Improvements to snow removal building at airport

6) Classifications of Construction:

Classification Type and Cost Total	Description
General Building (B) **Cost: $**	400 sq ft pre-engineered metal building (PEMB)addition to the Las Vegas Municipal Airport's Snow Removal Equipment Building. Includes selective demolition, cast-in-place concrete, overhead coiling door, PEMB insulation, PEMB Metal siding, roofing, flashings and trim, sealant, gypsum board assemblies, painting, plumbing-grease interceptor, mechanical louvers, electrical equipment relocation and new, earthwork, site grading and base course.

New Mexico Department of WORKFORCE SOLUTIONS

LABOR RELATIONS DIVISION
121 Tijeras Ave NE, Suite 3000
Albuquerque, NM 87102
Phone: 505-841-4400
Fax: 505-841-4424

WWW.DWS.STATE.NM.US

PUBLIC WORKS PROJECT REQUIREMENTS

As a participant in a Public Works project valued at more than $60,000 in the state of New Mexico, the following list addresses many of the responsibilities that are defined by statute or regulation to each project stakeholder.

Contracting Agency

- Ensure that all contractors wishing to bid on a Public Works project when the project is $60,000 or more are actively registered with the Public Works and Apprenticeship Application (PWAA) website: http://www.dws.state.nm.us/pwaa (Contractor Registration) prior to bidding.
- Please submit Notice of Award (NOA) and Subcontractor List(s) to the PWAA website promptly after the project is awarded.
- Please update the Subcontractor List(s) on the PWAA website whenever changes occur.
- All sub-contractors and tiers (excluding professional services) regardless of contract amount must be listed on the Subcontractor List and must adhere to the Public Works Minimum Wage Act.
- Ninety days after project completion please go into the PWAA system and close the project. Only contracting agencies are allowed to close the project. Agents or contractors are not allowed to close projects.

General Contractor

- Provide a complete Subcontractor List and Statements of Intent (SOI) to Pay Prevailing Wages for all contractors, regardless of amount of work, to the contracting agency within 3 (three) days of award.
- Ensure that all subcontractors wishing to bid on a Public Works project have an active Contractor Registration with the Public Works and Apprenticeship Application (PWAA) website: http://www.dws.state.nm.us/pwaa prior to bidding when their bid will exceed $60,000.
- Make certain the Public Works Apprentice and Training Act contributions are paid either to an approved Apprenticeship Program or to the Public Works Apprentice and Training Fund.
- Confirm the Wage Rate poster, provided in PWAA, is displayed at the job site in an easily accessible place.
- When the project has been completed, make sure the Affidavits of Wages Paid (AWP) are sent to the contracting agency.
- All subcontractors and tiers (excluding professional services) regardless of contract amount must pay prevailing wages, be listed on the Subcontractor List, and adhere to the Public Works Minimum Wage Act.

Subcontractor

- Ensure that all subcontractors wishing to bid on a Public Works project have an active Contractor Registration with the Public Works and Apprenticeship Application (PWAA) website: http://www.dws.state.nm.us/pwaa prior to bidding when their bid will exceed $60,000.
- Make certain the Public Works Apprentice and Training Act contributions are paid either to an approved Apprenticeship Program or to the Public Works Apprentice and Training Fund.
- All subcontractors and tiers (excluding professional services) regardless of contract amount must pay prevailing wages, be listed on the Subcontractor List, and adhere to the Public Works Minimum Wage Act.

Additional Information

Reference material and forms may be found in the New Mexico Department of Workforce Solutions Public Works web pages at: https://www.dws.state.nm.us/Labor-Relations/Labor-Information/Public-Works.

CONTACT INFORMATION

Contact the Labor Relations Division for any questions relating to Public Works projects by email at public.works@state.nm.us or call (505) 841-4400.

Type "B" - GENERAL BUILDING
Effective January 1, 2019

	Base Rate	Fringe Rate	Apprenticeship
Asbestos Worker - Heat & Frost Insulator	32.01	11.11	0.60
Boilermaker	34.97	27.35	0.60
Bricklayer/Blocklayer/ Stonemason	23.78	8.34	0.60
Carpenter/Lather	24.08	10.34	0.60
Cement Mason	20.71	9.78	0.60
Electricians-Outside Classifications			
Groundman	22.81	11.93	0.60
Equipment Operator	32.73	14.51	0.60
Lineman/Tech	38.51	16.02	0.60
Cable Splicer	42.36	17.01	0.60
Inside Classifications			
Wireman/Technician	31.55	10.75	0.60
Cable Splicer	34.71	10.84	0.60
Low-voltage Installer/Technician	28.95	7.52	0.60
Elevator Constructor	42.41	33.51	0.60
Elevator Constructor Helper	33.93	33.51	0.60
Glazier	20.25	5.05	0.60
Ironworker	26.50	15.56	0.60
Painter (Brush/Roller/Spray)	17.00	6.38	0.60
Paper Hanger	17.00	6.38	0.60
Drywall Finisher/Taper	24.08	10.34	0.60
Plasterer	22.42	8.16	0.60
Plumber/Pipefitter	29.45	11.52	0.60
Roofer	24.49	7.80	0.60
Sheetmetal Worker	30.28	16.60	0.60
Soft Floor Layer	20.71	9.78	0.60
Sprinkler Fitter	30.90	20.47	0.60
Tile Setter	23.52	8.10	0.60
Tile Setter Helper/Finisher	15.85	8.34	0.60
Laborers			
Group I	16.09	5.93	0.60
Group II	17.25	5.93	0.60
Group III	18.25	5.93	0.60
Group IV	20.25	5.93	0.60
Operators			
Group I	20.63	6.87	0.60
Group II	22.74	6.87	0.60
Group III	23.19	6.87	0.60
Group IV	23.62	6.87	0.60
Group V	23.80	6.87	0.60
Group VI	24.01	6.87	0.60
Group VII	24.12	6.87	0.60
Group VIII	27.08	6.87	0.60
Group IX	29.41	6.87	0.60
Group X	32.73	6.87	0.60
Truck Drivers			
Group I	14.76	6.25	0.60
Group II	15.00	6.25	0.60
Group III	15.50	6.25	0.60
Group IV	15.51	6.25	0.60
Group V	15.60	6.25	0.60
Group VI	15.75	6.25	0.60
Group VII	15.90	6.25	0.60
Group VIII	16.11	6.25	0.60
Group IX	16.32	6.25	0.60

NOTE: All Contractors are required to pay SUBSISTENCE, ZONE AND INCENTIVE PAY according to the particular trade. Details are located in a PDF attachment at WWW.DWS.STATE.NM.US. Search Labor Relations/Labor Information/Public Works/Prevailing Wage Rates.

SECTION 01 10 00

SUMMARY

PART 1 GENERAL

1.01 SPECIFICATION FORMATS AND CONVENTIONS

A. Specification Format: The Specifications are organized into Divisions and Sections using the 49-division format and CSI/CSC's "MasterFormat 2011" numbering system.

B. DIVISION 01 GENERAL REQUIREMENTS apply to Work of all Specification Sections.
   1. PART 1 GENERAL of each specification section contains requirements which pertain only to that section.

C. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions include:
   1. Abbreviated Language: Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
   2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
   3. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
   4. The word "provide" means to furnish and install, complete and ready for use.

1.02 SUMMARY BY REFERENCED

A. Work of the Contract can be summarized by references to the Contract, General Conditions, Supplementary Conditions, Specification Sections, Drawings, Addenda and Modifications to the Contract Documents issued subsequent to the initial printing of this Project Manual and including, but not necessarily limited to, printed material referenced by any of these. It is recognized that work of the Contract is also unavoidably affected or influenced by governing regulations, natural phenomenon, including weather conditions and other forces outside the Contract Documents.

1.03 WORK COVERED BY CONTRACT DOCUMENTS

A. Project will be constructed under a general construction contract.

B. The Project consists of a 400 square foot Pre-Engineered Metal Building (PEMB) addition to the Las Vegas Municipal Airport's Snow Removal Equipment Building. includes Selective Demolition, Cast-In-Place Concrete, Overhead Coiling Door, PEMB Insulation, PEMB Metal Siding, Roofing, Flashings and Trim; Sealant, Gypsum Board Assemblies, Painting, Plumbing-Grease interceptor, Mechanical louvers, Electrical equipment relocation and new, Earthwork, Site grading and base course.

C. The Work consists of a Base Bid. The Base Bid includes the elements of construction shown on the drawings and specified herein to construct a complete and operational project.

1.04 CONTRACTOR'S RESPONSIBILITIES

A. The awarded Contractor must have a minimum of 5 years experience as the General Contractor of Commercial Building Construction projects similar in complexity and size under the present firm or trade name.

B. Except as noted, provide and pay for all labor, materials, and equipment.

C. Pay required sales, gross receipts, and other taxes. Owner will pay Contractor applicable New Mexico gross receipts tax including local option tax and any increase in tax becoming effective after Contract date.

D. Secure and pay for permits, fees, and licenses necessary for execution of Work as applicable at time of receipt of bids or as otherwise required in other sections of the Specifications.

E. Give required notices.

F. Comply with codes, ordinances, regulations, and other legal requirements of public authorities which bear on performance of Work.

G. Request required inspections from public authorities, correct any noted deficiencies, and obtain certifications of satisfactory inspection. Deliver certificates to Owner in accordance with the Closeout Submittals Section.

1.05 USE OF THE PREMISES

A. Owner will occupy site and existing building during entire construction period.
   1. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage.
   2. Perform the Work so as not to interfere with Owner's operations.
   3. Maintain existing building in a weathertight condition throughout construction period. Repair damage caused by construction operations.
   4. Protect building and its occupants during construction period.

B. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the Work is indicated.

1. Limits: Confine constructions operations to area designated on drawings
2. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
    a. Schedule deliveries to minimize use of driveways and entrances.
    b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 21 00

ALLOWANCES

PART 1 GENERAL

1.01 DESCRIPTION

A. This Section includes administrative and procedural requirements governing Utility Service Allowances. Each Utility Service Allowance is a sum of money included in the Contract Price to cover the cost of a service, all inclusive, to be provided under the Contract by a party other than the Contractor.
   1. The Contractor will be reimbursed only for the costs invoiced by the party providing the service and no mark up, such as overhead and profit, shall be charged by the Contractor. Actual services may be less than, equal to, or greater than, the estimated allowance amount. Contractor will be paid only the actual cost of the services.
   2. Contractor costs to integrate the work of a Utility Service Provider are not included in Utility Service Allowances.

B. Submit proposals for purchases of services scheduled below in the form specified for Change Orders.
   1. Submit invoices or delivery slips to show actual costs for services provided, delivered and installed.
   2. At project closeout, credit unused allowance amounts to the Owner and charge for overage amounts by Change Order.

1.02 SCHEDULE OF VALUES

A. Include each item in Schedule of Values as a line item, listing amount of Allowances specified in this section.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 ALLOWANCE SCHEDULE

A. Utility Service Allowances Schedule:
   1. Relocation of Underground Utilities: Allow the amount of $ 0.00 .
   2. Electric Service: Allow the amount of $ 0.00 .
   3. Gas Service: Allow the amount of $ 0.00 .
   4. Water Service: Allow the amount of $ 0.00 .
   5. Sewer Service: Allow the amount of $ 0.00 .

END OF SECTION

SECTION 01 25 00

SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. Section includes general requirements applicable to substitutions of materials, products, equipment and systems.

B. Substitution Requests:
1. No product is "approved" for Substitution prior to Bid. The Contract is based on material and equipment specified in the Specifications or described in the Drawings without consideration of possible substitute or "or-equal" items.
2. Where indicated that substitute or "or-equal" item of material or equipment may be furnished or used if acceptable to the A/E, application for such acceptance shall not be considered until after the effective date of the Contract.
3. Submit written requests for Product Substitution along with a copy of the **SUBSTITUTION REQUEST FORM** following this Section, after award of the Contract for Construction and within 30 days after Notice to Proceed.

1.02 SUBSTITUTION OF MATERIALS AND EQUIPMENT

A. Substitutions, General: Catalog numbers and specific brands or trade names are used in materials, products, equipment and systems required by the Specifications to establish the standards of quality, utility and appearance required. Alternative products which are of equal quality and of required characteristics for the purpose intended may be proposed for use provided the Contractor complies with provisions of Contract General Conditions subject to the following provisions:
1. See Section 01 60 00: Basic Product Requirements for requirements regarding product options.
2. Substitutions will only be authorized by properly executed Change Order or Field Instruction.
3. Substitutions shall be considered when a product becomes unavailable through no fault of Contractor.
4. Owner has no obligation to entertain substitutions.

B. Substitution Provisions:
1. Documentation: Substitutions will not be considered if they are indicated or implied on shop drawing, product data or sample submittals. All requests for substitution shall be by separate written request from Contractor. See paragraph below for documentation required in the submission of request for substitution.
2. Cost and Time Considerations: Substitutions will not be considered unless a net reduction in Contract Sum or Contract Time results to Owner's benefit, including redesign costs, life cycle costs, plan check and permit fees, changes in related Work and overall performance of building systems.

3. Design Revision: Substitutions will not be considered if acceptance will require substantial revision of the Contract Documents or will substantially change the intent of the design, in the opinion of the A/E. The intent of the design shall include functional performance and aesthetic qualities.
4. Data: It shall be the responsibility of the Contractor to provide adequate data demonstrating the merits of the proposed substitution, including cost data and information regarding changes in related Work.
5. Determination by A/E: A/E will determine the acceptability of proposed substitutions and will notify Contractor in writing of acceptance or rejection. The determination by the A/E regarding functional performance and aesthetic quality shall be final.
6. Non-Acceptance: If a proposed substitution is not accepted, Contractor shall immediately provide the specified product.
7. Substitution Limitation: Only one request for substitution will be considered for each product.

C. Request for Substitution Procedures: Comply with provisions of Contract General Conditions and the following.
1. Contractor shall prepare a request for substitution and submit the request to A/E for review and recommendation for acceptance. Acceptance and approval of substitutions shall be by A/E.
   a. Present the request for substitution using form provided by A/E.
   b. Comply with other administrative requirements shall be as directed by Owner's Representative.
2. Substitution requests shall include complete product data, including drawings and descriptions of products, fabrication details and installation procedures. Include samples where applicable or requested.
3. Substitution requests shall include appropriate product data for the specified product(s) of the specified manufacturer, suitable for use in comparison of characteristics of products.
   a. Include a written, point-by-point comparison of characteristics of the proposed substitute product with those of the specified product.
   b. Include a detailed description, in written or graphic form as appropriate, indicating all necessary changes or modifications needed to other elements of the Work, which will be performed by the Contractor at no additional expense to the Owner, if the proposed substitution is accepted.
4. Substitution requests shall include a statement indicating the substitution's effect on the Construction Schedule. Indicate the effect of the proposed substitution on overall Contract Time and, as applicable, on completion of portions of the Work for use by Owner.
5. Except as otherwise specified, substitution requests shall include detailed cost data, including a proposal for the net change, if any, in the Contract Sum.
6. Substitution requests shall include signed certification that the Contractor has reviewed the proposed substitution and has determined that the substitution, in combination with the cost or time savings, represents an equivalent or superior condition in every respect to product requirements and value indicated or specified in the Contract Documents, and that the substitution is suited for and

can perform the purpose or application of the specified product indicated or specified in the Contract Documents.

7. Substitution requests shall include a signed waiver by the Contractor for change in the Contract Time or Contract Sum because of the following:
   a. Substitution failed to perform adequately.
   b. Substitution required changes in on other elements of the Work.
   c. Substitution caused problems in interfacing with other elements of the Work.
   d. Substitution was determined to be unacceptable by authorities having jurisdiction.
8. A request constitutes a representation that Contractor:
   a. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
   b. Will provide same warranty for Substitution as for specified product.
   c. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
9. If, in the opinion of the A/E, the substitution request is incomplete or has insufficient data to enable a full and thorough review of the intended substitution, the substitution may be summarily refused and determined to be unacceptable.

D. Contract Document Revisions:
   1. Should a Contractor-proposed substitution or alternative sequence or method of construction require revision of the Contract Drawings or Specifications, including revisions for the purposes of determining feasibility, scope or cost, or revisions for the purpose of obtaining review and approval by authorities having jurisdiction, A/E will make revisions as approved in writing in advance by Owner.
   2. Contractor shall pay for services of A/E for researching and reporting on proposed substitutions or alternative sequence and method of construction when such activities are considered additional services to the design services contracts of A/E.
   3. Contractor shall pay for costs of expenses incurred by A/E. These costs may include travel, reproduction, long distance telephone and shipping costs reimbursable at cost plus usual and customary mark-up for handling and billing.
   4. Contractor shall pay such fees whether or not the proposed substitution or alternative sequence or method of construction is ultimately accepted by Owner and a Change Order executed.

PART 2 PRODUCTS (NOT APPLICABLE TO THIS SECTION).

PART 3 EXECUTION (NOT APPLICABLE TO THIS SECTION).

END OF SECTION

SUBSTITUTION REQUEST - After Award of Contract		
Project: Snow Removal Equipment Building Modifications		**Substitution Request Number:**
Re:		**Date:**
From:		**A/E Project Number:**
To:		
Specification Title:		**Description:**
Section:	**Page:**	**Article/Paragraph:**

Proposed Substitution:		
Manufacturer:	Address:	Phone:
Trade Name:		Model No.:
Installer:	Address:	Phone:
History: ☐ New product ☐ 1-4 years old ☐ 5-10 years old ☐ More than 10 years old		
Differences between proposed substitution and specified:		
☐ Point-by-point comparative data attached — **REQUIRED BY A/E**		

Reason for not providing specified item:	
Similar Installation:	
Project:	Architect:
Address:	Owner:
	Date Installed:
Proposed substitution affects other parts of Work: ☐ No ☐ Yes	
Explain	

Savings to Owner for accepting substitution: _____ ($_____)
Proposed substitution changes Contract Time: ☐ No ☐ Yes [Add] [Deduct] _____ days
Supporting Data Attached: ☐ Drawings ☐ Product ☐ Data ☐ Samples ☐ Tests ☐ Reports

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The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete and credit will be due to the Owner. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by:

Signed by:

Firm:

Address:

Telephone:

Attachments:

A/E's REVIEW AND ACTION

☐ Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.

☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.

☐ Substitution rejected - Use specified materials

☐ Substitution Request received too late - Use specified materials.

Signed by: Date:

Additional Comments: ☐Contractor ☐Subcontractor ☐Supplier ☐Manufacturer ☐A/E

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SECTION 01 26 00

CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Section includes:
   1. Change Procedures.
   2. Proposal Requests.
   3. Effect of Change on Schedule.
   4. Correlation of Contractor Submittals.

1.02 CHANGE PROCEDURES

A. Minor Changes in the Work:
   1. AIA Form G710.
   2. The A/E issues Supplemental Instructions to the Contractor for minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time.

B. Construction Change Directive:
   1. AIA Form G714.
   2. A/E issues Construction Change Directive which describes changes in the Work and designates methods for determining changes in Contract Sum or Contract Time.
   3. Contractor proceeds with changes in the Work for subsequent inclusion in a Change Order.
   4. Documentation:
      a. Document each quotation for change in cost or time with sufficient data to allow evaluation of quotation.
      b. Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
      c. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

C. Change Orders:
   1. AIA Form G701.
   2. Execution: A/E will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
   3. Reservation of Rights: An executed change order represents full and final settlement of all claims arising out of a modification including all claims for delays and disruptions resulting from, caused by, or incident to such modifications.

D. Provide A/E with name of individual authorized to receive change documents, and responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.

1.03 PROPOSAL REQUESTS

A. The A/E may issue a Proposal Request including a detailed description of proposed change with supplementary or revised Drawings and specifications for executing the change.

B. The Contractor may propose changes by submitting a request for change to A/E, describing proposed change and its full effect on the Work.
   1. Include a statement describing reason for the change, and effect on Contract Sum/Price and Contract Time with full documentation and a statement describing effect on Work by separate or other Contractors as described in previous paragraph.
   2. Document requested substitutions in accordance with Section 01 25 00 – Product Requirements.

C. Proposal Format:
   1. Within 10 days, Contractor will prepare and submit a Proposal Worksheet using Work Breakdown Detail and Summary forms following this Section.
      a. For each Element of Work, calculate additions showing:
         1) Description and quantity.
         2) Material cost including delivery charges.
         3) Labor cost directly attributable to the change.
         4) Equipment rental cost.
         5) Subtotal.
      b. For each Element of Work, calculate deductions showing:
         1) Description and quantity.
         2) Material cost including delivery charges.
         3) Labor cost directly attributable to the change.
         4) Equipment rental cost.
         5) Subtotal.
      c. Subcontractor's net change in cost.
      d. Subcontractor's OH&P at percentage stipulated in Conditions of the Contract.
      e. Subcontractor's Bond.
      f. Subcontractor's Total.
      g. Contractor's OH&P at percentage stipulated in Conditions of the Contract.
      h. Contractor's Bond.
      i. Contractor's Insurance.
      j. Applicable Tax.
      k. Contractor's Total.

1.04 EFFECT OF CHANGE ON SCHEDULE

A. With proposal, include an updated Contractor's Construction Schedule that indicates the effect of the change, including but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

B. No change order request may include additional time required to perform the work, or additional supervision costs unless the additional work is shown to affect the critical path of the project.

1.05 CORRELATION OF CONTRACTOR SUBMITTALS

A. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.

B. Promptly revise progress schedules to reflect change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.

C. Promptly enter changes in Project Record Documents.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

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CHANGE ORDER REQUEST (PROPOSAL)

Project:	**From:**
Date:	**Re:**
Change Order Request Number	**Project Number:**

This Change Order Request (C.O.R.) contains an itemized quotation for changes in the Contract Sum or Contract Time in response to proposed modifications to the Contract Documents based on Proposal Request No. _____ .

Description of Proposed Change:

Attached supporting information from: ☐Subcontractor ☐Supplier _____ ☐ _____

Reason for Change:

Does Proposed Change involve a change in Contract Sum? ☐ No ☐ Yes [Increase] [Decrease_____

Does Proposed Change involve a change in Contract Time? ☐ No ☐ Yes [Increase] [Decrease] _____days

Attached pages: ☐ Proposal Worksheet Summary:
☐ Proposal Worksheet Detail(s):

Signed by: **Date:**

Copies: ☐Owner ☐Consultants ☐ _____ ☐ _____ ☐ _____ ☐File

CHANGE ORDER PROPOSAL WORKSHEET DETAIL

Project:	**From:**
Date:	**Re:**
Change Order Request Number	**Project Number:**
Worksheet No	

Complete this Worksheet for each element of Work

ADDITIONS

			Unit Prices		**Subtotals**		**Total**
Item	**Description**	**Qty**	**Materials**	**Labor**	**Materials**	**Labor**	
1							
2							
3							
4							
5							
Subtotal (Enter this number on Worksheet Summary)							

DEDUCTIONS

			Unit Prices		**Subtotals**		**Total**
Item	**Description**	**Qty**	**Materials**	**Labor**	**Materials**	**Labor**	
1							
2							
3							
4							
5							
Subtotal (Enter this number on Worksheet Summary)							

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CHANGE ORDER PROPOSAL WORKSHEET SUMMARY

Project:	**From:**
Date:	**Re:**
Change Order Request Number	**Project Number:**

Enter Worksheet Detail Information below

ADDITIONS

Item	Sheet	Description	Material	Labor	Equipment	Subtotal
1						
2						
3						
4						
5						
6						
7						
		Subtotal				

DEDUCTIONS

Item	Sheet	Description	Material	Labor	Equipment	Subtotal
1						
2						
3						
4						
5						
6						
7						
		Subtotal				

Subcontractor's Net: _____

Subcontractor's OH&P and Bond: _____

Subcontractor's Total: $ _____

Contractor's OH&P and Bond: _____

Insurance: _____

Contractor's Subtotal: $ _____

NM Gross Receipts Tax: _____

WORKSHEET TOTAL $ _____

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SECTION 01 29 00

PAYMENT PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Schedule of values.

B. Applications for payment.

C. Defect Assessment.

1.02 SCHEDULE OF VALUES

A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule:
   1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including Submittals Schedule and Application for Payment forms with Continuation Sheets.
   2. Submit the Schedule of Values to A/E at earliest possible date but no later than seven (7) days before the date scheduled for submittal of initial Applications for Payment.

B. Submit printed schedule on AIA Form G703 - Continuation Sheet for G702.

C. Format: Utilize Table of Contents of this Project Manual. Identify each line item with number and title of major specification Section. Identify site mobilization, bonds, and insurance.

D. Include in each line item, amount of Allowances specified in this section.

E. Include in each line item, amount of Alternates specified in this section.

F. Include separately from each line item, direct proportional amount of Close-out.

G. Revise schedule to list approved Change Orders with each Application for Payment.

1.03 APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments as certified by A/E and paid for by Owner.
   1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.

B. Submit five (5) signed and notarized copies of each application on AIA Form G702 - Application and Certificate for Payment and AIA G703 - Continuation Sheet for G702.
   1. One (1) copy shall include waivers of lien and similar attachments if required.

C. Content and Format:
   1. Utilize Schedule of Values for listing items in Application for Payment.
   2. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor.
   3. A/E will return incomplete applications without action.

D. Submit updated construction schedule with each Application for Payment.

E. Payment Period: Submit at intervals stipulated in the Agreement.

F. Submit with transmittal letter as specified for Submittals in Section 01 33 00 - Submittal Procedures.

G. Substantiating Data: When A/E requires substantiating information, submit data justifying dollar amounts in question. Include the following with Application for Payment:
   1. Current construction photographs.
   2. Record documents for review by Owner which will be returned to Contractor.
   3. Affidavits attesting to off-site stored products.
   4. Construction progress schedules, revised and current.

H. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.

I. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
   1. List of subcontractors.
   2. Schedule of Values.
   3. Contractor's Construction Schedule (preliminary if not final).
   4. Submittals Schedule (preliminary if not final).
   5. List of Contractor's staff assignments.
   6. Certificates of insurance and insurance policies.
   7. Performance and payment bonds.

J. Application for Payment at Substantial Completion:
   1. Submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
   2. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
   3. Reflect Certificates of Partial Substantial Completion issued in Application for Payment.

K. Final Payment Application:
   1. Submit final Application for Payment with releases and remainder of supporting documentation , including, but not limited, to the following:
      a. Proof that taxes, fees, and similar obligations were paid.
      b. Updated final statement, accounting for final changes to the Contract Sum.
      c. Final waivers from every entity involved with performance of the Work who is lawfully entitled to a lien. Evidence that claims have been settled.
      d. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims", 2 copies.
      e. AIA Document G706A, "Contractor's Affidavit of Release of Liens", 2 copies.
      f. AIA Document G707, "Consent of Surety to Final Payment", 2 copies
   2. Refer to Section 01 77 00 Closeout Procedures, for final completion requirements.

1.04 DEFECT ASSESSMENT

A. Replace the Work, or portions of the Work, not conforming to specified requirements.

B. If, in the opinion of the A/E it is not practical to remove and replace the Work, the A/E will direct appropriate remedy or adjust payment.

C. At the discretion of the A/E:
   1. The defective Work may remain, but unit sum/price will be adjusted to new sum/price or,
   2. Defective Work will be partially repaired to instructions of A/E and unit sum/price will be adjusted to new sum/price.

D. Authority of A/E to assess defects and identify payment adjustments is final.

E. Non-Payment For Rejected Products: Payment will not be made for rejected products for any of the following:
   1. Products wasted or disposed of in a manner that is not acceptable.
   2. Products determined as unacceptable before or after placement.
   3. Loading, hauling, and disposing of rejected products.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 31 00

PROJECT MANAGEMENT AND COORDINATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Project Coordination.

B. Preconstruction meeting.

C. Progress meetings.

D. Pre-installation meetings.

E. Requests for Interpretation (RFIs).

1.02 PROJECT COORDINATION

A. Coordinate scheduling, submittals, and Work of various sections of Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later where indicated on the Drawings.

B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.

C. Coordinate space requirements, supports, and installation of mechanical and electrical Work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

D. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within construction. Consider finish elements when locating fixtures and outlets to minimize disruption to finish elements. Verify locations with Architect before installation.

E. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion and for portions of Work designated for Owner's partial and full occupancy.

F. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.03 PRECONSTRUCTION MEETING

A. A/E will schedule meeting after Notice of Award.

B. Attendance Required: Owner, A/E, Contractor, and major subcontractors.

C. Agenda:
1. Execution of Owner-Contractor Agreement.
2. Submission of executed bonds and insurance certificates.
3. Distribution of Contract Documents.
4. Submission of Schedule of Values and Submittals Schedule.
5. Designation of personnel representing parties in Contract and A/E.
6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
7. Scheduling.
8. Testing, Inspecting and Laboratory Services.
9. Use of premises by Owner and Contractor.
10. Owner's requirements and partial occupancy.
11. Construction facilities and controls.
12. Temporary utilities.
13. Security and housekeeping procedures.
14. Procedures for maintaining record documents.

D. Minutes shall be distributed within one week after meeting to participants.

1.04 PROGRESS MEETINGS

A. Schedule and administer meetings throughout progress of the Work at maximum bi-monthly intervals.

B. Make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.

C. Attendance Required: Job superintendent, major subcontractors and suppliers, A/E, and others as appropriate to agenda topics for each meeting.

D. Agenda:
1. Review minutes of previous meetings.
2. Review of Work progress.
3. Field observations, problems, and decisions.
4. Identification of problems and Requests for information impeding planned progress.
5. Review of submittals schedule and status of submittals.

6. Review of off-site fabrication and delivery schedules.
7. Maintenance of progress schedule.
8. Corrective measures to regain projected schedules.
9. Planned progress during succeeding work period.
10. Coordination of projected progress.
11. Maintenance of quality and work standards.
12. Effect of proposed changes on progress schedule and coordination.
13. Other business relating to Work.

E. Record minutes and distribute copies within one week after meeting to participants, with copies to A/E, Owner, and those affected by decisions made.

1.05 PRE-INSTALLATION MEETINGS

A. Coordination meeting required for complex items requiring coordination and understanding among several participants.
1. Hold meetings when required in individual specification sections or the Contractor deems necessary. Meetings shall focus on specific concerns and do not relieve the Contractor of the responsibility to coordinate the Work when a pre-installation meeting is not required by a Section.
2. Hold meetings in which all trades responsible for the various assemblies of a component of the Work meet before the work begins, to discuss how each aspect is to be coordinated with other adjacent construction so that the responsibilities for installation of various components and progression of the work is clearly understood.
3. Convene pre-installation meetings at Project site prior to commencing work of specific section.

B. Require attendance of parties directly affecting, or affected by Work of specific section.

C. Notify A/E in advance of meeting date.

D. Prepare agenda and preside at meeting:
1. Review conditions of installation, preparation and installation procedures.
2. Review coordination with related work.

E. Record minutes and distribute copies within one week after meeting to participants, with copies to A/E, Owner, and those affected by decisions made.

1.06 REQUESTS FOR INTERPRETATIONS

A. Definition: Request from Contractor seeking interpretation or clarification of the contract Documents.

B. Procedure: Immediately on discovery of the need for interpretation of the contract Documents, and if not possible to request interpretation at the Progress meeting. Prepare and submit an RFI in the form specified.
   1. RFIs shall originate with the Contractor. RFIs submitted by entities other than the Contractor will be returned to the Contractor with no response.
   2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.

C. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
   1. Project name.
   2. Date.
   3. Name and trade of entity seeking interpretation.
   4. RFI number, numbered sequentially.
   5. Specification Section number and title and related paragraphs as appropriate.
   6. Drawing number and detail references, as appropriate.
   7. Field dimensions and conditions, as appropriate.
   8. Contractor's suggested solution(s). If Contractor's solution(s) impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI
   9. Attachments: include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
      a. Supplementary drawings prepared by the Contractor shall include dimensions, thicknesses, and details of affected materials, assemblies and attachments.

D. RFI Form: Software generated form provided by the A/E or Contractor's approved form.
   1. Attachments shall be electronic files in Adobe Acrobat PDF format.

E. A/E's action may include a request for additional information.

F. A/E's action which may result in a change to the Contact Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Contract Modifications Procedures Section.
   1. If so, notify A/E in writing within 10 days of receipt of RFI response.

G. On receipt of A/E's action, update RFI log and immediately distribute the RFI response to affected parties. Review response and notify A/E within 7 days if Contractor disagrees with response.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 32 00

CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.01 SUMMARY

A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
   1. Construction Progress Schedule.
   2. Submittals Schedule.
   3. Construction Progress Reporting.

1.02 CONTRACTOR'S PROGRESS SCHEDULE

A. Format: Horizontal bar chart:
   1. Approximate sheet size: 17 by 28 inches.
   2. Provide separate bar for each major item of Work. Arrange in sequence and identify bars with specification section numbers and titles from Project Manual Table of Contents.
   3. Horizontal scale: Time with first work day of each month identified. Adjust scale to show entire construction period plus extensions.
   4. Vertical spacing: Allow space for notations and revisions.

B. Show complete sequence of construction by activity. Indicate:
   1. Dates for beginning and completion of each construction item.
   2. Projected percentage of completion for each item as of first work day of each month and mid-month (each 15 days).
   3. Projected percentage of completion for total Work as of first day of each month.
   4. Work of separate construction phases.
   5. Required delivery dates for Owner furnished products and required completion dates for work by others.
   6. Required dates for return of specific submittals and for selection of finishes.

C. Procedures:
   1. Submit for review by A/E three (3) copies of preliminary Progress Schedule within 20 days of date of Agreement between Owner and Contractor but no later than submission of first payment application.
   2. Revise to address review comments and resubmit.
   3. Update Progress Schedule and submit three (3) copies with each Application for Payment.
      a. Identify progress of each activity to date of submittal and projected completion date.

b. Show activities modified since last submittal and other identifiable changes.

c. Provide narrative report as needed to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken or proposed and its effect.

D. Use: The Contractor shall endeavor to manage the work in accordance with the scheduling indicated by the first approved Progress Schedule. The intent is to promote good job management, not rigidly bind the Contractor to a planned procedure. For this reason, finish activities such as painting or laying of carpet must not be scheduled concurrently with finish plastering or door installation. The Contractor shall use special care to coordinate efforts of various subcontractors, especially mechanical and electrical, to assure proper completion of their work ahead of general finish operations.

E. Coordinate Contractor's Progress Schedule with the Schedule of Values, Submittals Schedule, payment requests, and other required schedules and reports.

F. No contract work shall be done without an A/E approved progress schedule. The items in the activities for the denoted critical path will determine the controlling operations of the work.

G. During the life of the project, the Contractor shall review the progress schedule with the A/E at the regularly scheduled Progress Meetings unless otherwise specified. The Contractor shall submit a revised progress schedule within 5 working days of the review meeting if the Contractor is behind schedule or if the schedule has been modified. Revised progress schedules must be submitted to and approved by the A/E.

H. If the Contractor deviates from the currently approved progress schedule by not following the logical sequence of the critical path, payment will be withheld for the pay items for the affected activities until the Contractor submits a revised progress schedule and this schedule is approved by the A/E.

I. Reporting: Each month with the Request of Payment, submit a copy of the current Progress Schedule marked to show actual percentage of completion for each category of work, as well as the aggregate percentage of completion.

J. Behind Schedule Progress: If the actual progress curve at any time falls more than 10% behind the proposed curve, the Contractor shall promptly take the steps necessary to get the work back on schedule. It is emphasized that the purpose of this scheduling is to assure orderly management of the project and the pushing of finish activities into areas where rough activities are not completed shall not be tolerated. Neither shall last minute rush scheduling be permitted to enable the Contractor to finish on time if it involves poor construction procedures.

1.03 SUBMITTALS SCHEDULE

A. The Contractor shall prepare and keep current, for the A/E's review, a schedule of submittals which is coordinated with the Contractor's construction schedule and allows the A/E reasonable time to review submittals.

B. Submit three (3) copies of schedule arranged in chronological order by dates required to maintain progress schedule. List the following information in a tabular format and include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates:
   1. Scheduled date for first submittal.
   2. Specification Section number and title.
   3. Name of subcontractor.
   4. Description of the Work covered.

1.04 CONSTRUCTION PROGRESS REPORTING

A. Submit three (3) copies at time of discovery of Conditions affecting Construction Progress.
   1. Immediately on discovery of a difference between field conditions and the Contract Documents, prepare a detailed report.
   2. Submit report with a request for information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. This Section includes administrative and procedural requirements for submitting Construction Submittals.

B. Related Sections requiring submittals:
1. Section 01 25 00 - Substitution Procedures.
2. Section 01 29 00 - Payment Procedures.
3. Section 01 32 00 - Construction Progress Documentation.
4. Section 01 43 00 - Quality Assurance.
5. Section 01 45 00 - Quality Control.
6. Section 01 60 00 - Product Requirements.
7. Section 01 70 00 - Execution Requirements.
8. Section 01 77 00 - Closeout Procedures.
9. Section 01 78 00 - Closeout Submittals.

1.02 SUBMITTAL TYPES NOT INCLUDED IN THIS SECTION

A. Preconstruction Submittals:
1. Certificates of insurance.
2. Payment and performance bonds.
3. Proposed subcontractor and product lists.
4. Preliminary construction progress schedule.
5. Proposed use of the site and site logistics, including signage.

B. Closeout Submittals:
1. Written notices of substantial and final completion.
2. Final application for payment.
3. Record documents: Record drawings and specifications, addenda, change orders, field orders.
4. O&M data.
5. Spare parts and maintenance materials.
6. Certificates of payment.
7. Release of liens and waiver of debts and claims.
8. Consent of surety to final payment.
9. Executed Warranties.
10. Keying.
11. Materials, Extra Stock and Tools.

1.03 CONSTRUCTION SUBMITTALS

A. Work-related Action and Informational submittals of this section are categorized as follows:

1. Shop drawings include specially-prepared technical data for this project, including drawings, diagrams, performance curves, data sheets, schedules, templates, patterns, reports, calculations, instructions, measurements and similar information not in standard printed form for general application to a range of similar projects.
2. Product data include standard printed information on materials, products and systems; not specially-prepared for this project, other than the designation of selections from among available choices printed therein.
3. Samples include both fabricated and unfabricated physical examples of materials, products and units of work; both as complete units and as smaller portions of units of work; either from limited visual inspection or (where indicated) for more detailed testing and analysis.
   a. Samples shall be supplied for use by the A/E, and unless specifically requested on the Contractor's cover sheet, will not be returned to the Contractor.
   b. Mock-ups are a special form of samples, which are too large or otherwise inconvenient for handling in specified manner for transmittal of sample submittals.
4. Design Data Design calculations, mix designs, analyses or other data pertaining to a part of work.
5. Certificates and Letters of Certification:
   a. Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.
   b. Document required of Contractor, or of a manufacturer, supplier, installer or Subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.
6. Sample Warranties.
7. Manufacturer's Installation Instructions include preprinted material describing installation of a product, system or material, including special notices and concerning impedances, hazards and safety precautions.

B. QA/ QC and Informational Submittals are categorized as follows and may be delivered in electronic format if desired.

1. Test reports.

2. Manufacturer's field reports:
   a. Documentation of the testing and verification actions taken by manufacturer's representative at the job site, in the vicinity of the job site, or on a sample taken from the job site, on a portion of the work, during or after installation, to confirm compliance with manufacturer's standards or instructions.
   b. The documentation must be signed by an authorized official of a testing laboratory or agency and must state the test results; and indicate whether the material, product, or system has passed or failed the test.
3. Construction photographs.
4. Draft Applications for Payment.
5. Schedule of values.
6. Construction progress schedules.

C. Individual submittal requirements are specified in applicable sections for each unit of work.

1.04 SUBMITTAL GENERAL REQUIREMENTS

A. Submittals Schedule: Comply with requirements of Division 1 Section "Progress Schedule" for list of submittals and time requirements for scheduled performance of related construction activities.

B. Coordination and Sequencing: Coordinate preparation and processing of submittals with performance of the work so that work will not be delayed by submittals. Coordinate and sequence different categories of submittals for same work, and for interfacing units of work, so that one will not be delayed for coordination of A/E's review with another.

C. Processing Time: Allow enough time for submittal review including time for resubmittals. Time for review shall commence on A/E's receipt of submittal.

D. Submittal Log: The Contractor shall generate and maintain a submittal log which shall include:
   1. Every section requiring submittals.
   2. Category of submittal required for each section.
   3. Status of each category.

1.05 PREPARATION OF SUBMITTALS

A. Shop Drawings:
   1. Provide newly-prepared information, on reproducible sheets, with graphic information at accurate scale (except as otherwise indicated), with name of preparer indicated (firm name).
   2. Show dimensions and note which are based on field measurement.
   3. Identify materials and products in the work shown.

4. Indicate compliance with standards, and special coordination requirements.
5. Do not allow shop drawing copies without appropriate final "Action" markings by A/E to be used in connection with the work.
6. Submit six copies to the A/E of which three will be returned to the Contractor.

B. Product Data:
1. Collect required data into one submittal for each unit of work or system; and mark each copy to show which choices and options are applicable to project.
2. Include manufacturer's standard printed recommendations for application and use, compliance with standards, application of labels and seals, notation of field measurements which have been checked, and special coordination requirements.
3. Maintain one set of product data (for each submittal) at project site, available for reference by A/E and others.
4. Do not submit product data, or allow its use on the project, until submittal has been returned with the A/E's final review.
5. Submit six copies to the A/E of which three will be returned to the Contractor.
6. Installer's Copy: Do not proceed with installation of materials, products or systems until final copy of applicable product data is in possession of Installer.

C. Samples:
1. Provide samples for A/E's use. Submit samples where required by a section, for selection or review and confirmation of color, pattern, texture, and "kind". Samples requested for color boards will not be returned to the Contractor.
2. Provide units identical with final condition of proposed materials or products for the work. Include "range" samples (not less than 3 units) where unavoidable variations must be expected, and describe or identify variations between units of each set.
3. Provide full set of optional samples where A/E's selection is required. Prepare samples to match A/E's sample where so indicated. Include information with each sample to show generic description, source or product name and manufacturer, limitations, and compliance with standards.
4. A/E will not "test" samples (except as otherwise indicated) for compliance with other requirements, which are therefore the exclusive responsibility of Contractor.

D. Mock-Ups: Mock-ups and similar samples specified in individual work sections are recognized as a special type of sample. Comply with requirements for "samples" to greatest extent possible, and process transmittal forms to provide a record of activity.

1.06 CONTRACTOR'S REVIEW

A. Review each submittal and check for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to A/E.

B. At time of submission, note in writing, highlight, circle or otherwise identify any deviations in submittal from Contract Documents. The Contractor must submit in writing, any request for modification to the plans and specifications.

1. Shop drawings and submittals that are submitted to the A/E for review do not constitute "in writing" unless proposed modification has been described on the submittal form, brought to the attention of the A/E, and reason for modification is stated.
2. In any event, the responsibility for proposing changes to the plans and specifications by means of shop drawings or submittals, and receiving approval for such changes, resides with the Contractor. No additional costs for replacement of unapproved modifications with the original specified materials will be paid to the Contractor.

C. Do not combine items from different specification sections in submittal, unless called for in specifications.

D. Approval Stamp: Stamp each submittal with a uniform, approval stamp.

E. Execute and attach to each submittal, "CONTRACTOR SUBMITTAL FORM" (sample follows this Section), to identify project, date, Contractor, subcontractor, submittal name and number.

F. General Distribution: Provide additional distribution of submittals to subcontractors, suppliers, fabricators, installers, governing authorities and others as necessary for proper performance of the work. Include such additional copies in transmittal to A/E where required to receive "Action" marking before final distribution. Record distributions on transmittal forms.

G. Begin no fabrication or work that requires submittals until return of submittals with A/E's final review.

H. Submittals which are received from sources other than through Contractor's office will be returned by A/E "without action."

1.07 A/E'S REVIEW

A. General: A/E will not review submittals that do not bear Contractor's approval stamp and will return them without action.

B. A/E will review submittals and where possible return within 2 weeks of receipt. Where submittal must be held for coordination, Contractor will be so advised by A/E.

C. Submittals requiring a color selection will be held until all Color samples and charts for the project have been received.

1. At that time, Color Boards will be prepared and submitted to the Owner for approval.

2. After final selections have been made by the Owner, those submittals will be processed by the A/E and returned to the Contractor.

D. A/E will affix stamp and initials or signature, and indicate requirements for resubmittal or review of submittal.

E. A/E will return submittals to Contractor for distribution or for resubmission.

F. Submittal Review Stamps:
1. "No Exception Taken": Reviewed for general conformity to the requirements of Drawings and Specifications. Quantities shown not verified. Contractor's full responsibility is in no way relieved by this action.
2. "Make Corrections Noted": Reviewed and noted for general conformity to requirements of Drawings and Specifications. Quantities shown not verified. Contractor's full responsibility is in no way relieved by this action.
3. "Revise & Resubmit": Reviewed and noted for general conformity to requirements of Drawings and Specifications. Provide missing information, make corrections, and resubmit as noted.
4. "Rejected/Resubmit": Reviewed and not accepted. Provide product data, shop drawings, certifications, warranties, etc which meet or exceed the requirements of the Drawings and Specifications and resubmit.
5. "Receipt Acknowledged": Submittal for Section is not required or submittal is being held by A/E for coordination of work with that of another Section.

G. A/E review does not constitute acceptance or responsibility for accuracy or dimensions, nor shall it relieve the Contractor from meeting any requirements of the Contract Documents, nor shall it constitute approval for any modification from the Contract Documents unless such modifications are specifically stated as such on the submittal and specifically allowed by the Engineer.

H. A/E to return submittals with only cursory review when it becomes apparent the submittals are not acceptable, and/or incomplete.

I. Payment and Time for Review of Excessive Submittals After First Resubmittal:
1. Include Contractor's statement to A/E that all costs shall be paid by the Contractor and executed by Change Order for all A/E's review time and costs at A/E's standard billing rates.
2. Submittals will be reviewed by A/E at convenience of the A/E.
3. Delays caused by the need for resubmittal shall not constitute basis for claim.

1.08 NOT ACCEPTED AND REJECTED SUBMITTALS

A. Contractor shall make corrections required by the A/E. If the Contractor considers any correction or notation on the returned submittals to constitute a change to the contract drawings or specifications; notice as required under the clause entitled, "Changes," is to be given to the A/E.

B. Contractor is responsible for the dimensions and design of connection details and construction of work. Failure to point out deviations may result in the Owner requiring rejection and removal of such work at the Contractor's expense.

C. If changes are necessary to submittals, the Contractor shall make such revisions and submission of the submittals in accordance with the procedures above. No item of work requiring a submittal change is to be accomplished until the changed submittals are approved.

1.09 REVIEWED AND REVIEWED AND NOTED SUBMITTALS

A. The A/E's review or acceptance of submittals is not to be construed as a complete check, and indicates only that the general method of construction, materials, detailing and other information are satisfactory.

B. Review will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the General Conditions of the Contract is responsible for dimensions, and the satisfactory construction of all work.

C. After submittals have been reviewed by the A/E, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

#	CONTRACTOR SUBMITTAL FORM	
Specification No. Title/Description:	Project:	Contractor's Submittal No.: Date: Product Description:
	CONTRACTOR:	Dates of any previous submissions:
	Subcontractor / Supplier:	Manufacturer:
	Specification No.:	Drawing Nos.:
	Are there any deviations to the Contract Documents? ☐ No ☐ Yes (Explain and Identify:) *Undisclosed deviations/modifications do not relieve the Contractor from the obligation to provide the specified product and detail of installation, and may be cause for rejection of the Work. Deviations and modifications must be listed here or in a separate Request for Substitution.*	

CONTRACTOR'S CERTIFICATION: This submittal has been reviewed by the Contractor in compliance with Submittal Procedures of the CONTRACT DOCUMENTS' SPECIFICATIONS. Any deviations or substitutions to the CONTRACT DOCUMENTS have been identified above and submitted in compliance with the CONTRACT DOCUMENTS.

If this is a re-submittal, identify on a sheet(s) attached to this form all responses to comments on the previous submittal and all changes other than those specifically requested by the A/E on the previous submittal.

Signed _____ Date:

A/E'S REVIEW RESPONSE

(Refer to Submittal Specification for explanation of categories.)

Date Received:	No. Copies Received:
☐ **NO EXCEPTION TAKEN**	
☐ **MAKE CORRECTIONS NOTED**	
☐ **REVISE & RESUBMIT**	
☐ **REJECTED/RESUBMIT**	
☐ **RECEIPT ACKNOWLEDGED**	
By:	Date:
Date Returned:	No. Copies Returned:
A/E'S COMMENTS, IF ANY:	
A/E'S ATTACHMENTS, IF ANY:	

Note: DO NOT combine items from different specification sections into one submittal unless called for in the Section. If provisions in the "General Conditions" conflict with this form, the provisions as stated in the "General Conditions" shall prevail.

MOLZENCORBIN
ENGINEERS | ARCHITECTS | PLANNERS
2701 Miles Road SE, Albuquerque, NM 87106

SECTION 01 42 00

REFERENCE STANDARDS

PART 1 GENERAL

1.01 SUMMARY

A. General: Basic Contract definitions are included in the Conditions of the Contract.

B. Back-Up: "Back-up" as relating to any item, product, or documents within the scope of this Contract, shall mean the total supporting and substantiating data which forms the basis of the summary as it relates to products, means, methods, costs, certificates, and similar items. Back-up shall include pertinent data required to support the summary including, but not necessarily limited to, the following:
1. Technical data, reports, and certifications.
2. Costs, both materials and labor, direct and indirect.
3. Manufacturer's recommendations.
4. Means and methods.
5. History.
6. Samples.
7. Comparative analysis.
8. Testing laboratory reports, tests, and recommendations.
9. Code authority approvals and authorizations.
10. Justification.

1.02 DEFINITIONS

A. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."

B. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.

C. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

D. "Provide": Furnish and install, complete and ready for the intended use.

E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.

1.03 INDUSTRY STANDARDS

A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

B. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.

C. Conflicting Requirements: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to A/E for a decision before proceeding.

D. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to A/E for a decision before proceeding.

E. Copies of Standards: Each entity engaged in construction on Project must be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.

1.04 ABBREVIATIONS AND ACRONYMS

A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list:

AA	Aluminum Association
AAMA	American Architectural Manufacturing Association
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ADAAG	Americans with Disabilities Accessibility Act Guidelines
ADC	Air Diffusion Council

AHA	American Hardboard Association
AHC	Architectural Hardware Consultant
AHJ	Authority Having Jurisdication
AI	Asphalt Institute
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
AOC	Architectural Openings Consultants
APA	American Plywood Association
APWA	American Public Works Association
ASAE	American Society of Agricultural Engineers
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWI	Architectural Woodwork Institute
AWWA	American Water Works Association
AWS	American Welding Society
CBM	Certified Ballast Manufacturers
CDC	Certified Door Consultants
CFR	Code of Federal Regulations
CID	Construction Industries Division

CPSC	Consumer products Safety Commission
CRSI	Concrete Reinforcing Steel Institute
CSA	Canadian Standards Association
DHI	Door and Hardware Institute
EEI	Edison Electric Institute
EHC	Electrified Hardware Consultant
ETL	Electrical Testing Laboratories
FM	Factory Mutual
FS	Federal Specification General Services Administration Specifications and Consumer Information Distribution Section (WFSIS)
GA	Gypsum Association
GANA	Glass Association of North America
HMMA	Hollow Metal Manufacturers Association
HPVA	Hardwood Plywood and Veneer Association
IBC	International Building Code
ICEA	Insulated Cable Engineers Association
IEBC	International Existing Building Code
IECC	International Energy Conservation Code
IEEE	Institute of Electrical and Electronics Engineers
IFC	International Fire Code
ISA	Instrument Society of America
LEED	Leadership in Energy and Environmental Design

MIL	Military Specification Naval Publications and Forms Center
MPI	Master Painters Institiute
NAAMM	National Association of Architectural Metal Manufacturers
NACE	National Association of Corrosion Engineers
NEC	National Electric Code
NEMA	National Electrical Manufacturers' Association
NESC	National Electric Safety Code
NFPA	National Fire Protection Association
NFPA	National Forest Products Association
NMCBC	New Mexico Commercial Building Code Code Regulations Licensing Department Construction Industries Divisions
NMDWS	New Mexico Department of Workforce Solutions
NRCA	National Roofing Contractors Association
NWWDA	National Wood Window and Door Association
OSHA	Occupational Safety & Health Administration
PCA	Portland Cement Association
PCI	Prestressed Concrete Institute
PS	Product Standard US Department of Commerce
SDI	Steel Door Institute
SEFA	Scientific Equipment and Furniture Association
SIGMA	Sealed Insulating Glass Manufacturer's Association
SJI	Steel Joist Institute

SMACNA	Sheet Metal and Air Conditioning Contractors' National Association, Inc.
SSPC	Steel Structure Painting Council
TMS	The Masonry Society
UL	Underwriters' Laboratories, Inc.
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code International Association of Plumbing/Mechanical Officials
WWPA	Western Wood Products Association

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 43 00

QUALITY ASSURANCE

PART 1 GENERAL

1.01 SUMMARY

A. Provisions for quality assurance apply to workmanship and craftsmanship applied to work executed in the performance of the Contract.
   1. Perform work with suitable qualified personnel to produce work of specified quality.
   2. Refer to applicable Standards and Codes.
   3. Refer to Workmanship requirements of trade associations.
   4. Test materials in accordance with applicable standards.
   5. Provide field samples and mock-ups to establish acceptable level of quality and a basis for judging work.
   6. Follow inspection requirements.

B. Related Work Described Elsewhere: Provisions of trade associations, manufacturer's printed instructions, recommendations, methods, and criteria for application and installation of systems and assemblies, various technical sections of these specifications, the Drawings, and References Section.
   1. Provisions of work furnished under this Contract and installed under this Contract.
   2. Provisions of work installed under this Contract furnished by others.

1.02 QUALIFICATIONS

A. Project Superintendent:
   1. The superintendence of the General Contractor for the total overall Work shall be administered by one qualified person who is thoroughly trained and experienced in the duties of a Project Superintendent.
   2. Project Superintendent shall have a minimum of 10 years of construction experience, with a minimum of 5 years being in commercial construction.
   3. Project Superintendent shall demonstrate successful completion of a minimum of 5 projects of similar scope and budget through a resume and letters of recommendation.
   4. The Project Superintendent shall exercise general supervision over the Work, have the decision-making authority of the Contractor, and be familiar with the specified requirements and methods to be used in the scheduling, supervision, performance, and execution of the Work.
   5. Project Superintendent's qualifications are subject to review and approval by the Owner and A/E and shall not be reassigned until final acceptance of the Work, unless permitted in writing by the Owner.

B. Subcontractors: The superintendence of trades involved in work of this project shall be administered, supervised, and directed by at least one qualified journeyman foreman who is thoroughly trained and skilled in the arts generic to his trade and such qualifications may be subject to review and approval by the A/E.

C. Workmen: Workmen engaged in the performance of work comprising a part of the total Work of this Contract shall be adequate in number, thoroughly trained and experienced in the installation of the specified and selected products and who are completely familiar with the requirements of their respective work and this Work.

D. Apprentice: Apprentice personnel shall, in the performance of their respective Work, be supervised and directed in their duties under the competent supervision and direction of experienced journeymen experienced and skilled in their trade.

E. Manufacturers: Products used in the work of this project shall be produced by recognized manufacturers regularly engaged in the manufacturing of such and similar products with a history of successful production of products specified in the various sections of these specifications and as otherwise approved by the A/E.

1. In the use of equal or similar manufactured products proposed for inclusion into the Work, comply with the provisions of Submittal Section.

F. Fabricators, Suppliers, and Personnel: Fabricators, erectors, suppliers, installers, and applicators shall have not less than five years continuous experience in the execution of their respective duties and their qualifications may be subject for review and approval by the A/E.

G. Licensed Applicators: Applicators of specific systems, licensed by a manufacturer or company of such products, shall be qualified in every respect required by the manufacturer or company to the extent permitting the issuance of all required guarantees, warranties, and certificates of compliance to the approval of the A/E.

1.03 SUBMITTALS

A. Within ten (10) days following the execution of the Contract, submit the personal work history of the Project Superintendent proposed to be assigned to the project to its final conclusion.

B. Submittal may be in the form of a letter or standard employment "Job Application" covering the person's last five (5) years work history and contact source, names, and telephone numbers for use in verification of qualifications and recommendations.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 GENERAL

A. General: Prior to any work being performed in the execution of the Contract, personnel who supervise, or otherwise direct the scope of their respective work, shall become thoroughly familiar with surface conditions affecting their work, the interface requirements of all other trades whose work affects their work, and become completely knowledgeable with the specified materials and methods needed for the proper coordination and execution of the work.

END OF SECTION

SECTION 01 45 00

QUALITY CONTROL

PART 1 GENERAL

1.01 WORK INCLUDED

A. Quality Control and Control of Installation.

B. Tolerances.

C. Testing and Laboratory Services:
   1. Provisions of cooperation with the selected testing laboratory and all others responsible for testing and inspection of the Work.
   2. Requirements for testing may be described in various other sections of these specifications.
   3. Where no testing requirements are described, but the Owner decides that testing is required, the Owner may direct that such testing be performed under current standards for testing. Payment for such testing will be made as described in this section.
   4. Contractor shall select a testing laboratory subject to the approval of the Owner.

D. Special Inspection Services: In addition to the inspections provided by CID, the New Mexico Building Code mandates that the Owner or the Engineer or Architect acting on behalf of the owner employ one or more special inspectors who shall provide inspections during construction on elements that are critical to the safety of the structure. It is important to note that these special inspectors are not on the project in lieu of the regular CID building inspector, but rather they are on the project in addition to the regular CID building inspector.
   1. Where the New Mexico Building Code mandates that the Owner employ Special Inspectors, Special Inspection Agency shall be paid by the Contractor.
   2. For special inspection type and frequency refer to Structural Drawings Quality Insurance Plan for Schedule.
   3. The Special Inspection Agency shall be an agency approved by the Owner as being qualified by knowledge and experience to perform the Special Inspection for the category of work being constructed.
   4. More than one Special Inspector may be required to provide the varied knowledge and experience necessary to adequately inspect all of the categories of work requiring Special Inspection.
   5. Requirements for inspections may be described in various sections of these specifications.

E. Manufacturers' Field Services: Requirements for manufacturers' field services may be described in various other sections of these specifications.

1.02 QUALITY CONTROL AND CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.

B. Comply with manufacturers' instructions, including each step in sequence.

C. When manufacturers' instructions conflict with Contract Documents, request clarification from A/E before proceeding.

D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Perform Work by persons qualified to produce required and specified quality.

F. Verify field measurements are as indicated on Shop Drawings or as instructed by manufacturer.

G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.03 TOLERANCES

A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

B. Comply with manufacturers' tolerances. When manufacturers' tolerances conflict with Contract Documents, request clarification from A/E before proceeding.

C. Adjust products to appropriate dimensions; position before securing products in place.

1.04 TESTING AND INSPECTION SERVICES

A. Codes and Standards:
   1. Testing, when required, will be in accordance with pertinent codes and regulations and with selected standards of the American Society for Testing and Materials.
   2. Inspections will be conducted at intervals required by current building codes and regulations and include:
      a. Regulatory Inspections.

b. Special Inspections:
   1) In addition to the inspections provided by the Code Authority having Jurisdiction, the New Mexico Building Code mandates that the Owner or the Engineer or Architect acting on behalf of the Owner employ one or more Special Inspectors who shall provide inspections during construction on elements that are critical to the safety of the structure. It is important to note that these Special Inspectors are not on the project in lieu of the regular AHJ building inspector, but rather they are on the project in addition to the regular building inspector.
c. Seismic Inspections.
d. Structural Observations.

B. Qualifications of testing agency or laboratory: The testing agency or laboratory will be qualified to the Owner's approval in accordance with ASTM E329.

C. Agency Responsibilities:
1. Cooperate with A/E and Contractor in performance of duties.
2. Provide qualified personnel to perform required tests and inspections.
3. Notify A/E and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
4. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
5. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
6. Do not release, revoke, alter, or increase requirements of the Contract. Documents or approve or accept any portion of the Work.
7. Do not perform any duties of Contractor.

D. Agency Reports:
1. Prepare and submit certified written reports that include the following:
   a. Date of issue.
   b. Project title and number.
   c. Name, address, and telephone number of testing agency.
   d. Dates and locations of samples and tests or inspections.
   e. Names of individuals making tests and inspections.
   f. Description of the Work and test and inspection method.
   g. Identification of product and Specification Section.
   h. Complete test or inspection data.
   i. Test and inspection results and an interpretation of test results.
   j. Ambient conditions at time of sample taking and testing and inspecting.
   k. Name and signature of laboratory inspector.
   l. Recommendations on retesting and reinspecting.
2. Promptly process and distribute required copies of reports and related instructions to ensure necessary retesting and replacement of materials with the least possible delay in progress of the Work.

E. Special Inspection Reports:
   1. Provide Special Inspection Reports listing all construction special inspections or reviews of testing performed during that month, noting all uncorrected deficiencies, and describing the corrections made both to these deficiencies and to previously reported deficiencies.
   2. Each report shall be signed by the special inspector who performed the special inspection or reviewed the testing, regardless of whether they reported any deficiencies.
   3. Each report shall be signed by the Contractor and submitted to the Engineer of Record.

F. Limits on Testing Authority:
   1. Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
   2. Agency or laboratory may not approve or accept any portion of the Work.
   3. Agency or laboratory may not assume duties of Contractor.
   4. Agency or laboratory has no authority to stop the Work.

G. Contractor Responsibilities: Cooperate with agencies performing required tests, inspections, and similar quality-control services. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
   1. Access to the Work.
   2. Incidental labor necessary to facilitate tests and inspections.
   3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
   4. Preliminary design mix proposed for use for material mixes that require control by testing agency.

1.05 PAYMENT FOR TESTING

A. The Contractor will pay for initial testing and inspections services required by these specifications, the Quality Assurance Plans shown on the drawings and building code or regulatory agencies. Where the New Mexico Building Code mandates that the Owner employ Special Inspectors, Special Inspectors shall be selected by the Owner and paid by the Contractor.

B. When there is work which the Owner requires tested and inspected in addition to specified and required tests, the Contractor will pay for the tests if the work does not comply with required standard and specifications. The Owner will pay for the tests if the work does comply with the required standards and specifications.

C. Retesting and Re-inspecting: When initial reports indicate non-compliance with the Contract Documents, all subsequent retesting and re-inspecting occasioned by the non-compliance shall be performed by the same agency and costs thereof will be paid by the Contractor at no additional cost to the Owner.

1.06 CODE COMPLIANCE TESTING AND INSPECTING

A. Inspections and tests required by codes, ordinances, or by a plan approval authority, and which are made by a legally constituted authority, shall be the responsibility of and shall be paid for by the Contractor, unless otherwise provided in the Contract Documents.

1.07 CONTRACTOR'S CONVENIENCE TESTING AND INSPECTING

A. Inspecting and testing performed exclusively for the Contractor's convenience shall be the sole responsibility of the Contractor.

1.08 INSPECTION BY OWNER'S PERSONNEL

A. From time to time, personnel in the employ of the Owner may inspect the Work where the work is in progress, but shall have no authority to direct the Contractor or request changes in the Work except through the A/E.

1.09 MANUFACTURERS' FIELD SERVICES

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

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 TAKING SPECIMENS

A. Specimens for testing and samples, unless otherwise provided in the Contract documents, will be taken by the testing personnel. Sampling equipment and personnel will be provided by the testing laboratory. Deliveries of specimens and samples to the testing laboratory will be performed by the testing laboratory.

3.02 SCHEDULES FOR TESTING AND INSPECTING

A. By advance discussion with the selected agency, determine the time required for the agency to perform its tests and inspection and to issue each of its findings.

B. Provide required time within the construction schedule.

C. When changes of construction schedule are necessary during construction, coordinate such changes of schedule with the agency as required.

D. When the agency is ready to test or inspect according to the established schedule, but is prevented from performing its duties due to incompleteness of the Work, all extra charges attributable to the delay shall be back-charged to the Contractor and shall not be borne by the Owner.

3.03 ALTERNATIVE INSPECTION PROCEDURE

A. The A/E shall have the right to require alternative inspection procedures other than as specified when, in the A/E's judgment, other inspections are required to demonstrate compliance with the contract requirements. Costs of such alternative inspections will be borne by the Owner if products are found to comply; otherwise, costs shall be borne by the Contractor.

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SUMMARY

A. Types of temporary facilities and controls may include, but not be limited to:
1. Temporary Utilities.
2. Construction Facilities.
3. Temporary Construction.
4. Construction Aids.
5. Vehicular Access.
6. Temporary Barriers.
7. Temporary Controls.
8. Removal of Utilities, Facilities, and Controls.

1.02 CONDITIONS OF USE

A. The following conditions apply to use of temporary services and facilities by all parties engaged in the Work:
1. Keep temporary services and facilities clean and neat.
2. Minimize waste and abuse; limit availability of temporary facilities to essential and intended uses.
3. Maintain facilities in good operating condition until removal. Protect from damage caused by freezing temperatures and similar elements.
4. Relocate temporary services and facilities as required by progress of the Work.

B. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.

C. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

1.03 TEMPORARY UTILITIES

A. Types of temporary services required may include, but not be limited to water service, sewer and drainage, sanitary facilities, heating and cooling, ventilation and humidity control, electrical power, electrical distribution, lighting, surface drainage, and telephones.
1. Standards: Comply with ANSI A10.6, NEC's "Temporary Electrical Facilities," and NFPA 241.

B. Water Service: Provide rubber hoses as necessary to serve Project site. Where non-potable water is used, mark each outlet with adequate health-hazard warning signs.

C. Sewers and Drainage:
   1. If sewers are available, provide temporary connections to remove effluent that can be discharged lawfully. Connect temporary sewers to system as directed by sewer department officials.
   2. If sewers are not available or cannot be used, provide drainage ditches, dry wells, stabilization ponds, and similar facilities.
   3. If neither sewers nor drainage facilities can be lawfully used for discharge of effluent, provide containers to remove and dispose of effluent off-site in a lawful manner.
   4. Maintain temporary sewers and drainage facilities in a clean, sanitary condition. After heavy use, restore normal conditions promptly.
   5. Filter out excessive soil, construction debris, chemicals, oils, and similar contaminants that might clog sewers or pollute waterways before discharge.
   6. Provide temporary filter beds, settlement tanks, separators, and similar devices to purify effluent to levels acceptable to authorities having jurisdiction.

D. Dewatering Equipment and Drains: Comply with requirements in applicable Division 32 Sections for temporary drainage and dewatering facilities, and operations not directly associated with construction activities included in individual Sections. Where feasible, use same facilities. Maintain Project site, excavations, and construction free of water.

E. Temporary Fire Protection: Until fire-protection needs are supplied by permanent facilities, install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
   1. Provide portable, UL rated-fire extinguishers, installed on walls on mounting brackets, visible and accessible from space being served, with sign mounted above.
   2. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.
   3. Store combustible materials in containers in fire-safe locations.
   4. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities, stairways, and other access routes for firefighting.
   5. Prohibit smoking in occupied buildings and hazardous fire-exposure areas.
   6. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition.

F. Heating and Cooling:
   1. Heating Units: Listed and labeled, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use for type of fuel being consumed.

2. Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity.
3. Select equipment from that specified that will not have a harmful effect on completed installations or elements being installed.

G. Ventilation and Humidity Control:
1. Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity.
2. Select equipment from that specified that will not have a harmful effect on completed installations or elements being installed.
3. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.

H. Electrical Power and Distribution System:
1. General: Where possible, engage appropriate local utility company to install temporary service or connect to existing service. Where utility company provides only part of the service, provide the remainder with matching, compatible materials and equipment. Comply with utility company recommendations. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services. Provide adequate capacity at each stage of construction. Before temporary utility is available, provide trucked-in services. Obtain easements to bring temporary utilities to Project site where Owner's easements cannot be used for that purpose.
2. Electric Power and Distribution Service: Provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during construction period. Include meters, transformers, overload-protected disconnecting means, automatic ground-fault interrupters, and main distribution switchgear.
   a. Where permitted and overhead and exposed for surveillance, wiring circuits, not exceeding 125-V ac, 20-A rating, and lighting circuits may be nonmetallic sheathed cable.
   b. Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
   c. Receptacles: Properly configured, NEMA-polarized outlets to prevent insertion of 110- to 120-V plugs into higher-voltage outlets; equipped with ground-fault circuit interrupters, reset button, and pilot light and adequate for connection of power tools and equipment.
   d. Provide waterproof connectors to connect separate lengths of electrical power cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.
3. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations and traffic conditions.
   a. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

b. Provide one 100-W incandescent lamp per 500 sq. ft., uniformly distributed, for general lighting, or equivalent illumination.
c. Provide one 100-W incandescent lamp every 50 feet in traffic areas.
d. Provide one 100-W incandescent lamp per story in stairways and ladder runs, located to illuminate each landing and flight.
e. Install exterior-yard site lighting that will provide adequate illumination for construction operations, traffic conditions, and signage visibility when the Work is being performed.

I. Use Charges:
1. Water Service: Use water from Owner's existing water system without metering and without payment of use charges.
2. Electric Power Service: Use electric power from Owner's existing system without metering and without payment of use charges.

1.04 CONSTRUCTION FACILITIES

A. Locate field offices, storage sheds, sanitary facilities, and other facilities for easy access. Coordinate location with Owner.

B. Maintain support facilities until Substantial Completion. Remove immediately after Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

C. Sanitary Facilities: Provide temporary toilets, wash facilities. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.
1. Single-occupant self-contained toilet units of chemical, aerated recirculation, or combustion type; vented; fully enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material, including hand-sanitizing capability.
2. Shield toilets to ensure privacy.
3. When toilets for public use are included in the Work, provide accessible unit located on an accessible route and provide separate facilities for males and females.
4. Disposable Supplies: Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Maintain adequate supply. Provide covered waste containers for disposal of used material.

D. Drinking Water: Provide drinking-water fountains or containerized bottled drinking water, or tap supply including paper cups.

E. Field Offices: With lockable entrances, operable windows, and serviceable finishes; heated and air conditioned; on foundations adequate for normal loading. Provide space for Project meetings, with table and chairs.

F. Storage Areas and Sheds: Size to storage requirements for products of individual Sections, allowing for access and orderly provision for maintenance and for inspection of products to requirements of Section.

1.05 TEMPORARY CONSTRUCTION

A. Comply with inspection requests from Authorities having Jurisdiction..

B. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities.
   1. Provide new materials. Undamaged, previously used materials in serviceable condition may be used if approved in writing by A/E and Owner. Provide materials suitable for use intended.
   2. Provide temporary weathertight enclosure for building exterior to accommodate acceptable working conditions and protection for products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons.
      a. Provide access doors with self-closing hardware and locks.
      b. Gypsum Board: 5/8" thick Type X for fire-rated areas.
   3. Provide temporary exitways as required by the Fire Marshall or Authority having jurisdiction.
   4. Where heating or cooling is needed and permanent enclosure is not complete, provide insulated temporary enclosures.
   5. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.
   6. Close vertical openings of 25 sq.ft. or less with plywood or similar materials. Close horizontal openings in floor or roof decks and horizontal surfaces with load-bearing, wood-framed construction. Lumber and Plywood: Comply with requirements in Division 06 Section.

1.06 CONSTRUCTION AIDS

A. Lifts and Hoists: Provide facilities for hoisting materials and personnel. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

1.07 VEHICULAR ACCESS

A. Temporary Roads: Construct and maintain temporary trafficways adequate to support loads and to withstand exposure to traffic during construction period.
   1. Provide dust-control treatment that is nonpolluting and nontracking. Reapply treatment as required to minimize dust.

1.08 TEMPORARY BARRIERS

A. Site Enclosure Fence: Before construction operations begin install enclosure fence with lockable entrance gates. Locate where indicated, or enclose entire Project site or portion determined sufficient to accommodate construction operations. Install in a manner that will prevent people, dogs, and other animals from easily entering site except by entrance gates.

1. Chain-Link Fencing: Minimum 2-inch, 0.148-inch thick, galvanized steel, chain-link fabric fencing; minimum 6 feet high with galvanized steel pipe posts; minimum 2-3/8-inch OD line posts and 2-7/8-inch OD corner and pull posts.

B. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.

C. Barricades, Warning Signs, and Lights: Comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and public of possible hazard. Where appropriate and needed, provide lighting, including flashing red or amber lights.

D. Temporary Partitions: Erect and maintain dustproof partitions and temporary enclosures to limit dust and dirt migration and to separate areas from fumes and noise.

1. Dust Control:
   a. Execute Work by methods to minimize raising dust from construction operations.
   b. Provide positive means to prevent air-borne dust from dispersing into atmosphere.
2. Noise Control:
   a. Provide methods, means, and facilities to minimize noise produced by construction operations.
   b. Avoid using tools and equipment that produce harmful noise. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms near Project site.

1.09 TEMPORARY CONTROLS

A. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Containerize and clearly label hazardous, dangerous, or unsanitary waste materials separately from other waste. Comply with Division 1 Section "Execution Requirements" for progress cleaning requirements.

B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

C. Erosion and Sediment Control: Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation. Minimize surface area of bare soil exposed at one time. Provide temporary measures including berms, dikes, and drains, and other devices to prevent water flow. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

D. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with pollution and environmental control requirements of authorities having jurisdiction.

E. Pest and Rodent Control: Before deep foundation work has been completed, retain a local exterminator or pest-control company to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests. Engage this pest-control service to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Obtain extended warranty for Owner. Perform control operations lawfully, using environmentally safe materials.

F. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from construction damage. Protect tree root systems from damage, flooding, and erosion.

1.10 BULLETIN BOARD

A. Furnish and maintain bulletin board adjacent to field office. Display the following throughout construction period:
   1. Wage rates.
   2. Safety requirements.
   3. Official notices and announcements.

1.11 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

A. At earliest feasible time, when acceptable to Owner, change over from use of temporary utility to use of permanent service.

B. Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
   1. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements in Division 1 Section "Closeout Procedures."

C. Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 60 00

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

A. Section includes administrative and procedural requirements for selecting products for use in Project
   1. Product Delivery, Storage, and Handling
   2. Product Warranties
   3. Product Options
   4. Reuse of Existing Materials

B. See individual specification sections for specific requirements

1.02 DEFINITIONS

A. For the purposes of this Specification Section, the terms "material and equipment" and "products" have the same meaning and are used interchangeably.
   1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation, shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
   2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
   3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

B. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.

1.03 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on project, product selected shall be compatible with other products incorporated into the Project, even if other products were also options.

B. Do not use materials and equipment removed from existing premises, except as specifically permitted by Contract Documents.

1.04 PRODUCT DELIVERY REQUIREMENTS

A. Transport and handle products in accordance with manufacturer's instructions.

B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.

C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.05 PRODUCT STORAGE AND HANDLING REQUIREMENTS

A. Store and protect products in accordance with manufacturers' instructions.

B. Store with seals and labels intact and legible.

C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.

D. For exterior storage of fabricated products, place on sloped supports above ground

1.06 PROTECTION AFTER INSTALLATION

A. Provide substantial coverings as necessary to protect installed products from damage from traffic and subsequent construction operations. Remove coverings when no longer needed.

1.07 PRODUCT WARRANTIES

A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

B. Submittal Time: Comply with requirements in Division 1.

1.08 PRODUCT OPTIONS

A. General Product Requirements:
   1. Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.

2. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
3. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
4. Limit selection to products with warranties not in conflict with requirements of the Contract Documents.
5. Where products are accompanied by the term "as selected," A/E will make selection.
   a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, A/E will select color, pattern, or texture from manufacturer's product line that does not include premium items.
   b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, A/E will select color, pattern, or texture from manufacturer's product line that includes both standard and premium items.
6. Where products are accompanied by the term "match sample," sample to be matched is sample provided by A/E.
7. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
8. Comply with size, make, type and quality specified, or as specifically approved in writing by the A/E.

B. Manufactured and Fabricated Products:
   1. Design, fabricate and assemble in accordance with the referenced engineering and shop practices.
   2. Manufacture like parts of duplicate units to standard sizes and gages, to be interchangeable.
   3. Two or more items of the same kind shall be identical, by the same manufacturer.
   4. Products shall be suitable for service conditions.
   5. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically requested by the Contractor and favorably reviewed by the A/E.
   6. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

C. Selection Criteria:
   1. Products Specified Only By Reference Standard: select any product meeting that standard.
   2. Products Specified By Naming Several Products Or Manufacturers: select any one of the products or manufacturers named, which complies with the specifications; no options or substitutions.

3. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for any manufacturer not named in accordance with the following article.
   a. Other manufacturers' products may be accepted, provided sufficient information is submitted to allow the A/E to determine that products proposed as substitutions are equivalent to those named.
   b. Contractor must submit written request for substitutions for any product or manufacturer not specifically named.
   c. Proof of product equivalency is the Contractor's responsibility.
   d. A/E and the named manufacturer (when manufacturer desires) shall be the judge of the acceptability of the proposed product substitution
4. Products specified by naming only one product or manufacturer shall be considered to be the "Basis of Design." The use of a Brand Name or Manufacturer within these specifications is for the purpose of describing the standard of quality, performance and characteristics desired and is not intended to limit or restrict competition.
5. "Basis of Design" provides the performance and operational requirements of the system
   a. Term indicates specific product or system used as basis for design
   b. Manufacturers may submit their equivalent product, but only if product complies with or is superior to specified requirements, functional design and warranty. Product must also meet aesthetic characteristics of specified product wherever appearance is critical in the opinion of the Architect. .
   c. Products that obviously differ in appearance and quality from "Basis of Design Product" will be rejected.

1.09 REUSE OF EXISTING MATERIAL

A. Except as specifically indicated or specified, materials and equipment removed from an existing structure shall not be used in the completed Work.

B. For material and equipment specifically indicated or specified to be reused in the Work:
   1. Use special care in removal, handling, storage, and reinstallation to assure proper function in the completed Work.
   2. Arrange for transportation, storage, and handling of products which require off-site storage, restoration or renovation. Include all costs for such work in the Bid.

1.10 MANUFACTURER'S INSTRUCTIONS

A. When Contract Documents require installation of work to comply with manufacturer's instructions, such instructions must be included with:
   1. Shop drawing and/or product data submitted if an operation and maintenance manual is not required.

2. Operation and maintenance data if required.

B. Handle, install, connect, clean, condition, and adjust products in strict accordance with such instructions and in conformity with specified requirements.
   1. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with A/E for further instructions.
   2. Do not proceed with work without clear instructions.

C. Perform work in accordance with manufacturer's instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 70 00

EXECUTION REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

A. This Section includes administrative and procedural requirements for Execution of the Work, including, but not limited to, the following:
   1. Installation
   2. Field Engineering
   3. Cutting and Patching
   4. Protecting Installed Construction
   5. Progress Cleaning

1.02 INSTALLATION

A. Utility Requirements:
   1. The Contractor shall arrange for all spotting of lines by utility companies in advance of any excavation work.
   2. Verify utility requirements and characteristics of equipment are compatible with facility utilities. Coordinate work of various specification sections having interdependent requirements for installing, connecting to, and placing in service such equipment.

B. Space Requirements:
   1. Coordinate space requirements and installation of mechanical, electrical, and other work shown diagrammatically on Drawings. Follow routing shown for pipes, ducts, and wireways as closely as practicable. Utilize spaces efficiently to maximize accessibility for other installations, maintenance, and repairs.
   2. Where space is limited, coordinate installation of components to ensure maximum access for maintenance. Ensure space provided around equipment and fixtures complies with applicable codes.

C. Concealment: In finished areas, conceal pipes, ducts, and wire ways within construction except as otherwise indicated. Where practical, conceal supports, fasteners, and other attachment devices.

D. Arrangement:
   1. Unless otherwise indicated, installations shall be aligned vertically and horizontally. Place piping, conduit, wire ways, and other linear items parallel with lines of building.

2. Coordinate mounting heights and spacing of components so that finished work is neat and orderly with organized appearance.
3. Repetitive items such as hangers and fasteners shall be equally spaced unless indicated otherwise.

E. Blocking, anchors, and supports: Determine and coordinate requirements for blocking, anchors, and supports needed for proper installation of products. Provide necessary components whether or not indicated on Drawings or specified.

F. Finished surfaces: Coordinate locations of fixtures, boxes, and other recessed or surface mounted items with finish elements and grades to ensure proper installation and neat appearance.

G. Openings made in installed exterior surfaces shall be closed to protect construction from weather and extremes of temperature and humidity.

1.03 FIELD ENGINEERING

A. Employ Registered Land Surveyor acceptable to Owner.

B. Locate and protect survey control and reference points. Promptly notify A/E of discrepancies discovered.

C. Control datum for survey is that shown on Drawings.

D. Verify set-backs and easements; confirm drawing dimensions and elevations.

E. Provide field engineering services. Establish elevations, lines, and levels, utilizing recognized engineering survey practices.

F. Maintain complete and accurate log of control and survey work as Work progresses.

1.04 CUTTING AND PATCHING

A. Employ skilled and experienced installer to perform cutting and patching.

B. Submit written request in advance of cutting or altering elements affecting:
1. Structural integrity of element.
2. Integrity of weather-exposed or moisture-resistant elements.
3. Efficiency, maintenance, or safety of element.
4. Visual qualities of sight exposed elements.

C. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:
1. Fit the several parts together, to integrate with other Work.

2. Uncover Work to install or correct ill-timed Work.
3. Remove and replace defective and non-conforming Work.
4. Remove samples of installed Work for testing.
5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.

D. Execute work by methods to avoid damage to other Work, and to provide proper surfaces to receive patching and finishing.

E. Identify hazardous substances or conditions exposed during the Work to A/E for decision or remedy.

F. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.

G. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work. Remove debris and abandoned items from area and from concealed spaces.

H. Cut masonry and concrete materials using masonry saw or core drill.

I. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

J. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.

K. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 84 00, to full thickness of penetrated element.

L. Remove, cut, and patch Work in manner to minimize damage and to permit restoring products and finishes to original or specified condition. Restore Work with new products in accordance with requirements of Contract Documents.
1. Materials: As specified in product sections; match existing with new products and salvaged products for patching and extending work.
2. Refinish existing visible surfaces to remain in renovated rooms and spaces, to specified condition for each material, with neat transition to adjacent finishes.
3. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
4. Prepare surface and remove surface finishes to permit installation of new work and finishes.

5. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit.
6. Where new Work abuts or aligns with existing, provide smooth and even transition.
   a. When finished surfaces are cut so that smooth transition with new Work is not possible, terminate existing surface along straight line at natural line of division and submit recommendation to A/E for review.
   b. Where change of plane of 1/4-inch or more occurs, submit recommendation for providing smooth transition; to A/E for review.
7. Patch Work to match existing adjacent Work in texture and appearance.
8. Trim existing doors to clear new floor finish. Refinish trim to specified condition.

M. Asphalt Pavement:
1. Where existing or new pavement is damaged from construction operations, cut to install new underground utilities and where existing items are removed from paved areas:
   a. Cut pavement with saw or other means to provide neat, straight joints.
   b. Where existing pavement is damaged by removals, remove additional pavement to allow clean cuts.
   c. Backfill and sufficiently compact removal area prior to placement of pavement.
   d. Place pavement to match existing materials and thickness.
   e. Immediately after placement.

N. Special Roof Penetrations:
1. New roofing:
   a. Coordinate, locate and schedule roof penetrations prior to installation of new roof system.
   b. Coordinate roof penetrations such that installation does not void roof warranty.
2. Existing roofing:
   a. Prior to penetrating, cutting, and patching existing roofing, verify with Owner if roof is under warranty. If warranted, employ roof contractor certified by manufacturer of roof system, make required inspections and notifications, and perform cutting and patching as required to ensure warranty is not violated.
   b. Protect building interior during operations and return roof to weather tight condition after the work is performed.

1.05 PROTECTING INSTALLED CONSTRUCTION

A. Protect installed Work and provide special protection where specified in individual specification sections.

B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.

C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.

D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.

E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.

F. Prohibit traffic from landscaped areas.

1.06 PROGRESS CLEANING

A. Conduct cleaning and disposal operations to comply with codes, ordinances, regulations, and anti-pollution laws.

B. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.

C. Use only those cleaning materials and methods recommended by manufacturer of the surface material to be cleaned.

D. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

E. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

F. Remove waste materials, debris, and rubbish from site weekly and legally dispose of off-site.

G. Remove debris and rubbish from pipe chases, plenums, crawl spaces, above suspended ceilings, and other closed and remote spaces prior to enclosing space.

H. Prior to surface finishing, broom and vacuum clean interior areas to eliminate dust.

I. Washing of concrete trucks and dumping of excess cementitious material on site is not allowed. All such materials and contaminated soil shall be removed.

J. Soils and other site material contaminated by paint residues, oils, fuels, and other construction products shall be removed and replaced with equivalent soil or material.

K. Existing lawns, landscaped areas, and areas for future landscaping affected by construction operations shall be raked to remove stones, mortars, aggregates, and other construction debris in excess of 3/4 inch diameter.

L. Clean mud and sediment resulting from Contractor's operations or traffic from all sidewalks, public streets and parking areas.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 77 00

CLOSEOUT PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
   1. Closeout Procedures
   2. Final Cleaning
   3. Final Completion and Inspection
   4. Maintenance service
   5. Correction Period Inspection

1.02 CLOSEOUT PROCEDURES

A. Substantial Completion:
   1. Preliminary Procedures: Prior to requesting A/E's inspection for certification of substantial completion (for either entire work or portions thereof), complete the following and list known exceptions in request:
      a. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
      b. Advise Owner of pending insurance change-over requirements.
      c. Submit specific warranties, workmanship/maintenance bonds, maintenance agreements, final certifications and similar documents.
      d. Obtain and submit releases enabling Owner's full and unrestricted use of the work and access to services and utilities, including occupancy permits, operating certificates, and similar releases.
      e. Prepare and submit Project Record Documents, operation and maintenance manuals, and similar final record information.
      f. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
      g. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
      h. Complete startup testing of systems.
      i. Submit test/adjust/balance records.
      j. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
      k. Advise Owner of changeover in heat and other utilities.
      l. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

m. Complete final cleaning requirements, including touchup painting.
n. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

2. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, A/E will either proceed with inspection or notify Contractor of unfulfilled requirements. A/E will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor' list or additional items identified by A/E, that must be completed or corrected before certificate will be issued.
   a. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
   b. Results of completed inspection will form the basis of requirements for Final Completion.

B. List of Incomplete Items (Punch List):
   1. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction:
      a. Organize list of spaces in sequential order, starting with exterior areas first then proceeding from lowest to highest room number.
      b. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.

1.03 FINAL CLEANING

A. Employ experienced workers or professional cleaners for final cleaning.
   1. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program.
   2. Comply with manufacturer's written instructions.

B. Clean equipment and fixtures to sanitary condition with cleaning materials appropriate to surface and material being cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

C. Replace filters of operating equipment.

D. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
   1. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
   2. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.

3. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
4. Remove tools, construction equipment, machinery, and surplus material from Project site.
5. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
6. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
7. Sweep concrete floors broom-clean in unoccupied spaces.
8. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
9. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
10. Remove labels that are not permanent.
11. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
    a. Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
    b. Wipe surfaces of mechanical and electrical equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
    c. Replace parts subject to unusual operating conditions.
    d. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
    e. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
    f. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
    g. Leave Project clean and ready for occupancy.

E. Comply with Safety Standards for Cleaning:
1. Do not burn waste materials.
2. Do not bury debris or excess materials on Owner's property.
3. Do not discharge volatile, harmful, or dangerous materials into drainage systems.
4. Remove waste materials from Project site and dispose of lawfully.

F. Removal of Protection: Except as otherwise indicated or requested by A/E/Engineer, remove temporary protection devices and facilities which were installed during course of the work.

G. Compliances: Comply with safety standards and governing regulations for cleaning operations. Do not burn waste materials at site, or bury debris or excess materials on Owner's property, or discharge volatile or other harmful or dangerous materials into drainage systems. Remove waste materials from site and dispose of in a lawful manner.

H. Where extra materials of value remaining after completion of associated work have become Owner's property, dispose of these to Owner's best advantage as directed.

1.04 FINAL COMPLETION

A. Preliminary Procedures:
1. Submit a final Application for Payment according to Section 01 29 00 Payment Procedures. Submit with final releases, waivers and consents.
2. Submit certified copy of A/E's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by A/E. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
3. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
4. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
5. Notify Owner and request change over in insurance, utilities, and security; send copy of notice to A/E.
6. Submit insurance certificates for products and completed operations as required by Specification Sections.
7. Submit complete close-out package per Section 01 78 00 Closeout Submittals.
8. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems per Section 01 79 00 Demonstration and Training.

1.05 FINAL INSPECTION

A. Submit a written request for final inspection for acceptance. On receipt of request, A/E will either proceed with inspection or notify Contractor of unfulfilled requirements. A/E will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

B. Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.06 MAINTENANCE SERVICE

A. Furnish service and maintenance of components indicated in specification sections for specified period from date of Substantial Completion.

B. Examine system components at frequency consistent with reliable operation. Clean, adjust, and lubricate as required.

C. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by manufacturer of original component.

D. Do not assign or transfer maintenance service to agent or Subcontractor without prior written consent of Owner.

1.07 CORRECTION PERIOD INSPECTION

A. 30 days prior to end of one year correction period, schedule and attend a one year correction period inspection. Appropriate subcontractors shall attend.

B. Coordinate time of inspection with A/E.

C. Representatives of Owner, A/E, and appropriate consultants will attend.

D. Correct deficiencies shall be noted and addressed.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 78 00

CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.01 SUMMARY

A. This Section includes the following Closeout Submittals:
   1. Project Record Documents
   2. Operation and Maintenance Manuals
   3. Tools, Spare Parts, Maintenance and Extra Stock Products
   4. Warranties
   5. Certificates of Inspection and Compliance

1.02 PROJECT RECORD DOCUMENTS

A. General:
   1. Do not use Project Record Documents for construction purposes. Store Record Documents and Samples in the field office apart from the Contract Documents used for construction.
   2. Protect Project Record Documents from deterioration and loss.
   3. Provide access to Project Record Documents for A/E reference during normal working hours.
   4. Maintain one (1) copy of each document type during construction period for Project Record Document purposes.
   5. Post changes and modifications to Project Record Documents on a weekly basis.

B. Record Drawings: Maintain and submit one (1) set of blue- or black-line white prints of Contract Drawings and Shop Drawings.
   1. Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
      a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.
      b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
      c. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
         1) Clearly describe the change by note and by graphic line, as required.
         2) Date all entries.

3) Call attention to the entry by a "cloud" around the area or areas affected.
4) In the event of overlapping changes, different colors may be used for each of the changes.

d. Where changes are caused by Construction Change Directive numbers, Change Order numbers, alternate numbers, and similar identification, clearly indicate the change by note in ink, colored pencil, or rubber stamp.

e. Where changes are caused by Contractor-originated proposals approved by the A/E, including inadvertent errors by the Contractor which have been accepted by the A/E, clearly indicate the change by note in erasable colored pencil.

f. Because design of future modifications to the facility may require accurate information as to the final physical arrangement of items which were originally drawn schematically on the Drawings convert schematic layouts to show its final physical arrangement.

g. Show on the job set of Record Drawings, by dimension accurate to within 1 inch, the centerline of each run of items described in the preceding paragraph. Clearly identify the item by accurate note such as "3" cast iron water main", etc. Show, by symbol or note, the vertical control elevation of the item. Make all identification sufficiently descriptive that it may be related reliably to the specifications.

h. The A/E may waive the requirements for conversion of schematic data where, in the A/E's judgment, such conversion serves no beneficial purpose. A/E will issue a written waiver when this applies.

i. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.

j. Submit documents to A/E prior to or in conjunction with submission of Contractor's request for Substantial Completion and in accordance with Owner's procedures.

C. Record Specifications: Submit one (1) copy of Project's Specifications, including addenda and contract modifications. Mark copy to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
3. Note related Change Orders and Record Drawings, where applicable.

D. Miscellaneous Record Submittals: Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work Bind or file miscellaneous records and identify each, ready for continued use and reference. Include the following:

1. Addenda.
2. Change Orders and other modifications to the Contract.
3. Reviewed Shop Drawings, Product Data, and Samples.
4. Manufacturer's instruction for assembly, installation, and adjusting.
5. Test and Inspection Reports.
6. Design Mix Records.
7. Inspections by Authority having Jurisdiction.

1.03 OPERATION AND MAINTENANCE MANUALS

A. General:

1. Submit two (2) copies of each manual in final form at least 10 days before final inspection. A/E will return copy with comments.
2. Correct or modify each manual to comply with comments. Submit two (2) copies of each corrected manual within 10 days of receipt of A/E's comments.

B. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.

1. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.

C. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain a title page, table of contents, and manual contents.

1. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
2. Subject matter included in manual.
3. Name and address of Project.
4. Name and address of Owner.
5. Date of submittal.
6. Name, address, and telephone number of Contractor.

7. Name and address of A/E.
8. Table of Contents: List each product included in manual, identified by product name, indexed to content of volume, and cross-referenced to Specification Section number in Project Manual.
9. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
10. Include information needed for daily operations and management of systems and equipment. In addition to requirements in this Section, include operation data required in individual Specification Sections and equipment descriptions, operating standards, operating procedures, operating logs, wiring and control diagrams, and license requirements.
11. Include the following:
    a. Product name and model number.
    b. Manufacturer's name.
    c. Equipment identification with serial number of each component.
    d. Equipment function.
    e. Operating characteristics.
    f. Limiting conditions.
    g. Performance curves.
    h. Engineering data and tests.
    i. Complete nomenclature and number of replacement parts.
12. Operating Procedures: Include startup, break-in, and control procedures; stopping and normal shutdown instructions; routine, normal, seasonal, and weekend operating instructions; and required sequences for electric or electronic systems.
13. Systems and Equipment Controls: Describe sequence of operation, and diagram controls as installed.
14. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

D. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
1. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
2. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

E. Include the following in combined or separate manuals:
1. Manual for materials and finishes:
2. Building Products, Applied Materials, and Finishes: Include product data, with catalog number, size, composition, and color and texture designations.

3. Instructions for Care and Maintenance: Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
4. Moisture Protection and Weather Exposed Products: Include product data listing applicable reference standards, chemical composition, and details of installation. Include recommendations for inspections, maintenance, and repair.
5. Manual for equipment and systems.
6. Each Item of Equipment and Each System: Include description of unit or system, and component parts. Identify function, normal operating characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and model number of replaceable parts.
7. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications.
8. Include color coded wiring diagrams as installed.
9. Include original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
10. Include control diagrams by controls manufacturer as installed.
11. Include Contractor's coordination drawings, with color coded piping diagrams as installed.
12. Include charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
13. Include list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.

1.04 TOOLS, SPARE PARTS, MAINTENANCE AND EXTRA STOCK PRODUCTS

A. Furnish tools, spare parts, maintenance, extra products and computer programming materials in quantities specified in individual specification sections and deliver to Owner.
   1. Provide list of tools, spare parts, maintenance materials, extra stock and computer programming, materials for review by A/E.

B. Deliver to Project site and place in location as directed by Owner, extra stock as specified in sections.
   1. Owner's Representative will log in materials as delivered.
   2. Obtain receipt for delivered materials.

1.05 WARRANTIES

A. Submittal Time: Submit written warranties on request of A/E or designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.

B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
   1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
   2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
   3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.

C. Provide additional copies of each warranty to include in operation and maintenance manuals.

1.06 CERTIFICATES OF INSPECTION AND COMPLIANCE

A. For inspections throughout the construction period required by regulatory agencies, obtain and maintain certificates issued to show compliance.

B. Assemble certificates and any formal written evidence of regulatory compliance in three ring binder with table of contents and submit to A/E prior to or in conjunction with submission of Notice of Substantial Completion.
   1. Include Contractor's Certification that all work has been performed in compliance with the New Mexico Building Code, current edition and all of its referenced codes including, but limited to IBC, UPC, UMC, NEC.

C. Certificate of Occupancy: Prior to Substantial Completion, obtain Certificate of Occupancy from authorities having jurisdiction. Submit with Notice for Substantial Completion.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 02 41 19

SELECTIVE DEMOLITION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:
1. Demolishing designated building equipment and fixtures.
2. Demolishing designated construction.
3. Removing designated items for relocation and reinstallation.
4. Protecting items designated to remain.
5. Removing demolished materials.

B. Related Work:
1. Section 01 31 00 – Project Management and Coordination.
2. Section 01 33 00 – Submittal Procedures: Requirements for submittals.
3. Section 01 70 00 – Cutting and Patching.

1.02 CONSTRUCTION SUBMITTALS

A. Demolition Schedule: Indicate overall schedule and interruptions required for utility and building services.

B. Where Work of this Section involves adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.

C. Submit list of utilities and systems that will be relocated and those that will be temporarily out of service. Indicate how long service will be disrupted.

1.03 CLOSEOUT SUBMITTALS

A. Project Record Documents: Accurately record actual locations of capped utilities, concealed utilities discovered during demolition, and subsurface obstructions.

1.04 DEFINITIONS

A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.

B. Remove and Salvage: Detach items from existing construction and deliver them to Owner.

C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.

D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

E. Cutting and Patching: Removal of portions of existing construction as required to accommodate the Work.

1.05 MATERIALS OWNERSHIP

A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be removed from Project site.

1.06 QUALITY ASSURANCE

A. Conform to current applicable codes for demolition work, dust control, and products requiring utility disconnection and re-connection.

B. Conform to current applicable codes for procedures when hazardous or contaminated materials are discovered.

C. Obtain required permits from authorities having jurisdiction.

1.07 PRE-DEMOLITION MEETINGS

A. Convene minimum one week prior to commencing work of this section.

1.08 SCHEDULING

A. Cooperate with Owner in scheduling noisy operations and waste removal that may impact Owners operation in adjoining spaces.

B. Coordinate utility and building service interruptions with Owner.
   1. Do not disable or disrupt building fire or life safety systems without three days prior written notice to Owner.
   2. Schedule tie-ins to existing systems to minimize disruption.
   3. Coordinate Work to ensure fire sprinklers, fire alarms, smoke detectors, emergency lighting, exit signs and other life safety systems remain in full operation in occupied areas.

1.09 PROJECT CONDITIONS

A. Conduct demolition to minimize interference with adjacent [and occupied] building areas.

B. Cease operations immediately if structure appears to be in danger and notify Architect/Engineer. Do not resume operations until directed.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 PREPARATION

A. Notify affected utility companies before starting work and comply with their requirements.

B. Mark location and termination of utilities.

C. Erect, and maintain temporary barriers and security devices at locations indicated, including warning signs and lights, and similar measures, for protection of the public, Owner, and existing improvements indicated to remain.

D. Erect and maintain weatherproof closures for exterior openings.

E. Erect and maintain temporary partitions to prevent spread of dust, odors, and noise to permit continued Owner occupancy.

F. Prevent movement of structure; provide temporary bracing and shoring required to ensure safety of existing structure.

G. Provide appropriate temporary signage including signage for exit or building egress.

H. Do not close or obstruct building egress path.

I. Do not disable or disrupt building fire or life safety systems without three days prior written notice to Owner.

3.02 SALVAGE REQUIREMENTS

A. Coordinate with Owner to identify building components and equipment required to be salvaged.
   1. Tag components and equipment Owner designates for salvage.
   2. Protect designated salvage items from demolition operations until items can be removed.
   3. Carefully remove building components and equipment indicated to be salvaged.
   4. Disassemble as required to permit removal from building.
   5. Package small and loose parts to avoid loss.
   6. Mark equipment and packaged parts to permit identification and consolidation of components of each salvaged item.
   7. Prepare assembly instructions consistent with disassembled parts. Package assembly instructions in protective envelope and securely attach to each disassembled salvaged item.

B. Deliver salvaged items to Owner. Obtain signed receipt from Owner.

3.03 DEMOLITION

A. Conduct demolition to minimize interference with adjacent and occupied building areas.

B. Maintain protected egress from and access to adjacent existing buildings at all times.

C. Do not close or obstruct roadways and sidewalks without permits.

D. Cease operations immediately if structure appears to be in danger and notify Architect/Engineer.

E. Disconnect and remove designated utilities within demolition areas.

F. Cap and identify abandoned utilities at termination points when utility is not completely removed. Annotate Record Drawings indicating location and type of service for capped utilities remaining after demolition.

G. Demolish in orderly and careful manner. Protect existing improvements and supporting structural members.

H. Carefully remove building components indicated to be reused.
   1. Disassemble components as required to permit removal.
   2. Package small and loose parts to avoid loss.
   3. Mark components and packaged parts to permit reinstallation.
   4. Store components, protected from construction operations, until reinstalled.

I. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.

J. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.

K. Remove temporary Work.

L. Perform cutting and removal work to remove minimum necessary, and in a manner to avoid damage to adjacent work. Cut finished surfaces such as masonry, tile, plaster and metals, by methods to terminate surfaces in a straight line at a natural point of division.

M. Protect from damage existing finishes, equipment, and adjacent work scheduled to remain. Protect existing and new work from weather and extremes of temperature.

N. Cutting: Cut existing construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction.
   1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to

size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.

2. Existing Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
3. Proceed with patching after construction operations requiring cutting are complete.

3.04 SCHEDULES

A. Elements to be removed and relocated, removed and disposed of and removed and to be salvaged to the Owner (if any) are noted on the Drawings.

B. Protect materials and equipment remaining.

C. Demolish materials, equipment and construction as shown on the Drawings.

END OF SECTION

SECTION 07 92 00

ELASTOMERIC SEALANTS

PART 1 GENERAL

1.01 SCOPE OF WORK

A. Provide elastomeric joint sealants, joint fillers and joint backer materials for complete and durable seal at all locations scheduled and as indicated on the Drawings.

1.02 RELATED WORK

A. Included Elsewhere to be Performed in Compliance with this Section:
1. Division 03: Concrete
2. Division 07: Thermal and Moisture Protection
3. Division 08: Openings
4. Division 13: Special Construction

B. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

1.03 REFERENCES

A. ASTM C 321 - Standard Test Method for Bond Strength of Chemical-Resistant Mortars.

B. ASTM C 834 - Standard Specification for Latex Sealants.

C. ASTM C 882 - Standard Test Method for Bond Strength of Epoxy-Resin Systems Used with Concrete by Slant Shear.

D. ASTM C 919 - Standard Practice for Use of Sealants in Acoustical Applications.

E. ASTM C 920 - Standard Specification for Elastomeric Joint Sealant.

Type S	Single-component sealant.
Type M	Multi-component sealant.
Grade P	Pourable or self-leveling for horizontal applications.
Grade NS	Non-sag for vertical applications.
Class 100/50	Sealant shall withstand an increase of at least 100% and a decrease of least 50% of the joint width
Class 50	Sealant shall withstand an increase and decrease of at least 50% of the joint width.
Class 25	Sealant shall withstand an increase and decrease of at least 25% of the joint width.

Use T	Pedestrian and vehicular traffic areas such as walkways, plazas, decks, and parking garages
Use NT	Non-traffic areas, horizontal and vertical surfaces.
Use M	Sealant meets this specification when tested on mortar.
Use G	Sealant meets this specification when tested on glass.
Use A	Sealant meets this specification when tested on aluminum.
Use I	Sealant meets this specification when immersed in non-chlorinated water.
Use O	Sealant meets this specification when tested on substrates other than the above. Specify substrates types in project specification.

F. ASTM C 1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid Applied Sealants.

1.04 SUBMITTALS

A. Comply with pertinent provisions of SUBMITTALS SECTION.

B. Product Data: Materials list of items proposed to be provided under this Section.

C. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.

D. Shop Drawings or catalog illustrations in sufficient detail to show installation and interface of the work of this Section with the work of adjacent trades.

E. Manufacturer's current recommended installation procedures which, when reviewed by Engineer/Architect, will become the basis for accepting or rejecting actual installation procedures used on the Work.

F. Color Charts of Sealants: Colors shall be selected by the Architect/Engineer (A/E) from the range of manufacturer's standard colors.

G. Qualification Data: For qualified applicator.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company regularly engaged in manufacturing and marketing of products specified in this section.

B. Applicator Qualifications:
   1. Applicator shall have at least three years' experience in installing materials of types specified and shall have successfully completed at least three projects of similar scope and complexity.

C. Single Source Responsibility for Joint Sealants:
   1. Obtain joint sealants from single manufacturer for each different product required to ensure compatibility.
   2. Manufacturer shall instruct applicator in procedures for intersecting sealants.

D. Perform work in accord with ASTM C-1193 guidelines except where more stringent requirements are indicated or specified.

E. Schedule applications of waterproofing, water repellents and preservative finishes after sealant installation unless sealant manufacturer approves otherwise in writing. Cure installed sealant sufficiently prior to subsequent applications.

1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver products in original factory packaging bearing identification of product, manufacturer, and batch number. Provide Material Safety Data Sheets for each product.

B. Store products in a location protected from freezing, damage, construction activity, precipitation, and direct sunlight in strict accordance with manufacturer's recommendations.

C. Condition products to approximately 60° to 70°F (16° to 21°C) for use in accordance with manufacturer's recommendations.

D. Handle all products with appropriate precautions and care as stated on Material Safety Data Sheet.

1.07 SUBSTRATE CONDITIONS

A. General:
   1. Provide joints properly dimensioned to receive the approved sealant system.
   2. Provide joint surfaces that are clean, dry, sound and free of voids, deformations, protrusions and contaminants that may inhibit application or performance of the joint sealant.
   3. Provide a reservoir to accept sealant at expansion joints with preformed joint fillers.

1.08 PROJECT CONDITIONS

A. Do not use products under conditions of precipitation or freezing weather. Use appropriate measures for protection and supplementary heating to ensure proper curing conditions in accordance with manufacturer's recommendations if application during inclement weather occurs.

B. Ensure substrate is dry.

C. Protect adjacent work from contamination due to mixing, handling, and application of flexible epoxy joint filler.

1.09 WARRANTY

A. Deliver to the A/E signed copies of the following written warranties against adhesive and cohesive failure of the sealant and against infiltration of water and air through the sealed joint for a period of three years from date of completion.
   1. Manufacturer's standard warranty covering sealant materials.
   2. Applicator's standard warranty covering workmanship.
   3. Defective work shall include, but not be restricted to, joint leakage, cracking, crumbling, melting, running, loss of adhesion, loss of cohesion, or staining of adjoining or adjacent work or surfaces.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Manufacturers may be from those listed or an A/E approved equal:
   1. Tremco, Inc.
   2. Pecora.
   3. Sonneborn(R) Building Products, ChemRex, Inc.
   4. General Electric.
   5. Dow Corning.
   6. A/E approved equal.

B. Compatibility:
   1. Compatibility: Provide joint sealants and accessory materials that are compatible with one another, and with adjacent materials, as demonstrated by sealant manufacturer using ASTM C 1087 testing and related experience.
   2. Joint Sealant Standard: Comply with ASTM C 920 and other specified requirements for each joint sealant.
   3. Stain Test Characteristics: Where sealants are required to be nonstaining, provide sealants tested per ASTM C 1248 as non-staining on porous joint substrates specified.
   4. Food Contact Suitability: Where sealants are required to be suitable for contact with food provide sealants complying with 21 CFR 177.2600.

2.02 MATERIALS

A. Sealant A: High Performance, medium-modulus, low VOC, UV-Stable, non-sag sealant; ASTM C920 compliant, Grade NS, Class 50, Use NT. Acceptable sealants:
   1. Single-Component Silicones Type S:
      a. Spectrem 1, 2 or 3.
      b. Pecora 860.
      c. A/E approved equal.

2. Single Component Urethane Type S:
   a. Sonolastic(R) NP 1.
   b. Vulkem 116, 911, 921 or 931.
   c. Tremflex 25.
   d. Pecora Dynatrol I XL.
   e. A/E approved equal.
3. Multi Component Urethane Type M:
   a. Sonolastic(R) NP 2.
   b. Dymeric 511.
   c. Vulkem 227 or 922.
   d. Pecora Dynatred.
   e. A/E approved equal.

B. Sealant B: Self-leveling sealant having a Shore A hardness of not less than 25 or more than 50 and plus-or-minus 25 percent joint movement capability; comply with ASTM C920, Grade P or NS, Class 25. Acceptable sealants:
1. Single-Component Urethane, Type S, comply with TT-S-00230C:
   a. Sonolastic SL 1.
   b. Vulkem 45.
   c. Tremflex SL.
   d. Pecora Urexpan NR-201.
   e. A/E approved equal.
2. Multi-component Urethane, Type M, comply with TT-S-00227E:
   a. Sonolastic SL 2.
   b. THC-900/901.
   c. Vulkem 227 or 245.
   d. Pecora Urexpan NR-200.
   e. A/E approved equal.

C. Sealant Type C: Non-skinning and non-staining flexible sealant designed for buttering or bedding application between non-porous substrates, including galvanized steel, unpainted steel and coated metals that are squeezed together by fastening.
1. Butyls:
   a. Tremco JS-773.
   b. Tremco Butyl Sealant.
   c. Pecora.
   d. A/E approved equal.

D. Sealant Type D: Non-sag, high-performance sealant for perimeter caulking and glazing. Acceptable products
1. Urethanes:
   a. Vulkem 1, 911, 921 or 931.
   b. Dymonic.
   c. Tremflex 25.
   d. A/E approved equal.

2. Silicones:
   a. Spectrem 2 or 3.
   b. Proglaze.
   c. A/E approved equal.
3. Other:
   a. JS-773.
   b. Tremco Butyl Sealant.
   c. Tremco Acoustical.
   d. A/E approved equal.

E. Joint Cleaner: Non-corrosive and non-staining type recommended by sealant manufacturer and compatible with joint forming materials.

F. Joint Primer: As recommended by sealant manufacturer for substrates, conditions and exposures indicated.

G. Bond Breaker: Polyethylene tape or other adhesive faced tape as recommended by sealant manufacturer to prevent sealant contact where it would be detrimental to sealant performance.

H. Joint Backer: Polyethylene foam rod:
   1. Soft: Non-gassing, reticulated closed-cell for use with cold-applied joint sealants. Comply with ASTM C 1330.
   2. Closed-cell: Designed for use with cold-applied joint sealants for on-grade or below-grade applications.

I. Joint Filler: Closed-cell polyethylene joint filler designed for use in cold joints, construction joints, or isolation joints wider than 1/4 inch (6 mm).
   1. Size required for joint design.
   2. Masking Tape: Non-staining, non-absorbent tape product compatible with joint sealants and adjacent joint surfaces that is suitable for masking.

J. Expanding Insulating Foam Sealant for filling gaps and sealing around windows and doors.

2.03 OTHER MATERIALS

A. Provide other materials as selected by the Contractor and approved by the sealant manufacturer as compatible, which not specifically described but are required for a complete and proper installation.

PART 3 EXECUTION

3.01 SURFACE CONDITIONS

A. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.

B. Applicator shall examine the areas and conditions under which work of this Section will be performed.
   1. Verify conformance with manufacturer's requirements.
   2. Report unsatisfactory conditions in writing to the A/E.
   3. Do not proceed until unsatisfactory conditions are corrected.

C. Preformed joint fillers in joints to be sealed should provide a reservoir to accept the sealant such as by a molded breakaway joint cap or a removable block out. Preformed joint fillers that may contact the sealant should not be impregnated with oil, bitumen, non-curing polymers or similar contaminants.

3.02 PREPARATION

A. Prepare surfaces to receive sealants in accord with sealant manufacturer's instructions and recommendations except where more stringent requirements are indicated.

B. Thoroughly clean joint surfaces using cleaners approved by sealant manufacturer whether primers are required or not.
   1. Remove all traces of previous sealant and joint backer by mechanical methods, such as by cutting, grinding and wire brushing, in manner not damaging to surrounding surfaces.
   2. Remove paints from joint surfaces except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer.
   3. Remove wax, oil, grease, dirt film residues, temporary protective coatings and other residues by wiping with cleaner recommended for that purpose. Use clean, white, lint-free cloths and change cloths frequently.
   4. Remove dust by blowing clean with oil-free, compressed air.

C. Back-Up Material:
   1. Install appropriate size backer rod, larger than joint where necessary according to manufacturer's recommendations.
   2. Install polyethylene joint filler in joints wider than 1/4 inch (6 mm) to back-up material per manufacturer's recommendations.
   3. Do not install epoxy joint filler over backer rod.

D. Bond Breaker: Install bond-breaker strip in joint to be sealed on top of back-up material to prevent adhesion of sealant to back-up material; install per manufacturer's recommendations.

E. Prime Joint Substrates Where Required:
   1. Use and apply primer according to sealant manufacturer's recommendations.
   2. Confine primers to sealant bond surfaces; do not allow spillage or migration onto adjoining surfaces.

F. Taping:
   1. Use masking tape where required to prevent sealant or primer contact with adjoining surfaces that would be permanently stained or otherwise damaged by such contact or the cleaning methods required for removal.
   2. Apply tape so as not to shift readily and remove tape immediately after tooling without disturbing joint seal.

3.03 INSTALLATION

A. Provide the approved sealant system indicated in the schedule, and in strict accord with the manufacturer's recommendations as approved by the A/E.

B. Install sealants immediately after joint preparation.

C. Mix and apply multi-component sealants in accord with manufacturer's printed instructions.

D. Install sealants to fill joints completely from the back, without voids or entrapped air, using proven techniques, proper nozzles and sufficient force that result in sealants directly contacting and fully wetting joint surfaces.

E. Install sealants to uniform cross-sectional shapes with depths relative to joint widths that allow optimum sealant movement capability as recommended by sealant manufacturer.

F. Tool sealants in manner that forces sealant against back of joint, ensures firm, full contact at joint interfaces and leaves a finish that is smooth, uniform and free of ridges, wrinkles, sags, air pockets and embedded impurities.
   1. Dry tooling is preferred; tooling liquids that are non-staining, non-damaging to adjacent surfaces and approved by sealant manufacturer may be used if necessary when care is taken to ensure that the liquid does not contact joint surfaces before the sealant.
   2. Provide concave tooled joints unless otherwise indicated to provide flush tooling or recessed tooling.
   3. Provide recessed-tooled joints where the outer face of substrate is irregular.

G. Remove sealant from adjacent surfaces in accord with sealant and substrate manufacturer recommendations as work progresses.

H. Protect joint sealants from contact with contaminating substances and from damages. Cut out, remove and replace contaminated or damaged sealants, immediately, so that they are without contamination or damage at time of substantial completion.

3.04 UNACCEPTABLE SEALANT USE

A. Do not install sealants in lieu of other required building enclosure weatherproofing components such as flashing, drainage components, and joint closure accessories; or to close gaps between walls, floors, roofs, windows and doors that exceed acceptable

installation tolerances; or to fill gaps where materials have been misfit such as where door frames meet wall base and flooring, around switch plate and receptacle covers, around light fixture back plates.

B. Remove sealants that have been applied in an unacceptable manner and correct building enclosure deficiencies.

3.05 INSTALLATION SCHEDULE

A. Sealant Type A: For exterior and interior joints in vertical surfaces and non-traffic horizontal surfaces such as, but not limited to:
   1. Control and expansion joints in cast-in-place concrete.
   2. Joints on precast beams and planks.
   3. Joints between architectural precast concrete units.
   4. Control and expansion joints in unit masonry.
   5. Control and expansion joints on exposed interior surfaces of exterior walls.
   6. Joints between different materials listed above.
   7. Perimeter joints between materials listed above and frames of exterior and interior doors, windows, storefronts, louvers, elevator entrances and similar openings.
   8. Control and expansion joints in ceiling and overhead surfaces.
   9. Perimeter joints of exterior openings.
   10. Trim or finish joints subject to movement.

B. Sealant Type B: For exterior and interior joints in horizontal and sloped traffic surfaces such as, but not limited to:
   1. Control, expansion and isolation joints in cast-in-place concrete.
   2. Control, expansion and isolation joints in structural precast concrete units.
   3. Joints between architectural precast concrete paving units.
   4. Tile control and expansion joints.
   5. Joints between different materials listed above.

C. Sealant Type C: For interior or exterior joints in vertical surfaces between laps in fabrications of sheet metal:
   1. Metal building roof and side wall panels.
   2. Between dissimilar metals to prevent galvanic action.
   3. Air ducts.

D. Sealant Type D: For general architectural sealing and caulking not listed above such as:
   1. Under metal thresholds and saddles.
   2. Bedding sealant for sheet metal flashing.
   3. For frames of metal or wood and glazing.
   4. Silicone only around plumbing fixtures.

END OF SECTION

SECTION 08 36 13

SECTIONAL OVERHEAD DOORS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Insulated Sectional Overhead Doors.
   1. Electric Operators and Controls.
   2. Operating Hardware, tracks, and support.

B. RELATED SECTIONS
   1. Section 03 30 00 – Cast-In-Place Concrete: Prepared opening in concrete.
   2. Section 07 92 00 – Joint Sealers: Perimeter sealant and backup materials.
   3. Section 09 90 00 – Paints and Coatings: Field painting.
   4. Section 13 34 19 – Pre-Engineered Metal Buildings.

1.02 REFERENCES

A. ANSI/DASMA 102 - American National Standard Specifications for Sectional Overhead Type Doors.

1.03 DESIGN / PERFORMANCE REQUIREMENTS

A. Wind Loads: Design and size components to withstand loads caused by pressure and suction of wind acting normal to plane of wall as calculated in accordance with applicable code. Refer to Structural Criteria shown on the Drawings.

B. Wiring Connections: match voltage and phase to existing electrical panel as noted on Electrical Drawings.

C. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.

1.04 SUBMITTALS

A. Submit under provisions of Section 01 33 00 – Submittal Procedures.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.

C. Shop Drawings: Indicate plans and elevations including opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations, and installation details.

D. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

E. Operation and Maintenance Data.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum five years documented experience.

B. Installer Qualifications: Authorized representative of the manufacturer with minimum five years documented experience.

C. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened labeled packaging until ready for installation.

B. Protect materials from exposure to moisture until ready for installation.

C. Store materials in a dry, ventilated weathertight location.

1.07 WARRANTY

A. Warranty: Manufacturer's limited door and operators System warranty for 10 year against delamination of polyurethane foam from steel face and all other components for 3 years or 20,000 cycles, whichever comes first.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Basis of Design: Overhead Door Corp., Insulated Steel Sectional Overhead Door: 591 Series Thermacore Insulated Steel Door

2.02 INSULATED SECTIONAL OVERHEAD DOORS

A. Insulated Steel Sectional Overhead Doors shall have the following characteristics:
   1. Door Assembly: Metal/foam/metal sandwich panel construction, with PVC thermal break and weather-tight ship-lap design meeting joints.
      a. Panel Thickness: 1-5/8 inches.
      b. Exterior Surface: Ribbed, textured.
      c. Exterior Steel: .015 inch hot-dipped galvanized.
      d. End Stiles: 16 gauge.

e. Spring Counterbalance: Sized to weight of the door, with a helically wound, oil tempered torsion spring mounted on a steel shaft; cable drum of diecast aluminum with high strength galvanized aircraft cable. Sized with a minimum 7 to 1 safety factor.
   1) Standard cycle spring: 10,000 cycles.
f. Insulation: CFC-free and HCFC-free polyurethane, fully encapsulated.
g. Thermal Values: R-value of 14.86; U-value of 0.067.
h. Air Infiltration: 0.08 cfm at 15 mph; 0.08 cfm at 25 mph.

2. Finish and Color:
   a. Two coat baked-on polyester:
      1) Interior color, white.
      2) Exterior color, to be selected from manufacturer's standard colors.
3. Windload Design: Provide to meet the Design/Performance requirements specified.
4. Hardware: Galvanized steel hinges and fixtures. Ball bearing rollers with hardened steel races.
5. Lock:
   a. Interior mounted slide lock with interlock switch for automatic operator.
   b. Locking mechanism designed to maintain security for exterior while permitting break out when impacted from the inside.
6. Weatherstripping:
   a. EPDM bulb-type strip at bottom section.
   b. Flexible Jamb seals.
   c. Flexible Header seal.
7. Track: Provide track as recommended by manufacturer to suit loading required and clearances available.
   a. Size: 2 inch.
   b. Type: Follow roof slope.
8. Electric Motor Operation: Provide UL listed electric operator, size and type as recommended by manufacturer to move door in either direction at not less than 2/3 foot nor more than 1 foot per second. Operator shall meet UL325/2010 requirements for continuous monitoring of safety devices.
   a. Entrapment Protection: Required for momentary contact, includes radio control operation.
      1) Pneumatic sensing edge up to 18 feet wide. Constant contact only complying with UL 325/2010.
   b. Operator Controls:
      1) Push-button operated control stations with open, close, and stop buttons.
      2) Surface mounting.
      3) Interior location.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin installation until openings have been properly prepared.

B. Verify wall openings are ready to receive work and opening dimensions and tolerances are within specified limits.

C. Verify electric power is available and of correct characteristics.

D. If preparation is the responsibility of another installer, notify A/E of unsatisfactory preparation before proceeding.

3.02 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

A. Install overhead doors and track in accordance with approved shop drawings and the manufacturer's printed instructions.

B.

C. Coordinate installation with adjacent work to ensure proper clearances and allow for maintenance.

D. Anchor assembly to wall construction and building framing without distortion or stress.

E. Securely brace door tracks suspended from structure. Secure tracks to structural members only.

F. Fit and align door assembly including hardware.

G. Coordinate installation of electrical service. Complete power and control wiring from disconnect to unit components.

3.04 CLEANING AND ADJUSTING

A. Adjust door assembly to smooth operation and in full contact with weatherstripping.

B. Clean doors and frames.

C. Remove temporary labels and visible markings.

3.05 PROTECTION

A. Do not permit construction traffic through overhead door openings after adjustment and cleaning.

B. Protect installed products until completion of project.

C. Touch-up, damaged coatings and finishes and repair minor damage before Substantial Completion.

END OF SECTION

SECTION 09 90 00

PAINTING AND COATING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:
1. Interior Painting and Coating.
2. Exterior Painting and Coating.

1.02 REFERENCES

A. SSPC-SP 1 - Solvent Cleaning

B. SSPC-SP 2 - Hand Tool Cleaning

C. SSPC-SP 3 - Power Tool Cleaning

D. SSPC-SP 13 / NACE No. 6 Surface Preparation for Concrete

E. ASTM F1869 - Moisture Test by use of Calcium Chloride

F. ASTM D4258 - Standard Practice for Cleaning Concrete

G. ASTM D4259 - Standard Practice for Abrading Concrete

H. ASTM D4260 - Standard Practice for Etching Concrete

I. ASTM D4263 - Plastic Sheet Method for Checking Moisture in Concrete

J. EPA-Method 24

K. ICRI # 03732

1.03 SUBMITTALS

A. Product Data: Manufacturer's data sheets on each paint and coating product should include:
1. Product characteristics.
2. Surface preparation instructions and recommendations.
3. Primer requirements and finish specification.
4. Storage and handling requirements and recommendations.
5. Application methods.
6. Cautions.

B. Selection Samples: Submit a complete set of color chips that represent the full range of manufacturer's color samples available.

C. Verification Samples: For each finish product specified, submit samples that represent actual product, color, and sheen.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver manufacturer's unopened containers to the work site. Packaging shall bear the manufacturer's name, label, and the following list of information:
1. Product name, and type (description).
2. Application and use instructions.
3. Surface preparation.
4. VOC content.
5. Environmental issues.
6. Batch date.
7. Color number.

B. Storage: Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

C. Store materials in an area that is within the acceptable temperature range, per manufacturer's instructions. Protect from freezing.

D. Handling: Maintain a clean, dry storage area, to prevent contamination or damage to the coatings.

1.05 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not apply coatings under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Basis of Design: Sherwin-Williams Company.

B. Products by the following manufacturer's may be substituted for scheduled products when equivalent in performance:
1. Dunn Edwards Paint Company.
2. PPG Architectural Coatings, Inc.

2.02 APPLICATION/SCOPE

A. Surfaces to be coated:
   1. Exterior Metal: Galvanized.
   2. Exterior Metal: Structural Steel, Ferrous Metal and Metal Door Frames.
   3. Concrete Floors.
   4. Interior Plywood.

2.03 MATERIALS - GENERAL REQUIREMENTS

A. Paints and Coatings - General:
   1. Unless otherwise indicated, provide factory-mixed coatings. When required, mix coatings to correct consistency in accordance with manufacturer's instructions before application. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturer's product instructions.

B. Primers:
   1. Where the manufacturer offers options on primers for a particular substrate, use primer categorized as "best" by the manufacturer.

2.04 ACCESSORIES

A. Coating Application Accessories:
   1. Provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials required, per manufacturer's specifications.

2.05 EXTRA MATERIALS

A. Supply 1 gallon of each color, and type; store where directed.

B. Label each container with Building Name, surface applied to, and date in addition to manufacturer's label showing type of paint and color.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin application of coatings until substrates have been properly prepared. Notify Architect or Specifier of unsatisfactory conditions before proceeding.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

C. Proceed with work only after conditions have been corrected, and approved by all parties, otherwise application of coatings will be considered as an acceptance of surface conditions.

3.02 SURFACE PREPARATION

A. Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

B. Fill all cracks, voids, bug holes and joints with appropriate filler or ArmorSeal Crack Filler, ArmorSeal Joint Sealant, or ArmorSeal Expresspatch.

C. For concrete floor surfaces, follow the ASTM methods listed below:
   1. ASTM F1869 Moisture Test by use of Calcium Chloride
   2. ASTM D4258 Standard Practice for Cleaning Concrete.
   3. ASTM D4259 Standard Practice for Abrading Concrete.
   4. ASTM D4260 Standard Practice for Etching Concrete.
   5. ASTM D4263 Plastic Sheet Method for Checking Moisture in Concrete.
   6. SSPC-SP 13/Nace 6 Surface Preparation of Concrete.
   7. ICRI # 03732 Surface Preparation of Concrete.

D. WARNING: Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

E. Remove mildew before painting by washing with a solution of one part liquid household bleach and three parts of warm water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for ten minutes. Rinse thoroughly with clean water and allow the surface to dry 48 hours before painting. Wear protective glasses or goggles, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

F. No exterior painting should be done immediately after a rain, during foggy weather, when rain is predicted, or when the temperature is below 50°F, unless products are designed specifically for these conditions. On large expanses of metal siding, the air, surface and material temperatures must be 50°F or higher to use low temperature products.

3.03 SURFACE PREPARATION METHODS

A. Concrete, SSPC-SP13 or NACE 6: This standard gives requirements for surface preparation of concrete by mechanical, chemical, or thermal methods prior to the application of bonded protective coating or lining systems.
   1. Minimum substrate cure is 28 days at 75°F.

2. An acceptable prepared concrete surface should be free of contaminants, laitance, loosely adhering concrete, and dust, and should provide a sound, uniform substrate suitable for the application of protective coating or lining systems. Remove all form release agents, curing compounds, salts, efflorescence, laitance, and other foreign matter by sandblasting, shotblasting, mechanical scarification, or suitable chemical means. Refer to ASTM D4260. Rinse thoroughly to achieve a final pH between 8.0 and 10.0. Allow to dry thoroughly prior to coating.

B. Galvanized Metal: Clean per SSPC-SP1 using detergent and water or a degreasing cleaner to remove greases and oils. Apply a test area, priming as required. Allow the coating to dry at least one week before testing. If adhesion is poor, Brush Blast per SSPC-SP7 is necessary to remove these treatments.

C. Steel: Structural, Plate, etc.: Should be cleaned by one or more of the surface preparations described below. These methods are used throughout the world for describing methods for cleaning structural steel. Visual standards are available through the Society of Protective Coatings. A brief description of these standards together with numbers by which they can be specified follow.

1. Solvent Cleaning, SSPC-SP1: Solvent cleaning is a method for removing all visible oil, grease, soil, drawing and cutting compounds, and other soluble contaminants. Solvent cleaning does not remove rust or mill scale. Change rags and cleaning solution frequently so that deposits of oil and grease are not spread over additional areas in the cleaning process. Be sure to allow adequate ventilation.
2. Hand Tool Cleaning, SSPC-SP2: Hand Tool Cleaning removes all loose mill scale, loose rust, and other detrimental foreign matter. It is not intended that adherent mill scale, rust, and paint be removed by this process. Before hand tool cleaning, remove visible oil, grease, soluble welding residues, and salts by the methods outlined in SSPC-SP1.
3. Power Tool Cleaning, SSPC-SP3: Power Tool Cleaning removes all loose mill scale, loose rust, and other detrimental foreign matter. It is not intended that adherent mill scale, rust, and paint be removed by this process. Before power tool cleaning, remove visible oil, grease, soluble welding residues, and salts by the methods outlined in SSPC-SP1.
4. White Metal Blast Cleaning, SSPC-SP5 or NACE 1: A White Metal Blast Cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP1 or other agreed upon methods.
5. Commercial Blast Cleaning, SSPC-SP6 or NACE 3: A Commercial Blast Cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter, except for staining. Staining shall be limited to no more than 33 percent of each square inch of surface area and may consist of light

shadows, slight streaks, or minor discoloration caused by stains of rust, stains of mill scale, or stains of previously applied paint. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP1 or other agreed upon methods.

6. Brush-Off Blast Cleaning, SSPC-SP7 or NACE 4: A Brush-Off Blast Cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, loose mill scale, loose rust, and loose paint. Tightly adherent mill scale, rust, and paint may remain on the surface. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP 1 or other agreed upon methods.
7. Power Tool Cleaning to Bare Metal, SSPC-SP11: Metallic surfaces that are prepared according to this specification, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxide corrosion products, and other foreign matter. Slight residues of rust and paint may be left in the lower portions of pits if the original surface is pitted. Prior to power tool surface preparation, remove visible deposits of oil or grease by any of the methods specified in SSPC-SP1, Solvent Cleaning, or other agreed upon methods.
8. Near-White Blast Cleaning, SSPC-SP10 or NACE 2: A Near White Blast Cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter, except for staining. Staining shall be limited to no more than 5 percent of each square inch of surface area and may consist of light shadows, slight streaks, or minor discoloration caused by stains of rust, stains of mill scale, or stains of previously applied paint. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP1 or other agreed upon methods.
9. High- and Ultra-High Pressure Water Jetting for Steel and Other Hard Materials SSPC-SP12 or NACE 5: This standard provides requirements for the use of high- and ultra-high pressure water jetting to achieve various degrees of surface cleanliness. This standard is limited in scope to the use of water only without the addition of solid particles in the stream.
10. Water Blasting, NACE Standard RP-01-72: Removal of oil grease dirt, loose rust, loose mill scale, and loose paint by water at pressures of 2,000 to 2,500 psi at a flow of 4 to 14 gallons per minute.

3.04 INSTALLATION

A. Apply all coatings and materials with manufacturer's specifications in mind. Mix and thin coatings according to manufacturer's recommendation.

B. Do not apply to wet or damp surfaces.
   1. Wait at least 28 days before applying to new concrete or masonry. Or follow manufacturer's procedures to apply appropriate coatings prior to 28 days.
   2. Test new concrete for moisture content.

C. Apply coatings using methods recommended by manufacturer.

D. Uniformly apply coatings without runs, or sags, without brush marks, and with consistent sheen.

E. Dark Colors and Deep Clear Colors: Regardless of number of coats specified, apply as many coats as necessary for complete hide, and uniform appearance.

F. Apply coatings at spreading rate required to achieve the manufacturer's recommended dry film thickness.

G. Inspection: The coated surface must be inspected and approved by the Architect or Engineer just prior to each coat.

3.05 CLEAN-UP

A. During progress of work, remove from site discarded paint materials, rubbish, cans, and rags at end of each work day.

B. Upon completion of painting work, clean window glass and other paint spattered surfaces.
   1. Remove spattered paint by proper methods of washing and scraping.
   2. Use care not to scratch or otherwise damage finished surfaces.

3.06 PROTECTION

A. Protect finished coatings from damage until completion of project.

B. Touch-up damaged coatings after substantial completion, following manufacturer's recommendation for touch up or repair of damaged coatings. Repair any defects that will hinder the performance of the coatings.

3.07 INTERIOR PAINTING AND COATING SCHEDULE

A. Concrete Floors: Sealer
   1. 1 Coat S-W H&C® Wet Look Water Based Sealer Clear (200-300 sq/ft. per gallon)

B. Wood: Plywood Panels
   1. 1st Coat: S-W Premium Wall & Wood Primer, (4 mils wet, 1.8 mils dry).
   2. 2nd Coat: S-W ProMar 200 Zero VOC Latex Semi-Gloss, B31-2600 Series.
   3. 3rd Coat: S-W ProMar 200 Zero VOC Latex Semi-Gloss, B31-2600 Series (4 mils wet, 1.7 mils dry per coat).

3.08 EXTERIOR PAINTING AND COATING SCHEDULE:

A. Metal Galvanized:
   1. Primer: Pro Industrial Pro-Cryl Universal Metal Primer, B66-310, <100 g/L VOC.
   2. 1st coat: Pro Industrial Acrylic Semi-Gloss, B66-650 series, <50 g/L VOC.
   3. 2nd coat: Pro Industrial Acrylic Semi-Gloss, B66-650 series, <50 g/L VOC.

B. Metal Ferrous: Structural Steel, Metal Door Frames:
   1. Primer: Pro Industrial Pro-Cryl Universal Metal Primer, B66-310, <100 g/L VOC.
   2. 1st coat: Pro Industrial Acrylic Semi-Gloss, B66-650 series, <50 g/L VOC.
   3. 2nd coat: Pro Industrial Acrylic Semi-Gloss, B66-650 series, <50 g/L VOC.

END OF SECTION

SECTION 13 34 19

PRE-ENGINEERED METAL BUILDINGS

PART 1 GENERAL

1.01 SCOPE

A. Furnish and install a rigid frame, single slope pre-engineered metal building (PEMB) addition to an existing PEMB. Components include shop fabricated structural steel building frame; metal wall system, sloped interlocking seam roof system including gutter and downspouts as indicated on the Drawings; trim, closure seals, building insulation and accessories.
   1. Actual building length, width and eave height shall be as shown on Drawings.

1.02 QUALITY ASSURANCE

B. Perform Work in accordance with AISC and MBMA Low Rise Building Systems Manual.

C. Insulation Surface Burning Characteristics:
   1. Batt Insulation: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.

D. The building and accessories shall be a warranted system and the product of one manufacturer.

E. The design is based on Alliance Steel Building Systems. However, products of similar design are available from other manufacturers and will be considered for approval in advance by the Architect. Product names and numbers used are similar to Alliance products and are used as a descriptive standard of quality and finish. Alternate manufacturers' products must match panel rib configurations, and finish colors.

F. Installer Qualifications
   1. Demonstrated quality of workmanship.
   2. Minimum number of installations: Five.
   3. Minimum age of installations: Two years.

G. Requirements of Regulatory Agencies and Accepted Standards
   1. Latest edition of New Mexico Uniform Building Code.
   2. Latest edition AISC "Specifications for the Design, Fabrication, and Erection of Steel Buildings".
   3. Latest edition of AISI "Specifications for the Design of Light gage Cold Formed Steel Structural Members".

1.03 SUBMITTALS

A. Manufacturer's Instructions: Submit preparation requirements, anchor bolt placement

B. Manufacturer's product data.

C. Color charts and physical samples: Submit for color selections for wall panels and roofing. Provide physical finish samples for those options selected by the A/E as being a probable match to the existing.

D. Design Analysis
   1. The design analysis shall be the design of a licensed Professional Engineer experienced in design of this work and shall include complete calculations for the building, its components, and the foundations. Calculations shall be stamped by a New Mexico Registered PE.
   2. Foundations shown on the drawings are based on loads derived from a representative set of similar building types and are to be used for bidding purposes only. The Engineer of Record will verify that the foundations shown are adequate for the building supplied using the criteria in paragraph Foundations. All loads from the Pre-Engineered Metal Building are to be provided so the foundation can be verified. Assumptions and conclusions shall be explained, and cross-referencing shall be clear.
   3. Wind forces on various parts of the structure, both positive and negative pressure, shall be calculated with the controlling pressure summarized.
   4. Lateral forces due to seismic loading shall be calculated and tabulated for the various parts and portions of the building. Computer programmed designs shall be accompanied by stress values and a letter of certification, signed by a licensed Professional Engineer, stating the design criteria and procedures used and attesting to the adequacy and accuracy of the design. A narrative of the computer program delineating the basic methodology shall be included. Computer program output shall be annotated and supplemented with sketches to verify the input and output.
   5. Critical load conditions used in the final sizing of the members shall be emphasized.
   6. The design analysis shall include the name and office phone number of the designer, who shall function as a point of contact to answer questions during the detail drawing review.

E. Building dimensions are shown on Drawings.
   1. Building dimensions shall be as standard be as standard with manufacturer, not less than those indicated but exceeding the indicated dimensions only by the amount of the closest standard size thereto. Eave height shall be measured from the top of finished floor to intersection of insides of roof and sidewall sheets. The clear height between finished floor and bottom of roof steel shall be as indicated.

F. Shop drawings

1. Submit complete descriptive Drawings that will detail the following:
   a. Required modifications to the slab and foundation details.
   b. All vertical and lateral design loads shall be as listed in the STRUCTURAL DESIGN CRITERIA on the Drawings and shall be shown clearly in the calculations submitted as part of the shop drawings. All reactions for the design of foundations shall be provided so that the foundation system maybe verified.
   c. Complete framing and erection plans and details.
   d. Anchor bolt setting plan.
   e. Covering and flashing details.
   f. Door and window interface details including framing around garage doors.
   g. All other details necessary to clearly indicate the proper assembly of all building parts.

G. Sample Roof weather and finish warranties.

H. Certifications

1. Submit certifications of the following:
   a. Building has been designed in accordance with the design criteria shown on the Drawings.
   b. Special loads imposed by the overhead mechanical equipment, and miscellaneous building appurtenances on the building frames have been included in the design.

I. Welder Qualifications: On request.

1.04 THE WORK

A. It is the intention of these specifications that the components to construct a complete and weathertight building be included, and that the costs for such be included in the bid.

1.05 RELATED WORK

A. Foundations:

1. Foundations including anchor bolt embedment length shall be as designed by the Engineer in consideration of the soil conditions of the building site.
2. Reactions for the design of foundations shall be supplied by the building manufacturer.
3. Anchor rod diameter shall be as specified by the building manufacturer and shall be supplied by the Contractor

1.06 PRODUCT DELIVERY AND STORAGE

A. Deliver items in manufacturer's original, unopened crating and protective packaging.

B. Store materials where they will not be damaged in any way.

C. Handle so as to prevent damage to finished surface.

1.07 JOB CONDITIONS

A. Prior to commencing erection of any members, inspect footings, preformed channels and anchoring for dimensional accuracy and suitability for the purpose intended.

B. Coordinate with other trades as required.

C. Report discrepancies to A/E.

D. Field modification of parts shall be the responsibility of the building erector, and shall be in accordance with the highest standards.

1.08 WARRANTY

A. Furnish 20-year manufacturer warranty for pre-engineered building standing seam roof system. Include coverage for weather tightness after installation.

B. Furnish 20-year warranty to include coverage for roofing exterior pre-finished surfaces color coat against chipping, cracking or crazing, blistering, peeling, chalking, or fading

PART 2 PRODUCTS

2.01 STRUCTURAL FRAME

A. Structural Steel Design
   1. All hot-rolled structural steel members shall be designed in accordance with the latest edition of AISC "Specifications" and all cold formed steel structural members shall be designed in accordance with the latest edition of AISI "Specifications".
   2. See design drawings for design criteria.

B. Primary Framing
   1. Rigid Frames
      a. Frames shall consist of welded up plate section columns and roof beams complete with necessary splice plates for bolted field assembly.

b. Base plates, cap plates, compression/splice plates and stiffener plates shall be factory welded into place and have the connection holes shop fabricated.
c. Columns and roof beams shall be fabricated complete with holes in webs and flanges for the attachment of secondary structural members and bracing except for field work as noted on manufacturer's erection Drawings.
d. Bolts for field assembly of frame members shall be high strength, direct-tension indicating bolts as shown on erection drawings.

C. Secondary Structural Members
1. Purlins and Girts:
a. Purlins and Girts shall be "Z" or "C" shaped, precision roll formed.
b. Girts shall be 8" deep "Z" or "C" sections.
c. Purlins shall be 8" or 9-1/2" deep "Z" sections.
d. Outer flange of girts shall contain factory punched holes for panel connections.
e. Outer flange of purlins shall contain factory punched holes for panel connections. Optional purlins are also available without factory punched holes for panel connections.
2. Bracing:
a. Bracing shall be located by Manufacturer as indicated on Drawings.

b. Diagonal bracing shall be hot rolled of size indicated on erection drawings, and attached to columns and roof beams where and as indicated on erection drawings. Bracing shall not in any way interfere with doors, windows, or other Architectural features.
c. Sag rods, when required, shall be hot rolled and installed as indicated on erection drawings.
d. Flange and purlin braces when required by the structural design shall be provided and installed.

D. Welding
1. Welding procedures and operator qualifications and welding quality standards shall be in accordance with the American Welding Society Structural Welding Code. Inspection other than visual inspection as defined by AWS, paragraph 8.15. 1, shall be identified and negotiated prior to bidding.
2. Certification of welder qualifications shall be supplied when requested.

E. Structural Painting
1. Prior to painting, the fabricator shall clean the steel of loose rust, loose mill scale, dirt and other foreign material. Unless otherwise specified, the fabricator shall not sandblast, frame clean or pickle prior to painting. The fabricator shall then factory coat all steel with one coat of primer paint formulated to equal or exceed the performance requirements of Federal Specification TT-P-636.

2. Shop coat of paint is primer and is intended to protect the steel for a short period of exposure. Subsequent finish painting, if required, is to be performed in the field by others.

2.02 ROOF COVERING

A. General
1. The roof shall be standing seam roofing.
2. Details shall be in accordance with the manufacturer's Drawings and these construction documents.
3. Installation shall be in accordance with the manufacturer's Drawings and these construction documents.

B. Roof Panels: AllianceLok 16
1. Standing seam roof panel shall be UL-90 rated and shall be 16" in width with a 2" high straight vertical rib on each side.
2. Roof panels shall be 24 gauge steel.
3. Clips shall be designed so that movement between the panel and the clip does not occur.
4. Low or high fixed or floating clips shall be 2-3/8" or 3-3/8" in height providing a 3/8" clearance for insulation between the panel and the purlin.
5. Panel pan shall match existing roof configuration with respect to striations, ribs, and finish color.
6. Finish: full strength, 70% Kynar 500® or Hylar 5000® fluoropolymer coating
   a. Manufacturer shall warrant that coating shall not blister, peel, crack, chip, or experience material rust through for 20 years. For a period of 20 years chalking shall not exceed #8 - ASTM D4214 and fading shall be 5ΔE Color Difference Units or less.
7. One side of the panel shall be female in configuration suitable to accept the other male side and form a self-locking assembly.
8. Endlaps shall have a backup channel and a prepunch cinch strap for proper placement of fasteners. Endlaps shall be the only place in the roof system where exposed through fasteners are used.

C. Fasteners
1. Panels to Structural Members: 1/4-14 x 7/8" Type AB self-tapping, 3//8" hex-headed galvanized screws with 5/8" o.d. metal-backed neoprene washers or per Architectural specifications.
2. Panel to panel connections: 1/4-14 x 7/8" Type AB self-tapping, 3/8" hex-headed galvanized screws with 5/8" o.d. metal backed neoprene washers.

D. Miscellaneous Materials
1. General: Material used in flashing and transition parts shall be painted or finished to match the roof panel material as specified.
2. Closures: High single slope closures shall match panel corrugation profile.

3. Rain Gutter and Downspouts
   a. Gutter shall be manufacturer's standard and shall be fabricated from galvanized steel, ASTM Specification A525, G90 coating, latest issue.
   b. Gutters shall have a factory finish to match Metal Roofing and shall be supported by matching pre-finished hangers from roof panels.
   c. Preformed corner closures shall be installed to match the contour configuration of the trim and gutter.
   d. Preformed weather seals shall be installed to completely fill roof configuration voids prior to installation of the roof gutter.
   e. Comply with all manufacturer recommendations.
   f. Provide and install compatible and matching downspouts as indicated on Drawings.

2.03 WALL AND SOFFIT CONSTRUCTION

A. Exterior Wall Panels:
   1. Panels shall be continuous from sill to eave. Endwall edge cuts shall be beveled to match roof slope
   2. Base Metal: Wall panels shall be formed from 26 gauge conforming to ASTM A792, Gr80 with a minimum yield strength of 80,000 PSI with a coating of hot-dipped zinc-aluminum alloy in accordance with AZ50 and Az55.
   3. Panel shall be 3' wide with corrugations to match existing PEMB, 1-1/4" to 1-1/2 " high 12" on center with two minor corrugations between each of the major corrugations the entire length of the panel.
      a. Lapped edges shall be fitted with continuous gaskets. Sidelaps shall be at least one major rib (min 4").
   4. Panel Finish:
      a. Primer both sides: A corrosion inhibiting, water-base prime coat applied to a dry film thickness of no less than 0.20 mils and no more than 0.25 mils, shall be oven cured, water quenched and dried.
      b. Thermoset coating system composed of polyester resin modified by copolymerization with a functional silicone resin intermediate. Dry film thickness shall be no more than 0.9 mils and no less than 0.7 mils.
      c. Humidity Test: No blistering, cracking, peeling, loss of gloss or softening of the finish after 1200 hours of exposure to 100% humidity at 100° F ± 5° F per ASTM D 2247-92.
      d. Strippable film shall be applied to the topside of the painted coil to protect the finish during fabrication, shipping and field handling. Remove film before installation.

H. Exterior soffit shall of the same panels as the exterior walls. Match the direction and flashing method of the existing PEMB's soffit.

2.04 FACTORY LAMINATED METAL BUILDING INSULATION

A. FHC rating of 25/50 in accordance with ASTM Specification E84 and bear UL and the NAIMA 202-96® (Rev. 2000) standard identification labels

B. Fiber glass blanket insulation shall have a density of 0.6 pcf and shall be available in 1-1/2" through 8" thickness.

C. Fiberglass insulation facings shall be laminated on one side.

D. R-values shall be as noted on the Drawing cover Sheet, Building Criteria

2.05 ACCESSORIES

Wind Bracing: As required by system manufacturer to accomplish the occupational purpose as illustrated in the Drawings. Comply with all provisions of the 2015 IBC and other regulatory agencies having jurisdiction.

A. Rake and Eave Trim
1. Provide and install manufacturer's trim of profile to match existing building. . Fabricate from galvanized steel, ASTM Specification A525, G90 coating, latest issue.
2. Gable trim shall have a factory finish to match metal roofing (Galvalume).
3. Provide end closures as required.
4. Provide weatherseals as required.

B. Wall Penetrations
1. Provide openings and required flashing, reinforcing, sealants and all accessories in accordance with manufacturer's recommendations and industry standards for all wall penetrations as indicated on the Drawings.
2. Coordinate with mechanical and other contractors as required.

2.06 OPENINGS

A. Provide opening framing, trim and flashings for sectional door, louvers and other openings in exterior walls which may be required or noted on the drawings.

PART 3 EXECUTION

3.01 GENERAL

A. Erect building and install accessories in accordance with erection drawings using proper tools and equipment. Erection practices shall conform to Section 5, MBMA "Code of Standard Practices". There shall be no field modifications to primary structural members except as authorized and specified by the manufacturer.

3.02 EXAMINATION

A. Verify that foundation, floor slab, mechanical and electrical utilities, and placed anchors are in correct position.

3.03 INSTALLATION

A. Skilled erectors experienced and familiar with PEMBs shall construct the building addition in accordance with manufacturer's printed installation instructions and approved shop/erection drawings.

B. Adjustments and field modifications are included in the scope of work and shall be made in a manner acceptable to the A/E and Owner.

C. Work shall be level and plumb and suitable for the purpose intended for a complete and watertight assembly.

3.04 CLEANING

A. Remove waste materials as specified in Division 01, and leave premises clean and free of construction scraps, debris and disturbed soil.

END OF SECTION

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CITY OF LAS VEGAS
1700 NORTH GRAND AVENUE
LAS VEGAS, NEW MEXICO

MAY 2019

construction plans for the

MUNICIPAL AIRPORT (LVS)
SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS

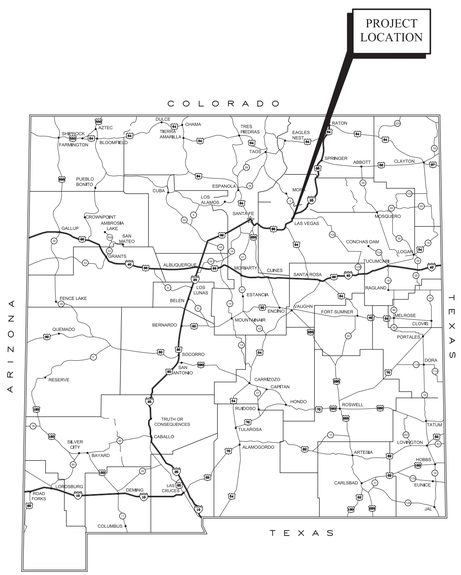
910 AIRPORT ROAD
LAS VEGAS, NEW MEXICO 87701

BUILDING CRITERIA

	DESIGNED TO MEET 2015 NMEBC/IEBC, NMECC/IECC, NMCBC/IBC 2015 NMMC/UMC, AND IFC; 2017 NMEC/NEC AND ANSI A117.1 CURRENT EDITION
TYPE	LAS VEGAS MUNICIPAL AIRPORT SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS EXISTING BUILDING USE (UNCHANGED) VEHICLE & EQUIPMENT STORAGE W/ ACCESSORY OFFICE OCCUPANCY CLASSIFICATION STORAGE: S–1 TYPE OF CONSTRUCTION V–B
BUILDING ATTRIBUTES TABLE 503	BUILDING FLOOR AREA – NON SEPARATED MIXED OCCUPANCY S–1 (EXISTING) 4947 SF S–1 (ADDITION –ALTERNATION LEVEL 2) 400 SF TOTAL AREA 5347 SF ALLOWABLE AREA: 9000 SF NO OF STORIES (UNCHANGED) 1 BUILDING HEIGHT (UNCHANGED) 25 FT
EXTERIOR PROTECTION	FIRE SEPARATION DISTANCES >30 FT ON ALL SIDES FIRE RESISTANCE RATING FOR EXTERIOR WALLS BASED ON DISTANCE NOT REQUIRED
INTERIOR PROTECTION	PORTABLE FIRE EXTINGUISHERS REQUIRED: 2A UNITS EA 1500 SF FLOOR AREA PER IFC SECTION 906 4A UNITS AT 75FT MAX SPACING REQUIRED 2 – 4A:80B:C EXTINGUISHER EXISTING
DESIGN OCCUPANT LOAD MEANS OF EGRESS	FUNCTION OF SPACE/SF PER OCCUPANT — OCCUPANT LOAD BUSINESS AREAS OFFICE 550 SF/100 SF PER OCCUPANT = 6 STORAGE ROOMS STORAGE 4344 SF/300 SF PER OCCUPANT = 15 ACCESSORY AREAS TOILET FACILITIES 146 SF TARE & OVERHANGS 593 SF TOTAL OCCUPANT LOAD 21
	MEANS OF EGRESS REQUIRED AT 36" WIDE EACH 1 EXITS TO PUBLIC WAY PROVIDED (UNCHANGED) 3
PLUMBING FIXTURES	PLUMBING FACILITIES CLASSIFICATION: (UNCHANGED) BUSINESS WATER CLOSETS PROVIDED: 1 TOTAL LAVATORIES PROVIDED: 1 TOTAL OTHER FIXTURES PROVIDED: 1 HOSE BIB, 1 SHOWER
INSULATION VALUES NMECC	CLIMATE ZONE: LAS VEGAS, SAN MIGUEL COUNTY, ZONE 5B IN ACCORDANCE WITH 4.7.6.10 NMAC, THIS STORAGE OCCUPANCY ADDITION IS NOT PROVIDED WITH HEATING OR COOLING BY EQUIPMENT OR SYSTEMS CAPABLE OF MAINTAINING 50 DEGREES FARENHEIT DURING THE HEATING SEASON AND 85 DEGREES FARENHEIT DURING THE COOLING SEASON. IT IS CONSEQUENTLY, NOT CONSIDERED A CONDITIONED SPACE, NOR DOES IT COMMUNICATE DIRECTLY WITH A CONDITIONED SPACE. BUILDINGS THAT DO NOT CONTAIN CONDITIONED SPACES ARE EXEMPT FROM THE BUILDING THERMAL ENVELOPE PROVISIONS OF THE IECC PER SECTION 101.5.2.2 BUILDING ENVELOPE: — INSULATION TO BE PROVIDED: METAL BUILDING ROOF: R–19 THERMAL BATT INSULATION METAL BUILDING WALLS: R–13 MIN THERMAL BATT INSULATION PERIMETER: R–7.5

INDEX OF DRAWINGS

SEQUENCE	SHEET	DESCRIPTION
1	G–001	COVER SHEET, INDEX OF DRAWINGS, BUILDING CRITERIA
2	G–002	GENERAL REQUIREMENTS AND SPECIFICATIONS
3	C–101	SITE PLAN
5	S–001	GENERAL STRUCTURAL NOTES
6	S–101	FOUNDATION PLAN AND STRUCTURAL DETAILS
7	A–101	OVERALL FLOOR PLAN, DEMO, FLOOR, REFLECTED AND ROOF PLAN
8	A–201	EXTERIOR ELEVATIONS, BUILDING SECTION AND DETAILS
9	P–101	PLUMBING PLANS, SCHEDULES AND SPECIFICATIONS
10	P–501	PLUMBING DETAILS
11	M–101	PARTIAL HVAC PLANS, SCHEDULE AND SPECIFICATIONS
12	E–101	ELECTRICAL DEMOLITION AND MODIFICATION DETAILS



VICINITY MAP

CERTIFICATION:

I, JOHN QUINN PATE, REGISTERED LANDSCAPE ARCHITECT NO. 0087 HEREBY CERTIFY THAT THE FOLLOWING PLANS AND DESIGNS WERE MADE UNDER MY SUPERVISION AND DIRECTION AND THAT SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

STATE OF NEW MEXICO — JOHN QUINN PATE — NO. 1784 — REGISTERED ARCHITECT

7/16/19

N.M.R.L.A. NO. 0087

THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR THE CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

ALL IDEAS, DESIGNS, ARRANGEMENTS, AND PLANS INDICATED OR REPRESENTED BY THIS INSTRUMENT ARE OWNED BY AND THE PROPERTY OF MOLZEN–CORBIN & ASSOCIATES, AND WERE CREATED AND DEVELOPED FOR USE ON AND IN CONNECTION WITH THE SPECIFIED PROJECT. THESE IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL NOT BE USED BY ANY PERSON, FIRM, OR CORPORATION FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN CONSENT OF MOLZEN–CORBIN & ASSOCIATES.

THESE DRAWINGS REFLECT INFORMATION ON UTILITIES GATHERED BY SITE INSPECTION, DISCUSSIONS WITH MUNICIPAL OFFICIALS, AND PREVIOUS CONSTRUCTION DOCUMENTS. IT IS POSSIBLE THAT THE EXACT LOCATION OF LINES AND UTILITY CONNECTION POINTS IN THE VICINITY OF REQUIRED WORK MAY BE DIFFERENT FROM THE LOCATION SHOWN ON THESE DRAWINGS. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

CIVIL ENGINEERS
Molzen Corbin
Mike Provine, P.E.

STRUCTURAL ENGINEERS
ABQ ENGINEERING, INC

ARCHITECTS
Molzen Corbin
John Quinn Pate, RA/RLA

MECHANICAL ENGINEERS
Molzen Corbin
Paul Romero, P.E.

ELECTRICAL ENGINEERS
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Daniel Gonzales, P.E.

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Molzen Corbin Project Number: LVG180-14

G-001
Sheet

DESCRIPTION	REV DATE	REV NO	NUMERIC SCALE CONFIRMATION
		△	DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES IF THIS BAR EQUALS ONE INCH

GLV–001 7/15/19

NOTICE OF EXTENDED PAYMENT PROVISION: THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT

GENERAL PROJECT PROCEDURES AND INFORMATION

I. THE CONTRACT

A.CONSTRUCTION DOCUMENTS CONSIST OF:
- THE AGREEMENT
- THE GENERAL CONDITIONS ARE THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, AIA DOCUMENT A201, 2007 EDITION.
- THE SUPPLEMENTARY AND OTHER CONDITIONS OF THE CONTRACT ARE THOSE CONTAINED IN THE PROJECT MANUAL
- THE SPECIFICATIONS ARE THOSE CONTAINED IN THE PROJECT MANUAL
- DRAWINGS
- SPECIFICATIONS
- THE ADDENDA
- MODIFICATIONS WHICH MAY BE ISSUED AFTER THE AGREEMENT

B.DELAYS

1. CLAIMS FOR ADDITIONAL TIME SHALL BE MADE BY WRITTEN NOTICE TO THE A/E WITHIN TEN (10) DAYS AFTER THE CONTRACTOR RECOGNIZES THE CONDITION THAT MAY GIVE RISE TO THE CLAIM.
2. DELAYS FOR CHANGES IN THE WORK SHALL BE IN ACCORDANCE WITH THE GENERAL CONDITIONS OF THE CONTRACT.
3. LIQUIDATED DAMAGES AMOUNT IS $100/CALENDAR DAY AFTER THE DATE OF SUBSTANTIAL COMPLETION.

C.PERMITS

CONTRACTOR WILL SUBMIT CONSTRUCTION DOCUMENTS TO CID FOR PERMIT AND PAID PERMIT FEES.

II. REVIEW OF GENERAL REQUIREMENTS

A.SUMMARY OF THE WORK

SCOPE OF WORK INCLUDES:

1. EARTHWORK, CAST–IN–PLACE CONCRETE, PRE–ENGINEERED METAL BUILDING, PLUMBING OIL WATER SEPERATOR AND EXHAUST LOUVER, ELECTRICAL POWER, LIGHTING MODIFICATIONS, OVERHEAD SECTION DOOR WITH ELECTRIC MOTOR OPERATOR

B.CONTRACT MODIFICATIONS

1. ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS: FOR MINOR CHANGES IN THE WORK, ASI'S OR FIELD ORDERS MAY BE INITIATED BY THE CONTRACTOR, ARCHITECT, OR OWNER, BUT ARE FORMALLY ISSUED BY A/E. ASI'S DO NOT INVOLVE ADJUSTMENT IN THE CONTACT SUM OR CONTRACT TIME AND BECOME VALID BY WRITTEN ORDER.
2. CONSTRUCTION CHANGE DIRECTIVES/ CHANGE ORDERS: ALERT A/E TO THE POTENTIAL NEED FOR MODIFICATION AS SOON AS ONE SURFACES.
- DEVELOP AND SUBMIT EXPECTED COSTS AND TIMES.
- FOLLOW PROCEDURE SPECIFIED IN THE GENERAL REQUIREMENTS.
- PROVIDE COST BREAKDOWN FOR THE ITEMS. MARKUP SHALL NOT EXCEED ALLOWANCES LISTED IN THE AGREEMENT AND MODIFICATIONS TO GENERAL CONDITIONS, ITEM 13.0.
- INCLUDE ITEMIZED BREAKDOWN OF COSTS.
- LIST GROSS RECEIPTS TAX SEPARATELY.
- NUMBER COST PROPOSALS CONSECUTIVELY.

3. FOR CHANGES IN THE WORK, WHICH IF NOT IMPLEMENTED PROMPTLY MIGHT DELAY THE PROJECT, THE A/E AND OWNER WILL ISSUE A CONSTRUCTION CHANGE DIRECTIVE. SEVERAL APPROVED COST PROPOSALS MAY BE ROLLED INTO A CHANGE ORDER WITH AGREEMENT OF BOTH PARTIES. COSTS INCURRED TO PERFORM THE WORK INCLUDED IN CHANGE DIRECTIVES CANNOT BE INVOICED UNTIL A CHANGE ORDER HAS BEEN PROCESSED AND SIGNED BY THE OWNER.

C.PAYMENT PROCEDURES

1. SCHEDULE OF VALUES:
- SCHEDULE SHOULD BE PREPARED CONSIDERING WORK SEQUENCE REQUIREMENTS LISTED IN THE SPECIFICATION SECTION: PROVIDE INITIAL SCHEDULE NO LESS THAN SEVEN (7) DAYS PRIOR TO SUBMITTING FIRST PAY APPLICATION. SCHEDULE MUST BE REVIEWED AND APPROVED BY THE OWNER AND THE A/E.
- PROVIDE SEPARATE LINE ITEMS IN THE SCHEDULE OF VALUES BASED ON THE MAJOR PORTIONS OF THE WORK. INCLUDE COST FOR EACH ITEM AND A LINE ITEM FOR PUNCH LIST WORK, FINAL CLEANING, DEMOBILIZATION, AND CLOSEOUT OF THAT PORTION OF THE WORK. LIST CHANGE ORDERS SEPARATELY BY CO NUMBER.
- COORDINATE THE SCHEDULE OF VALUES WITH THE CONSTRUCTION SCHEDULE. THE SCHEDULE OF VALUES WILL BE THE BASIS OF MONTHLY PAY ESTIMATES.

1. CONTRACTOR'S PAY ESTIMATES:
- PAYMENTS TO THE CONTRACTOR SHALL BE IN ACCORDANCE WITH THE GENERAL CONDITIONS AND THE AGREEMENT. REFER TO GENERAL CONDITIONS, SUPPLEMENTAL GENERAL CONDITIONS (EXTENDED PAYMENT PROVISION).
- SUBMIT A DRAFT PAY APPLICATION AT THE PROGRESS MEETING ON THE 25TH OF THE MONTH. THE CONTRACTOR'S SUPERINTENDENT, OWNER'S REPRESENTATIVE, AND A/E WILL MEET TO REVIEW THE WORK, PHOTOGRAPHICALLY RECORD WORK IN PLACE, AND TO COMPARE COSTS SHOWN IN THE SCHEDULE OF VALUES WITH CONSTRUCTION IN PLACE AND ON–SITE CONSTRUCTION MATERIALS. FOR PAYMENT OF OFF–SITE MATERIALS, SUBMIT PROOF OF PURCHASE AND INSURANCE CERTIFICATE OF STORAGE FACILITY.
- ONCE DRAFT PAYMENT APPLICATION HAS BEEN RECONCILED, CONTRACTOR WILL PREPARE, SIGN, AND SUBMIT TO THE A/E FIVE (5) COPIES OF THE APPLICATION FOR PAYMENT INCORPORATING CHANGES FROM THE DRAFT COPY. ONLY INK–SIGNED APPLICATIONS WILL BE ACCEPTED BY THE OWNER.
- ARCHITECT WILL REVIEW EACH APPLICATION AND, IF APPROVED, CERTIFY AND SUBMIT ALL COPIES TO OWNER (2 BUSINESS DAYS MAXIMUM)
- OWNER WILL SIGN AND PROCESS CERTIFIED APPLICATION FOR PAYMENT.

D.PROJECT MANAGEMENT AND COORDINATION

1. PROGRESS MEETINGS: CONTRACTOR SHALL RECORD AND DISTRIBUTE MINUTES TO PARTIES.
- SCHEDULE: AS DETERMINED AT THIS MEETING, BUT AT LEAST ONCE ON THE 25TH OF EACH MONTH FOR PAY APPLICATION REVIEW.
- SUBSEQUENT MEETINGS WILL BE SCHEDULED AT THAT FIRST PROGRESS MEETING.
- LOCATION: PROJECT SITE
- CONTRACTOR WILL BRING TO EACH PROGRESS MEETING COPIES FOR ALL ATTENDEES OF THE CURRENT VERSIONS OF:

A. AGENDA

B. RFI LOG

C. TWO WEEK LOOK AHEAD SCHEDULE FOR WORK (ITEMIZED, BAR CHART)

D. SUBMITTALS LOG

2. PRE–INSTALLATION MEETINGS: PRE–INSTALLATION MEETINGS SHALL BE IMPLEMENTED WHEN CALLED FOR IN A SPECIFICATION SECTION AND WHEN CONTRACTOR DEEMS NECESSARY – CONTRACTOR'S RESPONSIBILITY TO SCHEDULE. NOTIFY THE A/E IN ADVANCE IF A/E'S ATTENDANCE IS NECESSARY; PROVIDE MINIMUM OF THREE (3) DAYS NOTICE, PLEASE.
3. REQUEST FOR INFORMATION OR CLARIFICATION (RFI): CONTRACTOR WILL USE ITS OWN STANDARD FORM TO SUBMIT REQUESTS TO A/E FOR INFORMATION OR CLARIFICATION OF CONTRACT DOCUMENTS. SUBCONTRACTORS SHALL FORWARD REQUESTS THROUGH THE CONTRACTOR. PLEASE CHECK TO DETERMINE IF INFORMATION REQUESTED IS ALREADY INCLUDED IN THE CONSTRUCTION DOCUMENTS. SPECIFICATIONS, SCHEDULES, AND DETAILS ARE OFTEN OVERLOOKED.
   a. ARCHITECT WILL SOLICIT A RESPONSE FROM THE APPROPRIATE PARTY AND RETURN RESPONSE TO CONTRACTOR, WHO WILL IN TURN RESPOND TO ITS SUBS.
   b. CONTRACTOR TO MAINTAIN THE RFI LOG AND DISTRIBUTE UPDATED LOG AT EACH PROGRESS MEETING.

E.SUBMITTAL PROCEDURES

1. SUBMITTALS\SHOP DRAWINGS: ELECTRONIC SUBMITTALS PREFERRED EXCEPT FOR PRODUCT MATERIAL AND COLOR SAMPLES WHICH WILL NEED ACTUAL SAMPLES FOR REVIEW AND SELECTION.
2. SUBMITTALS MUST BEAR THE REVIEW STAMP OF THE CONTRACTOR AND INCLUDE A SUBMITTAL FORM (COVER SHEET) PRIOR TO BEING SENT FOR OUR REVIEW. THE REQUIRED MOLZEN CORBIN SUBMITTAL FORM IS AVAILABLE IN ELECTRONIC FILE FORMAT. PLEASE INCLUDE MOLZEN CORBIN SUBMITTAL FORM WITH EACH SUBMITTAL.
3. FOLLOW THE SUBMISSION REQUIREMENTS; INCLUDE SECTION NUMBER, TITLE, CONTRACTOR'S REVIEW AND CERTIFICATION, IDENTIFY ANY DEVIATIONS, ETC.
   c. EACH SUBMITTAL MUST HAVE A SEPARATE NUMBER LISTED ON THE COVER SHEET. IF THE A/E RETURNS AN INCOMPLETE OR REJECTED SUBMITTAL TO THE CONTRACTOR, THE CONTRACTOR MUST RESUBMIT THAT SECTION. IF THE RE–SUBMITTAL IS NOT SATISFACTORY, THE CONTRACTOR WILL BE CHARGED FOR ADDITIONAL REVIEWS.
   d. DO NOT COMBINE ITEMS FROM DIFFERENT SPECIFICATION SECTIONS IN SUBMITTAL UNLESS CALLED FOR IN THE SPECIFICATIONS. IF SUBMITTALS FROM DIFFERENT SECTIONS ARE LUMPED TOGETHER, ANY REJECTION MAY CAUSE THE ENTIRE PACKAGE TO BE REJECTED.
   e. IF ALL ITEMS LISTED IN A SPECIFICATION SECTION ARE NOT SUBMITTED TOGETHER, INDICATE THAT IT IS A ©PARTIAL SUBMITTAL△ ON THE SUBMITTAL FORM, AND LIST THE MISSING COMPONENTS.
   f. SUBMITTALS RECEIVED IN A TIMELY MANNER WILL BE PROCESSED IN A TIMELY MANNER IN THE ORDER SHOWN IN THE CONTRACTOR'S SUBMITTAL SCHEDULE
   g. SUBMITTALS REQUIRING A COLOR SELECTION WILL BE HELD UNTIL ALL COLOR SAMPLES AND CHARTS FOR THE PROJECT HAVE BEEN RECEIVED.
   h. NO PAYMENT WILL BE MADE FOR EQUIPMENT ON SITE OR EQUIPMENT INSTALLATION UNTIL SATISFACTORY SHOP DRAWINGS AND PRELIMINARY O&M MANUALS HAVE BEEN SUBMITTED AND REVIEWED. REMEMBER TIMELINESS REQUIREMENTS.

F. TEMPORARY FACILITIES AND CONTROLS

1. TEMPORARY UTILITIES: TO BE PAID BY THE CONTRACTOR AND INCLUDED IN THE CONTRACT SUM.
2. CONSTRUCTION FACILITIES:
- PROVIDE TOILET FACILITY FOR WORKERS. THE PORTABLE TOILET WILL BE LOCATED WITHIN CONSTRUCTION FENCING.
- THE CONTRACTOR MAY PROVIDE A CONSTRUCTION OFFICE TRAILER. COORDINATE LOCATION WITH THE OWNER.

3. BARRIERS AND FENCING: THE CONTRACTOR SHALL ERECT TEMPORARY CONSTRUCTION FENCING AND BARRIERS AS NEEDED FOR SAFETY AND SECURITY.
4. TEMPORARY CONTROLS: WASTE DISPOSAL: MANAGE WASTE DISPOSAL AND KEEP THE SITE CLEAN.
5. BULLETIN BOARD: POST REQUIRED POSTERS AND WAGE RATE INFORMATION.

G.CLOSEOUT SUBMITTALS

1. SECTION DEFINES PROJECT RECORD DOCUMENTS. THE CONTRACTOR WILL USE ONE SET OF CONTRACT DOCUMENTS FOR PREPARING THE RECORD DOCUMENTS. ADDENDUM ITEMS, CHANGE ORDER ITEMS, AND MINOR CHANGES TO THE WORK SHALL BE INTEGRATED INTO THE RECORD DRAWINGS.
2. RECORD ALL ACTUAL CONSTRUCTION INFORMATION IN THE PROJECT MANUAL AND DRAWINGS. RECORD DOCUMENTS (©AS–BUILTS△) ARE TO BE LEGIBLY MARKED, TO RECORD THE ACTUAL CONSTRUCTION. THE ARCHITECT WILL REVIEW RECORD DOCUMENTS PRIOR TO PROCESSING PAY ESTIMATES.
3. CONTRACTOR WILL MAINTAIN THE DOCUMENTS IN GOOD CONDITION, READY FOR THE INSPECTION, AND APART FROM OTHER DOCUMENTS USED FOR CONSTRUCTION.

III.TASKS TO BE COMPLETED

A.CONTRACTOR'S TASKS

1. OBTAIN BUILDING PERMIT.
2. SECURE WORK AREA AT END OF EACH WORK DAY.
3. BUILD AND ERECT ©PROJECT IDENTIFICATION△ SIGN. SIGN INFORMATION TO BE PROVIDED BY THE ARCHITECT AND OWNER.

MOLZENCORBIN

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NOTICE OF EXTENDED PAYMENT PROVISION:
THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH

STATE OF NEW MEXICO
JOHN QUINN PATE
NO. 1784
REGISTERED ARCHITECT
7/16/19

REV NO	REV DATE	DESCRIPTION

PROJECT NUMBER: LVG180–14
DESIGNED BY: NRH
DRAWN BY: NRH
CHECKED BY: JQP
PRIME DESIGN PROFESSIONAL: JOHN Q. PATE
PROJECT DATE: JULY 2019

GENERAL PROJECT INFORMATION AND PROCEDURES

SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS
LAS VEGAS MUNICIPAL AIRPORT (LVS)
LAS VEGAS, NEW MEXICO

G-002
SHEET

PLOT DATE: 7/16/2019 12:13 PM
SAVE DATE: 7/15/2019 3:11 PM
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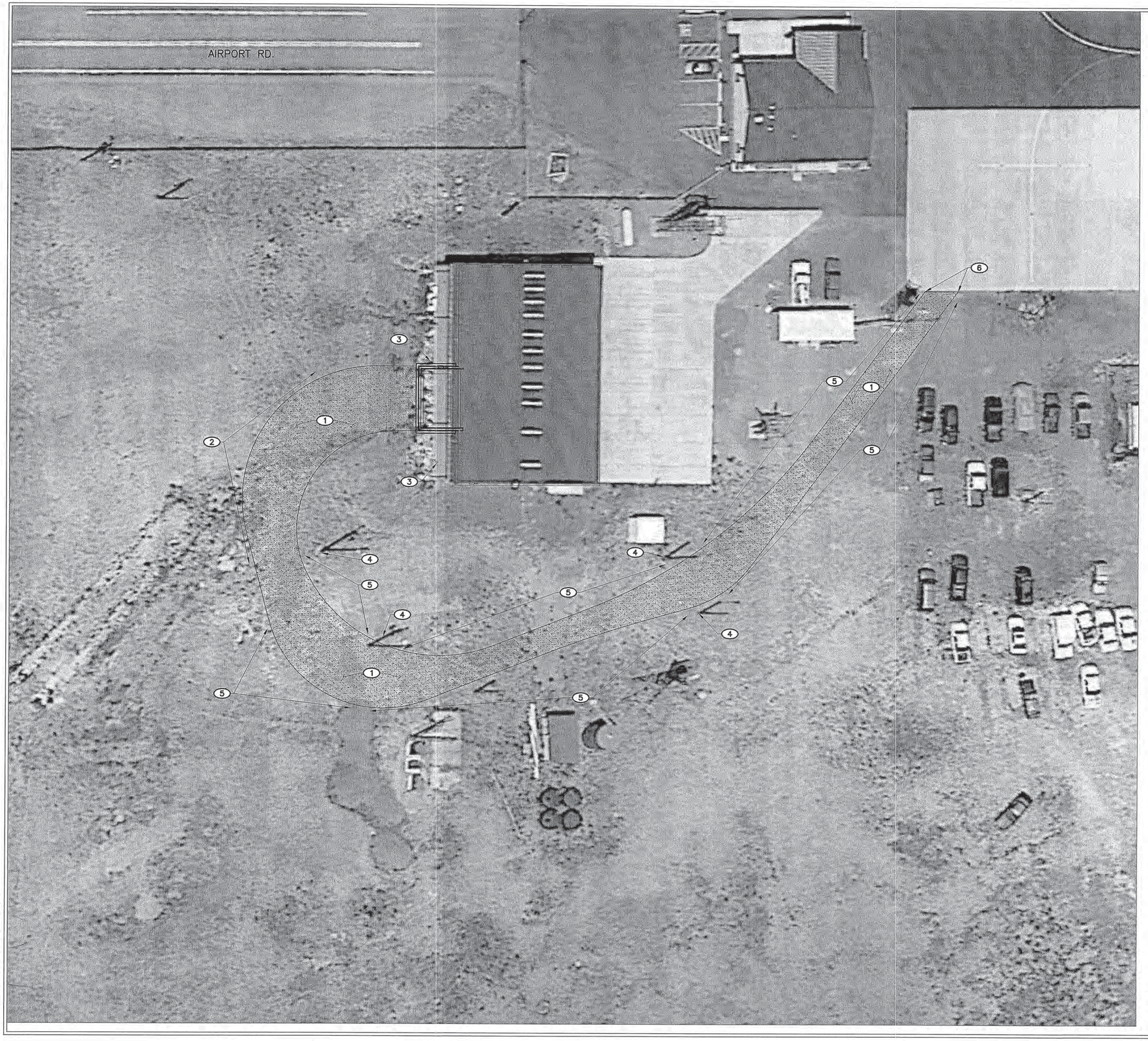

KEYED NOTES

1. 6" COMPACTED BASE COURSE OR ASPHALT MILLINGS – **BY OTHERS**
2. START GRADING 3" BELOW FINISH GRADE. GRADE 10:1 AWAY FROM BUILDING TO MATCH EXISTING GRADE – **BY OTHERS**
3. PROTECT NEW CLEANOUTS. FIELD VERIFY EXACT LOCATION
4. EXISTING POWER POLE WITH OVER HEAD ELECTRIC
5. GRADE OFF EDGE OF BASE COURSE ROADWAY TO MATCH EXISTING – **BY OTHERS**
6. MATCH EXISTING GRADE OF CONCRETE SLAB – **BY OTHERS**

THIS DRAWING PROVIDED FOR INFORMATION ONLY

N

0 2' 5' 10' 20' 40'
1"=20'-0"

CAUTION:
NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE SHOWN IN APPROXIMATE LOCATION ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS.

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NUMERIC SCALE CONFIRMATION
DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH

JOHN M. PROVINE
NEW MEXICO
10997
REGISTERED PROFESSIONAL ENGINEER
7/16/19

REV NO	REV DATE	DESCRIPTION

PROJECT NUMBER: LVG180-14
DESIGNED BY: MC
DRAWN BY: JLB
CHECKED BY: JMP
PRIME DESIGN PROFESSIONAL: JOHN Q. PATE
PROJECT DATE: JULY 2019

SITE PLAN

SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS
LAS VEGAS MUNICIPAL AIRPORT (LVS)
LAS VEGAS, NEW MEXICO

C-101
SHEET

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GENERAL CRITERIA

1. DESIGN LOADS:
   A. VERTICAL DEAD LOADS 5 psf MIN.
      ROOF ____ 2.2 psf MIN.

      VERTICAL LIVE LOADS ____ IBC 2015
      ROOF ____ 20.0 psf NON-REDUCIBLE
      FLOOR ____ 100 psf MIN.

   B. WIND LOADS ____ SECTION 1609, IBC 2009
      BASIC WIND SPEED ____ V_{3s} = 115 MPH
      EXPOSURE ____ "C"
      BUILDING GROUP ____ II
      IMPORTANCE FACTOR ____ I = 1.00
      HEIGHT ADJUSTMENTS FACTOR ____ = 1.21 (0-15')
      ____ = 1.29 (20')
      ____ = 1.35 (25')
      ____ = 1.40 (30')

   C. SEISMIC LOADS ____ IBC 2015
      SITE CLASS ____ D
      SEISMIC IMPORTANCE FACTOR ____ 1.00
      SEISMIC DESIGN CATEGORY ____ B
      ALLOWABLE 1/3 STRESS INCREASE FOR COMBINED VERTICAL AND WIND/SEISMIC LOADS

2. CAST-IN-PLACE CONCRETE:
   a. F'c = 3000 psi @ 28 DAYS (AIR ENTRAINED) - ALL EXTERIOR BUILDING
   b. F'c = 3000 psi @ 28 DAYS (NONE AIR ENTRAINED) - ALL BUILDING

3. REINFORCING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615 OR A706, 3. GRADE 60.

4. UNLESS NOTED OTHERWISE, LAP SPLICED OR EMBEDMENT LENGTHS SHALL CONFORM TO TABLE A, CLASS B SPLICE. SEE THIS SHEET, TABLE A.

5. UNLESS NOTED OTHERWISE, CONCRETE COVER OVER STEEL REINFORCEMENT SHALL CONFORM TO THE MINIMUMS REQUIRED BY CURRENT ADDITION OF ACI 318.

6. REINFORCEMENT DETAILING AND PLACEMENT SHALL CONFORM TO ACI 318 AND ACI 315, EXCEPT WHERE OTHERWISE INDICATED.

FOUNDATION NOTES

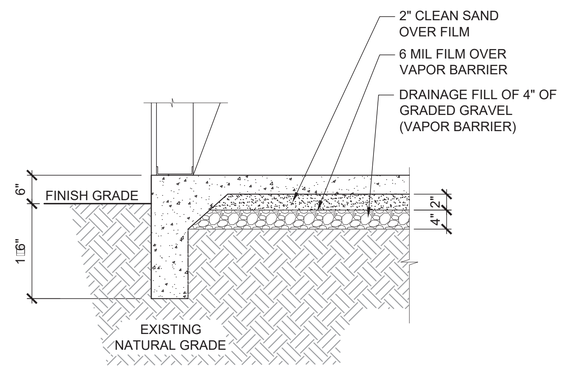
1. DESIGN FOUNDATION BEARING PRESSURE (NET) 1500 PSF DEAD + LIVE LOAD. DESIGN PRESSURE MAY BE INCREASED BY 1/3 FOR COMBINED VERTICAL AND WIND/SEISMIC LOADS.

2. REINFORCEMENT SHALL BE PLACED MID-DEPTH OF SLAB, U.N.O.

3. CHAMFER EXPOSED EDGES OF CONCRETE 3/4", AT EXPOSED EDGES UNLESS OTHERWISE NOTED.

4. SUB-GRADE PREPARATION:
   EXISTING FOUNDATIONS AND UTILITIES AT ANY POINT BENEATH OR WITHIN 3'-0" OF THE NEW STRUCTURES SHALL BE REMOVED ENTIRELY. ANY FILL MATERIAL FROM PREVIOUS CONSTRUCTION ACTIVITIES WHICH IS ENCOUNTERED WITHIN THE BUILDING FOOTPRINT SHOULD ALSO BE REMOVED ENTIRELY. EXPOSED SUBGRADE AT THE BASE OF REQUIRED EXCAVATION WHICH IS TO RECEIVE FILL SHALL BE COMPACTED TO NOT LESS THAN 90% MAXIMUM LAB DENSITY FOR COHESIVE MATERIAL, AND 95% MAXIMUM LAB DENSITY FOR COHESIONLESS MATERIAL, TO A MINIMUM DEPTH OF 8". SEE EXCAVATION/FILL DETAIL THIS SHEET.

5. FILL:
   ALL FILL PLACED UNDER BUILDING SLABS SHALL BE NON-EXPANSIVE AND SHALL BE COMPACTED TO NOT LESS THAN 95% MAXIMUM DENSITY ACCORDING TO ASTM D-1557.



A EXCAVATION/FILL DETAIL
Scale: NONE

TABLE A - REINFORCEMENT TENSION LAPS, EMBEDMENT AND HOOK LENGTHS
f_y = 60000 psi f'_c = 3000 psi

BAR SIZE (d)	CLEAR SPACING (IN)			EMBEDMENT AND CLASS A LAP (IN)						CLASS B LAP (IN)						HOOK (IN)
				TOP BAR			OTHER BARS			TOP BAR			OTHER BARS			
	2d	3d	5d	$2d \cdot S_y/3d$	$S_y/3d$	$S_y/5D$	$2d \cdot S_y/3d$	$S_y/3d$	$S_y/5D$	$2d \cdot S_y/3d$	$S_y/3d$	$S_y/5D$	$2d \cdot S_y/3d$	$S_y/3d$	$S_y/5D$	
3	3/4	1 1/8	1 7/8	16	16	16	13	13	13	21	21	21	16	16	16	9
4	1	1 1/2	2 1/2	22	22	22	17	17	17	28	28	28	22	22	22	11
5	1 1/4	1 7/8	3 1/8	27	27	27	21	21	21	35	35	35	27	27	27	14
6	1 1/2	2 1/4	3 3/4	35	32	32	27	25	25	46	42	42	35	32	32	17
7	1 3/4	2 5/8	4 3/8	48	38	38	37	29	29	63	49	49	48	38	38	20
8	2	3	5	63	45	43	49	35	33	82	59	56	63	45	43	22
9	2.256	3 3/8	5 5/8	80	57	48	62	44	37	104	74	63	80	57	48	25
10	2.54	3.81	6.35	102	73	58	78	56	45	132	94	76	102	73	58	28
11	2.82	4.23	7.05	125	89	71	96	69	55	162	116	93	125	89	71	31

NOTES FOR TABLE A

1. LENGTHS SHOWN CONFORM WITH NON SEISMIC PROVISIONS OF ACI 318-95 FOR UNCOATED BARS NOT ENCLOSED BY CLOSELY SPACED SPIRALS OR TIES. DEVELOPMENT OF REINFORCEMENT NOT COVERED BY THE TABLE SHALL CONFORM WITH ACI 318-95.

2. MULTIPLY LENGTHS SHOWN BY 0.87 FOR 4000 PSI. CONCRETE, BUT LENGTH OF LAP SHALL NOT BE LESS THAN 12 INCH.

3. MULTIPLY LENGTHS SHOWN BY 1.3 FOR LIGHTWEIGHT AGGREGATE CONCRETE.

4. BAR CLEAR SPACING IS THE CENTER TO CENTER BAR SPACING MINUS TWO BAR DIAMETERS WHEN ALL BARS ARE LAPPED AT THE SAME LOCATION. WHEN BAR LAPS ARE STAGGERED, AND LAP HALF THE BARS ARE LAPPED AT THE SAME LOCATION, THE BAR CLEAR SPACING IS TWICE THE CENTER TO CENTER BAR SPACING MINUS TWO BAR DIAMETERS. WHEN ALL BARS ARE EMBEDDED AT THE SAME LOCATION, THE BAR CLEAR SPACING IS THE CENTER TO CENTER BAR SPACING MINUS ONE BAR DIAMETER.

5. CLASS A LAP LENGTHS APPLY ONLY WHERE NOTED ON THE DRAWINGS.

6. LAP AND EMBEDMENT LENGTHS SHOWN APPLY WHEN MINIMUM CONCRETE COVER OVER BARS CONFORMS WITH VALUES GIVEN IN THE TABLE FOR "CONCRETE COVER". THESE COVER VALUES CONFIRM WITH ACI 318-95.

7. CLASS A LAP AND EMBEDMENT LENGTH HAVE SAME VALUE.

8. CLASS B LAP LENGTHS APPLY FOR ALL SPLICES UNLESS NOTED OTHERWISE.

9. HOOK LENGTH GIVEN IS THE STRAIGHT LINE DISTANCE FROM THE LOCATION OF MAXIMUM STRESS IN THE BAR TO THE OUTSIDE END OF THE HOOK. MULTIPLY LENGTHS GIVEN BY 0.7 FOR HOOKS WITH SIDE COVER NORMAL TO THE HOOK NOT LESS THAN 2-1/2 INCH AND FOR 90 DEGREE HOOKS COVER ON BAR EXTENSION BEYOND HOOK NOT LESS THAN 2 INCH.

10. TOP BARS ARE HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 12 INCHES OF CONCRETE IS CAST BELOW THE REINFORCEMENT.

11. MULTIPLY LAP AND EMBEDMENT LENGTHS GIVEN BY 2.0 FOR BARS WITH CLEAR SPACING OF TWO BAR DIAMETERS OR LESS OR CONCRETE COVER OF ONE BAR DIAMETER OR LESS.

12. MINIMUM CONCRETE COVER FROM FACE OF MEMBER TO EDGE BAR SHALL NOT BE LESS THAN TWO AND ONE HALF BAR DIAMETERS.

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Albuquerque, New Mexico 87106
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NUMERIC SCALE CONFIRMATION
DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH

JAMES CRAIG HAGELGANZ
NEW MEXICO
15559
PROFESSIONAL ENGINEER
7/15/19

REV NO	REV DATE	DESCRIPTION

PROJECT NUMBER: LVG180-14
DESIGNED BY: JCH
DRAWN BY: DM
CHECKED BY: JCH
PRIME DESIGN PROFESSIONAL: JOHN Q. PATE
PROJECT DATE: MAY 2019

GENERAL STRUCTURAL NOTES

SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS
LAS VEGAS MUNICIPAL AIRPORT - LVS
LAS VEGAS, NEW MEXICO

S-001
SHEET

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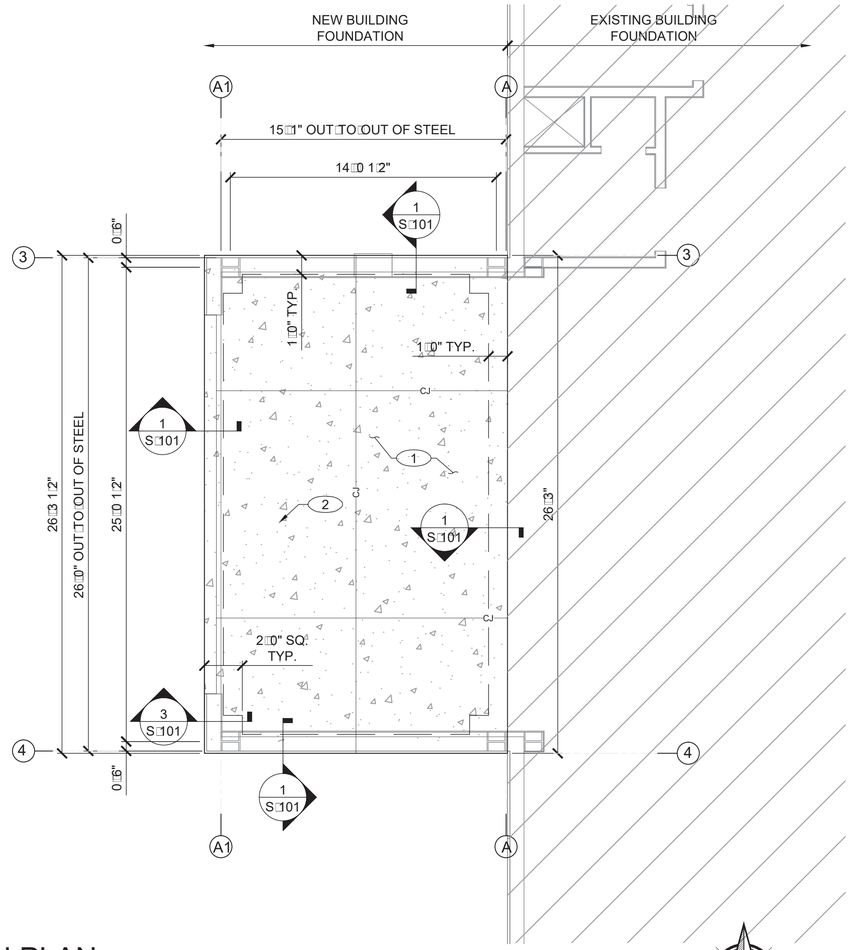


1 FOUNDATION PLAN

Scale□1□4" □ 1□0"

General No□es

F1. SEE METAL BUILDING MANUFACTURERS DRAWING FOR ANCHOR BOLT DIAMETER AND LOCATIONS. ANCHOR BOLTS SHALL BE 20" IN LENGTH MINIMUM.

F2. OVER□EXCAVATION OF SOIL REMOVED BELOW FOOTINGS SHALL BE REPLACED AND COMPACTED IN LAYERS TO 95□ OF MODIFIED PROCTOR DENSITY.

F3. INTERIOR CONCRETE SLABS ON GRADE, UNLESS OTHERWISE NOTED, SHALL BE REINFORCED WITH WELDED WIRE FABRIC MATS AS FOLLOWS□
4" SLAB □6 x 6 W1.4 x W1.4
6" SLAB □6 x 6 W2.1 x W2.1

F4. ELECTRIC CONDUIT AND OTHER PIPES EMBEDDED IN THE CONCRETE FLOOR SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318, PARAGRAPH 6.3.

F5. LOCATE ALL SLEEVES, DRAINS, OPENINGS, EMBEDDED ITEMS, ETC. THAT ARE INDICATED ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL SUCH ITEMS ARE CORRECTLY POSITIONED □ INSTALLED PRIOR TO PLACEMENT OF CONCRETE.

F6. SEE SHEET S□001FOR ADDITIONAL NOTES AND LEGEND.

Ke□ed No□es

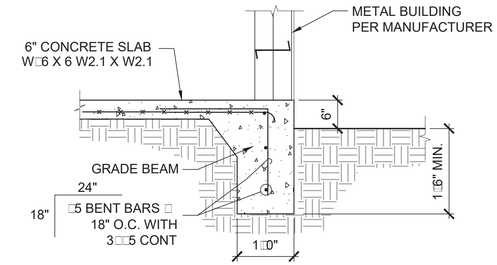
1. 6" CONCRETE SLAB ON GRADE WITH TURNDOWN FOUNDATION BELOW GRADE.
2. SAWN CONTROL JOINT. C.J. SHALL BE A MAXIMUM 12□0" O.C. EACH WAY.

0 1 2 4 8 16
1□4" □ 1□0"

Le□end

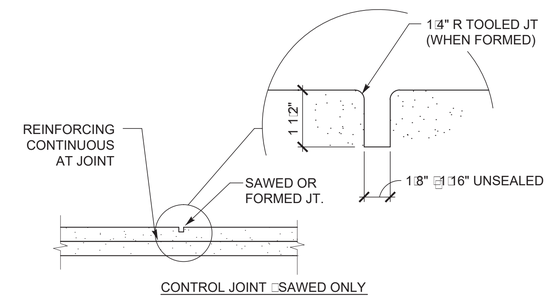
GRID LINE
CJ CONTROL JOINT

AB	ANCHOR BOLT	LW	LONG WAY
BC	BLOCK CORE DOWELS	NS	NEAR SIDE
CD	CORNER DOWELS	PD	PIER DOWELS
CF	COLUMN FOOTING	RF	RECTANGULAR FOOTING
CJ	CONTROL JOINT	SD	SLAB DOWEL
FD	FOOTING DOWEL	SW	SHORT WAY
FH	FOOTING HORIZONTAL	ST	SPIRAL TIE
FS	FAR SIDE	WF	WALL FOOTING
FT	FOOTING TRANSVERSE	WH	WALL HORIZONTAL
GB	GRADE BEAM	WV	WALL VERTICAL
HT	HORIZONTAL TIES		



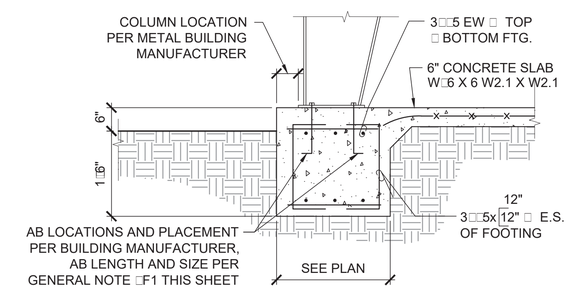
1 PERIMETER SECTION

Scale□3□4" □ 1□0"



2 SECTION □ CONTROL JOINT

Scale□3□4" □ 1□0"



3 SECTION □ FOOTING

Scale□3□4" □ 1□0"

MOLZENCORBIN
2701 Miles Road SE
Albuquerque, New Mexico 87106
505 242 5700 office
505 242 0673 fax
MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH

JAMES CRAIG HAGELGANZ NEW MEXICO 15559 LICENSED PROFESSIONAL ENGINEER
7□15□19

REV NO	REV DATE	DESCRIPTION

PROJECT NUMBER: LVG180□14
DESIGNED BY: JCH
DRAWN BY: DM
CHECKED BY: JCH
PRIME DESIGN PROFESSIONAL: JOHN Q. PATE
PROJECT DATE: MAY 2019

FOUNDATION PLAN AND STRUCTURAL DETAILS

SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS
LAS VEGAS MUNICIPAL AIRPORT □LVS□
LAS VEGAS, NEW MEXICO

S-101
SHEET

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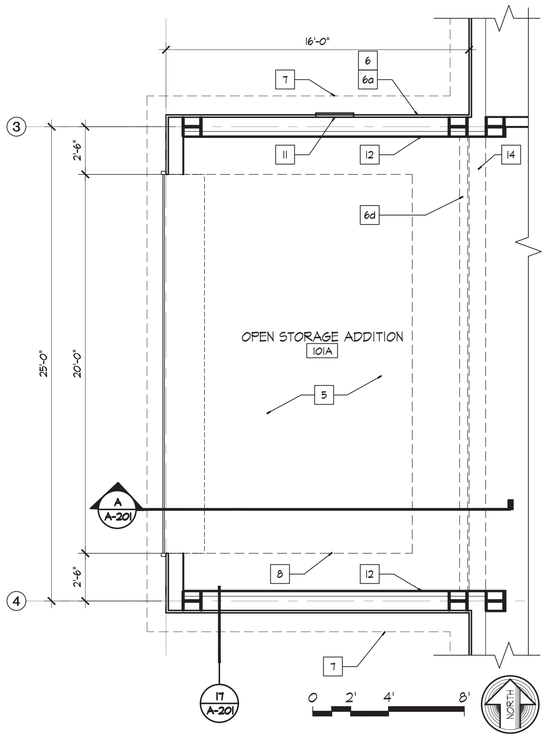
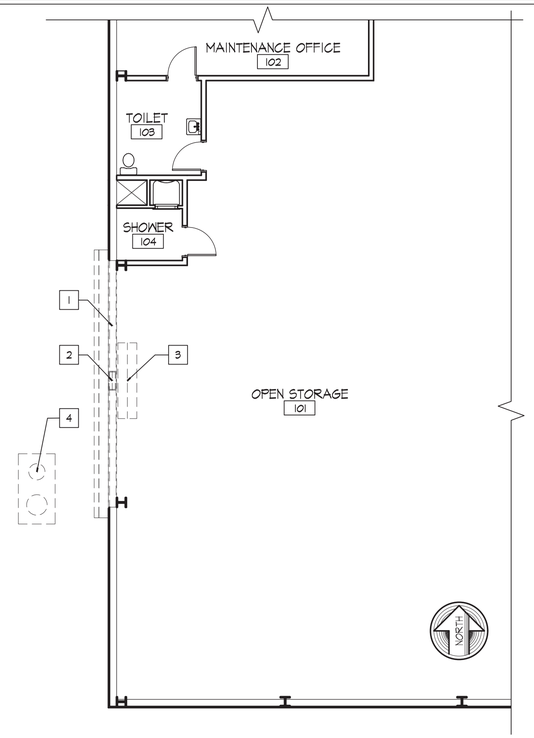
PLOT DATE: 7/15/2019 4:15 PM
PLOT BY: DAVID MARTINEZ
K:\PROJECTS\2018\19-023\STRUCTURAL\STRUCTURAL SHEETS



ENLARGED FLOOR PLAN

1/4"=1'-0" 3



DEMOILTION PLAN

0 4' 8' 16' 1/8"=1'-0" 2

KEYED NOTES

1. REMOVE EXISTING METAL WALL PANELS, SOFFIT, GUTTERS, INSULATION, PLYWOOD WAINSCOT BETWEEN COLUMNS 3 & 4
2. REMOVE EXISTING MECHANICAL LOUVER
3. REMOVE AND RELOCATE EXISTING CASEWORK. COORDINATE NEW LOCATION WITH OWNER
4. DEMOLISH OIL WATER SEPARATOR INSTALL NEW PER P-101
5. CONCRETE SLAB ON GRADE OVER VAPOR BARRIER OVER COMPACTED FILL PER STRUCTURAL DRAWINGS, FINISHED AS SCHEDULED ON A-101 AND PER SPECIFICATION SECTION 09 90 00
6. PRE-ENGINEERED STRUCTURE (REFER TO SPECIFICATION SECTION 13 34 19) INCLUDES
   - 6a. METAL WALL PANELING AT EXTERIOR; DRIP EDGE FLASHING; INSULATION AT INTERIOR
   - 6b. METAL ROOFING OVER INSULATION OVER STEEL PURLINS ON METAL BUILDING STRUCTURAL FRAME
   - 6c. DOWNSPOUTS FROM CONTINUOUS EAVE GUTTER ABOVE,
   - 6d. METAL BUILDING MAIN FRAME, WALL OPENING FRAMING
7. ROOF LINE ABOVE, 12" OVERHANG
8. OVERHEAD SECTIONAL DOOR
9. LIGHT FIXTURE; SEE E-101
10. EXPOSED STRUCTURE AND METAL BUILDING INSULATION ABOVE
11. MECHANICAL LOUVER; SEE M-101
12. 5/8" CDX PLYWOOD 8'-0" TALL WAINSCOT OVER 2-1/2" METAL STUDS AT 18" O.C. W/ TOP AND BOTTOM TRACK; PAINT TO MATCH EXISTING
13. EXISTING RADIANT HEATER TO REMAIN
14. EXISTING GIRT TO REMAIN; APPROX. 15'-0" AFF
15. RECONFIGURE EXISTING GUTTER AND DOWNSPOUTS FOR NEW WORK. HEM AND CAP ENDS. RELOCATE EXISTING DOWNSPOUTS.
16. SNOW REMOVAL EQUIPMENT, NIC

GENERAL NOTES

A. DEMOLISH AND REMOVE EXISTING CONSTRUCTION ONLY TO THE EXTENT REQUIRED BY NEW CONSTRUCTION AND AS INDICATED.

B. REFER TO CIVIL PLANS FOR SITE IMPROVEMENT AND UTILITY REMOVALS AND RELOCATIONS

C. REFER TO PLUMBING AND MECHANICAL PLANS FOR DEMOLITION AND NEW WORK.

D. REFER TO ELECTRICAL PLANS FOR DEMOLITION AND NEW WORK.

E. SEE STRUCTURAL FOR CONCRETE SLAB

F. PROVIDE THERMAL BATT INSULATION IN EXTERIOR WALLS AND ROOF, MATCH EXISTING

G. PROVIDE 1/2" EXPANSION JOINT WHERE NEW CONCRETE ABUTS EXISTING, SEAL JOINT WITH SELF-LEVELING ELASTOMERIC SEALANT

FINISHES - ADDITION

FLOOR	- EXPOSED CONCRETE, SEALED
WALLS	- PAINTED PLYWOOD WAINSCOT UP TO 8'-0" AFF, EXPOSED STRUCTURE AND INSULATION
CEILING	- EXPOSED STRUCTURE AND INSULATION

MOLZENCORBIN

2701 Miles Road SE
Albuquerque, New Mexico 87106
505 242 5700 office
505 242 0673 fax
MolzenCorbin.com

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NUMERIC SCALE CONFIRMATION

DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH

STATE OF NEW MEXICO
JOHN QUINN
PE & LTE
NO. 1784
REGISTERED ARCHITECT

7/15/19

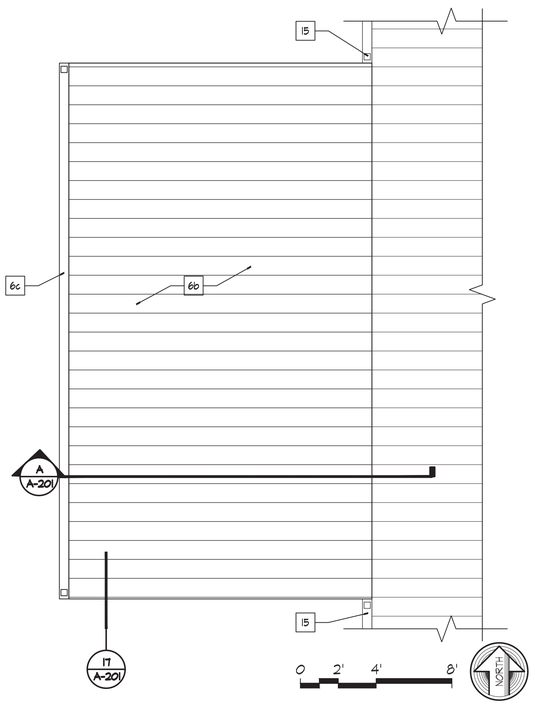
REV NO	REV DATE	DESCRIPTION

PROJECT NUMBER: LVG180-14
DESIGNED BY: NRH
DRAWN BY: NRH
CHECKED BY: JQP
PRIME DESIGN PROFESSIONAL: JOHN Q. PATE
PROJECT DATE: JULY 2019

OVERALL FLOOR PLAN, DEMOLITION, ENLARGED FLOOR, REFLECTED CEILING AND ROOF PLANS

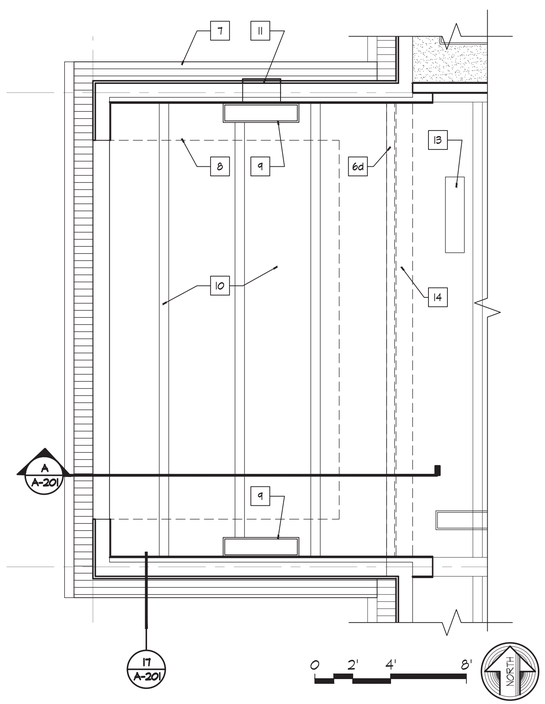
SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS
LAS VEGAS MUNICIPAL AIRPORT (LVS)
LAS VEGAS, NEW MEXICO

A-101
SHEET



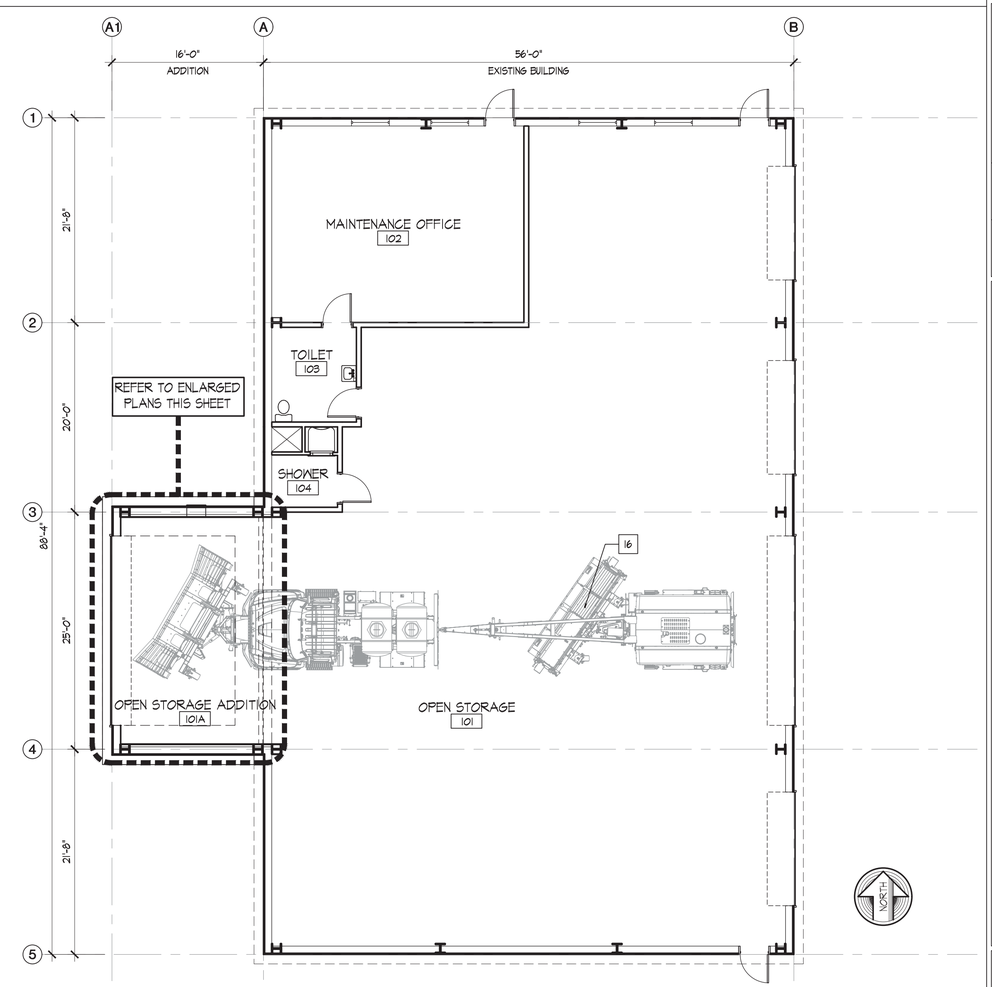
ROOF PLAN

1/4"=1'-0" 6



REFLECTED CEILING PLAN

1/4"=1'-0" 5



OVERALL FLOOR PLAN

0 4' 8' 16' 1/8"=1'-0" 1

PLOT DATE: 7/15/2019 2:11 PM
SAVE DATE: 7/15/2019 2:06 PM
I:\LASVEGAS\LVG180-14 SNOW REMOVAL BLDG\DWGS\ALV-101

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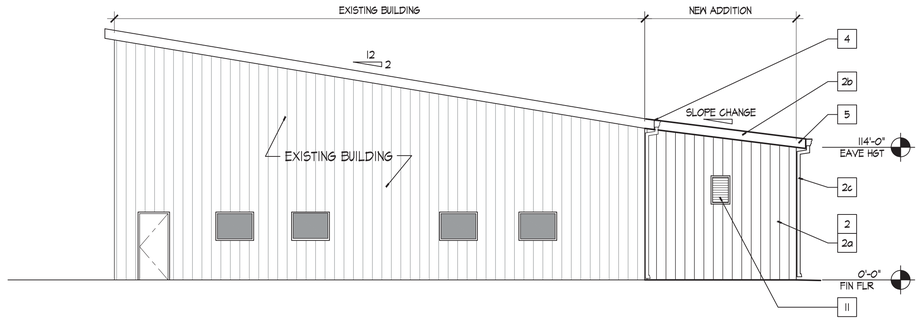
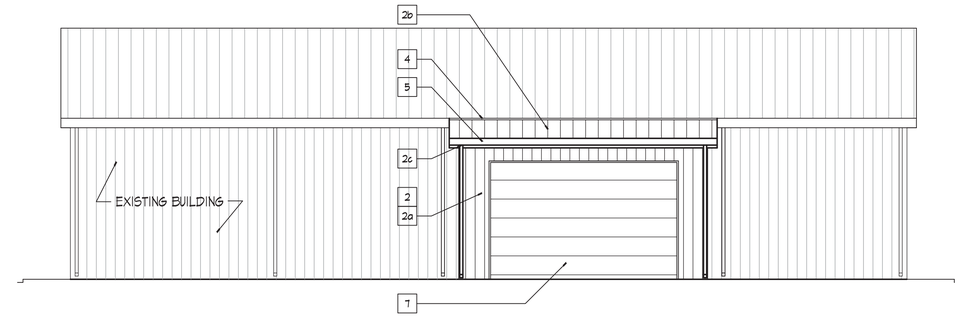


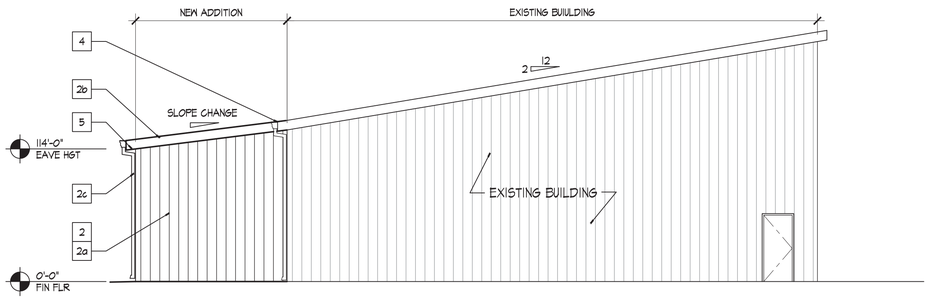
NORTH ELEVATION

1/8"=1'-0" 4



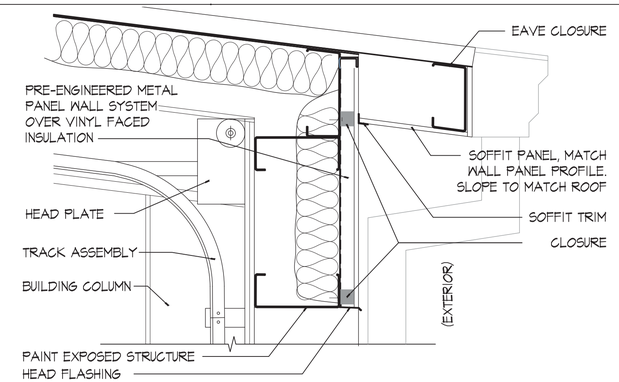
WEST ELEVATION

1/8"=1'-0" 1



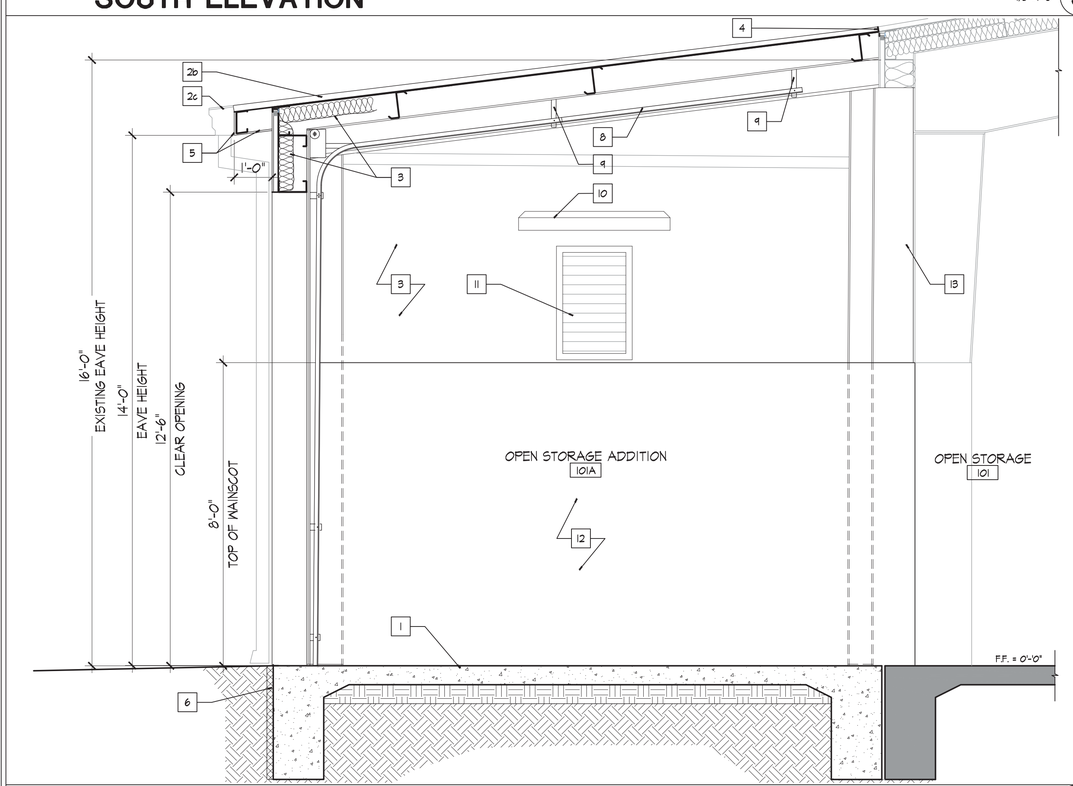
SOUTH ELEVATION

1/8"=1'-0" 9



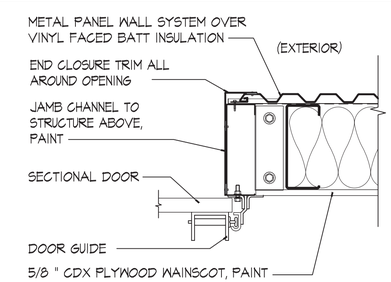
SECTIONAL DOOR HEAD

1-1/2"=1'-0" 8



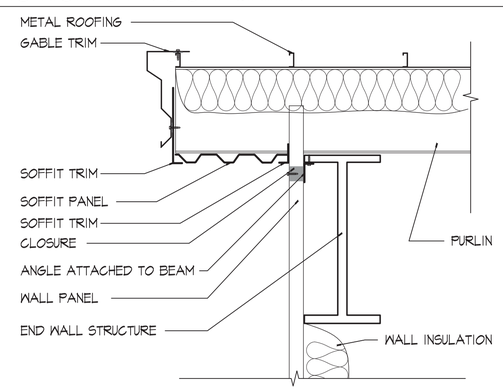
BUILDING SECTION

1/2"=1'-0" A



SECTIONAL DOOR JAMB

1-1/2"=1'-0" 13

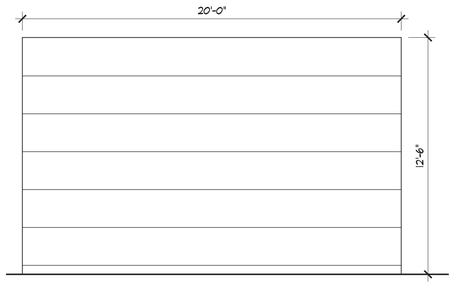


EAVE DETAIL

1-1/2"=1'-0" 17

KEYED NOTES

1. CONCRETE SLAB ON GRADE OVER VAPOR BARRIER OVER COMPACTED FILL PER STRUCTURAL DRAWINGS, FINISHED AS SCHEDULED ON A-101 AND PER SPECIFICATION SECTION 09 90 00
2. PRE-ENGINEERED STRUCTURE (REFER TO SPECIFICATION SECTION 13 34 19) INCLUDES
   - 2a. METAL WALL PANELING AT EXTERIOR; DRIP EDGE FLASHING; INSULATION AT INTERIOR
   - 2b. METAL ROOFING OVER INSULATION OVER STEEL PURLINS ON METAL BUILDING STRUCTURAL FRAME
   - 2c. DOWNSPOUTS FROM CONTINUOUS EAVE GUTTER ABOVE,
   - 2d. METAL BUILDING MAIN FRAME, WALL OPENING FRAMING
3. EXPOSED VINYL FACED INSULATION
4. ROOF PANELS SAME PROFILE AS EXISTING. LAP NEW PANEL UNDER EXISTING A MINIMUM OF 4 " OR AS REQUIRED BY METAL BUILDING MANUFACTURER. PROVIDE TO LAYERS OF TAPE SEALER. RE-FASTEN TO EAVE STRUT.
5. METAL SOFFIT PANEL AND FLASHING TO MATCH EXISTING BUILDING
6. PERIMETER RIGID FOUNDATION INSULATION
7. SECTIONAL DOOR
8. HORIZONTAL TRACK ASSEMBLY TO FOLLOW THE ROOF SLOPE
9. HORIZONTAL TRACK SUPPORT PER MANUFACTURER
10. LIGHT FIXTURE; SEE E-101
11. LOUVER; SEE M-101
12. 5/8" CDX PLYWOOD 8'-0" TALL WAINSCOT OVER 2-1/2" METAL STUDS AT 18" O.C. W/ TOP AND BOTTOM TRACK; PAINT TO MATCH EXISTING
13. EXTEND NEW INSULATION WITH VINYL FACE TO EXISTING COLUMN



INSULATED SECTIONAL DOOR
MOTOR OPERATED

DOOR TYPE

1/4"=1'-0" 16

MOLZENCORBIN

2701 Miles Road SE
Albuquerque, New Mexico 87106
505 242 5700 office
505 242 0673 fax
MolzenCorbin.com

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DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH

STATE OF NEW MEXICO
JOHN QUINN PATE
NO. 1784
REGISTERED ARCHITECT

REV NO	REV DATE	DESCRIPTION

PROJECT NUMBER: LVG180-14
DESIGNED BY: NRH
DRAWN BY: NRH
CHECKED BY: JQP
PRIME DESIGN PROFESSIONAL: JOHN Q. PATE
PROJECT DATE: JULY 2019

EXTERIOR ELEVATIONS, BUILDING SECTION
OPENING DETAILS AND ROOF DETAIL
DOOR TYPE ELEVATION

SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS
LAS VEGAS MUNICIPAL AIRPORT (LVS)
LAS VEGAS, NEW MEXICO

A-201
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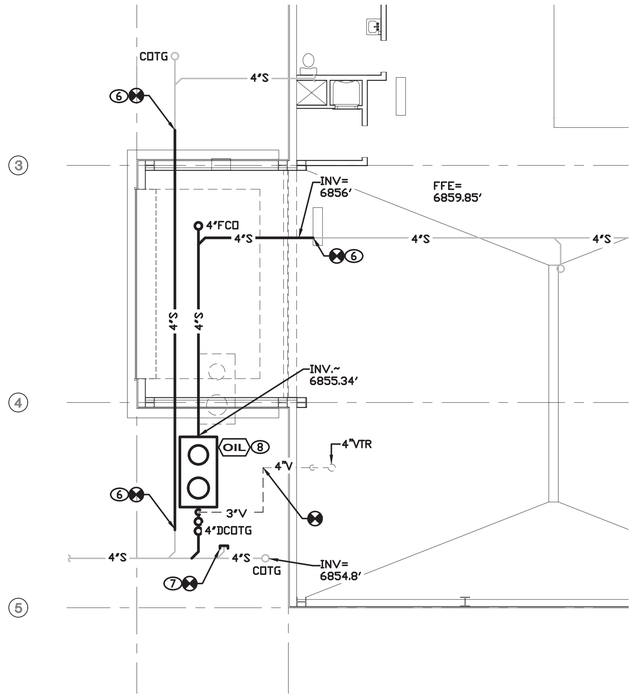
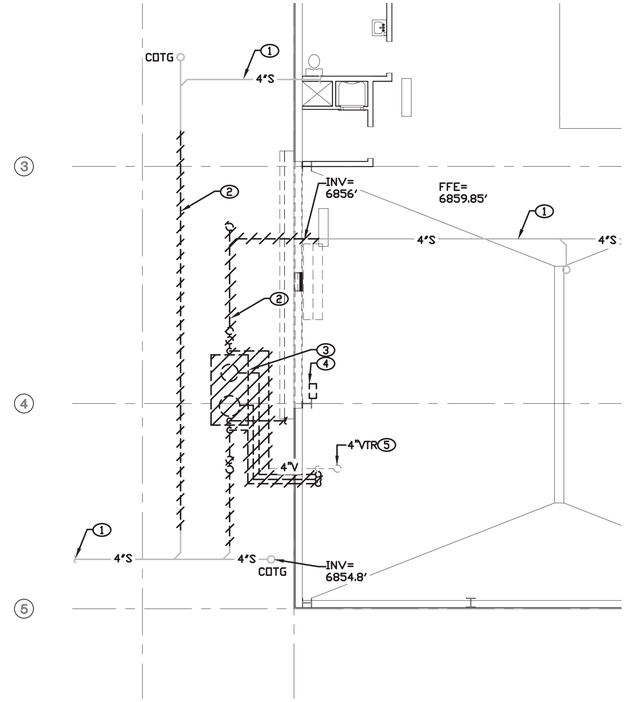


PLUMBING SEWER, VENT PLAN – ADDITION

SCALE: 1/8"=1'=0"

N



PLUMBING SEWER, VENT– DEMOLITION PLAN

SCALE: 1/8"=1'=0"

N

KEYED NOTES

1. EXISTING SEWER PIPING TO REMAIN.
2. REMOVE EXISTING SEWER PIPING SYSTEM AS INDICATED BY SLASH MARKS.
3. REMOVE EXISTING SAND/OIL INTERCEPTOR COMPLETE.
4. REMOVE EXISTING OIL WATER SEPARATOR CONTROL PANEL.
5. EXISTING VENT THRU ROOF.
6. NEW TO EXISTING CONNECTION. PROVIDE AND INSTALL SEWER PIPING SYSTEM AS ILLUSTRATED.
7. NEW TO EXISTING CONNECTION. PROVIDE AND INSTALL CAP.
8. PROVIDE AND INSTALL SAND/OIL INTERCEPTOR PER MANUFACTURER'S REQUIREMENTS.

PLUMBING SCHEDULE

OIL

OIL/SAND SEPARATOR: 500 GALLON, CONFORM TO ASTM C1227 SPECIFICATIONS FOR PRECAST CONCRETE WATER AND WASTE WATER STRUCTURES, 4000 PSI MINIMUM CONCRETE COMPRESSIVE STRENGTH, STEEL REINFORCING CONFORMING TO ASTM A615, 4" INLET AND 4" OUTLET CONNECTIONS, DESIGNED FOR HEAVY TRAFFIC LOADS, 24 INCH MANHOLE COVERS.

GENERAL REQUIREMENTS:

1. DESIGN SPECIFICATIONS CONFORM TO LATEST ASTM C1227 SPECIFICATIONS FOR PRECAST CONCRETE WATER AND WASTEWATER STRUCTURES.
2. CONCRETE COMPRESSIVE STRENGTH 4,000 PSI MINIMUM.
3. STEEL REINFORCING DESIGN TO CONFORM TO REQUIREMENTS OF ASTM C890 SPECFICATIONS FOR STRUCTURAL DESIGN LOADING FOR WATER WASTEWATER STRUCTURES AND SHALL UTILIZE GRADE 60 REBARS CONFORMING TO THE REQUIREMENTS OF ASTM A615 OR ASTM A185 OR BOTH.
4. ADDITIONAL REINFORCING AT ALL OPENINGS BY CONTRACTOR
5. CASTING/TOP PROVIDED AND INSTALLED BY CONTRACTOR, GRADE RINGS SUPPLIED BY ALBUQUERQUE VAULT CO. OR FIELD ADJUSTED.
6. PIPE PENETRATION LOCATIONS PER JOB REQUIREMENTS-FIELD VERIFY AND ADJUSTED BY CONTRACTOR.
7. PIPE INLET AND OUTLET LOCATIONS TO HAVE CAST IN PLACE BOOTS.
8. JOINTS TO BE SEALED WITH 1" DIAMETER BUTYL RUBBER JOINT SEALANT CONFORMING TO THE REQUIREMENTS OF LATEST AASHTO SPECIFICATIONS M-198 AND MEETS FEDERAL SPECIFICATION SS-S-0021.
9. SECTIONS ARE MONOLITHIC WEIGHTS:
   TOP SECTION 2,200 LBS
   BOTTOM SECTION 7,700 LBS
10. CLEAN OUT ASSEMBLY FOR GREASE/SAND TRAPS DETAIL REQUIRED AT OUTLET
11. EXCAVATION HOLE BOTTOM SHALL BE 2 FEET WIDER AND 2' LONGER THAN TOTAL OUTSIDE DIMENSION.
12. DESIGNED FOR H-20 LOADING. TRAFFIC RATED.

MANUFACTURED BY ALBUQUERQUE VAULT COMPANY.

PLUMBING SPECIFICATIONS

A. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.

B. COORDINATE WITH THE WORK OF OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE CONDITIONS AT THE PROJECT SITE.

C. DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. PROVIDE PLUMBING, CONNECTIONS, ACCESSORIES, OFFSETS, CONTROLS AND MATERIALS NECESSARY FOR A COMPLETE FUNCTIONAL SYSTEM INSTALLATION.

D. SEWER AND VENT PIPING BELOW GRADE AND BELOW BUILDING CAN BE THE FOLLOWING:

CAST IRON SOIL PIPE: ASTM A74, SERVICE WEIGHT, BELL AND SPIGOT ENDS. USE CAST IRON FITTINGS, ASTM A74. JOINTS: HUB AND SPIGOT, CISPI HSN COMPRESSION TYPE WITH ASTM C564 NEOPRENE GASKETS OR LEAD AND OAKUM. JOINTS MANUFACTURED BY TYLER LUBRI/FAST OR EQUIVALENT.

CAST IRON PIPE: CISPI 301, HUBLESS, SERVICE WEIGHT. FITTINGS: CAST IRON, CISPI 301. JOINTS: CISPI 310, NEOPRENE GASKETS AND STAINLESS STEEL CLAM AND SHIELD ASSEMBLIES. FOR BELOW GRADE INSTALLATIONS UTILIZE HEAVY DUTY STAINLESS STEEL 304 BANDS AND TIGHTENING DEVICES, AND ASTM C564 RUBBER SLEEVE MANUFACTURED BY HUSKEY SD 4000 OR EQUIVALENT. 2" WIDE COUPLINGS ARE NOT ALLOWED FOR BELOW GRADE INSTALLATIONS.

E. SEWER , VENT AND ROOF DRAIN LEADER PIPING ABOVE GRADE CAN BE THE FOLLOWING:

CAST IRON PIPE: CISPI 301, HUBLESS, SERVICE WEIGHT. FITTINGS: CAST IRON, CISPI 301. JOINTS: CISPI 310, NEOPRENE GASKETS AND STAINLESS STEEL CLAM AND SHIELD ASSEMBLIES.

F. SANITARY SEWER AND VENT PIPING SHALL BE TESTED BY APPLYING A 10 FOOT HEAD OF WATER PRESSURE ABOVE THE HIGHEST LINE TO BE TESTED. THE SEGMENT OF THE SYSTEM BEING TESTED MUST HOLD WATER PRESSURE FOR ONE HOUR WITHOUT SHOWING A DROP IN LEVEL. ALL SEWER AND VENT PIPING LOCATED UNDERGROUND MUST BE TESTED BEFORE BACKFILLING.

G. FLOOR CLEANOUTS AND DOUBLE CLEANOUTS SHALL BE HEAVY DUTY DUCO CAST IRON CLEANOUT WITH ROUND ADJUSTABLE SCORIATED BRONZE TOP. CLOSURE PLUG TYPE. PIPE OUTLET SAME SIZE AS PIPE AND CONNECTION LIQUID - AIR TIGHT AND COMPATIBLE WITH PIPE. MANUFACTURED BY JR SMITH, ZURN OR EQUIVALENT.

H. REMOVE EXISTING SAND/OIL INTERCEPTOR COMPLETE. OIL SHALL BE PROPERLY DISPOSED IN ACCORDANCE TO APPLICABLE REGULATIONS.

MOLZENCORBIN

2701 Miles Road SE
Albuquerque, New Mexico 87106
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505 242 0673 fax
MolzenCorbin.com

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NUMERIC SCALE CONFIRMATION

DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH

PAUL M. ROMERO
NEW MEXICO
14932
REGISTERED PROFESSIONAL ENGINEER

07-16-19

REV NO	REV DATE	DESCRIPTION

PROJECT NUMBER:	LVC180-14
DESIGNED BY:	PR
DRAWN BY:	NRH
CHECKED BY:	PR
PRIME DESIGN PROFESSIONAL:	JOHN Q. PATE
PROJECT DATE:	JULY 2019

PLUMBING PLANS, SCHEDULES AND SPECIFICATIONS

SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS
LAS VEGAS MUNICIPAL AIRPORT (LVS)
LAS VEGAS, NEW MEXICO

P-101

SHEET

PLOT DATE: 7/16/2019 7:13 PM
SAVE DATE: 7/16/2019 7:12 PM
I:\LASVEGAS\LVC180-14 SNOW REMOVAL BLDG\DWGS\PLV-101

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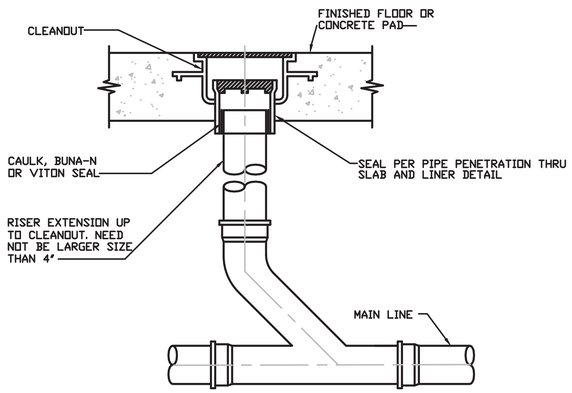
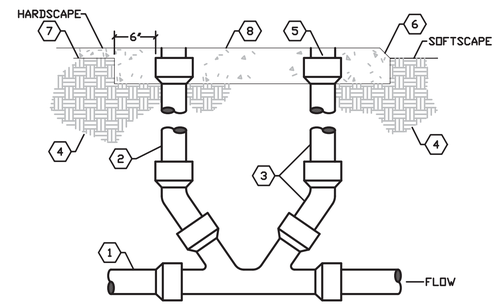


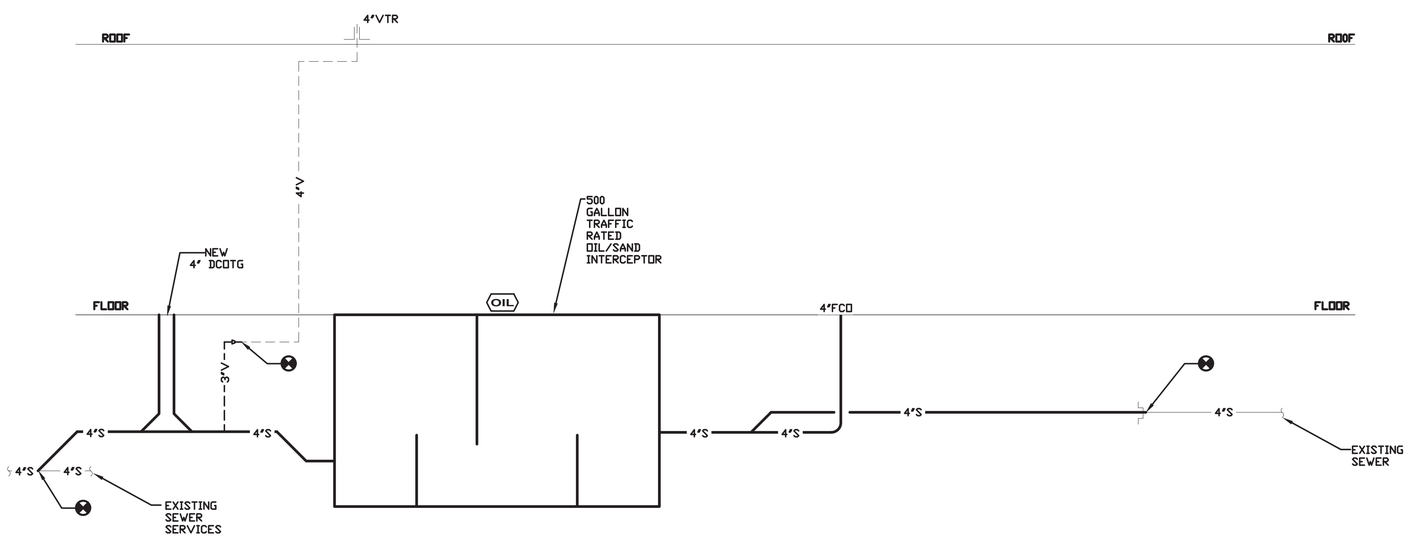
A FLOOR CLEANOUT DETAIL
SCALE = NONE



KEYED NOTES

1. SERVICE LINE, SEE SPECIFICATIONS FOR PIPE MATERIALS.
2. SAME SIZE AS SERVICE LINE
3. CAST IRON SOIL PIPE RISER AND FITTINGS.
4. COMPACTED EARTH.
5. IRON FERRULE WITH A BRASS COUNTER-SUNK SCREW PLUG.
6. 2" CHAMFER ON ALL COLLARS IN EARTH.
7. FINISH GRADE.
8. 4" THICK CONCRETE COLLAR.

B DOUBLE CLEANOUT TO GRADE DETAIL (DCOTG)
SCALE = NONE



C SAND/OIL INTERCEPTOR DETAIL
SCALE = NONE

MOLZENCORBIN
2701 Miles Road SE
Albuquerque, New Mexico 87106
505 242 5700 office
505 242 0673 fax
MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH

PAUL M. ROMERO
NEW MEXICO
14932
REGISTERED PROFESSIONAL ENGINEER
07-16-19

REV NO.	REV DATE	DESCRIPTION

PROJECT NUMBER: LVG180-14
DESIGNED BY: PR
DRAWN BY: NRH
CHECKED BY: PR
PRIME DESIGN PROFESSIONAL: JOHN Q. PATE
PROJECT DATE: JULY 2019

PLUMBING DETAILS

SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS
LAS VEGAS MUNICIPAL AIRPORT (LVS)
LAS VEGAS, NEW MEXICO

P-501
SHEET

PLOT DATE: 7/16/2019 7:18 PM
SAVE DATE: 7/16/2019 7:15 PM
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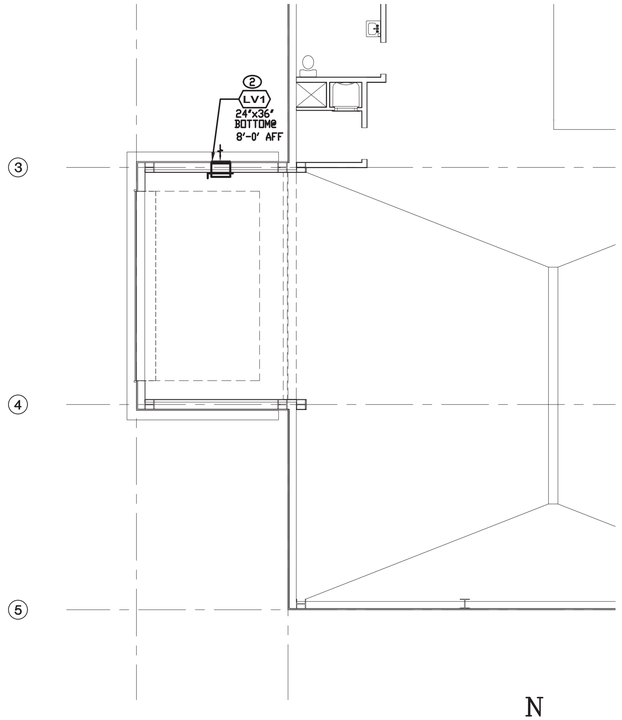
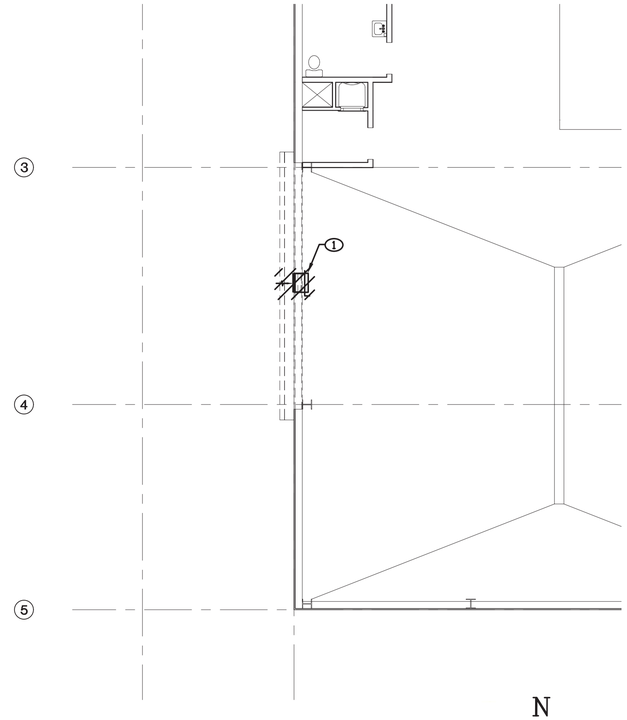


PARTIAL HVAC PLAN – ADDITION

SCALE: 1/8"=1'=0"

N



PARTIAL HVAC DEMOLITION PLAN

SCALE: 1/8"=1'=0"

N

KEYED NOTES

1. EXISTING LOUVER AND BACKDRAFT DAMPER TO BE REMOVED COMPLETE.
2. PROVIDE AND INSTALL LOUVER. SIZE AS INDICATED ON PLANS.

LOUVER SCHEDULE

LOUVER: 4" DEEP FRAME, 35° BLADE DESIGN, EXTRUDED ALUMINUM, DRAIN GUTTERS IN THE HEAD MEMBER, HORIZONTAL BLADES, INTERNAL BIRDSCREEN TO MATCH LOUVER. ACCESSORY DAMPERS AS LISTED IN REMARKS, LOUVERS SHALL HAVE STANDARD FINISH. UNIT SHALL BE CAPABLE OF CAPACITIES LISTED BELOW. SITE ELEVATION 6,400 FEET. MFG: GREENHECK ESD-404 OR EQUIVALENT.

SYMBOL	GREENHECK MODEL #	WIDTH (IN)	HEIGHT (IN)	FREE AREA (FT^2)	VELOCITY (FPM)	DESIGN FLOW (CFM)	REMARKS
LV1	ESD-403	24	36	2.55	~500	~1275	INTAKE . FURNISH WITH STANDARD ENAMEL COLOR TO BE SELECTED BY ARCHITECT. FURNISH WITH BAROMETRIC DAMPER.

HVAC SPECIFICATIONS

A. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.

B. COORDINATE WITH THE WORK OF OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE CONDITIONS AT THE PROJECT SITE.

C. DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. PROVIDE, DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE FUNCTIONAL SYSTEM INSTALLATION.

D. ALL JOINTS AND SEAMS ON SUPPLY, OUTSIDE AIR, RETURN AND AND EXHAUST DUCTS, ROUND OR RECTANGULAR, MUST BE SEALED AIR TIGHT PER SMACNA STANDARDS. CONSTRUCT ALL DUCTS, CASINGS, PLENUMS, ETC., FROM GALVANIZED STEEL SHEETS. SHEETS SHALL BE FREE OF BLISTERS, SLIVERS, PITS, AND IMPERFECTLY GALVANIZED SPOTS. REINFORCING ANGLES AND BARS, AND DUCT SUPPORT MATERIALS SHALL BE GALVANIZED STEEL. DUCT CONSTRUCTION AND GAUGES SHALL BE PER SMACNA STANDARDS. DUCT JOINTS FOR LOW PRESSURE DUCTWORK SHALL BE SEALED TO MEET 1" WC PRESSURE CLASSIFICATION. SEAL ALL TRANSVERSE JOINTS WITH IRON GRIP 601 AS MANUFACTURED BY HARDCAST PER MANUFACTURER'S INSTRUCTIONS. DUCT TAPE IS NOT AN ACCEPTABLE MEANS OF SEALING DUCTS. EXCEPTION: DO NOT SEAL EXPOSED DUCTWORK.

E. COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS AND MAINTAIN SERVICEABILITY TO VALVES AND EQUIPMENT.

F. DUCTWORK OR PENETRATIONS THRU ASSEMBLIES SHALL BE CAULKED AIRTIGHT BY MEANS OF A APPROVED CAULKING MATERIAL.

MOLZENCORBIN

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Albuquerque, New Mexico 87106
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NUMERIC SCALE CONFIRMATION

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IF THIS BAR EQUALS ONE INCH

PAUL M. ROMERO
NEW MEXICO
14932
REGISTERED PROFESSIONAL ENGINEER

07-16-19

REV NO	REV DATE	DESCRIPTION

PROJECT NUMBER: LVG180-14
DESIGNED BY: PR
DRAWN BY: NRH
CHECKED BY: PR
PRIME DESIGN PROFESSIONAL: JOHN Q. PATE
PROJECT DATE: JULY 2019

PARTIAL HVAC PLANS, SCHEDULE AND SPECIFICATIONS

SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS
LAS VEGAS MUNICIPAL AIRPORT (LVS)
LAS VEGAS, NEW MEXICO

M-101

SHEET

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SAVE DATE: 7/16/2019 7:37 PM
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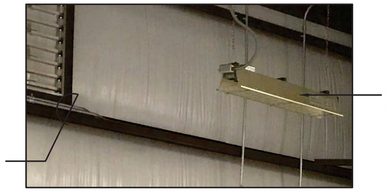
USE AVAILABLE SPARE SPACES IN EXISTING PANEL "A" FOR CIRCUIT BREAKERS INSTALLATION TO BE USED WITH NEW LOADS.



REROUTE ALL CONDUITS WITH CONDUCTORS. COORDINATE NEW ROUTING IN FIELD.

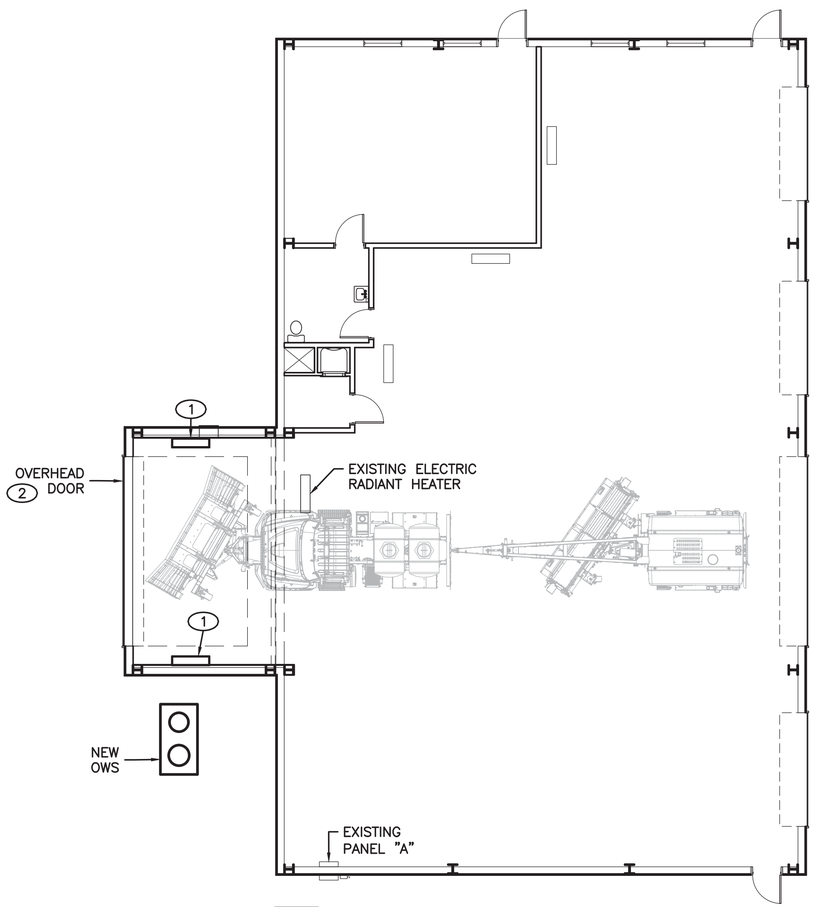
RAISE HEATER IF NECESSARY

MOVE JUNCTION BOX. REROUTE CONDUIT TO NEW JB LOCATION. COORDINATE NEW JB LOCATION IN FIELD.

OIL WATER SEPARATOR (OWS) AND LEVEL SENSOR TO BE MOVED. WIRING TO BE DEMOLISHED.

CAUTION:

NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE SHOWN IN APPROXIMATE LOCATION ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS.



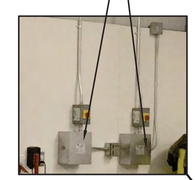
PLAN VIEW – ADDITION

SCALE: 1/8"=1'–0"

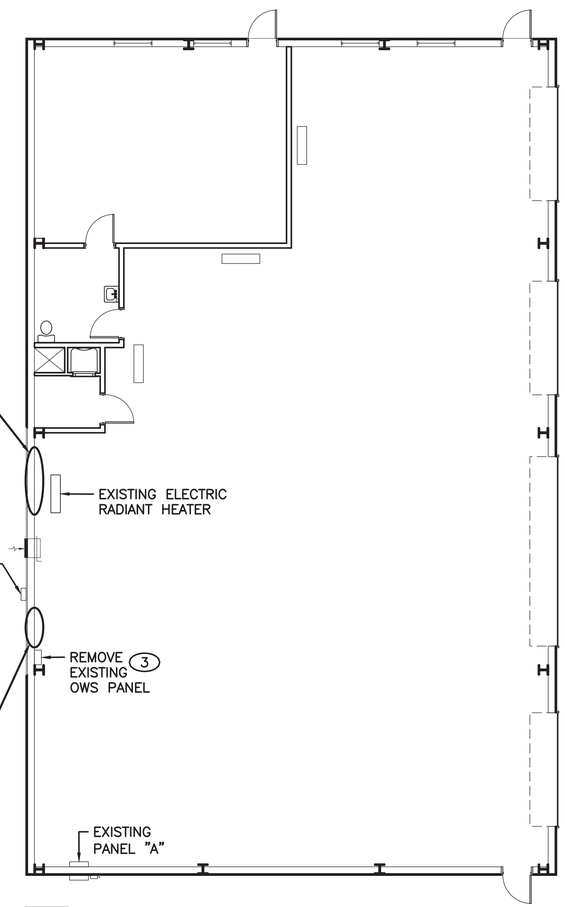
KEYED NOTES (#)

1. PROVIDE WALL MOUNT LED LIGHTING FIXTURE. REFER TO LUMINAIRE SCHEDULE THIS SHEET. MOUNT FIXTURE 12' AFF. POWER FIXTURE FROM EXISTING PANEL "A". INSTALL APPROPRIATE CIRCUIT BREAKER IN SPARE SPACE OF THE PANEL. COORDINATE CONDUIT ROUTING IN FIELD.
2. POWER OVERHEAD DOOR FROM EXISTING PANEL "A". INSTALL APPROPRIATE CIRCUIT BREAKER IN SPARE SPACE OF THE PANEL. INSTALL APPROPRIATE ON/OFF CONTROL DEVICES ON THE WALL ADJACENT TO THE DOOR. COORDINATE CONDUIT ROUTING IN FIELD.
3. REMOVE EXISTING OWS PANEL. PULL WIRING BACK TO SOURCE. DEMOLISH CONNECTING CONDUITS.

LUMINAIRE SCHEDULE				
DESCRIPTION	MFR	MODEL #	VOLT	WATT
INTERIOR (DRY/DAMP) 4' LENGTH, LED ENCLOSED AND GASKETED	COLUMBIA	LXEM4-40ML-RFP-EU	120	42



MOVE EQUIPMENT. COORDINATE NEW LOCATION & CONDUITS WITH CONDUCTORS ROUTING IN FIELD.



MOVE DEVICES. COORDINATE NEW LOCATION AND CONDUIT ROUTING IN FIELD.

EXISTING PLAN VIEW

SCALE: 1/8"=1'–0"

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IF THIS BAR EQUALS ONE INCH

DANIEL GONZALES NEW MEXICO (1996) PROFESSIONAL ENGINEER

7-15-19

REV NO	REV DATE	DESCRIPTION

PROJECT NUMBER:	LVC180-14
DESIGNED BY:	NW
DRAWN BY:	NW
CHECKED BY:	DG
PRIME DESIGN PROFESSIONAL:	JOHN Q. PATE
PROJECT DATE:	JULY 2019

ELECTRICAL
DEMOLITION AND MODIFICATION DETAILS

SNOW REMOVAL EQUIPMENT BUILDING MODIFICATIONS
LAS VEGAS MUNICIPAL AIRPORT (LVS)
LAS VEGAS, NEW MEXICO

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