

PROJECT MANUAL

Project:

**CITY HALL FIRST FLOOR REMODELING
CITY OF FOUNTAIN**

LKA PROJECT NO. 15-009

Client:

CITY OF FOUNTAIN
FOUNTAIN, COLORADO

Date:

SEPTEMBER 01, 2015

LKA PARTNERS, INC.

A Professional Corporation
for Architecture/Planning

430 North Tejon Street, Suite 208
Colorado Springs, CO 80903
719 / 473-8446

PROJECT MANUAL

FOR

**CITY HALL FIRST FLOOR REMODELING
CITY OF FOUNTAIN**

CITY OF FOUNTAIN
FOUNTAIN, CO

PROJECT NO. 15-009

ARCHITECTS

THE LKA PARTNERS, INC.
430 NORTH TEJON STREET, SUITE 208
COLORADO SPRINGS, CO 80903
719 / 473-8446

SEPTEMBER 01, 2015

PROJECT DIRECTORY

PROJECT NAME

**CITY HALL FIRST FLOOR REMODELING
CITY OF FOUNTAIN**

LKA PARTNERS, INC.
430 North Tejon Street, Suite 208
Colorado Springs, CO 80903
719/ 473-8446
719/ 473-8448 (FAX)

ARCHITECTS

PLANT ENGINEERING CONSULTANTS, INC.
320 W Fillmore Suite 100
Colorado Springs CO 80907
719/ 473-7077
719/ 473-7025 (FAX)

MECHANICAL
ELECTRICAL
TECHNOLOGY

ADDRESS ALL QUESTIONS DURING BIDDING PERIOD TO THE ARCHITECT.

TABLE OF CONTENTS

FOR

PROJECT MANUAL

CITY HALL FIRST FLOOR REMODELING

CITY OF FOUNTAIN
11 SOUTH MANIN STREET
FOUNTAIN, COLORADO

PROJECT NO. 15-009

September 01, 2015

THE PAGES IN EACH SECTION ARE NUMBERED. THE LAST PAGE OF EACH SECTION CONTAINS THE WORDS "END OF SECTION". NOTIFY ARCHITECT IF ANY PAGE IS MISSING IN A SECTION OF YOUR PROJECT MANUAL.

PROCUREMENT AND CONTRACTING REQUIREMENTS SUBGROUP

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

DOCUMENTS

00 21 13	Instructions to Bidders
00 41 13	General Contract Bid Form - Base Bid
00 43 13	Bid Bond
00 52 13	Agreement
00 61 13	Performance Bond
00 61 13.16	Labor and Material Payment Bond
00 61 19	Maintenance Bond
00 72 00	General Conditions

GENERAL REQUIREMENTS SUBGROUP

DIVISION 01 - GENERAL REQUIREMENTS

01 11 13	General Requirements
01 29 73	Schedule of Values
01 33 00	Submittals
01 33 23	Shop Drawings, Product Data, and Samples
01 77 00	Contract Closeout Requirements, Intermediate and Final

FACILITY AND CONSTRUCTION SUBGROUP

DIVISION 2	EXISTING CONDITIONS	
	02 41 00	Selective Demolition
DIVISION 3	CONCRETE	
	Not Used	
DIVISION 4	MASONRY	
	Not Used	
DIVISION 5	METALS	
	Not Used	
DIVISION 6	WOOD AND PLASTICS	
	06 10 00	Rough Carpentry
	06 20 00	Finish Carpentry
DIVISION 7	THERMAL AND MOISTURE PROTECTION	
	07 92 00	Joint Sealants
DIVISION 8	OPENINGS	
	08 11 13	Hollow Metal Doors and Frames
	08 14 29	Prefinished Wood Doors
	08 71 00	Door Hardware
	08 81 00	Glazing
DIVISION 9	FINISHES	
	09 21 00	Gypsum Board Partitions and Walls
	09 51 00	Suspended Ceiling Systems
	09 61 16	Epoxy Vapor Sealer
	09 65 00	Resilient Flooring
	09 68 00	Carpeting
	09 91 00	Painting
DIVISION 10	SPECIALTIES	
	10 14 00	Identifying Devices

DIVISION 11 EQUIPMENT

Not Used

DIVISION 12 FURNISHINGS

Not Used

DIVISION 13 SPECIAL CONSTRUCTION

Not Used

DIVISION 14 CONVEYING SYSTEMS

Not Used

DIVISION 15 THROUGH DIVISION 19

Not Used

FACILITY SERVICES SUBGROUP

DIVISION 20 THROUGH DIVISION 29

Information Shown on the Drawings

SITE AND INFRASTRUCTURE SUBGROUP

DIVISION 30

Not Used

DIVISION 31 EARTHWORK

Not Used

DIVISION 32 EXTERIOR IMPROVEMENTS

Not Used

DIVISION 33 UTILITIES

Not Used

END TABLE OF CONTENTS

1.01 BIDDERS

Bids will be accepted only from General Contractors who attend the mandatory pre-bid conference and tour. A list of attendees will be posted on the City of Fountain website.

1.02 BIDDING INFORMATION

- A. Bid proposals for furnishing all labor and materials required for the work on this project shall be received and publicly read aloud at the time, date, and place indicated in Document 00 11 13.
- B. The bidder shall fill in all blank spaces on the Bid Forms (Document 00 41 13). Submit bid proposal on forms provided by Architect or on an exact copy of it. Seal the bid proposal forms in an envelope addressed to the Owner and plainly mark the outside of the envelope with the name and address of the bidder, time set for the opening of bids, project name, and the name of the addressee. One (1) original copy of the bid proposal forms and documents shall be submitted. Do not remove bid forms from the Project Manual, the Architect will issue bid proposal forms for the use of bidders by Addendum.
- C. If a bidder submits his bid proposal by mail, he shall enclose the above described sealed envelope in a second envelope addressed to the Owner having the bidder's return address in the upper left hand corner.
- D. The Officer, whose duty it is to open the bids, will decide when the bid opening is at hand and no bid received thereafter will be considered. The Owner or Architect will not be responsible for the premature opening of any bid that is not properly addressed and identified.
- E. Any bid proposal improperly completed or modified in any respect will be subject to rejection. Each bid shall specify a price, written in ink or typewritten, in both words and figures of each of the separate items required. In case of discrepancy between the written words and the figures, the written words shall govern.
- F. If the party bidding is an incorporated body, the bid proposal shall be signed by the President and Secretary or a duly authorized agent and be accompanied by the corporation seal. If not a corporation, all interested parties must sign the proposal.
- G. The Owner reserves the right to reject any or all bid proposals and to waive informalities and irregularities. In that event, bid guarantees from the bidder(s) will be returned.

1.03 BID GUARANTEE

- A. Each bid proposal shall be accompanied by a bid bond, a certified check, or a cashier's check, payable to the Owner, without condition, in an amount equal to five percent 5% of the base bid proposal, as a guarantee that the bidder, if notified of acceptance, will promptly enter into a contract with the Owner and will provide Performance and Payment Bonds and Certificates of Insurance within ten (10) days from the date of the Notice of Award of the Contract.
- B. Bid guarantees will be returned to all unsuccessful bidders within thirty (30) days after the opening of bids. The bid guarantee of the three low bidders will be returned promptly after the Owner and the apparent low bidder have executed the Contracts, or, if no award has been made within forty-five (45) days after the date of the opening of the bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.

- C. In the event the bidder whose proposal is accepted fails to execute the Contract or supply proper bonds and certificates, his bid guarantee shall be forfeited in full to the Owner as liquidated damages for the delay and extra work entailed thereby.
- 1.04 EXAMINATION OF SITE AND CONSTRUCTION DOCUMENTS
Prior to submitting bid proposal, each bidder shall examine the site of the project, compare it with the Construction Documents, and be satisfied as to the existing conditions under which the work shall be accomplished. No allowances will be made in behalf of a bidder for any error or negligence in determining these conditions. Refer also to Article 1.13 for mandatory prebid meeting.
- 1.05 INTERPRETATION OF DOCUMENTS
- A. No interpretation of the drawings, specifications, or other documents will be made to any bidder orally. Only interpretations made in conformity with the following procedure shall be valid.
 - B. Each request for interpretation shall be in writing, addressed to The LKA PARTNERS, Inc., 430 North Tejon Street, Suite 208, Colorado Springs, Colorado 80903. To be given consideration, requests must be received before:
 - 1. 12:00 Noon, Seven Calendar Days prior to Date of Bid Opening
 - 2. Responses to interpretations and supplemental instructions will be issued by the Architect in the form of written Addenda.
 - 3. Informal oral requests for interpretation may be made direct to Architect.
- 1.06 ADDENDA
Contractor shall acknowledge any Addenda issued during the bidding period on the bid forms in the spaces provided. Failure of a bidder to receive any Addenda shall not release the bidder from any obligations under his bid, provided said Addendum was sent by U.S. Mail, Express Mail, or Facsimile to the address furnished by the bidder for delivery or transmittal of Addenda. All Addenda so issued shall become a part of the Contract Documents.
- 1.07 INTERPRETATION OF QUOTED PRICES
In case of a difference in written words and figures on the Bid Form, the amount stated in written words shall govern, unless obviously incorrect.
- 1.08 DELIVERY
The bidder is responsible for delivering the bid proposal to the proper place at the proper time. The mere fact that a proposal was dispatched will not be considered. The bidder must have the bid proposal actually delivered.
- 1.09 CONTRACTS
Work for this project shall be executed under one prime construction contract between the Owner and the Contractor. Refer to Document 00500.
- 1.10 PERFORMANCE, LABOR AND MATERIAL, PAYMENT BONDS, AND INSURANCE CERTIFICATES
Contractor:
- 1. Performance Bond and Payment Bond are required. Refer to Documents 00 61 13 and 00 61 19.
 - 2. General Liability, Auto Liability and Workmen's Compensation Insurance Certificates are required. Refer to Document 00 72 00, General Conditions for insurance requirements.

1.11 COORDINATION OF WORK

Contractor and all subcontractors shall, jointly and severally, coordinate the various portions of the work for installation procedures, shop drawings, and final installation of all related materials. Responsibility for enforcing coordination requirements shall rest solely with the Contractor.

1.12 SUBSTITUTIONS

- A. Each bidder represents that the bid is based on the materials and equipment described in the Contract Documents.
- B. Direct reference in the specifications or drawings to any article, device, product, materials, fixture, form or type of construction, by name, make, or catalog number, with or without the words "or equivalent" or "or approved substitute", shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition. The Contractor in such cases may, at his option, use any article, device, product, material, fixtures, form or type of construction which is deemed, in the judgment of the Architect and expressed in writing, as an equivalent to that named.
- C. In order to allow the fullest competition, consistent with the Owner's interest, the Architect will give consideration, prior to submission of bid proposals, to requests for approval of products competitive with and similar to those specified by proprietary name.
- D. To be considered for approval, all substitution requests shall:
 - 1. Be in writing, addressed to the Architect at the address given on the front cover of the Project Manual, and shall clearly identify this Project by Name and Architect's Project Number, also as shown on the front cover of the Project Manual.
 - 2. Be received in the Architect's office no later than 2:00 P.M. at least ten (10) calendar days prior to date of Bid opening. Requests for Substitution after said date and time will not be considered.
 - 3. Include all data, information, and characteristics of the proposed item, so that a direct comparison can be readily made. It is the sole responsibility of the submitter to provide complete and accurate, descriptive and technical information so that Architect can properly evaluate the submittal. Each item proposed for substitution shall be clearly identified.
 - 4. Submit listing of local installations where proposed products have been provided, include names and phone numbers of references familiar with the installation and performance of products.
 - 5. Explain fully the differences, if any, between the proposed product and the product named in the Specifications. Architect will not complete the submittal (e.g., select from options, or between models or product lines) and will not seek information from manufacturer's literature on file in the Architect's office or in other locations, including web sites.
 - 6. Address/identify any issues affecting Project schedule including availability of product(s) should the request be approved.
 - 7. Give complete information on changes, in the event the proposed product requires for its proper incorporation into the Project, any change to design of the Project (e.g., architectural, structural, mechanical, electrical, etc. systems) as expressed in the Drawings and/or Specifications.
 - 8. In the case of manufactured cabinets and aluminum windows, submit actual casework and window samples with any request for substitution.
- E. If the request has been submitted in compliance with the above stated requirements and if the Architect and the Owner decide the proposed product is of equivalent value to the products named in the Specifications as suitable in every respect for use in the project, the Architect will

accept the item and list it in an Addendum which will be sent to all parties who have received complete sets of the Contract Documents.

- F. Attention is called to the fact that prior approval is required only for substitution of those products not specified by proprietary name or as an approved manufacturer. Manufacturers and systems listed within a specification section are acceptable subject to their fully meeting the detail requirements of that particular section. No increase in the Contract Sum will be considered whether or not the request for substitution is approved.
- G. **All costs and fees (redesign costs) for making modifications, e.g., architectural, civil, structural, mechanical, electrical, etc., to the Contract Documents, as well as all costs pertaining to construction of the Work, made necessary by selection/provision of products other than Basis-of-Design products, shall be the responsibility of the Contractor and no increase in the Construction Contract Amount will be made on account thereof. Contractor shall reimburse Owner for said redesign costs via deductive change order.**
- H. Except as may be permitted by provisions of Section 01 60 00 (Material and Equipment), Substitutions submitted after the time period established herein will not be considered.
- I. Manufacturers/Products approved via the Prior Approval process will be listed in a subsequent Addendum, which may or may not impose conditions on the approval.

1.13 PRE-BID CONFERENCE AND TOUR

- A. A **mandatory** Pre-Bid Conference and Tour will be held at:
116 South Main Street
Fountain, Colorado
Time and date for this conference will be as noted in the Advertisement for Bids.
 - 1. This conference is mandatory for General contractors who wish to bid on the project.
Refer to Article 1.04 for further information.

1.14 METHOD OF AWARD

The Owner will consider both Base Bid and Alternates amounts in making award. If bids exceed the funds available, the Owner may reject all bids or may enter into negotiations with the selected bidder(s).

1.15 TIME OF COMPLETION AND LIQUIDATED DAMAGES

- A. The Contractor must agree to commence work within five (5) days following receipt of a written "Notice to Proceed". Such notice will be issued by the Owner within twelve (12) days after the date of opening of the bids provided the Contractor has fulfilled all requirements necessary for execution of the Contract and provided the bid does not exceed the funds available for the project.
- B. The Owner desires all work associated with this project to be substantially complete on or before 120 calendar days from the date of issuance of the Notice to Proceed. The Contractor agrees to substantially complete the work on or before the above date.

1.16 PARTIAL INFORMATION

Partial sets of the Drawings and Specifications will not be issued by the Architect. The Architect and Owner disclaim any and all responsibility for errors or omissions made by parties using partial information in compiling their proposals.

1.17 LIST OF SUBCONTRACTORS AND MATERIAL SUPPLIERS

- A. Each bidder shall indicate on the Bid Form, in the spaces provided, the names of the subcontractors he intends to employ in the event his bid is accepted.
- B. Within five (5) days following the opening of bids and prior to the award of a Contract, the apparent low bidder shall submit in triplicate, a full and complete list of subcontractors and material suppliers intended for employ on the work in the event the bid is accepted.
- C. The list of material suppliers shall include the manufacturer's name and descriptive data of the materials to be furnished. When said list is approved and contract is awarded, the list shall not be changed except upon written approval from the Owner.

1.18 STATE AND LOCAL LAWS

Bidders are expected to familiarize themselves with the laws and acts of the State of Colorado and the ordinances of the city or county in which the project is located.

END OF DOCUMENT

CITY OF FOUNTAIN
FOUNTAIN, COLORADO

Date: _____

GENERAL CONTRACT BID FORM

PROJECT NAME: CITY HALL FIRST FLOOR REMODELING

TO: City of Fountain
Fountain, Colorado

FROM: _____ Bidder
_____ Address
_____ City/State/Zip

Operating as an individual, a Company, a Corporation (strike out conditions which do not apply) organized and existing under the laws of the State of _____, or a Proprietorship, a Partnership or Joint Venture (strike out conditions which do not apply) consisting of:

BASE BID PROPOSAL

Having carefully examined the Project Manual, Bidding and Construction Documents entitled CITY HALL FIRST FLOOR REMODELING as prepared by The LKA PARTNERS, Inc., as well as the premises and conditions affecting the work, the undersigned proposes and agrees to furnish all coordination, labor, materials, plant equipment, transportation and other facilities required to execute all the work in strict accordance with the Construction Documents for the lump sum consideration of:

_____ Dollars (\$ _____)

SUBCONTRACTORS

If awarded a contract for this project, the undersigned agrees to employ the following subcontractors:

MECHANICAL _____

ELECTRICAL _____

SUBCONTRACTORS LISTED ABOVE WILL BE TAKEN INTO CONSIDERATION BY THE OWNER IN DETERMINING THE SUCCESSFUL BIDDER.

ADDENDA ACKNOWLEDGMENT

The undersigned acknowledges receipt of the following Addenda:

ADDENDUM NUMBER	DATE OF ADDENDUM
_____	_____
_____	_____
_____	_____

NOTICE OF ACCEPTANCE

The undersigned, if determined to be the successful bidder, agrees to execute a Contract with the Owner and to deliver the required Bonds for the faithful performance of the Contract and certificate of insurance required by the Construction Documents. Costs of bonds and insurance are included in Base Proposal Sum.

COMPLETION

The Owner desires substantial completion of this project on or before 120 calendar days from the date of issuance of the Notice to Proceed.

If a Notice of Award is issued within ten (10) calendar days following date of bid opening, the undersigned agrees to substantially complete all of the work on or before the above listed date.

GENERAL STATEMENT

The undersigned has checked the above figures, and understands that the Owner and Architect will not be responsible for any errors or omissions on the part of the undersigned in preparing this Proposal.

In submitting this Proposal, it is understood that the right is reserved by the Owner to reject any or all bids and to waive all informalities in connection therewith. It is agreed that this Proposal may not be withdrawn for a period of forty-five (45) days from date of opening of bids.

The undersigned declares that the person or persons signing this Proposal is/are fully authorized to sign on behalf of the firm listed and to fully bind the firm listed to all the Proposal's conditions and provisions.

It is agreed that no person or persons or company other than the firm listed below or as otherwise indicated has any interest whatsoever in this Proposal or the Contract that may be entered into as a result of this Proposal and that in all respects the Proposal is legal and firm, submitted in good faith without collusion or fraud.

It is agreed that the undersigned has complied and will comply with all requirements of local, state, and national laws, and that no legal requirements have been or will be violated in making or accepting this Proposal, or in the prosecution of the work required.

Submitted this _____ day of _____, 2015.

(Firm Name)_____

(Address)_____

(Signature)_____

(Name Typed)_____

(Title)_____

S E A L
(If Bidder is Corporation)

END OF DOCUMENT

CITY OF FOUNTAIN BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,

_____ as Principal and hereby hold and firmly bound into the City of Fountain, Colorado as OWNER in the penal sum of _____ (5%)

_____ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assign.

Signed this _____ day of _____, 20_____.

The Condition of the above obligation is such that whereas the Principal has submitted to the City of Fountain a certain BID, attached hereto and hereby made a part hereof to enter a contract in writing for the construction of **First Floor Remodel – 116 South Main Street Fountain CO**

NOW, THEREFORE,

- (a) If said BID shall be rejected, or
- (b) If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and shall furnish a BOND for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for the value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by an extension of the time within which the OWNER may accept said BID, and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

(Principal, Contractor)

(Surety)

BY:_____

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

CONSTRUCTION CONTRACT
114 South Main Street First Floor Remodel

This Construction Contract is made this ____ day of _____, 2015 between The City of Fountain, a Colorado municipal corporation and home rule city (hereinafter "City"), and _____ (hereafter "Contractor"). City and Contractor, for the consideration hereinafter referenced, agree as follows:

ARTICLE I
THE CONTRACT DOCUMENTS

1. The Contract consists of this Contract, plus any documents listed below or attached hereto as Exhibits, including but not limited to: Proposals, Drawings, Specifications, addenda issued prior to execution of this Agreement, Performance, Labor, Material Payment and Maintenance Bonds and other documents referenced in this Contract plus Modifications or written Change Orders issued after execution of this Contract. All of the above-referenced documents which are attached hereto are a part of the Construction Contract, and are incorporated by this reference into this Contract.
2. The Contract represents the entire and integrated agreement between the parties, and supersedes prior negotiations, representations, or agreements, whether oral or written.
3. The Construction Contract is to be executed in duplicate by City and Contractor. Contractor, by executing the Construction Contract represents that it has inspected and is familiar with the Property and the local conditions under which the work is to be performed.

ARTICLE II
CONTRACT WORK

Contractor and its Subcontractors shall fully perform all Work described in the Contract, except to the extent specified in the Contract to be the responsibility of others, or as stated herein. For purposes of this contract, a Subcontractor is defined as a person or entity, including their employees and agents, with whom Contractor has a contract for any portion of the Work or materials to be provided for the Work. Except where expressly provided otherwise in the Contract, all references to Subcontractors shall apply to Sub-Subcontractors and their agents and employees. All contracts between Contractor and Subcontractors shall conform to this Contract.

ARTICLE III
CONTRACT TIME

1. After execution of this Contract, City shall deliver to Contractor a written Notice to Proceed, and upon receipt of such Notice, Contractor shall promptly apply for and obtain all appropriate permits. Completion of the Project shall occur within 120 calendar days after receipt by Contractor of the Notice to Proceed.
2. Construction under this Contract shall begin on the date agreed upon between the City and the Contractor on the Notice to Proceed issued by the City.
3. Substantial Completion of the Work shall be determined at a later date. "Completion of the Project" means completion of the improvements in accordance with the plans and specifications and shall mean that the Project is ready for occupancy/use by City.
4. The times stated in the Contract may be extended by a written Change Order for such reasonable time that Contractor has been justifiably delayed in the Work by any reason beyond Contractor's control, such as labor disputes, fire, prolonged transportation delays, injuries, or any delays caused by City, provided such delays are not a result of Contractor's negligence or the negligence of any Subcontractor, material, man or employee of the Contractor or under Contractor's supervision.

5. All times stated in this Contract are of the essence.

ARTICLE IV CONTRACT PRICE

City shall pay Contractor for Contractor's performance of the Contract the contract Price, which shall not exceed \$. City shall make payments in the form of monthly progress payments plus a Final Payment as set forth in Article V.

ARTICLE V PAYMENTS

1. City shall make progress payments based upon the percentage of Work completed, as set forth in monthly Applications for Payment submitted by Contractor to City as the Work progresses. Contractor shall submit such Applications for Payment by the 25th day of the month. City shall pay undisputed amounts in the application to Contractor no later than the 5th day of the following month. No payments shall be made that are not in compliance with the requirements of Article 91 of Title 24 Colorado Revised Statutes.
2. Final Payment shall be made within 30 days following completion of the Project and City's acceptance of the Work, except as otherwise provided in this Agreement. No final payment shall be made until compliance with the requirements of section 38-26-107 Colorado Revised Statutes including advertising of notice of final settlement in a newspaper of general circulation and including withholding of any funds required to be withheld for payment of claims under this statute.

ARTICLE VI TERMINATION OR SUSPENSION BY CONTRACTOR

1. The Contract may be terminated or the Work may be suspended by Contractor if the Work is stopped for a period of 30 days through no fault of Contractor, a Subcontractor, or any other persons under their direction, for any of the following reasons:
 - A. Order of any court or public authority having jurisdiction;
 - B. National emergency or act of government;
 - C. City has not made payment within 10 days of the date such payment is due;
 - D. City has caused unreasonable and repeated suspensions, delays or interruptions;
 - E. City has failed to furnish to Contractor upon request anything City is required to furnish under the Contract;
 - F. Work has been stopped for a period of 60 consecutive days through no fault of Contractor, a Subcontractor, or any person working under their direction, and because City has consistently failed to perform its obligations under this Contract pertaining to matters important to progress of the Work.
 - G. Contractor reasonably determines that unsafe conditions exist, in which case Contractor may suspend the Work until such conditions are remedied. Such suspension shall not be considered a breach of this contract by Contractor, and Contractor will be entitled to an equitable adjustment to the Contract Price and Contract Time.
2. Contractor shall give City seven (7) days written notice of any of the above reasons, and thereafter may terminate the contract and recover from City payment for Work satisfactorily completed.

ARTICLE VII TERMINATION OR SUSPENSION BY CITY

1. City may, upon seven (7) days written notice to Contractor, terminate or suspend the Contract without prejudice to any other remedy City may have, for the following reasons:

- A. Contractor substantially fails to comply with laws, ordinances, rules, regulations or orders of public authorities having jurisdiction;
 - B. Contractor breaches any provision of the contract;
2. Upon request by City, Contractor shall provide a detailed accounting of costs required to finish the Work.

**ARTICLE VIII
CITY'S RIGHTS AND RESPONSIBILITIES**

- 1. City shall pay all development fees due to any city, county or state entity relating to the Project.
- 2. Should Contractor fail to clean up the site as required in this Agreement or General Conditions, City may obtain clean up services elsewhere and offset or charge the cost against Contractor.
- 3. City and its representatives will be given reasonable access to the Work site to monitor the progress and manner of construction.
- 4. Before Contractor shall be entitled to Final Payment: (i) City may inspect the Project, make a punch list of deficiencies, and all punch list items shall be completed; and (ii) the Work site shall be in broom clean condition, free of trash or debris, boxes, wrappings and equipment.

**ARTICLE IX
CONTRACTOR'S RIGHTS AND RESPONSIBILITIES**

- 1. Contractor shall be responsible for all Work under this contract, including the techniques, sequences, procedures, and means, and for coordination of all Work. Contractor shall supervise and direct the Work to the best of its ability, and give it all attention necessary for such proper supervision and direction. Contractor shall insure that sufficient numbers of properly skilled and licensed, if required by any local, city, county or state law, rule or ordinance, workers are performing the Work.
- 2. Contractor shall maintain at all times strict discipline among its employees, and Contractor agrees not to employ for the Work any person unfit or without sufficient skill to perform the job for which he or she was employed in the sole discretion of the Contractor.
- 3. Contractor shall provide and pay for all labor, materials, and equipment, including tools, construction equipment, and machinery, as necessary for the proper completion of the Work according to the Contract.
- 4. Contractor shall pay all taxes required by law in connection with the Work, including sales tax, use tax, and similar taxes. Note; Contractor can use the City's tax-exempt status when this status applies. Contractor shall secure and pay fees for all licenses and permits necessary for proper completion of the Work.
- 5. Contractor shall comply with all laws, ordinances, rules, regulations and orders of all public authorities with jurisdiction, which relate to the Work.
- 6. Contractor shall provide for and oversee all safety orders, precautions, laws, regulations, ordinances, and programs necessary for the reasonable safety of the performance of the Work. Contractor shall take reasonable precautions for the safety of all employees and other persons whom the Work might affect, all labor and material incorporated in the Work, and all property and improvements on or adjacent to the Work site.
- 7. Contractor shall keep the work premises and adjoining ways free of waste material and rubbish caused by the performance of the Work. Contractor shall remove all waste material and rubbish upon termination of

the Work, together with all its tools, equipment, machinery, and surplus materials. Contractor shall conduct general clean up of operations, including surfaces, paved streets, walks, steps, and interior floors, upon completion or termination of the Work.

8. Contractor shall make arrangements for all required tests, inspections, or approvals to be conducted in a timely manner to avoid delay of the Work. Testing company shall be approved by the City.
9. Contractor shall provide all documents, reports and other information requested by the City, and shall cooperate with City to the fullest extent possible.
10. Contractor is not an architect, engineer, or designer and is not hired to perform any of these services. Suggestions made by contractor related to these services are merely options to be considered by City after consultation with the appropriate professional, and are not to be relied upon by City.
11. Any remaining inventory or material is the property of the Contractor.
12. Contractor shall furnish necessary surveys for the work, including placement of stakes at property lines if required, and shall secure and pay for construction easements as necessary for completion of the Work.
13. Contractor shall comply with all applicable provisions of the Construction Code, Chapter 12.04 of the Fountain Municipal Code, and any other applicable City requirements.

ARTICLE X CORRECTION OF WORK

1. Contractor shall promptly correct any Work which is not in compliance with applicable codes and regulations whether observed before or after substantial Completion of the Work, at any stage of progress. Contractor shall bear costs of such correction, including any additional testing, inspections, and other necessary expenses. Contractor shall remove from the Work site any portions which are not in compliance. Should Contractor fail to promptly correct any portion of the Work or perform any other obligation under applicable codes and regulations, City may cause such corrections or obligations to be performed by a third party at Contractor's expense.
2. Contractor's obligation to correct work expires one year after last completion of the work, unless the noncompliance was latent and not discovered under reasonable diligence within the one-year period, in which case Contractor's obligation to correct expires one year from discovery of the noncompliance.
3. If City prefers to accept Work which is not in compliance with the Contract, City may do so instead of requiring its removal and correction, in which case the Contract Price will be reduced as appropriate. Such adjustment shall be made whether or not Final Payment has been made. Contractor shall pay funds due under such adjustment within ten days after such adjustment.

ARTICLE XI CHANGES IN THE WORK

1. The City may order changes in the Work, such as additions, deletions, or modifications, without invalidating the Contract, provided that appropriate adjustments are made in the Contract Price and time for completion. Changes shall be made by written Change Order. Change Orders shall be signed by both City and the Contractor stating A) a description of the change in the Work; B) the amount of the adjustment in Contract Price; and C) the extension of time necessary for the change. Contractor will determine the cost of additions required by Change Orders, and will add 15% of such amounts to the Contract Price for profit and overhead. In contrast, a 15% deduction for profit and overhead will not be made for deletions. Contractor shall not begin making any changes until it receives a written Change Order from City with provisions agreeable to both Contractor and City.

2. The terms of this Construction Contract, including Contract Price, are based on observations Contractor was able to make under conditions existing at the time of Contractor's bid. If concealed conditions are discovered as the Work progress which will affect the Contract Price or Contract Time or otherwise interfere with the performance of the Work, Contractor will stop the Work, notify City, and both parties will execute an appropriate Change Order.

ARTICLE XII INDEMNITY

1. Contractor agrees that Contractor shall indemnify, defend, and hold harmless City, its officers, employees, and agents, from and against any and all loss, damage, injuries, claims, costs, including attorney's fees, cause or causes of action, or any liability whatsoever resulting from, or arising out of, or in connection with the Contractor's obligations or actions under this contract, or from any act or obligation of any Subcontractor, laborer, materialman or agent of the Contractor.
2. This indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable for or by the Contractor or any Subcontractor, manufacturer or supplies under Worker's Compensation Act, disability benefits acts or other employee benefit acts.

ARTICLE XIII INSURANCE

1. **INSURANCE INSTRUCTIONS.** Contractor shall not commence work under this contract until all insurance required under this section has been obtained and such insurance has been approved by the City, nor shall the Contractor allow any sub-contractor to commence work on a subcontract until all similar insurance required of this Subcontractor has been so obtained. The City shall be included as an additional insured on all insurance coverages.
2. **WORKER'S STATUTORY COMPENSATION INSURANCE AND EMPLOYER LIABILITY INSURANCE.** The Contractor shall take out and maintain during the life of this contract the applicable statutory Worker's Compensation Insurance with an insurance company authorized to write such insurance and in the applicable state covering all employees, and in the case of any work sublet, the Contractor shall require the Subcontractor similarly to provide statutory Worker's Compensation Insurance for the latter's employees. The Contractor shall take out and maintain during the life of this contract, Employer's Liability Insurance with a limit of \$100,000 with an insurance company authorized to write such insurance in all states where the Contractor will have employees located in the performance of this contract and the Contractor shall require such Subcontractor similarly to maintain Employer's Liability Insurance on its employees.
3. **COMMERCIAL LIABILITY INSURANCE.** The Contractor shall maintain during the life of this contract such Public Liability Insurance as shall protect against claims for damages resulting from (1) bodily injury, including wrongful death, and property damage, which may arise from operations under this contract whether such operations be by self or by any Subcontractor or anyone directly or indirectly employed by either of them. The minimum acceptable limits of liability to be provided by such Public Liability Insurance shall be as follows:
 - A. Bodily Injury and Property Damage Limits are \$500,000 per occurrence Combined Single Limit
 - B. The Public Liability Insurance required by the preceding subparagraph shall include the following extensions of coverage:
 - C. Coverage shall be provided under a Commercial General Liability form of policy or similar thereto.

- D. X.C.U. Coverage - If the contract requires any work procedures involving blasting, excavating, tunneling, or other underground work, the liability coverage shall include Standard Blasting or Explosion Coverage, Standard Collapse Coverage and Standard Underground Coverage, commonly referred to as X.C.U. property damage liability coverage with limits of \$1,000,000 each occurrence.
 - E. The property damage coverage shall include a Broad form Property Damage Endorsement.
 - F. Contractual Liability coverage shall be included.
 - G. Protective Liability coverage shall be included to protect the Contractor against claims arising out of operations performed by Subcontractor.
 - H. Products Liability and/or Completed Operations coverage shall be included.
 - I. Completed Operations coverage shall be provided for two years following substantial completion of the work.
4. **AUTOMOBILE LIABILITY INSURANCE.** The Contractor shall take out and maintain during the life of the contract such comprehensive Automobile Liability Insurance as shall protect against claims for damages resulting from (1) bodily injury, including wrongful death, and (2) property damage, which may arise from the operations of any owned, hired, or non-owned automobiles used by or for work in any capacity in connection with the carrying out of this contract. The minimum acceptable limits of liability to be provided by such comprehensive Automobile Liability Insurance shall be as follows:
- A. Bodily Injury and Property Damage Limits are \$500,000 per occurrence Combined Single Limit
5. **CITY'S PROTECTIVE LIABILITY.** This insurance shall be in the name of the City and maintained in force for the duration of the contract by the Contractor. The policy shall provide a liability limit of not less than \$1,000,000 and shall protect against any and all claims, and liabilities for injury to or death of persons, or damage to property caused in whole or in part by, or alleged to have been caused in whole or in part by, the negligent acts or omissions of Contractor, Contractors agents, employees, or Subcontractor, in connection with or resulting from the operations performed under the terms of the agreement.
6. **EXCESS LIABILITY POLICY.** This insurance shall protect the Contractor against all claims in excess of the limits provided under the Commercial Automobile Liability and the Commercial General Liability. The liability limits of the Excess Liability Policy shall not be less than \$1,000,000.
7. **PROOF OF CARRIAGE OF INSURANCE.** The Contractor shall furnish the City satisfactory proof of carriage of the insurance required. All certificates of insurance shall state that 30 days written notice will be given to the City before the policy is canceled or changed. The Contractor and all Subcontractors shall include the City and the City's officers, agents and employees as "additional insured parties" on each policy for each project, except for Worker's Compensation Coverage. Each certificate of insurance shall state the type of coverage certified and shall be identified as one of the following:
- Insurance Coverage Limits
- A. Worker's Compensation Statutory
 - B. Employer's Liability \$100,000 each person
 - C. Commercial General Liability

	Bodily Injury	<u>\$500,000</u> each occurrence
	Property Damage	<u>\$500,000</u> each occurrence
D.	Commercial Automobile Liability	
	Bodily Injury	<u>\$500,000</u> each occurrence
	Property Damage	<u>\$500,000</u> each occurrence
E.	Excess Liability Policy	<u>\$1,000,000</u>
	Required <u>X</u>	
F.	City's Protective Liability Insurance	<u>\$1,000,000</u>

Two copies of each certificate shall be sent to the CITY.

**ARTICLE XIV
DISPUTE RESOLUTION**

1. Negotiation. In the event of any dispute, claim, questions or disagreement arising out of or in relation to this Contract or any part of the Contract, or the breach thereof (the "dispute") the parties hereto shall use their best efforts to settle such dispute. To this effect they shall consult and negotiate with each other in good faith, and recognizing their mutual interest, attempt to reach a just agreement which is satisfactory to both parties.
2. Mediation. If the dispute cannot be settled through negotiation within thirty (30) days, the parties agree to try in good faith to settle the dispute by mediation administered under the auspices of a recognized, established mediation service within the state of Colorado. If the parties are unable to settle the dispute through mediation within ninety (90) days, or if the parties fail to enter into mediation within ten (10) days after the expiration of the negotiation period, then the parties may initiate litigation relating to any dispute. In the event of litigation, venue shall be in the District Court of El Paso County, Colorado, or if subject to jurisdiction of the United States District, in the United States District Court for the District of Colorado.
3. Except as expressly provided for in the Contract, the parties waive all claims for consequential damages.

**ARTICLE XV
MISCELLANEOUS PROVISIONS**

1. Where this Agreement references a provision of the General Conditions or another Contract document, the reference incorporates all amendments or supplements.
2. Notices concerning the Contract shall be in writing and be deemed sufficiently given when personally delivered or sent by certified or registered mail if sent to the respective addresses of each party as set forth above.
3. Any modification of the Contract, including Change Orders, and any additional obligation assumed by either party in connection with this Contract shall be binding only if evidenced in writing signed by each party or an authorized representative thereof.
4. The rights of each party pursuant to this Contract are personal to that party and may not be assigned or transferred to any other person, firm, corporation, or other entity without the prior, express written consent of the other party. This contract is binding upon the successors and assigns to the parties.

5. Titles to the Articles in this Agreement are solely for convenience and shall not be used to explain, modify, simplify, or aid in the interpretation of this Agreement.
6. All duties, obligations, rights, and remedies provided for under the Contract are in addition to and shall not limit any duties, obligations, rights and remedies otherwise provided for by law.
7. No act or failure to act shall constitute a waiver of any right or duty, or constitute an approval or acquiescence, unless expressly provided for in writing.
8. The invalidity of any part or provision of the Contract shall not impair or affect in any manner the validity, enforceability or effect of the remaining parts and provisions of the Contract.
9. No applicable statute of limitations shall be deemed to have commenced with respect to any portion of the Work which is not in accordance with the requirements of the Contract, which would not be visible or apparent upon conducting a reasonable investigation, and which is not discovered by City until after the date which would be the date of commencement of the statute of limitations. The applicable statute of limitations instead shall be deemed to have commenced on the date of such discovery by City.
10. Nothing in this Contract shall be deemed to waive or otherwise limit any and all defenses available to the City pursuant to the Colorado Governmental Immunity Act or as otherwise provided by law.
11. The laws, rules and regulations of the State of Colorado, and City of Fountain shall be applicable in the enforcement, interpretation and execution of this Easement.
12. This Contract may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

This Construction Contract is entered as of the first date written above and is executed in triplicate.

City of Fountain _____

By: _____

Printed Name and Title: _____

The above person's signature verifies his/her authority to execute this Contract on behalf of City.

Contractor:

By: _____

Printed Name and title: _____

The above person's signature verifies her/her authority to execute this Construction Contract on behalf of the Contractor.

CITY OF FOUNTAIN PERFORMANCE BOND

1. KNOW ALL MEN BY THESE PRESENTS, THAT:

(Name) _____ As Principal, hereinafter called Principal, and

(Address) _____

(SURETY Name) _____ a corporation organized and existing under
the laws of the State of:

(SURETY Address) _____

and AUTHORIZED TO DO BUSINESS IN THE STATE OF COLORADO, as Surety, hereinafter called Surety, are held firmly bound to the CITY OF FOUNTAIN, COLORADO, as Obligee, hereinafter called the Obligee, in the sum of:
(Insert Proposal Amount in Words)

_____ dollars and no cents **(\$)** _____ DOLLARS),

lawful money of the United States of America, for payment of which sum well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, successors and assigns, jointly and severally, firmly by these presents.

2. WHEREAS, the Principal and the Obligee have entered into,

a contract dated the _____ day of _____ For the following project:

First Floor Remodel – 116 South Main Street Fountain CO

_____ which contract is by reference made a part hereof, and referred to as the Contract.

3. NOW THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT if the Principal shall promptly and faithfully perform all terms, conditions and other obligations of the Contract, and any modifications or extensions thereof granted by the Obligee, then this obligation shall be null and void: otherwise this obligation shall remain in full force and effect.

4. The Surety for value received agrees that no extension of time, change in, addition to, or other alteration modification of the terms, conditions or obligations of the Contract or work to be performed thereunder, or any forbearance on the part of either the Obligee or the Principal to the other shall in any way release or affect the liability or obligation of this Bond, and the Surety hereby waives notice of any such extension of time, change, addition, modification, alteration or forbearance.

Signed and sealed on the dates set forth below:

(Witness) _____ FOR: _____
(Principals Name)

BY: _____

(Seal) _____ ITS: _____
this _____ day of _____

(Witness) _____ FOR: _____
(Surety's Name)

BY: _____

(Seal) _____ ITS: _____
this _____ day of _____

Bond # _____

CITY OF FOUNTAIN LABOR & MATERIAL PAYMENT BOND

1. KNOW ALL MEN BY THESE PRESENTS, THAT:

(Name) _____ As Principal, hereinafter called Principal, and

(Address) _____

(SURETY Name) _____ a corporation organized and existing under
the laws of the State of:

(SURETY Address)

and AUTHORIZED TO DO BUSINESS IN THE STATE OF COLORADO, as Surety, hereinafter called Surety, are held firmly bound to the CITY OF FOUNTAIN, COLORADO, as Obligee, hereinafter called the Obligee, in the sum of: (Insert Proposal Amount in Words)

_____ dollars and no cents **(\$** _____ DOLLARS),

lawful money of the United States of America, for payment of which sum well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, successors and assigns, jointly and severally, firmly by these presents.

2. WHEREAS, the Principal and the Obligee have entered into,

a contract dated the _____ day of _____ For the following project:

First Floor Remodel – 116 South Main Street Fountain CO

_____ which contract is by reference made a part hereof, and referred to as the Contract.

3. NOW THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the Principal shall promptly make payments of all amounts lawfully due to all persons supplying or furnishing the Principal or the Principals subcontractors with labor, materials, rental machinery, tools or equipment used or performed in the prosecution of the work provided for in the Contract; and if the Principal shall indemnify and save harmless the Obligee to the extent of any payments in connection with the carrying out of the Contract which the Obligee may be required to pay under the law, all in accord with Colorado State Law, Section 38-26-105 C.R.S., then this obligation shall be null and void; otherwise this obligation shall remain in full force and effect.

AND FURTHER, should the Principal or the Principals subcontractors fail to duly pay for any labor, materials, team hire, sustenance, provisions, provender, or other supplies used or consumed by the Principal or the Principals subcontractors in the performance of the work contracted to be done or fails to pay any person who supplies rental machinery, tools or equipment, all amounts due as the result of the use of such machinery, tools, or equipment, in the prosecution of the work under the Contract, the Surety shall pay the same in an amount not exceeding the sum specified in this Bond together with interest at the rate of eight percent per annum, in accord with Colorado State Law, Section 38-26-106 C.R.S.

In accord with Colorado State Law, Section 38-26-105 C.R.S., actions against the Principal and Surety under this Bond shall be brought within six months after the final completion of the Contract as defined by the ordinances, rules and regulations of the City of Colorado Springs, Colorado, a home rule City, and not afterwards.

4. The Surety for value received agrees that no extension of time, change in, addition to, or other alteration or modification of the terms, conditions or obligations of the Contract or work to be performed thereunder, or any forbearance on the part of either the Obligee or the Principal to the other shall in any way release or affect the Surety's liability or obligation on this Bond, and the surety hereby waives notice of any such extension of time, change, addition, modification, alteration or forbearance.

CITY OF FOUNTAIN LABOR & MATERIAL PAYMENT BOND

PAGE 2

Signed and sealed on the dates set forth below:

(Witness) FOR: _____
(Principals Name)

BY: _____

(Seal) ITS: _____
this _____ day of _____

(Witness) FOR: _____
(Surety's Name)

BY: _____

(Seal) ITS: _____
this _____ day of _____

Bond # _____

CITY OF FOUNTAIN MAINTENANCE BOND

1. KNOW ALL MEN BY THESE PRESENTS, THAT:

_____ (Name)

_____ As Principal, hereinafter called Principal, and
(Address)

_____ (SURETY Name)

a corporation organized and existing under
the laws of the State of:

_____ (SURETY Address)

and AUTHORIZED TO DO BUSINESS IN THE STATE OF COLORADO, as Surety, hereinafter called Surety, are held firmly bound to the CITY OF FOUNTAIN, COLORADO, as Obligee, hereinafter called the Obligee, for the use and benefit of claimants as herein below defined, in the amount of: (Insert Proposal Amount in Words)

_____ dollars and no cents (\$ _____ DOLLARS),

lawful money of the United States of America, together with interest as may be provided by law, for the maintenance and guarantee obligations of the Contract, for the payment whereof Principal and Surety bind themselves, their heirs, executors, successors and assigns, jointly and severally, firmly by these presents.

2. WHEREAS, the Principal and the Obligee have entered into,

a contract dated the _____ day of _____ For the following project:

First Floor Remodel – 116 South Main Street Fountain CO

_____ which contract is by reference made a part hereof, and referred to as the Contract.

3. NOW THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the Principal shall promptly, properly and without cost to Obligee perform all maintenance and other guarantee obligations under the terms of the Contract, including any modifications or extensions thereof granted by the Obligee, for a period of TWO (2) year(s) from the date of final payment upon the Contract by the Obligee, and in the case of each correction or repair, during a period of one year after the date of said correction or repair or for the remaining period of years set forth herein, whichever is longer, then this obligation shall be null and void; otherwise this obligation shall remain in full force and effect.

4. The Surety for value received agrees that no extension of time, change in, addition to, or other alteration or modification of the terms, conditions or obligations of the Contract or work to be performed thereunder, or any forbearance on the part of either the Obligee or the Principal to the other shall in anyway release affect the Surety's liability or obligation on this Bond, and the surety hereby waives notice of any such extension of time, change, addition, modification, alteration or forbearance.

Signed and sealed on the dates set forth below:

_____ FOR: _____
(Witness) (Principals Name)

BY: _____

_____ ITS: _____
(Seal) this _____ day of _____

_____ FOR: _____
(Witness) (Surety's Name)

BY: _____

_____ ITS: _____
(Seal) this _____ day of _____

Bond # _____

GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.

Addenda--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the Contract Documents.

Agreement--The written instrument which is evidence of the agreement between OWNER and CONTRACTOR covering the Work.

Application for Payment--The form acceptable to OWNER which is to be used by CONTRACTOR during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

Asbestos--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

Bid--The offer or proposal of a bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

Bidding Documents--The Bidding Requirements and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

Bidding Requirements--The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security form, if any, and the Bid form with any supplements.

Bonds--Performance, Payment, Maintenance bonds and other instruments of security.

Change Order--A document recommended by OWNER'S REPRESENTATIVE which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

Claim--A demand or assertion by OWNER or CONTRACTOR seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

Contract--The entire and integrated written agreement between the OWNER and CONTRACTOR concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

Contract Documents--The Contract Documents establish the rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Notice to Proceed, the Bonds, these General Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications issued on or after the Effective Date of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Only printed or hard copies of the items listed in this paragraph are Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by OWNER to CONTRACTOR are not Contract Documents.

Contract Price--The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.03 in the case of Unit Price Work).

Contract Times--The number of days or the dates stated in the Agreement to: (i) achieve Substantial Completion; and (ii) complete the Work as evidenced by final payment (see Article 1.02B).

CONTRACTOR--The individual or entity with whom OWNER has entered into the Agreement.

Cost of the Work--See paragraph 11.01.A for definition.

Drawings--That part of the Contract Documents which graphically shows the scope, extent, and character of the Work to be performed by CONTRACTOR. Shop Drawings and other CONTRACTOR submittals are not Drawings as so defined.

Effective Date of the Agreement--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

Field Order--A written order issued by OWNER which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

General Requirements--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

Hazardous Environmental Condition--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

Hazardous Substances or Hazardous Materials -- Include, but are not limited to, petroleum products, radioactive materials, and all substances which are listed under 40 CFR 302 and 40 CFR 355, 49 CFR 172 and 29 CFR 1910.120.

Hazardous Waste--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

Laws and Regulations; Laws or Regulations--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

Liens--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

Milestone--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

Notice of Award--The written notice by OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.

Notice to Proceed--A written notice given by OWNER to CONTRACTOR fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform the Work under the Contract Documents.

OSHA--The Occupational Safety and Health Administration

OWNER—City of Fountain Water Department, a home rule municipality, the individual, entity, public body, or authority with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be performed.

OWNER's Consultant--An individual or entity having a contract with OWNER to furnish services as ENGINEER's independent professional associate or consultant with respect to the Project.

OWNER's Representative--The authorized representative of OWNER who may be assigned to the Project or any part thereof.

Partial Utilization--Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.

PCBs--Polychlorinated biphenyls.

Petroleum--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

Project--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents.

Radioactive Material--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

Samples--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

Shop Drawings--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of the Work.

Site--Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for the use of CONTRACTOR.

Specifications--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

Subcontractor--An individual or entity having a direct contract with CONTRACTOR or with any other subcontractor for the performance of a part of the Work at the Site.

Substantial Completion--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of OWNER the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to GC 14.04 Substantial Completion.

Supplier--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with CONTRACTOR or with any subcontractor to furnish materials or equipment to be incorporated in the Work by CONTRACTOR or any subcontractor.

Underground Facilities--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

Unit Price Work--Work to be paid for on the basis of unit prices.

Work--The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

Work Change Directive--A written statement to CONTRACTOR issued on or after the Effective Date of the Agreement and signed by OWNER ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times, or settled in accordance with Article 10.05, Claims and Disputes.

Written Amendment--A written statement modifying the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the nonengineering or nontechnical rather than strictly construction-related aspects of the Contract Documents.

1.02 Terminology

A. Intent of Certain Terms or Adjectives

1. Whenever in the Contract Documents the terms “as allowed,” “as approved,” or terms of like effect or import are used, or the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of OWNER as to the Work, it is intended that such action or determination will be solely to evaluate, in general,

the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to OWNER any duty or authority to supervise or direct the

performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.09 or any other provision of the Contract Documents.

B. Day

1. The word “day” shall constitute a calendar day of 24 hours measured from midnight to the next midnight.

C. Defective

1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to OWNER’S REPRESENTATIVE’S final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.04 or 14.05).

D. Furnish, Install, Perform, Provide

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of CONTRACTOR, “provide” is implied.

- E. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds*

A. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish.

2.02 *Copies of Documents*

A. OWNER shall furnish to CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

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

2.04 *Starting the Work*

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

2.05 *Before Starting Construction*

A. *CONTRACTOR's Review of Contract Documents:* Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. CONTRACTOR shall promptly report in writing to OWNER any conflict, error, ambiguity, or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from OWNER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless CONTRACTOR knew or reasonably should have known thereof.

B. *Preliminary Schedules:* Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to OWNER'S REPRESENTATIVE for its timely review:

1. a preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and

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

C. Evidence of Insurance: Before any Work at the Site is started, CONTRACTOR and OWNER shall each deliver to the other, with copies to each additional insured identified certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which CONTRACTOR and OWNER respectively are required to purchase and maintain in accordance with Article 5.

2.06 *Preconstruction Conference*

A. Within 20 days after the Contract Times start to run, but before any Work at the Site is started, a conference attended by CONTRACTOR, OWNER'S REPRESENTATIVE, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in paragraph 2.05.B, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 *Initial Acceptance of Schedules*

A. Unless otherwise provided in the Contract Documents, at least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, OWNER'S REPRESENTATIVE, and others as appropriate will be held to review for acceptability to OWNER, as provided below the schedules submitted in accordance with paragraph 2.05.B. CONTRACTOR shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to CONTRACTOR until acceptable schedules are submitted to OWNER'S REPRESENTATIVE.

1. The progress schedule will be acceptable to OWNER if it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on OWNER responsibility for the progress schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility therefore.

2. CONTRACTOR's schedule of Shop Drawing and Sample submittals will be acceptable to OWNER if it provides a workable arrangement for reviewing and processing the required submittals.

3. CONTRACTOR's schedule of values will be acceptable to OWNER as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to OWNER.

C. Clarifications and interpretations of the Contract Documents shall be issued by OWNER as provided in Article 9.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of OWNER, CONTRACTOR, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall

any such provision or instruction be effective to assign to OWNER, OWNER'S REPRESENTATIVE, or any of OWNER's Consultants, agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies

1. If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, CONTRACTOR shall report it to OWNER in writing at once. CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as required by paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.04; provided, however, that CONTRACTOR shall not be liable to OWNER for failure to report any such conflict, error, ambiguity, or discrepancy unless CONTRACTOR knew or reasonably should have known thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 Amending and Supplementing Contract Documents

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways: (i) a Written Amendment; (ii) a Change Order; or (iii) a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways: (i) a Field Order; (ii) OWNER'S approval of a Shop Drawing or Sample; or (iii) OWNER'S REPRESENTATIVE written interpretation or clarification.

3.05 Reuse of Documents

A. CONTRACTOR and any subcontractor or Supplier or other individual or entity performing or furnishing any of the Work under a direct or indirect contract with OWNER: (i) shall not have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of OWNER or OWNER's Consultant, including electronic media editions; and (ii) shall not reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other Project without written consent of OWNER and specific written verification or adaptation by OWNER. This prohibition will survive final payment, completion, and acceptance of the Work, or termination or completion of the Contract. Nothing herein shall preclude CONTRACTOR from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

4.01 Availability of Lands

A. OWNER shall furnish the Site. OWNER shall notify CONTRACTOR of any encumbrances or restrictions not of general application but specifically related to use of the Site with which CONTRACTOR must comply in performing the Work. OWNER will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If CONTRACTOR and OWNER are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in OWNER's furnishing the Site, CONTRACTOR may make a Claim therefore as provided in paragraph 10.05.

B. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

C. CONTRACTOR shall provide OWNER with copies of agreements with private landowners.

4.02 Subsurface and Physical Conditions

A. *Reports and Drawings:* The Project technical specifications identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that OWNER has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that OWNER has used in preparing the Contract Documents.

B. *Limited Reliance by CONTRACTOR on Technical Data Authorized:* CONTRACTOR may rely upon the general accuracy of the “technical data” contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such “technical data” is identified in the Project technical specifications. Except for such reliance on such “technical data,” CONTRACTOR may not rely upon or make any Claim against OWNER, OWNER’S REPRESENTATIVE, or any of OWNER’s Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR’s purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any “technical data” on which CONTRACTOR is entitled to rely as provided in paragraph 4.02 is materially inaccurate; or
2. is of such a nature as to require a change in the Contract Documents; or
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), notify OWNER in writing about such condition. CONTRACTOR shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *OWNER’s Review:* After receipt of written notice as required by paragraph 4.03.A, OWNER’S REPRESENTATIVE will promptly review the pertinent condi-

tion, determine the necessity of obtaining additional exploration or tests with respect thereto, and advise CONTRACTOR in writing of OWNER's findings and conclusions.

C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in CONTRACTOR's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of paragraphs 9.07 and 11.03.

2. CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or

c. CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.03.A.

3. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefore as provided in paragraph 10.05. However, OWNER, OWNER'S REPRESENTATIVE, and OWNER's Consultants shall not be liable to CONTRACTOR for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) sustained by CONTRACTOR on or in connection with any other Project or anticipated Project.

4.04 *Underground Facilities*

A. *Shown or Indicated*: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to OWNER by the owners of such Underground Facilities, including OWNER, or by others. Unless it is otherwise expressly provided in the Project technical specifications:

1. OWNER shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and CONTRACTOR shall have full responsibility for:

- a. reviewing and checking all such information and data,
- b. locating all Underground Facilities shown or indicated in the Contract Documents,
- c. coordination of the Work with the owners of such Underground Facilities, including OWNER, during construction, and
- d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), identify the OWNER of such Underground Facility and give written notice to that OWNER and to OWNER. OWNER will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility.

2. If OWNER concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price of Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or

extent, if any, of any such adjustment in Contract Price or Contract Times, OWNER or CONTRACTOR may make a Claim therefore as provided in paragraph 10.05.

4.05 Reference Points

A. OWNER shall provide engineering surveys to establish reference points for construction which are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of OWNER.

CONTRACTOR shall report to OWNER whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 Hazardous Environmental Condition at Site

A. *Reports and Drawings:* Reference is made to the Project technical specifications for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the OWNER in the preparation of the Contract Documents.

B. *Limited Reliance by CONTRACTOR on Technical Data Authorized:* CONTRACTOR may rely upon the general accuracy of the “technical data” contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such “technical data” is identified in the Project technical specifications. Except for such reliance on such “technical data,” CONTRACTOR may not rely upon or make any Claim against OWNER, OWNER’S REPRESENTATIVE or any of OWNER’s Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR’s purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
3. any CONTRACTOR interpretation of or conclusion drawn from any “technical data” or any such other data, interpretations, opinions or information.

C. CONTRACTOR shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. CONTRACTOR shall be responsible for a Hazardous Environmental

Condition created with any materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers, or anyone else for whom CONTRACTOR is responsible.

D. The provisions of paragraphs 4.02, 4.03, and 4.04 are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, Maintenance and Other Bonds*

A. CONTRACTOR shall furnish Performance, Payment and Maintenance Bonds acceptable to OWNER, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date of final payment, except as provided otherwise by Laws or Regulations or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Contract Documents.

B. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and 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 Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.

C. If the surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.01.B, CONTRACTOR shall within 20 days thereafter substitute another Bond and surety, both of which shall comply with the requirements of paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All Bonds and insurance required by the Contract Documents to be purchased and maintained by OWNER or CONTRACTOR shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds or insurance policies for the limits and coverages so required.

5.03 *Certificates of Insurance*

A. CONTRACTOR shall deliver to OWNER, with copies to each additional insured certificates of insurance (and other evidence of insurance requested by OWNER or any other additional insured) which CONTRACTOR is required to purchase and maintain.

5.04 Insurance

1.INSURANCE INSTRUCTIONS. CONTRACTOR shall not commence work under this contract until all insurance required under this section has been obtained and such insurance has been approved by the City, nor shall the CONTRACTOR allow any subconsultant or subcontractor to commence work on a subcontract until all similar insurance required of this subconsultant or subcontractor has been so obtained. The City shall be included as an additional insured on all insurance coverages except for professional liability insurance.

2. WORKER'S STATUTORY COMPENSATION INSURANCE AND EMPLOYER LIABILITY INSURANCE. The CONTRACTOR shall take out and maintain during the life of this contract the applicable statutory Worker's Compensation Insurance with an insurance company authorized to write such insurance and in the applicable state covering all employees, and in the case of any work sublet, the CONTRACTOR shall require the subconsultant or subcontractorsimilarly to provide statutory Worker's Compensation Insurance for the latter's employees. The CONTRACTOR shall take out and maintain during the life of this contract, Employer's Liability Insurance with a limit of \$100,000 with an insurance company authorized to write such insurance in all states where the CONTRACTOR will have employees located in the performance of this contract and the CONTRACTOR shall require such subconsultant or subcontractor similarly to maintain Employer's Liability Insurance on its employees.

3. COMMERCIAL GENERAL LIABILITY INSURANCE. The CONTRACTOR shall maintain during the life of this contract such Commercial General Liability Insurance as shall protect against claims for damages resulting from (1) bodily injury, including wrongful death, and property damage, which may arise from operations under this contract whether such operations be by self or by any subconsultant, subcontractor, or anyone directly or indirectly employed by either of them. The minimum acceptable limits of liability to be provided by such Liability Insurance shall be as follows:

- A. Bodily Injury and Property Damage Limits are \$500,000 per occurrence Combined Single Limit
- B. The Public Liability Insurance required by the preceding subparagraph shall include the following extensions of coverage:
- C. Coverage shall be provided under a Commercial General Liability form of policy or similar thereto.
- D. X.C.U. Coverage - If the contract requires any work procedures involving blasting, excavating, tunneling, or other underground work, the liability coverage shall include Standard Blasting or Explosion Coverage, Standard Collapse Coverage and Standard Underground Coverage, commonly referred to as X.C.U. property damage liability coverage with limits of

\$1,000,000 each occurrence.

- E. The property damage coverage shall include a Broad form Property Damage Endorsement.
- F. Contractual Liability coverage shall be included.
- G. Protective Liability coverage shall be included to protect the CONTRACTOR against claims arising out of operations performed by subconsultant or subcontractor.
- H. Products Liability and/or Completed Operations coverage shall be included.
- I. Completed Operations coverage shall be provided for two years following substantial completion of the work.

4. **AUTOMOBILE LIABILITY INSURANCE.** The CONTRACTOR shall take out and maintain during the life of the contract such comprehensive Automobile Liability Insurance as shall protect against claims for damages resulting from (1) bodily injury, including wrongful death, and (2) property damage, which may arise from the operations of any owned, hired, or non-owned automobiles used by or for work in any capacity in connection with the carrying out of this contract. The minimum acceptable limits of liability to be provided by such comprehensive Automobile Liability Insurance shall be as follows:

A. Bodily Injury and Property Damage Limits are \$500,000 per occurrence Combined Single Limit

5. **PROFESSIONAL LIABILITY INSURANCE.** This insurance shall be in force for the duration of the contract by the CONTRACTOR. The policy shall provide a liability limit of not less than \$1,000,000.00 and shall insure against damages and liabilities for injury or death of persons, or damage to property, to the extent caused by CONTRACTOR's negligent acts or omissions in connection with operations performed under the terms of this agreement.

6. **EXCESS LIABILITY POLICY.** This insurance shall protect the CONTRACTOR against all claims in excess of the limits provided under the Commercial Automobile Liability and the Commercial General Liability. The liability limits of the Excess Liability Policy shall not be less than \$1,000,000.

7. **PROOF OF CARRIAGE OF INSURANCE.** The CONTRACTOR shall furnish the City satisfactory proof of carriage of the insurance required. All certificates of insurance shall state that 30 days written notice will be given to the City before the policy is canceled or changed. The CONTRACTOR and all or subcontractors shall include the City and the City's officers, agents and employees as "additional insured

parties” on each policy for each project, except for Worker’s Compensation Coverage. Each certificate of insurance shall state the type of coverage certified and shall be identified as one of the following:

Insurance Coverage Limits

- A. Worker’s Compensation Statutory
- B. Employer’s Liability \$100,000
each person
- C. Commercial General Liability
 - Bodily Injury \$500,000
each occurrence
 - Property Damage \$500,000
each occurrence
- D. Commercial Automobile Liability
 - Bodily Injury \$500,000
each occurrence
 - Property Damage \$500,000
each occurrence
- E. Excess Liability Policy \$1,000,000
Required X
- F. City’s Protective Liability Insurance \$1,000,000

Two copies of each certificate shall be sent to the CITY.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. CONTRACTOR shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of OWNER or OWNER'S REPRESENTATIVE in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents. CONTRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.

B. At all times during the progress of the Work, CONTRACTOR shall assign a competent resident superintendent thereto who shall not be replaced without written notice to OWNER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.

6.02 *Labor; Working Hours*

A. CONTRACTOR shall provide competent, suitably qualified personnel to survey, lay out, and construct the Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without OWNER's written consent (which will not be unreasonably withheld) given after prior written notice to OWNER.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the General Requirements, CONTRACTOR shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the

Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to the benefit of OWNER. If required by OWNER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 Progress Schedule

A. CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.07 as it may be adjusted from time to time as provided below.

1. CONTRACTOR shall submit to OWNER for acceptance (to the extent indicated in paragraph 2.07), proposed adjustments in the progress schedule that will not result in changing the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.

6.05 Substitutes and “Or-Equals”

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or “or-equal” item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to OWNER for review under the circumstances described below.

1. “Or-Equal” Items: If in OWNER’s sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by OWNER as an “or-equal” item, in which case review and approval of the proposed item may, in OWNER’s sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment OWNER determines that: (i) it is at least equal in quality, durability, appearance, strength, and design characteristics; (ii) it will

reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and;

b. CONTRACTOR certifies that: (i) there is no increase in cost to the OWNER; and (ii) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

2. *Substitute Items*

a. If in OWNER's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "or-equal" item under paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. CONTRACTOR shall submit sufficient information as provided below to allow OWNER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefore. Requests for review of proposed substitute items of material or equipment will not be accepted by OWNER from anyone other than CONTRACTOR.

c. The procedure for review by OWNER will be as set forth in paragraph 6.05.A.2.d, as supplemented in the General Requirements and as OWNER may decide is appropriate under the circumstances.

d. CONTRACTOR shall first make written application to OWNER'S REPRESENTATIVE for review of a proposed substitute item of material or equipment that CONTRACTOR seeks to furnish or use. The application shall certify that the proposed substitute item will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified. The application will state the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the application, and available engineering, sales, maintenance, repair, and replacement services will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change, all of which will be considered by OWNER in evaluating the proposed substitute item. OWNER may require CONTRACTOR to furnish additional data about the proposed substitute item.

B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly

required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by OWNER. CONTRACTOR shall submit sufficient information to allow OWNER, in OWNER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by OWNER will be similar to that provided in subparagraph 6.05.A.2.

C. *OWNER's Evaluation:* OWNER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs 6.05.A and 6.05.B. OWNER will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized until OWNER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." OWNER will advise CONTRACTOR in writing of any negative determination.

D. *Special Guarantee:* OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.

E. *OWNER's Cost Reimbursement:* OWNER'S REPRESENTATIVE will record time required by OWNER and OWNER's Consultants in evaluating substitute proposed or submitted by CONTRACTOR pursuant to paragraphs 6.05.A.2 and 6.05.B and in making changes in the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) occasioned thereby. Whether or not OWNER approves a substitute item so proposed or submitted by CONTRACTOR, CONTRACTOR may be required to reimburse OWNER for the charges of OWNER and OWNER's Consultants for evaluating each such proposed substitute.

F. *CONTRACTOR's Expense:* CONTRACTOR shall provide all data in support of any proposed substitute or "or-equal" at CONTRACTOR's expense.

6.06 Concerning Subcontractors, Suppliers, and Others

A. CONTRACTOR shall not employ any subcontractor, Supplier, or other individual or entity (including those acceptable to OWNER as indicated in paragraph 6.06.B), whether initially or as a replacement, against whom OWNER may have reasonable objection. CONTRACTOR shall not be required to employ any subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

B. Contractor is solely responsible for the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to OWNER in advance for acceptance by OWNER by a specified date prior to the Effective Date of the Agreement, and if CONTRACTOR has submitted a list, OWNER's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such subcontractor, Supplier, or other individual or entity so identified may be revoked on the

basis of reasonable objection after due investigation. CONTRACTOR shall submit an acceptable replacement for the rejected subcontractor, Supplier, or other individual or entity without a change in bid price. No acceptance by OWNER of any such subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of OWNER to reject defective Work.

C. CONTRACTOR shall be fully responsible to OWNER for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such subcontractor, Supplier, or other individual or entity any contractual relationship between OWNER and any such subcontractor, Supplier or other individual or entity, nor shall it create any obligation on the part of OWNER to pay or to see to the payment of any moneys due any such subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

D. CONTRACTOR shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR.

E. CONTRACTOR shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with OWNER through CONTRACTOR.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for CONTRACTOR by a subcontractor or Supplier will be pursuant to an appropriate agreement between CONTRACTOR and the subcontractor or Supplier which specifically binds the subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and OWNER'S REPRESENTATIVE.

6.07 *Patent Fees and Royalties*

A. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. CONTRACTOR shall indemnify and hold harmless OWNER, OWNER's Consultants, the City of Fountain and the City Councils, Utilities Boards, officers, directors, partners, representatives, employees or

agents, and other consultants of each and any of them from and against all claims, costs, losses, damages, causes of action, or liability of any nature (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. OWNER shall pay all charges of OWNER-Owned Utilities for connections to the Work, and shall pay all charges of such OWNER-Owned Utilities for capital costs related thereto, such as plant investment fees.

6.09 *Laws and Regulations*

A. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, OWNER and OWNER'S REPRESENTATIVE shall not be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.

B. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, CONTRACTOR shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) arising out of or relating to such Work; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve CONTRACTOR of CONTRACTOR's obligations under paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work may be the subject of an adjustment in Contract Price or Contract Times. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefore as provided in paragraph 10.05.

6.10 Taxes

STATE OF COLORADO AND EL PASO COUNTY SALES AND USE TAXES. The Contractor shall obtain from the Colorado Department of Revenue a State Sales and Use Tax exemption certificate for this Project. The exemption certificate will exempt the Contractor and all subcontractors working on this Project from paying State of Colorado and El Paso County sales and use taxes on the purchase of building materials. The Contractor shall ensure the Contractor and all subcontractors use the tax exemption certificate and tax exemption Project number when purchasing all materials to be incorporated into this Project. No State of Colorado or El Paso County sales or use taxes shall be included in the bid prices for the Work covered by this Contract.

CITY OF FOUNTAIN SALES AND USE TAXES: The Contractor shall ensure the Contractor and all subcontractors pay all applicable City of Fountain sales and use taxes on the purchase of all materials used in the performance of the Work covered by this Contract. The cost of Fountain sales and use taxes shall be included in the bid prices.

Upon request of the Owner or the City of Fountain, the Contractor shall provide the Owner or City of Fountain with all necessary information to substantiate payment of all applicable City of Fountain Sales and Use taxes related to the purchase of all materials used in the performance of the work covered by this Contract. No refund of City of Fountain sales or use taxes shall be made to the Contractor or subcontractors.

6.11 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas

1. CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the OWNER or occupant thereof, or any third party, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such OWNER, occupant, or any third party, because of the performance of the Work, CONTRACTOR, at CONTRACTOR'S sole expense, shall promptly settle with such other party by negotiation or otherwise resolve the claim or other dispute resolution proceeding or at law.

3. CONTRACTOR shall indemnify and hold harmless OWNER, OWNER'S REPRESENTATIVE, OWNER's Consultants, the City of Fountain, and the City Councils, Utilities Boards, officers, directors, partners, representatives, employees, agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages, causes of action, or liability of any nature (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all

court or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against OWNER, OWNER'S REPRESENTATIVE, or any other party indemnified hereunder to the extent caused by or based upon CONTRACTOR's performance of the Work.

B. *Removal of Debris During Performance of the Work:* During the progress of the Work CONTRACTOR shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations. All excess fill materials or those that are unsuitable for use as backfill on the Site, shall be transported to and disposed of at a site or facility that has been approved for the disposal of such material by all applicable regulatory authorities. CONTRACTOR shall provide OWNER with proof of disposal of all such material at an approved site or facility.

C. *Cleaning:* Prior to Substantial Completion of the Work CONTRACTOR shall clean the Site and make it ready for utilization by OWNER. At the completion of the Work CONTRACTOR shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading Structures:* CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 Record Documents

A. CONTRACTOR shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to ENGINEER and OWNER'S REPRESENTATIVE for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to OWNER.

6.13 Safety and Protection

A. CONTRACTOR shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall submit to OWNER a safety plan for review prior to commencement of work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. CONTRACTOR shall comply with all applicable Codes, Standards, Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury, or loss to any property referred to in paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER, OWNER'S REPRESENTATIVE or OWNER's Consultant, or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR or any subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them). CONTRACTOR's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and OWNER has issued a notice to CONTRACTOR in accordance with paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

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

6.15 *Hazard Communication Programs*

A. CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, CONTRACTOR is obligated to act to prevent

threatened damage, injury, or loss. If an emergency occurs, CONTRACTOR shall notify OWNER's REPRESENTATIVE immediately, and provide written documentation of the emergency within 24 hours. CONTRACTOR shall give OWNER'S REPRESENTATIVE prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If OWNER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Work Change Directive or Change Order will be issued. CONTRACTOR shall only utilize appropriately trained personnel to respond to such emergencies.

6.17 *Shop Drawings and Samples*

A. CONTRACTOR shall submit Shop Drawings to OWNER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. All submittals will be identified as OWNER may require and in the number of copies specified in the General Requirements. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show OWNER the services, materials, and equipment CONTRACTOR proposes to provide and to enable OWNER to review the information for the limited purposes required by paragraph 6.17.E.

B. CONTRACTOR shall also submit Samples to OWNER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as OWNER may require to enable OWNER to review the submittal for the limited purposes required by paragraph 6.17.E. The numbers of each Sample to be submitted will be as specified in the Specifications.

C. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submittals acceptable to OWNER as required by paragraph 2.07, any related Work performed prior to OWNER's review and approval of the pertinent submittal will be at the sole expense and responsibility of CONTRACTOR.

D. *Submittal Procedures*

1. Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and

d. CONTRACTOR shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.

3. At the time of each submittal, CONTRACTOR shall give OWNER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to OWNER for review and approval of each such variation.

E. *OWNER's Review*

1. OWNER will timely review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals acceptable to OWNER. OWNER's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. OWNER's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. OWNER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called OWNER's attention to each such variation at the time of each submittal as required by paragraph 6.17.D.3 and OWNER has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by OWNER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.17.D.1.

F. *Resubmittal Procedures*

1. CONTRACTOR shall make corrections required by OWNER and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by OWNER on previous submittals.

6.18 *Continuing the Work*

A. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.04 or as OWNER and CONTRACTOR may otherwise agree in writing.

6.19 *CONTRACTOR's General Warranty and Guarantee*

A. CONTRACTOR warrants and guarantees to OWNER and OWNER's Consultants that all Work will be in accordance with the Contract Documents and will not be defective. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors, Suppliers, or any other individual or entity for whom CONTRACTOR is responsible; or
2. normal wear and tear under normal usage.

B. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents:

1. observations by OWNER;
2. recommendation by OWNER'S REPRESENTATIVE or payment by OWNER of any progress or final payment;
3. the issuance of a certificate of Substantial Completion by OWNER or any payment related thereto by OWNER;
4. use or occupancy of the Work or any part thereof by OWNER;
5. any acceptance by OWNER or any failure to do so;

6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by OWNER;

7. any inspection, test, or approval by others; or

8. any correction of defective Work by OWNER.

6.20 Indemnification.

A. CONTRACTOR shall indemnify and hold harmless OWNER, OWNER'S REPRESENTATIVE, OWNER's Consultants, the City of Fountain and the City Councils, Utilities Boards, officers, directors, partners, representatives, employees, agents, and other consultants and subcontractors of each and any of them from and against all claims, costs, losses, damages, causes of action, or liability of any nature (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage:

1. is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom; and

2. is caused in whole or in part by any willful misconduct or negligent, reckless or tortuous act or omission of CONTRACTOR, any subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of an individual or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of the negligence of any such individual or entity.

B. In any and all claims against OWNER or any of their respective City Councils, Utilities Boards, consultants, agents, officers, directors, partners, representatives, or employees by any employee (or the survivor or personal representative of such employee) of CONTRACTOR, any subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for CONTRACTOR or any such subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of CONTRACTOR under paragraph 6.20.A shall not extend to the liability of OWNER'S REPRESENTATIVE and OWNER's Consultants or to the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Hazardous Substances*

CONTRACTOR, subcontractors, suppliers, or anyone else for whom CONTRACTOR is responsible, shall not bring PCBs or hazardous waste to the Site. Asbestos-containing material may be brought to the Site by same only as part of equipment used to perform the Work, provided it is not damaged or exposed. Radioactive material may be brought to the Site by same only as sealed sources and as part of equipment used to perform the Work, provided that the party using the material is licensed to use the material and leak check certifications are provided by CONTRACTOR to OWNER prior to initiation of the Work.

At the completion of the Work, CONTRACTOR shall ensure that all hazardous substances and hazardous materials brought to or generated at the Site by CONTRACTOR, subcontractors, suppliers or anyone else for whom CONTRACTOR is responsible are removed from the Site.

6.22 *Hazardous Substance/Material Release to the Site*

If a hazardous substance or hazardous material is spilled, leaked or otherwise released to the environment or Site, by CONTRACTOR, subcontractors, suppliers or anyone else for whom CONTRACTOR is responsible, CONTRACTOR will take immediate steps to secure or otherwise isolate such condition, notify the OWNER and contain and clean up any such hazardous substance or hazardous material using only employees or subcontractors who have been properly trained in accordance with OSHA requirements for hazardous waste operations and emergency response. CONTRACTOR is responsible for making all notifications and complying with all regulatory requirements related to such an incident. Any waste generated as a result of a spill, leak or other release to the environment or Site by CONTRACTOR, subcontractors, suppliers or anyone else for whom CONTRACTOR is responsible shall become the property of CONTRACTOR and shall be disposed of in accordance with all applicable requirements. In addition to cleanup and disposal costs, CONTRACTOR is responsible for all costs associated with demobilization, remobilization, medical examinations, and all other costs, claims, losses, and damages, including but not limited to attorney fees and litigation costs as well as fines and penalties, incurred by OWNER as a result of any hazardous substance or hazardous material that is spilled, leaked or otherwise released to the environment or Site by CONTRACTOR, subcontractors, suppliers or anyone else for whom CONTRACTOR is responsible.

6.23 *Storage of Bulk Petroleum Products*

CONTRACTOR must store all bulk petroleum products such as bulk fuel or bulk lubricants in secured locations. In addition, CONTRACTOR shall provide OWNER with a Spill Prevention Control and Countermeasure (“SPCC”) Plan, for all such petroleum products, prepared in accordance with Federal requirements regardless of quantity.

ARTICLE 7 - OTHER WORK

7.01 *Related Work at Site*

A. OWNER may perform other work related to the Project at the Site by OWNER’s employees, or let other direct contracts therefore, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to CONTRACTOR prior to starting any such other work; and

2. if OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefore as provided in paragraph 10.05.

B. CONTRACTOR shall afford each other CONTRACTOR who is a party to such a direct contract and each utility OWNER (and OWNER, if OWNER is performing the other work with OWNER’s employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of OWNER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

C. If the proper execution or results of any part of CONTRACTOR’s Work depends upon work performed by others under this Article 7, CONTRACTOR shall inspect such other work and promptly report to OWNER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR’s Work. CONTRACTOR’s failure to so report will constitute

an acceptance of such other work as fit and proper for integration with CONTRACTOR'S Work except for latent defects and deficiencies in such other work.

D. Should CONTRACTOR, cause damage to the Work or property of any separate CONTRACTOR, or third party, at the site, or should any claim arising out of or resulting from CONTRACTOR'S performance of the Work at the site be made by any separate CONTRACTOR, or third party, against CONTRACTOR, OWNER, OWNER'S REPRESENTATIVE, or OWNER's City Council, Utilities Boards, Consultants or any other person, CONTRACTOR shall promptly attempt to settle with such other CONTRACTOR, or third party, by negotiation, or to otherwise resolve the dispute, by dispute resolution proceeding, or at law. CONTRACTOR shall indemnify and hold OWNER, OWNER'S REPRESENTATIVE, and OWNER's Consultants, the City of Fountain and the City Councils, Utilities Boards, officers, directors, partners, representatives, employees, agents, and other consultants of each and any of them harmless from and against all claims, costs, losses, damages, or liability of any nature (including, but not limited to, all fees and charges of OWNER'S REPRESENTATIVE, architects, attorneys and other professionals and all court or other dispute resolution costs) arising directly, indirectly or consequentially out of or resulting from any action, legal or equitable, brought by a separate CONTRACTOR against OWNER, OWNER'S REPRESENTATIVE, or OWNER's Consultants, the City of Fountain or the City Councils, Utilities Boards, officers, directors, partners, representatives, employees, agents, or other consultants of each and any of them to the extent based on a claim caused by, arising out of, or resulting from CONTRACTOR'S performance of the Work. Should a separate CONTRACTOR cause damage to the Work or property of CONTRACTOR or should the performance of Work by any separate CONTRACTOR at the site give rise to any other claim, CONTRACTOR shall not institute any action, legal or equitable, against OWNER, OWNER'S REPRESENTATIVE, or OWNER's Consultants, the City of Fountain or the City Councils, Utilities Boards, officers, directors, partners, representatives, employees, agents, or other consultants of each and any of them or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any mediator or arbitrator which seeks to impose liability on or to recover damages from OWNER, OWNER'S REPRESENTATIVE, or OWNER's Consultants or the officers, directors, employees, agents, or other consultants of each and any of them on account of any such damage or claim. If CONTRACTOR is delayed at any time in performing or furnishing Work by any act or neglect of a separate CONTRACTOR and OWNER and CONTRACTOR are unable to agree as to the extent of any adjustment in Contract Times attributable thereto, CONTRACTOR may make a claim for an extension of time in accordance with Article 12. An extension of the Contract Times shall be CONTRACTOR'S exclusive remedy with respect to OWNER, OWNER'S REPRESENTATIVE, or OWNER'S Consultants or the officers, directors, employees, agents, or other consultants of each and any of them for any delay, disruption, interference or hindrance caused by any separate CONTRACTOR. This paragraph does not prevent recovery from OWNER, OWNER'S REPRESENTATIVE, or OWNER'S Consultants or the officers, directors, employees, agents, or other consultants of each and any of them for activities that are their respective responsibilities.

7.02 Coordination

A. If OWNER intends to contract with others for the performance of other work on the Project at the Site, the following apply:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;

2. the specific matters to be covered by such authority and responsibility will be itemized; and

3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided, OWNER shall have sole authority and responsibility for such coordination.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 Communications to CONTRACTOR

A. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through OWNER'S REPRESENTATIVE.

8.02 Replacement of OWNER'S REPRESENTATIVE

A. In case of termination of the employment of OWNER'S REPRESENTATIVE, the OWNER shall replace the OWNER'S REPRESENTATIVE and such replacement shall assume full status under the Contract Documents of the former OWNER'S REPRESENTATIVE.

8.03 Furnish Data

A. OWNER shall promptly furnish the data required of OWNER under the Contract Documents.

8.04 Pay Promptly When Due

A. OWNER shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.02.C and 14.07.C.

8.05 Lands and Easements; Reports and Tests

A. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.01 and 4.05. Paragraph 4.02 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions and

drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized in preparing the Contract Documents.

8.06 Insurance

A. OWNER's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 Change Orders

A. OWNER is obligated to execute Change Orders as indicated in paragraph 10.03.

8.08 Inspections, Tests and Approvals

A. OWNER's responsibility in respect to certain inspections, tests, and approvals is set forth in paragraph 13.03.B.

8.09 Limitations on OWNER's Responsibilities

A. The OWNER shall not supervise, direct, or have control or authority over, nor be responsible for, CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. OWNER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

8.10 Undisclosed Hazardous Environmental Condition

A. OWNER's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in paragraph 4.06.

8.11 Appropriation of Funds

In accord with the City Charter, performance of the OWNER'S obligations under this Agreement are expressly subject to appropriation of funds by the City Council or Utility Board. Further, in the event that funds are not appropriated in whole or in part sufficient for performance of the OWNER's obligations under this contract, or appropriated funds may not be expended due to City Charter spending limitations, then this Agreement shall thereafter become null and void by operation of law, and the OWNER shall thereafter have no liability for compensation or damages to the CONTRACTOR in excess of the OWNER's authorized appropriation for this Contract or the applicable spending limit, which ever is less. The OWNER shall notify the CONTRACTOR as soon as reasonably possible in the event of non-appropriation or in the event a spending limitation becomes applicable.

The funds appropriated for this contract are equal to or exceed the contract amount for the year in which this contract was awarded and for calendar year 2008, For work to be completed in subsequent fiscal years after calendar year 2008, if any, the OWNER will notify the CONTRACTOR of the appropriation of funds for such work after the adoption of the OWNER's annual appropriation ordinance for those years.

The CONTRACTOR and the OWNER agree and acknowledge as a part of this contract, that no change order or other form or order or directive may be issued by the OWNER which requires additional compensable work to be performed, which work causes the aggregate amount payable under the contract to exceed the amount appropriated for this contract as listed above, unless the CONTRACTOR has been given a written assurance by the OWNER that lawful appropriations to cover the cost of the additional work have been made or unless such work is covered under a remedy-granting provision in this contract.

ARTICLE 9 -OWNER'S REPRESENTATIVE STATUS DURING CONSTRUCTION

9.01 *OWNER'S REPRESENTATIVE*

A. The OWNER will designate an OWNER'S REPRESENTATIVE during the construction period. The duties and responsibilities and the limitations of authority of the OWNER's REPRESENTATIVE during construction are set forth in the Contract Documents and will not be changed without written consent of OWNER.

9.02 *Visits to Site*

A. OWNER'S REPRESENTATIVE will make visits to the Site at intervals appropriate to the various stages of construction as OWNER'S REPRESENTATIVE deems necessary in order to observe as the progress that has been made and the quality of the various aspects of CONTRACTOR's executed Work. Based on information obtained during such visits and observations, OWNER'S REPRESENTATIVE, for the benefit of OWNER, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. OWNER'S REPRESENTATIVE will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. OWNER'S REPRESENTATIVE'S efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, OWNER'S REPRESENTATIVE will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defective Work.

B. OWNER'S REPRESENTATIVE's visits and observations are subject to all the limitations on OWNER'S REPRESENTATIVE's authority and responsibility set forth in paragraph 9.09, and particularly, but without limitation, during or as a result of OWNER'S REPRESENTATIVE's visits or observations of CONTRACTOR's Work.

OWNER'S REPRESENTATIVE will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work.

9.03 Clarifications and Interpretations

A. OWNER'S REPRESENTATIVE will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as OWNER may determine necessary, which shall be consistent with the intent of and reasonably inferable from the Contract Documents. Such written clarifications and interpretations will be binding on OWNER and CONTRACTOR. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a written clarification or interpretation, a Claim may be made therefore as provided in paragraph 10.05.

9.04 Authorized Variations in Work

A. OWNER'S REPRESENTATIVE may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER and also on CONTRACTOR, who shall perform the Work involved promptly. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of a Field Order, a Claim may be made therefore as provided in paragraph 10.05.

9.05 Rejecting Defective Work

A. OWNER'S REPRESENTATIVE will have authority to disapprove or reject Work which OWNER'S REPRESENTATIVE believes to be defective, or that OWNER'S REPRESENTATIVE believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. OWNER'S REPRESENTATIVE will also have authority to require special inspection or testing of the Work as provided in paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 Shop Drawings, Change Orders and Payments

A. In connection with OWNER's authority as to Shop Drawings and Samples, see paragraph 6.17.

B. In connection with OWNER'S REPRESENTATIVE's authority as to Change Orders, see Articles 10, 11, and 12.

C. In connection with OWNER'S REPRESENTATIVE's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

A. OWNER'S REPRESENTATIVE will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. OWNER'S REPRESENTATIVE will review with CONTRACTOR the OWNER'S REPRESENTATIVE's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). OWNER'S REPRESENTATIVE's written decision thereon will be final and binding (except as modified by OWNER'S REPRESENTATIVE to reflect changed factual conditions or more accurate data) upon OWNER and CONTRACTOR, subject to the provisions of paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. OWNER'S REPRESENTATIVE will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the accountability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and claims under Articles 11 and 12 in respect of changes in the Contract Price or Contract Times will be referred initially to OWNER'S REPRESENTATIVE in writing with a request for a formal decision in accordance with this paragraph. Written notice of each such claim, dispute or other matter will be delivered by the claimant to OWNER'S REPRESENTATIVE and other party to the Agreement promptly (but in no event later than ten days) after the start of the occurrence or event giving rise thereto, and written supporting data will be submitted to OWNER'S REPRESENTATIVE and the other party promptly, but no later than twenty days after the start of such occurrence or event and monthly thereafter for continuing events unless OWNER'S REPRESENTATIVE allows an additional period of time for the submission of additional or more accurate data in support of such claim, dispute or other matter. In the event opposing party is OWNER, decision will be made within 30 days of event. The opposing party shall submit any response to OWNER'S REPRESENTATIVE and the claimant within ten days after receipt of the claimant's last submittal (unless OWNER'S REPRESENTATIVE allows additional time). OWNER'S REPRESENTATIVE will render a formal decision in writing within ten days after receipt of the opposing party's submittal, if any, or within twenty days of receipt of claimants last submittal, in accordance with this paragraph (unless claimant allows an additional period of time).

B. OWNER'S REPRESENTATIVE's written decision on such claim, dispute or other matter will be final and binding upon OWNER and CONTRACTOR unless, within ten days after issuance of the OWNER'S REPRESENTATIVE's written decision, either party appeals the decision by giving the other party and OWNER'S REPRESENTATIVE written notice of request for executive negotiation. Within ten days of the delivery of

said notice, senior representatives of at least the OWNER and CONTRACTOR, having authority to settle the dispute, and the OWNER'S REPRESENTATIVE shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the dispute.

C. In the event a mutually acceptable decision cannot be reached through executive negotiation within twenty days of the appealing party's notice, or mutually agreeable longer period, or if the party receiving such notice will not meet within ten days, OWNER OR CONTRACTOR may declare, in writing delivered to the other party and the OWNER'S REPRESENTATIVE, the executive negotiation unsuccessful and may initiate further appeal. If further appeal is to be made; (i) such appeal shall be taken within the time limits and in accordance with the method and procedure for resolving such claim, dispute or other matter set forth in Article 16, or (ii) if no such provision for dispute resolution has been provided such written notice of intent to further appeal shall be delivered by OWNER or CONTRACTOR to the other and to OWNER'S REPRESENTATIVE within ten days after the date upon which the executive negotiation has been declared unsuccessful and a formal proceeding may be instituted by the appealing party in a forum of competent jurisdiction to exercise such rights or remedies as the appealing party may have with respect to such claim, dispute or other matter in accordance with applicable Laws and Regulations. OWNER'S REPRESENTATIVE's decision shall be final and binding unless formal proceeding is instituted within sixty days of the date of such delivery of written notice of intention to further appeal, unless otherwise agreed in writing by OWNER and CONTRACTOR.

9.09 *Limitations on OWNER'S REPRESENTATIVE's Authority and Responsibilities*

A. Neither OWNER'S REPRESENTATIVE's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by OWNER'S REPRESENTATIVE in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by OWNER'S REPRESENTATIVE shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by OWNER to CONTRACTOR, any subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. OWNER'S REPRESENTATIVE will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. OWNER'S REPRESENTATIVE will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

C. OWNER'S REPRESENTATIVE will not be responsible for the acts or omissions of CONTRACTOR or of any subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. OWNER'S REPRESENTATIVE's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.

E. The limitations upon authority and responsibility set forth in this paragraph 9.09 shall also apply to OWNER's Consultants, OWNER'S REPRESENTATIVE and assistants.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Written Amendment, a Change Order, or a Work Change Directive. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If OWNER and CONTRACTOR are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefore as provided in paragraph 10.05.

C. OWNER may, in anticipation of possibly ordering an addition, deletion or revision to the Work, request CONTRACTOR to prepare a proposal of cost and times to perform OWNER'S contemplated changes in the Work. CONTRACTOR'S written proposal shall be transmitted to the OWNER'S REPRESENTATIVE promptly, but not later than fourteen days after CONTRACTOR'S receipt of OWNER'S written request and shall remain a firm offer for a period not less than forty-five days after receipt thereof. CONTRACTOR is not authorized to proceed on an OWNER contemplated change in the Work prior to CONTRACTOR'S receipt of Change Order or Work Change Directive incorporating such change into the Work.

10.02 *Unauthorized Changes in the Work*

A. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in paragraph 3.04, except in the case of an emergency as provided in paragraph 6.16 or in the case of uncovering Work as provided in paragraph 13.04.B.

10.03 Execution of Change Orders

A. OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by OWNER'S REPRESENTATIVE (or Written Amendments) covering:

1. changes in the Work which are: (i) ordered by OWNER pursuant to paragraph 10.01.A, (ii) required because of acceptance of defective Work under paragraph 13.08.A or OWNER's correction of defective Work under paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by OWNER'S REPRESENTATIVE pursuant to paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.18.A.

B. In signing a Change Order, the OWNER and CONTRACTOR acknowledge and agree that:

1. the stipulated compensation (Contract Price or Contract Times, or both) set forth in the Change Order includes payment for (i) the Cost of the Work covered by the Change Order, (ii) CONTRACTOR'S fee for the overhead and profit, (iii) interruption of progress schedules, (iv) delay and impact, including cumulative impact, on other Work under the Contract Documents, and (v) extended overheads;

2. the Change Order constitutes full mutual accord and satisfaction for the change to the Work;

3. no reservation of rights to pursue subsequent claims on the Change Order will be made by either party; and

4. no subsequent claim or amendment of the Contract Documents will arise of or as a result of the Change Order.

10.04 Notification to Surety

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of

any such notice will be CONTRACTOR's responsibility. The amount of each applicable Bond will be adjusted to reflect the effect of any such change and notification of such change shall be provided to the OWNER.

10.05 Claims and Disputes

A. *Notice:* Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the claimant to OWNER'S REPRESENTATIVE and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. Notice of the amount or extent of the Claim, dispute, or other matter with supporting data shall be delivered to the OWNER'S REPRESENTATIVE and the other party to the Contract within 60 days after the start of such event (unless OWNER'S REPRESENTATIVE allows additional time for claimant to submit additional or more accurate data in support of such Claim, dispute, or other matter). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to OWNER'S REPRESENTATIVE and the claimant within 30 days after receipt of the claimant's last submittal (unless OWNER'S REPRESENTATIVE allows additional time).

B. *OWNER'S REPRESENTATIVE's Decision:* OWNER'S REPRESENTATIVE will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. OWNER'S REPRESENTATIVE's written decision on such Claim, dispute, or other matter will be final and binding upon OWNER and CONTRACTOR unless:

1. an appeal from OWNER'S REPRESENTATIVE's decision is taken within the time limits and in accordance with the dispute resolution procedures set forth in Article 16; or

2. if no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to appeal from OWNER'S REPRESENTATIVE's written decision is delivered by OWNER or CONTRACTOR to the other within 30 days after the date of such decision, and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction within 60 days after the date of such decision or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by OWNER and CONTRACTOR), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.

C. If OWNER'S REPRESENTATIVE does not render a formal decision in writing within the time stated in paragraph 10.05.B, a decision denying the Claim in its entirety

shall be deemed to have been issued 31 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any.

D. No Claim for an adjustment in Contract Price or Contract Times (or Milestones) will be valid if not submitted in accordance with this paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to CONTRACTOR will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Such employees shall include without limitation superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by OWNER.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

3. Payments made by CONTRACTOR to Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from subcontractors acceptable to OWNER and CONTRACTOR and shall deliver such

bids to OWNER, who will then determine, which bids, if any, will be acceptable. If any subcontract provides that the subcontractor is to be paid on the basis of Cost of the Work plus a fee, the subcontractor's Cost of the Work and fee shall be determined in the same manner as CONTRACTOR's Cost of the Work and fee as provided in this paragraph 11.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of CONTRACTOR.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of OWNER'S REPRESENTATIVE and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of CONTRACTOR, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of CONTRACTOR, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expressage, and similar petty cash items in connection with the Work.
- i. When the Cost of the Work is used to determine the value of a Change Order or of a Claim, the cost of premiums for additional Bonds and insurance required because of the changes in the Work or caused by the event giving rise to the Claim.
- j. When all the Work is performed on the basis of cost-plus, the costs of premiums for all Bonds and insurance CONTRACTOR is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by CONTRACTOR, whether at the Site or in CONTRACTOR's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.01.A.1 or specifically covered by paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the CONTRACTOR's fee.

2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site.

3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.

4. Costs due to the negligence of CONTRACTOR, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraphs 11.01.A and 11.01.B.

C. *CONTRACTOR's Fee:* When all the Work is performed on the basis of cost-plus, CONTRACTOR's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract

Price is determined on the basis of Cost of the Work, CONTRACTOR's fee shall be determined as set forth in paragraph 12.01.C.

D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to paragraphs 11.01.A and 11.01.B, CONTRACTOR will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to OWNER an itemized cost breakdown together with supporting data.

11.02 Cash Allowances

A. It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the work so covered to be performed for such sums as may be acceptable to OWNER. CONTRACTOR agrees that:

1. the allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
2. CONTRACTOR's costs for unloading and handling on the Site, labor, installation costs, overhead profit, and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

B. Prior to final payment, an appropriate Change Order will be issued as recommended by OWNER'S REPRESENTATIVE to reflect actual amounts due CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by OWNER subject to the provisions of paragraph 9.07.

B. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.

C. OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. if CONTRACTOR believes that CONTRACTOR is entitled to an increase in Contract Price as a result of having incurred additional expense or OWNER believes that OWNER is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the OWNER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in paragraph 11.01) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 12.01.C).

4. Where the work included is not covered by unit prices contained in the contract documents, and mutual agreement cannot be reached between OWNER and CONTRACTOR under paragraph 12.01.B.2 and 12.01.B.3 above, then the adjustment to the contract price shall be determined by OWNER-on a basis selected by OWNER.

C. *CONTRACTOR's Fee*: The CONTRACTOR's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under paragraphs 11.01.A.1 and 11.01.A.2, the CONTRACTOR's fee shall be 15 percent;

b. for costs incurred under paragraph 11.01.A.3, the CONTRACTOR's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of paragraph 12.01.C.2.a is that the subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such subcontractor under paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier subcontractor and CONTRACTOR will each be paid a fee of five percent of the amount paid to the next lower tier subcontractor;

d. no fee shall be payable on the basis of costs itemized under paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in CONTRACTOR's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times (or Milestones) may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Times (or Milestones) shall be based on written notice submitted by the party making the claim to the OWNER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

B. Any adjustment of the Contract Times (or Milestones) covered by a Change Order or of any Claim for an adjustment in the Contract Times (or Milestones) will be determined in accordance with the provisions of this Article 12.

12.03 *Delays Beyond CONTRACTOR's Control*

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefore as provided in paragraph 12.02.A. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

12.04 *Delays Within CONTRACTOR's Control*

A. The Contract Times (or Milestones) will not be extended due to delays within the control of CONTRACTOR. Delays attributable to and within the control of a

subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

12.05 *Delays Beyond OWNER's and CONTRACTOR's Control*

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay.

12.06 *Delay Damages*

A. In no event shall OWNER be liable to CONTRACTOR, any subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from:

1. delays caused by or within the control of CONTRACTOR; or

2. delays beyond the control of both OWNER and CONTRACTOR including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility owners or other contractors performing other work as contemplated by Article 7.

B. Nothing in this paragraph 12.06 bars a change in Contract Price pursuant to this Article 12 to compensate CONTRACTOR due to delay, interference, or disruption directly attributable to actions or inactions of OWNER or anyone for whom OWNER is responsible.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which OWNER or OWNER'S REPRESENTATIVE has actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. OWNER, OWNER'S REPRESENTATIVE, OWNER's Consultants, other representatives and personnel of OWNER, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of

CONTRACTOR's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 Tests and Inspections

A. CONTRACTOR shall give OWNER'S REPRESENTATIVE timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests. CONTRACTOR is responsible for the initial and subsequent inspections of CONTRACTOR'S Work to ensure that the Work conforms with the Contract Documents. CONTRACTOR shall give OWNER'S REPRESENTATIVE timely notice of readiness of the Work for all non-CONTRACTOR required inspections, tests or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. OWNER shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by paragraphs 13.03.C and 13.03.D below;
2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.04.B shall be paid as provided in said paragraph 13.04.B; and
3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish OWNER'S REPRESENTATIVE the required certificates of inspection or approval. Tests required by Contract Documents to be performed by CONTRACTOR and that require test certificates be submitted to OWNER'S REPRESENTATIVE for acceptance shall be made by an independent testing laboratory or agency licensed or certified in accordance with Laws and Regulations and applicable state and local statutes. In the event state license or certification is not required testing laboratories or agencies shall meet the following applicable requirements:

1. "Recommended Requirements for Independent Laboratory Qualification," published by the American Council of Independent Laboratories.
2. Basic requirements of ASTM E329, "Standard of Recommended Practice for Inspection and Testing Agencies for Concrete and Steel as Used in Construction" as applicable.

3. Calibrate testing equipment at reasonable intervals by devices of accuracy traceable to either the National Bureau of Standards or accepted values of natural physical constants.

D. CONTRACTOR shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for OWNER'S acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to CONTRACTOR'S purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to OWNER.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by CONTRACTOR without written concurrence of OWNER'S REPRESENTATIVE, it must, if requested by OWNER'S REPRESENTATIVE, be uncovered for observation.

F. Uncovering Work as provided in paragraph 13.03.E shall be at CONTRACTOR'S expense unless CONTRACTOR has given OWNER'S REPRESENTATIVE timely notice of CONTRACTOR'S intention to cover the same and OWNER'S REPRESENTATIVE has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of OWNER'S REPRESENTATIVE, it must, if requested by OWNER'S REPRESENTATIVE, be uncovered for OWNER'S REPRESENTATIVE—observation and replaced at CONTRACTOR'S expense.

B. If OWNER considers it necessary or advisable that covered Work be observed by OWNER'S REPRESENTATIVE or inspected or tested by others, CONTRACTOR, at OWNER'S request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as OWNER may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment. If it is found that such Work is defective, CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefore as provided in paragraph 10.05. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree

as to the amount or extent thereof, CONTRACTOR may make a Claim therefore as provided in paragraph 10.05.

13.05 *OWNER May Stop the Work*

A. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR, any subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

A. CONTRACTOR shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph 6.11.A is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or repaired or may have the rejected Work removed and replaced, and all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR. Repetitive malfunction of an equipment or product item shall be cause

for replacement and an extension of the correction period to a date one year following acceptable replacement. A repetitive malfunction shall be defined as any subsequent failure of an equipment or product item following original acceptance.

B. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

C. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

D. CONTRACTOR's obligations under this paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

E. Nothing in this Article 13 concerning the correction period shall establish a period of limitation with respect to any other obligation which CONTRACTOR has under the Contract Documents or Laws and Regulations. The establishment of time periods relates only to the specific obligations of CONTRACTOR to correct the Work, and has no relationship to the time within which CONTRACTOR's obligations under the Contract Documents or Laws or Regulations may be sought to be enforced, nor to the time within which proceedings may be commenced to establish CONTRACTOR's liability with respect to CONTRACTOR's obligations other than to specifically correct the Work.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to final payment,) prefers to accept it, OWNER may do so. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) attributable to OWNER's evaluation of and determination to accept such defective Work (such costs to be approved by OWNER as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by CONTRACTOR pursuant to this sentence. If any such acceptance occurs prior to OWNER'S REPRESENTATIVE's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and OWNER shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefore as provided in paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

13.09 *OWNER May Correct Defective Work*

A. If CONTRACTOR fails within a reasonable time after written notice from OWNER'S REPRESENTATIVE to correct defective Work or to remove and replace rejected Work as required by OWNER in accordance with paragraph 13.06.A, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days written notice to CONTRACTOR, correct and remedy any such deficiency.

B. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. In connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the Site, take possession of all or part of the Work and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER'S REPRESENTATIVE, agents and employees, and OWNER's other contractors access to the Site to enable OWNER to exercise the rights and remedies under this paragraph.

C. All Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) incurred or sustained by OWNER in exercising the rights and remedies under this paragraph 13.09 will be charged against CONTRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, OWNER may make a Claim therefore as provided in paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of CONTRACTOR's defective Work.

D. CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies under this paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The schedule of values established as provided in paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to OWNER. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 *Progress Payments*

A. Applications for Payments

1. At least 20 days before the date established for each progress payment (but not more often than once a month), CONTRACTOR shall submit to OWNER'S REPRESENTATIVE for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that OWNER has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect OWNER's interest therein, all of which must be satisfactory to OWNER.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of CONTRACTOR stating that all previous progress payments received on account of the Work have been applied on account to discharge CONTRACTOR's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. Review of Applications

1. OWNER'S REPRESENTATIVE will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER or return the Application to CONTRACTOR indicating in writing OWNER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application.

2. OWNER's REPRESENTATIVE recommendation of any payment requested in an Application for Payment will constitute a representation by OWNER's REPRESENTATIVE to OWNER, based on OWNER's REPRESENTATIVE's observa-

tions on the Site of the executed Work and on OWNER'S REPRESENTATIVE'S review of the Application for Payment and the accompanying data and schedules, that to the best of OWNER'S REPRESENTATIVE'S knowledge, information and belief:

- a. the Work has progressed to the point indicated;
- b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.07, and to any other qualifications stated in the recommendation); and
- c. the conditions precedent to CONTRACTOR'S being entitled to such payment appear to have been fulfilled in so far as it is OWNER'S REPRESENTATIVE'S responsibility to observe the Work.

3. By recommending any such payment OWNER'S REPRESENTATIVE will not thereby be deemed to have represented that: (i) inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to OWNER'S REPRESENTATIVE in the Contract Documents; or (ii) that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or entitle OWNER to withhold payment to CONTRACTOR.

4. Neither OWNER'S REPRESENTATIVE'S review of CONTRACTOR'S Work for the purposes of recommending payments nor OWNER'S REPRESENTATIVE'S recommendation of any payment, including final payment, will impose responsibility on OWNER'S REPRESENTATIVE to supervise, direct, or control the Work or for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for CONTRACTOR'S failure to comply with Laws and Regulations applicable to CONTRACTOR'S performance of the Work. Additionally, said review or recommendation will not impose responsibility on OWNER'S REPRESENTATIVE to make any examination to ascertain how or for what purposes CONTRACTOR has used the moneys paid on account of the Contract Price, or to determine that title to any of the Work, materials, or equipment has passed to OWNER free and clear of any Liens.

5. OWNER'S REPRESENTATIVE may refuse to recommend the whole or any part of any payment if, in OWNER'S REPRESENTATIVE'S opinion, it would be incorrect to make the representations to OWNER referred to in paragraph 14.02.B.2. OWNER'S REPRESENTATIVE may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in OWNER'S REPRESENTATIVE'S opinion to protect OWNER from loss because:

- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Written Amendment or Change Orders;
- c. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.09; or
- d. OWNER'S REPRESENTATIVE has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.02.A.
- e. Failure of the CONTRACTOR to submit schedules, daily reports, or other information as required under the contract.
- f. Failure of the CONTRACTOR to diligently prosecute the work and maintain progress to assure completion within the contract time.
- g. Any reasonable doubt that the work of the contract can be completed for the balance then unpaid.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to OWNER with OWNER'S REPRESENTATIVE's recommendation, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due, and when due will be paid by OWNER to CONTRACTOR.

D. Reduction in Payment

1. OWNER may refuse to make payment of the full amount recommended by OWNER'S REPRESENTATIVE because:

- a. claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work;
- b. Liens have been filed in connection with the Work, except where CONTRACTOR has delivered a specific Bond satisfactory to OWNER to secure the satisfaction and discharge of such Liens;
- c. there are other items entitling OWNER to a set-off against the amount recommended; or
- d. OWNER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.02.B.5.a through 14.02.B.5.g or paragraph 15.02.A.

2. If OWNER refuses to make payment of the full amount recommended by OWNER'S REPRESENTATIVE, OWNER must give CONTRACTOR immediate written notice stating the reasons for such action and promptly pay CONTRACTOR any amount remaining after deduction of the amount so withheld. OWNER shall promptly pay CONTRACTOR the amount so withheld, or any adjustment thereto agreed to by OWNER and CONTRACTOR, when CONTRACTOR corrects to OWNER's satisfaction the reasons for such action.

3. If it is subsequently determined that OWNER's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by paragraph 14.02.C.1.

E. Application of Article 91 of Title 24 Colorado Revised Statutes.

1. Payments shall be made by OWNER to the CONTRACTOR only in accordance with Article 91 of Title 24 Colorado Revised Statutes (Construction Contracts with Public Entities). The CONTRACTOR shall comply with the applicable provisions of Article 91 of Title 24 Colorado Revised Statutes. If there is a conflict between the applicable provisions of Article 91 of Title 24 Colorado Revised Statutes and the Contract, the provisions of Article 91 of Title 24 Colorado Revised Statutes, the statutory provisions shall govern to the extent of such conflict.

14.03 *CONTRACTOR's Warranty of Title*

A. CONTRACTOR warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

14.04 *Substantial Completion*

A. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that OWNER issue a certificate of Substantial Completion. Promptly thereafter, OWNER'S REPRESENTATIVE and CONTRACTOR, shall make an inspection of the Work to determine the status of completion. If OWNER'S REPRESENTATIVE does not consider the Work substantially complete, OWNER will notify CONTRACTOR in writing giving the reasons therefore. If OWNER'S REPRESENTATIVE considers the Work substantially complete, OWNER'S REPRESENTATIVE will prepare a certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment.

B. OWNER shall have the right to exclude CONTRACTOR from the Site after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Use by OWNER at OWNER's option of any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which OWNER, and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following conditions.

1. OWNER'S REPRESENTATIVE at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER'S REPRESENTATIVE believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees that such part of the Work is substantially complete, CONTRACTOR will certify to OWNER that such part of the Work is substantially complete and request OWNER'S REPRESENTATIVE to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER'S REPRESENTATIVE in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request OWNER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER'S REPRESENTATIVE and CONTRACTOR shall make an inspection of that part of the Work to determine its status of completion. If OWNER'S REPRESENTATIVE does not consider that part of the Work to be substantially complete, OWNER'S REPRESENTATIVE will notify OWNER and CONTRACTOR in writing giving the reasons therefore. If OWNER considers that part of the Work to be substantially complete, the provisions of paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

2. No occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, OWNER'S REPRESENTATIVE will promptly make a final inspection with CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 Final Payment

A. Application for Payment

1. After CONTRACTOR has, in the opinion of OWNER'S REPRESENTATIVE, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance, certificates of inspection, marked-up record documents (as provided in paragraph 6.12), and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by subparagraph 5.04.B.7; (ii) consent of the surety, if any, to final payment; and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in paragraph 14.07.A.2 and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full and an affidavit of CONTRACTOR that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible have been paid or otherwise satisfied. If any subcontractor or Supplier fails to furnish such a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

B. Review of Application and Acceptance

1. If, on the basis of OWNER'S REPRESENTATIVE observation of the Work during construction and final inspection, and OWNER'S REPRESENTATIVE review of the final Application for Payment and accompanying documentation as required by the Contract Documents, OWNER'S REPRESENTATIVE is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, OWNER'S REPRESENTATIVE will, within ten days after receipt of the final Application for Payment, indicate in writing OWNER'S REPRESENTATIVE recommendation of payment and present the Application for Payment to OWNER. At the same time OWNER'S REPRESENTATIVE will also give written notice to CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.09. Otherwise, OWNER'S REPRESENTATIVE will return the Application for Payment to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Within approximately Thirty days after the presentation to OWNER'S REPRESENTATIVE of the Application for Payment and accompanying documentation, but after the date for final settlement advertised in the Notice of Final Payment, pursuant to law, the amount recommended by OWNER'S REPRESENTATIVE will become due and, when due, will be paid by OWNER to CONTRACTOR. No payment shall be made by OWNER to CONTRACTOR that is not in compliance with the notification provisions and the withholding of funds provisions in section 38-26-107 Colorado Revised Statutes.

14.08 Final Completion Delayed

A. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, and if OWNER'S REPRESENTATIVE so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to OWNER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 Waiver of Claims

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by OWNER against CONTRACTOR, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by CONTRACTOR against OWNER other than those previously made in writing which are still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 *OWNER May Suspend Work*

A. At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to CONTRACTOR which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes a Claim therefore as provided in paragraph 10.05.

15.02 *OWNER May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. CONTRACTOR's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.07 as adjusted from time to time pursuant to paragraph 6.04);

2. CONTRACTOR's disregard of Laws or Regulations of any public body having jurisdiction;

3. CONTRACTOR's disregard of the authority of OWNER or OWNER'S REPRESENTATIVE; or

4. CONTRACTOR's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in paragraph 15.02.A occur, OWNER may, after giving CONTRACTOR (and the surety, if any) seven days written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the Site, and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) sustained by OWNER arising out of or relating to completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs,

losses, and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such reasonable claims, costs, losses, and damages incurred by OWNER will be incorporated in a Change Order. When exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

C. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.03 *OWNER May Terminate For Convenience*

A. Upon seven days written notice to CONTRACTOR, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Contract. In such case, CONTRACTOR shall be paid (without duplication of any items):

1. for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. for expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. for all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. for reasonable expenses directly attributable to termination.

B. CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *CONTRACTOR May Stop Work or Terminate*

A. If, through no act or fault of CONTRACTOR, the Work is suspended for more than 90 consecutive days by OWNER or under an order of court or other public authority, or OWNER'S REPRESENTATIVE fails to act on any Application for Payment within 30 days after it is submitted, or OWNER fails for 30 days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days written notice to OWNER and provided OWNER does not remedy such suspension or failure within that time, terminate the Contract and recover from OWNER payment on the same terms as provided in paragraph 15.03. In lieu of terminating the Contract and without

prejudice to any other right or remedy, if OWNER'S REPRESENTATIVE has failed to act on an Application for Payment within 30 days after it is submitted, or OWNER has failed for 30 days to pay CONTRACTOR any sum finally determined to be due, CONTRACTOR may, seven days after written notice to OWNER stop the Work until payment is made of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.04 are not intended to preclude CONTRACTOR from making a Claim under paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping the Work as permitted by this paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

If a dispute arises between the parties relating to this Agreement, the following procedure shall be followed:

A. The parties shall hold a meeting promptly, but in no event later than thirty (30) calendar days from the initial written notice of the dispute, attended by persons with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute; provided, however, that no such meeting shall be deemed to vitiate or reduce the obligations and liabilities of the parties thereunder or be deemed a waiver by a party hereto of any remedies to which such party would otherwise be entitled thereunder unless otherwise agreed to by the parties in writing.

B. If, within thirty (30) calendar days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they agree to submit the dispute to non-binding mediation and to bear equally the costs of the mediation.

C. The parties will jointly appoint a mutually acceptable mediator. If they fail to do so within twenty (20) calendar days from the conclusion of the negotiation period, they shall each select a mediator. The two mediators will then appoint a third mediator who shall, as the sole mediator, conduct mediation for the parties.

D. The parties agree to participate in good faith in the mediation and negotiations related thereto for a period of thirty (30) calendar days. The substantive and procedural law of the State of Colorado shall apply to the proceedings. If the parties are not successful in resolving the dispute through mediation, then the parties shall be free to litigate the matter, and agree that in the event of such litigation, the exclusive venue for such litigation shall be the El Paso County District Court, Colorado Springs, Colorado, and if necessary, for exclusive federal questions, the United States District Court for the District of Colorado.

ARTICLE 17 - MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Agreement.

17.05 *Governing Law*

A. This Agreement shall be construed in accordance with the laws of the state of Colorado, the Fountain City Charter, City Code, Ordinances, Rules and Regulations.

B. In the event of litigation, this Agreement shall be enforceable by or against the City of Fountain on behalf of The Water Department as provided in Fountain City Code. In the event of any dispute over the Agreement's terms and conditions, the exclusive venue and jurisdiction for any litigation arising thereunder shall be in the District Court of El Paso County, Colorado, and, if necessary for exclusive federal questions, the United States District Court for the District of Colorado.

17.06 *Non-Discrimination*

A. OWNER is committed to equal employment opportunity for all and maintains and implements equal opportunity and affirmative action where necessary in all of its daily operations. OWNER's policy is that no person shall be discriminated against because of race, color, national origin or ancestry, sex, age, religious convictions, veteran status, disability or political beliefs. CONTRACTOR shall comply with all Federal and State nondiscrimination laws and have an equal employment opportunity policy. CONTRACTOR shall also comply with OWNER's Equal Employment Opportunity/Affirmative Action policies regarding nondiscrimination and harassment, which includes sexual harassment, in the conduct of their business while on OWNER's property and/or interacting with OWNER's employees. Contractor will cooperate with OWNER in using CONTRACTOR's best efforts to ensure that Disadvantaged Business Enterprises are afforded the full opportunity to compete for subcontracts or work under this contract

PART 1 - GENERAL

1.01 SUMMARY OF WORK

- A. Conditions & Requirements: Division 1, General Requirements shall govern work under all Divisions of the Specifications.

- B. Schedule of Drawings, Specifications and Addenda:
 - 1. Drawings: Refer to Drawings Title Sheet
 - 2. Project Manual: City Hall first Floor Remodel
 - 3. Addenda: All Addenda issued prior to bidding.

- C. Examination of Site: Failure to visit site will in no way relieve any Contractor from necessity of furnishing materials or performing work that may be required to complete work in accordance with Drawings and Specifications without additional cost to Owner.

- D. Contractor shall be responsible for verifying location of all utilities prior to construction. Any damage to these utilities shall be the Contractor's responsibility and they shall be repaired at no cost to the Owner.

- F. Contracts: All work under this contract will be executed under one prime contract between the Owner and the Contractor.

- G. Contractor Use of Premises:
 - 1. Operations of the Contractor shall be limited to areas where work is indicated.
 - 2. Parking for construction workers' vehicles shall be in designated on-site parking areas.
 - 3. Use of adjacent roadways or property for the purpose of parking or staging of construction related equipment, vehicles, or equipment is not allowed.
 - 4. The Contractor shall have limited access to designated building restrooms. Refer Article 1.05 TEMPORARY SANITARY FACILITIES.
 - 5. On a daily basis, during regular business hours, the Contractor must check in with the City clerk to coordinate the schedule, number of workers on site, and current operations.
 - 6. Under no circumstance shall work which produces noxious fumes, odor, or excessive noise be completed during regular business hours.

- H. Protection of Property: The Contractor shall limit his operations and access to designated areas of the building. Other areas shall be left undisturbed. Any damage to such areas will require repair at the Contractor's expense.

- I. Work Sequence and Time of Completion:
 - 1. Ordering of materials needed for the project and the Submittal process shall take place as soon as possible after the Notice to Proceed.
 - 2. Work may begin in the Building on after the issuance of the Notice to Proceed.
 - 3. All work must be completed no later than 120 days from the date of issuance of the Notice to Proceed.
 - 4. The Contractor shall submit a schedule to the Owner for accomplishing the work on this project. Schedule shall comply with the above requirements and must be approved by the Owner before start of any construction.

1.02 TEMPORARY ELECTRICITY AND LIGHTING

- A. Service and Distribution: Owner will allow temporary electrical service from the existing building. Contractor shall provide temporary wiring, outlets, lights, etc., from sources

designated by the Owner, as required for construction power and lighting during construction period. Remove temporary wiring upon completion of work.

1. The Owner will pay for electricity used from the designated source.

B. Temporary Power: Contractor shall provide double duplex 120V outlets. Each subcontractor shall furnish extension cords necessary to convey electricity from double duplex outlets to portions of the buildings in which their work is in progress. Special power required for welders or other special equipment shall be provided by the trade requiring such power.

C. Temporary Lighting: Contractor shall provide necessary temporary lighting for progress of the work. Working lights required by trades shall be provided by each trade using plug-in portable lights. Contractor shall be responsible for verifying that temporary lighting is turned off when there is no work in progress unless required for security.

1.03 TEMPORARY TELPHONE SERVICE

Contractor shall provide for communications to the project site by cellular telephone, which shall be in the possession of the Project Superintendent.

1.04 TEMPORARY WATER

A. Contractor shall provide temporary connections, plumbing, piping, etc., necessary to convey water from existing on-site sources designated by the Owner, to places needed.

1. The Owner will pay for water used from the designated source.

1.05 TEMPORARY SANITARY FACILITIES

A. A restroom in the existing building will be designated for use by the Contractor during the construction period. The Contractor shall maintain this restroom in a neat and sanitary condition.

B. The Contractor is not required to provide a construction office trailer at the building site.

1. If a Contractor intends to place a construction office trailer at the project site, he shall request approval from the Owner and coordinate a mutually agreeable location. The contractor will be responsible for applying for, obtaining and paying for required State of Colorado temporary modular building permits.

1.06 REGULATORY REQUIREMENTS

A. The Pikes Peak Regional Building Department has jurisdiction for approval of this project.

Codes that have been adopted by the PPRBD are:

Pikes Peak Regional Building Code - 2011 Edition

International Building Code, 2009 Edition (partial)

International Plumbing Code, 2009 Edition

International Mechanical Code, 2009 Edition

International Energy Conservation Code, 2009 Edition

National Electrical Code 2011 Edition

B. The Contractor shall have sole responsibility for compliance on the job site to all applicable portions of the Occupational Safety and Health Act (OSHA) and compliance with the Equal Employment Opportunity Act.

C. Protection of life, health and public welfare as it relates to the execution of the construction contract is the responsibility of the Contractor. The Owner will not provide observation, inspection, supervision, or any comment on plans, procedures or actions employed at the project as they relate to safety of life, health, or public welfare.

1.07 PROJECT MEETINGS

- A. Preconstruction Conference: A meeting will be scheduled by the Owner at the site immediately prior to Contractor move-in. Representatives of the Contractor and Owner will be present. Job site procedures will be discussed:

- B. Progress Meetings: Regular weekly meetings will be scheduled at the project site. The Contractor's Project Manager and Superintendent, and Owner will be present. Minutes of progress meetings shall be kept and distributed by the Contractor. Minutes shall record only actual statements made and items discussed during the meetings. The following items will be discussed:
 - 1. Review of Work Progress Since Previous Meeting
 - 2. Field Observations, Problems, Conflicts
 - 3. Status of Previous Instructions Issued
 - 4. Problems Which Impede Construction Schedule
 - 5. Review of Off-Site Fabrication and Material Delivery Schedules
 - 6. Review Status of Contractor's Construction Schedule
 - 7. Discuss Procedures to Regain Projected Schedule
 - 8. Itemize Work for Succeeding Work Period Up to Next Progress Meeting
 - 9. Coordination of Schedules
 - 10. Maintenance of Quality Standards
 - 11. Review Contractor's Submittals
 - 12. Review Proposed Changes for Effect on Other Trades, Construction Schedule, Completion Date, and Costs
 - 13. Coordination of Owner's Separate Contracts
 - 14. Work In Progress During Visit
 - 15. Other Business as Required

1.08 ALTERATION PROJECT PROCEDURES

- A. In addition to demolition specified in Section 02 41 16 and demolition specifically shown on the drawings; cut, move, and remove items as necessary to provide access or to allow alterations and new work to proceed.

- B. Patch, repair, and refinish existing items to remain, to the specified conditions for each material, with transition to adjacent new items of construction.

- C. Assign the work of moving, removal, cutting, and patching to trades qualified to perform the work in a manner to cause least damage to each type of work. Provide means of returning surfaces to appearance of new work.

- D. Perform cutting and removal work to remove minimum necessary in a manner to avoid damage to adjacent work. Protect existing finishes, equipment and, adjacent work which is scheduled to remain, from damage. Protect existing and new work from weather and extremes of temperature.

- E. Prior to commencing work, carefully compare and check drawings that affect the location or elevation of the work to be executed. Should any discrepancy be found, immediately report the same to the Owner for verification and adjustment.

- F. Where new work is to be connected to existing work, special care shall be exercised not to disturb or damage the existing work more than necessary. Damaged work shall be replaced, repaired, and restored to its original condition at no cost to the Owner.

- G. Fire Protection:
 - 1. Maintain good housekeeping practices to reduce the risk of fire damage and injury to workmen.

2. A fire extinguisher shall be available at each location where cutting or welding is being performed. When temporary heating devices are used, a watchman shall be present to cover periods when other workmen are not on the premises.
3. Provide fire extinguishers in accordance with the recommendations of National Fire Code, NFPA Standards Nos. 10 and 241.
4. Special Fire Protection Requirements: If operations of Contractor require the building fire alarm system to be disabled at any time during construction period, a fire guard shall be provided by the Contractor for the length of time that the fire alarm system is disabled. Fire guard shall monitor the building continuously (24 hours / day) and report extraordinary events to Owner. Coordinate fire guard set up and responsibilities with Owner.

1.09 MATERIALS AND EQUIPMENT

- A. Transport and handle products by methods to prevent soiling or damage.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
- C. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weathertight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.
- D. For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation.

1.10 LIMITATION ON SUBSTITUTIONS

- A. Each bidder represents that the bid is based on the materials and equipment described in the proposed Contract Documents.
- B. During bidding period, Document 00 21 13 governs times for submitting requests for substitutions under requirements specified in this Section.
- C. Request for Substitution prior to submission of Bids (Prior Approval): To encourage competition consistent with the Owner's interest, the Architect will give consideration, prior to submission of Bids, to requests for approval of products competitive with and similar to those specified by proprietary name. Full extent of submittal information is left to the discretion of the submitter. However, to be considered, all such Requests for Substitution must:
 1. Be in writing, addressed to the Architect at the address given on the front cover of the Project Manual, and shall clearly identify this Project by Name and Architect's Project Number, also as shown on the front cover of the Project Manual.
 2. Be received in the Architect's office no later than 2:00 P.M. at least ten (10) calendar days prior to date of Bid opening. Requests for Substitution after said date and time will not be considered.
 3. Include all data, information, and characteristics of the proposed item, so that a direct comparison can be readily made. It is the sole responsibility of the submitter to provide complete and accurate, descriptive and technical information so that Architect can properly evaluate the submittal. Each item proposed for substitution shall be clearly identified.
 4. Submit listing of local installations where proposed products have been provided, include names and phone numbers of references familiar with the installation and performance of products.
 5. Explain fully the differences, if any, between the proposed product and the product named in the Specifications. Architect will not complete the submittal (e.g., select from options, or

- between models or product lines) and will not seek information from manufacturer's literature on file in the Architect's office or in other locations, including web sites.
6. Address/identify any issues affecting Project schedule including availability of product(s) should the request be approved.
 7. Give complete information on changes, in the event the proposed product requires for its proper incorporation into the Project, any change to design of the Project (e.g., architectural, structural, mechanical, electrical, etc. systems) as expressed in the Drawings and/or Specifications.
 8. In the case of manufactured cabinets and aluminum windows, submit actual casework and window samples with any request for substitution.
- D. **All costs and fees (redesign costs) for making modifications, e.g., architectural, civil, structural, mechanical, electrical, etc., to the Contract Documents, as well as all costs pertaining to construction of the Work, made necessary by selection/provision of products other than Basis-of-Design products, shall be the responsibility of the Contractor and no increase in the Construction Contract Amount will be made on account thereof. Contractor shall reimburse Owner for said redesign costs via deductive change order.**
- E. Substitutions after Award of Contract will only be considered under the following conditions:
1. Due to unavailability of specified product for reasons beyond the Contractor's control.
 2. Product will result in a better job.
 3. Product will improve lead time.
 4. Product will result in a savings to the Owner.
- F. Substitutions will not be considered when indicated on Shop Drawings or Product Data submittals 1) without a prior formal request; 2) when requested directly by subcontractor or supplier; 3) or when acceptance will require substantial revision of Contract Documents.
- G. Substitute products shall not be ordered or installed without written acceptance.
- H. Only one (1) request for substitution for each product will be considered. When substitution is not accepted, provide specified product.
- I. Manufacturers/Products approved via the Prior Approval process will be listed in a subsequent Addendum, which may or may not impose conditions on the approval.
- 1.11 **CONTRACTOR REPRESENTATION**
- A. Request for substitution constitutes a representation that Contractor has investigated proposed product and has determined that it is equal to or superior in all respects to specified product.
 - B. Contractor will provide same warranty for substitution as for specified product.
 - C. Contractor will coordinate installation of accepted substitute, making such changes as may be required for work to be completed in all respects.
 - D. Contractor waives claims for additional costs related to substitution that may later become apparent.
 - E. If such substituted products do not meet or exceed the above requirements, whether before, during or incorporated into the work, the Contractor shall, at no additional cost to the Owner, replace substituted products with the products originally specified.
- 1.12 **FINAL COMPLETION AND FINAL PAYMENT**
See General Conditions.

1.13 FINAL CLEANING

Upon completion and before being accepted by the Owner, the entire work inside and out, along with the entire premises shall be in first-class, clean condition.

1.14 CONTRACT CLOSEOUT REQUIREMENTS, INTERMEDIATE AND FINAL

See the requirements of Section 01 77 00

PART 2 - PRODUCTS

PART 3 – EXECUTION

Not Used.

END OF SECTION

SECTION 01 29 73 SCHEDULE OF VALUES

PART 1 - GENERAL

1.01 INFORMATION INCLUDED

Requirements for preparation and submittal of the Schedule of Values

1.02 RELATED REQUIREMENTS

- A. 00 72 00: General Conditions
- B. 01 11 00: General Requirements
- C. 01 33 00: Submittals
- D. 01 33 23: Shop Drawings, Product Data, and Samples

1.03 GENERAL REQUIREMENTS

- A. The requirements of this specification section are in addition to and not in lieu of any other requirements of the General and Supplementary Conditions of the Contract.

1.04 SCHEDULE OF VALUES

- A. Present Schedule on AIA form G702 and continuation sheet G703.
- B. Contractor's standard form or media-driven printout will be considered upon request provided that, in the sole judgment of the Owner, organization and presentation of information is equivalent to the form provided.
- C. Following the table of Contents of Project Manual, identify each line item by number and title of specification section. As a basis for computing values for progress payments, breakout values of material, labor, and production of certain required submittals (shop drawings, product data, calculations, test data, manufacturers' instructions, and samples only) for each specification section as a separate line item. Position submittals line item as the first line item of each affected specification section, just ahead of the materials value line for a given specification section. Cost of providing all other submittals shall be included in the line item for Section 01 33 00. Round off values to the nearest whole dollar.
- D. Value (including all costs of acquisition and transportation to the Project site) of materials, products, equipment, and the like (hereinafter referred to in this Section as "materials") entering permanently into the Work shall be distributed into line items for materials value according to division of the Work as determined by pertinent specification section number.
- E. Value of labor to install materials permanently entering into the Work shall be distributed into line items for labor value according to division of the Work as determined by pertinent specification section number.
- F. Value of items such as purchased or rented tools and equipment provided by subcontractors (or Contractor when performing some portion of the Work with his own forces, e.g., rough carpentry or door installation) and used to enable labor to be performed, as well as value of materials that are expended (e.g., fuels and lubricants) in the construction process, or that otherwise do not enter permanently into the Work shall be distributed into line items for labor value according to division of the Work as determined by pertinent specification section number.

- G. Value of items such as purchased or rented tools and equipment provided by the Contractor for use by his own forces and/or for one or more subcontractors shall be included in the appropriate Division 1 line item for labor or in the General Conditions line item.
- H. Value of labor, materials, and all other costs associated with demolition, removal, relocation, reinstallation or disposal of existing construction/items shall be presented in the line item of the specification Section covering such work. Refer to paragraph 1.04.C above.
- I. Provide additional breakout of material and/or labor values (as either or both are applicable) for line items as follows:
 - 1. General and Supplementary Conditions
 - 2. General Contractor's Bond(s)
 - 3. Liability Insurance
 - 4. Builder's Risk Insurance
 - 5. Building Permit
 - 6. Subcontractor Bonds
 - 7. 08 80 00 Glazing
 - a. Glazing Interior
 - 8. 09 21 00 Gypsum Board Partitions and Walls
 - a. Partition Framing
 - b. Acoustical Insulation
 - c. Gypsum
 - d. Joint Treatment, Trim & Accessories
 - 9. Any other item(s) required by Owner prior to Schedule of Values submittal approval.
- J. List materials and labor values of allowances, if any, as separate line items positioned as the last 2 lines of each affected specification section.
- K. List Contingency Allowance and Inspection Testing Allowance, if any, in the specified monetary amount for each allowance.
- L. Coordinate listings with Construction Schedule.
- M. Distribute subcontractors' overhead and profit amounts proportionately to the material and labor line items corresponding to the portion of the Work performed by them.
- N. Distribute Contractor's overhead and profit proportionately to all line items.
- O. Subcontracts spreadsheet: On a separate spreadsheet, list all subcontractors and the value of their subcontracts. For each major subcontract (\$10,000 or greater), list materials and labor values as separate line items. For items on which payments may be requested for stored materials, list sub-values for cost of each such stored material (including taxes, if any pertain to this Project).
- P. Submit Schedule, including separate subcontracts spreadsheet, in electronic pdf file format at least fifteen (15) calendar days before first Application for Payment. Form and content shall be acceptable to the Owner. Transmit under a transmittal form identifying Project by title and Owner's Project number.
- Q. If Contractor is uncertain where, how, or to what level of detail to breakout the value of any item, he shall contact the Owner, in writing if requested, before submission of the Schedule of Values.

- R. If Owner requires substantiating information, submit data justifying line item amounts in question. Provide one copy of data with a cover letter.

PART 2 – PRODUCTS
Not Used

PART 3 - EXECUTION
Not Used.

END OF SECTION

SECTION 01 33 00 SUBMITTALS

PART 1 - GENERAL

1.01 INFORMATION INCLUDED

- A. Submittal defined
- B. Submittal Categories established
- C. Requirements, procedures, and conditions
- D. Submittal schedule requirements

1.02 RELATED REQUIREMENTS

- A. Requirements pertaining to various submittals as described in the General and Supplementary Conditions
- B. Requirements for submittals described in other individual specification Sections
- C. Shop Drawings, Product Data and Samples: Section 01 33 23

1.03 SUBMITTALS DEFINED AND CLASSIFIED

- A. A submittal is anything required in the Contract Documents to be submitted by the Contractor to the Owner. Submittals are not Contract Documents and Owner's corrections/comments made on submittals do not constitute Modifications (refer to Conditions of the Contract) to the Contract Documents.
- B. Category I submittals require approval by the Owner and include:
 - 1. Schedule of Values (approval is for format and level of detail only)
 - 2. List of Subcontractors and Material Suppliers
 - 3. Submittal schedule (approval is for format and level of information only)
 - 4. Shop drawings
 - 5. Product Data
 - 6. Samples
 - 7. Applications for Payment
 - 8. Substitution requests
 - 9. Any item specifically classified in individual Sections as a Category I submittal
- C. Category II submittals are required for the Owner's information and as evidence of the Contractor's compliance with provisions of the Contract Documents. They are not required to be approved by the Owner. Consequently, Category II submittals will not be approved by the Owner and will normally not be returned to the Contractor. The Owner reserves the right to require the Contractor to resubmit any Category II submittal if the Owner becomes aware, at any time, of anything concerning the submittal which does not comply with the requirements of the Contract Documents. Any such discovery or lack thereof shall not relieve the Contractor from the obligation of having fully complied with, or the obligation to yet fully comply with, the conditions and provisions of the Contract Documents, and the Owner shall not be prevented from requiring removal and replacement of nonconforming work. Category II submittals include:
 - 1. Construction Schedule(s) and updates
 - 2. Performance and Labor and Material Payment Bonds
 - 3. Quality control plan
 - 4. Coordination drawings
 - 5. Engineering calculations

6. Test reports
 7. Certificates / certifications
 8. Manufacturer's instructions
 9. Contractor's list of corrections
 10. Warranties; sample and final copies
 11. Operation and Maintenance manuals / instructions
 12. Affidavits of Payment of Debts and Claims
 13. Lien waivers
 14. Consent of Surety to Final Payment
 15. All project closeout documents specified in Section 01 77 00
 16. Any item specifically classified in individual Sections as a Category II submittal
- D. For any required submittal not listed in this section, the Owner shall, upon discovery or request from the Contractor, determine the proper category of such submittal.
- E. Incomplete Submittal Packet(s): collection of submittals transmitted with required concurrent submittal(s) omitted. Refer to paragraph 1.04.G of this Section.
- F. Partial Submittal(s):
1. a shop drawing submittal that takes into account a single, uninterrupted subdivision of the total area of a building.
 2. a submittal of samples required for color, texture, pattern, or other finish (collectively, "color") selection by Owner that is inclusive of less than all such samples required to be submitted.
- 1.04 REQUIREMENTS, PROCEDURES, AND CONDITIONS
- A. The requirements of this Section are in addition to and not in lieu of any other requirements of the General and Supplementary Conditions of the Contract.
- B. Submit all submittals required by the Contract Documents and revise and resubmit as necessary to fully comply with specified requirements.
- C. Where a conflict occurs between or within specified standards and the Contract Documents, or should the Contractor have any question regarding the intent of the Contract Documents or any requirement thereof, the Contractor shall, prior to submission of any affected submittal, ensure his full understanding of said intent/requirement by making written Request for Interpretation/Information using the form provided in the Project Manual for this purpose.
- D. Contractor shall review all submittals to ensure strict conformance with requirements of the Contract Documents. Prior to transmitting each submittal, Contractor shall carefully review and coordinate all aspects of each item being submitted and verify that each item and the submittal for it conforms in all respects with the requirements of the Contract Documents. By signing and submitting same to Owner, Contractor acknowledges that said review and coordination has been performed. Contractor's transmission of the submittal to the Owner shall constitute prima facie evidence of Contractor's compliance with the provisions of the Contract Documents relating to submittals.
- E. Deliver submittals to Owner as directed at the project pre-construction conference. Facsimile transmissions will be not be accepted.
- F. Transmit submittals under Contractor's specific transmittal form, AIA Form G810, or other form acceptable to the Owner. Transmit each group of related submittals (submittals that are required under the same specification Section) under the same transmittal form. Do not transmit submittals required by different specification sections under the same transmittal form. Show

transmission date and identify Project, Architect, Contractor, subcontractor, manufacturer, supplier, and separate shop drawing producer if pertinent. List numbers of drawings and specification Section number as appropriate.

- G. Provide all submittals required by an individual Section at the same time as a single Submittal Packet. Incomplete Submittal Packets will be returned without further review and the Contractor shall be strictly liable for all resulting delays. Each submittal type (e.g., shop drawings, product data, calculations, etc.) shall be transmitted as a separate pdf file when in electronic form, and as a separately bound document when in hard copy form.
 - H. Partial Submittals will be reviewed only in the specific cases listed in Section 01 33 23.
 - I. On at least the first page of each submittal, and elsewhere as required for positive identification, clearly indicate the specification Section number in which the item was included. When an item is being resubmitted for any reason, transmit said item under new letter of transmittal and with a revised submittal number. Resubmittals shall have the same number as the original submittal with alphanumeric suffix consecutively numbered (e.g., R1, R2, etc.).
 - J. Protocol for numbering/identification of submittals shall be as follows: specification section number (without spaces) - specification section paragraph reference - date (MMDDYY format) submittal or revised submittal is transmitted to Owner - revision suffix (e.g., 084113-1.03.A-061513-R1 designates a submittal required for Section 08 41 13, paragraph 1.03.A on June 15, 2013, first resubmittal).
 - K. Maintain an accurate submittal log for the duration of the Contract, showing current status of all submittals. Make the submittal log available to the Owner upon request.
 - L. Prepare and transmit to Owner all submittals far enough in advance of scheduled dates for installation to provide all time required for reviews, for securing necessary approvals, for possible revisions and resubmittals, and for placing orders and securing delivery. Allow at least 15 calendar days (after receipt of submittal in Owner's office) for each review and re-review by Owner. Submittals received after 1:00 p.m. will be considered as received the following working day. Delays caused by tardiness in receipt of submittals will not be an acceptable basis for extension of the Contract completion date.
 - M. Specifically call attention to, Identify, make patent, and explain deviations, if any, from Contract Documents.
 - N. The Contract Documents impose upon the Contractor, subcontractors, manufacturers, suppliers, and distributors (collectively "contractor"), various responsibilities. Any statement, note or comment on any submittal that (1) diminishes, limits, disclaims, contravenes, or otherwise is inconsistent with said responsibilities, or (2) intentionally or unintentionally, imposes any responsibility whatsoever on the Owner, shall have no force or effect; and shall otherwise be deemed null and void whether or not said statement, note or comment be stricken by the Owner during the submittal review process.
 - O. Notwithstanding any purported ownership and/or copyright by Contractor, any subcontractor, supplier, manufacturer, or other submittal producer, copies of all submittals will be retained by the Contractor, and Owner as part of the Project Record Documents.
- 1.05 SCHEDULE OF SELECTED SUBMITTALS
- A. General: Within 15 days after Award of Contract and before any listed items are submitted, submit an electronic copy of the Submittal Schedule as described below. Compile a complete

and comprehensive schedule of the following submittals required during the course of the Work:

1. Shop Drawings
2. Product Data
3. Samples
4. Calculations
5. Coordination drawings
6. Test data/reports
7. Manufacturer's instructions/installation manuals
8. Certificates relating to products/materials

B. For each required submittal, list the following:

1. Date submittal is due from subcontractor/originator to Contractor.
2. Date submittal is due from Contractor to Owner.
3. Date submittal is due from Owner to Contractor.

C. Owner will not accept Submittals until the Contractor completes this schedule to the satisfaction of Owner. After approval by Owner of the initial schedule information, update schedule only by adding new information and due dates relating to required resubmittals.

D. Coordination: Coordinate the schedule with all necessary subcontractors and material suppliers to ensure their understanding of the importance of adhering to the approved schedule and their ability to do so. Coordinate as necessary to ensure management and transmission of submittals described herein.

PART 2 – PRODUCTS

Not used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01 33 23 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Shop drawing definition and requirements
- B. Product data definition and requirements
- C. Sample definition and requirements

1.02 RELATED REQUIREMENTS

- A. Requirements pertaining to Shop drawings, Product Data, and Samples as described in the Conditions of the Contract.
- B. Submittals: Section 01 33 00.
- C. Requirements for Shop drawings, Product Data, and Samples described in other Sections.

1.03 REQUIREMENTS, PROCEDURES, AND CONDITIONS

- A. The requirements of this Section are in addition to and not in lieu of any other requirements of the Conditions of the Contract or any other Contract Document.
- B. Shop drawings, product data, and samples (individually referred to in this Section as “submittal” or collectively as “submittals”) are not Contract Documents. The purpose of these submittals is to document the Contractor’s specific plan for conforming to the information and design requirements expressed in the Contract Documents.
- C. Contractor shall review all submittals to ensure strict conformance with the requirements of the Contract Documents. Contractor shall carefully review and coordinate all aspects of each item (product/material) in a submittal.
- D. Contractor’s approval required: Contractor’s unilateral approval of submittals, documented in the manner prescribed herein, is a condition precedent to review and action by Owner. Do not transmit submittals unless they have been reviewed and approved in full accord with the provisions of the Contract Documents, including but not necessarily limited to, the Conditions of the Contract, this Section, and Section 01 33 00. Contractor’s transmission of submittals to Owner shall constitute prima facie evidence of Contractor’s compliance with this provision.
- E. Approval of submittal(s) means Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittal(s) with the requirements of the Work, Contract Documents, and other pertinent submittals.
- F. By affixing Contractor’s signature (name, initials, stamp, mark or the like) to a submittal and transmitting submittal to zOwner, Contractor represents and certifies that the review and coordination required by this Section has been fully performed, and the submittal is therefore approved by Contractor; notwithstanding any statement(s) on the submittal made to qualify or limit the scope of said review and/or approval.
- G. Any review or approval note or comment made on a submittal indicating that it has been submitted contrary to the provisions of the Contract Documents may cause rejection of the submittal by Owner.

- H. Contractor's signature on the first sheet of any Shop Drawing or Product Data submittal shall be understood to be in effect for all sheets included in a particular submittal (e.g., electronic pdf file or bound hardcopy).
 - I. Transmit submittals with reasonable promptness and in such sequence as to ensure efficient progress of the Work and to cause no delay in the Work or in the activities of the Owner or his separate contractors.
 - J. Submit only those submittals required by the Contract Documents. Submittals not required by the Contract Documents will not be processed by the Owner and will be either returned to the Contractor without action or discarded.
 - K. Provide all submittals required by an individual specification Section at the same time, in a single Submittal Packet. Incomplete Submittal Packets will be returned to Contractor without action.
 - L. Color assignment for review comments and corrections shall be as follows:
 1. Owner: contrasting red only.
 2. Contractor: contrasting green only.
 3. Subcontractor (if not producer of submittal): contrasting blue only.
 4. Producer of submittal: black only.
 - M. Owner's Review: After review, submittals made under provisions of this Section shall be returned to the Contractor marked with one or more of the actions noted below, as appropriate:
 1. "Approved": Contractor may proceed with fabrication, purchase, or both of items so marked.
 2. "Furnish as Corrected": Contractor may, subject to the corrections noted, proceed with fabrication, purchase or both of items so marked.
 3. "Revise and Resubmit": Contractor may not proceed with fabrication or purchase.
 4. "Submit Specified Item" or "Rejected": Contractor may not proceed with fabrication or purchase of items so marked.
 - N. When an action of "Revise and Resubmit" is used, it applies to an entire submittal and Submittal Packet. Submittals so marked must be resubmitted meeting all requirements as if submitted for the first time, including new copies of all required submittals (both Category I and II) specified under that Section.
 - O. Submittal items returned with an action of "Submit Specified Item" or "Rejected" must be re-submitted providing revised copies of submittal information for only those items that were so marked. Re-submittals that include information or items previously reviewed and given an action by the Owner of "Approved" or "Furnish as Corrected" will not be reviewed or acted upon by the Owner again.
- 1.04 SHOP DRAWINGS
- A. Shop Drawings are drawings, diagrams, and schedules prepared by the Contractor, a subcontractor, supplier, or manufacturer to illustrate some portion of the Work. Individual Specification Sections may limit which of these entities shall produce shop drawings required under that Section. Shop drawings show fabrication details, layout or placement of materials, products, and equipment as may be required to demonstrate that such materials, products, and equipment, and the location / position thereof, conform to the requirements of the Contract Documents. Shop drawings establish the actual detail of all manufactured or fabricated items; indicate proper relation to and coordination with adjoining work; amplify design details in relation to physical spaces and conditions of installation, and identify and incorporate minor

adjustments of design or construction to suit actual conditions and/or constraints, if any are necessary for the proper use and installation of said materials, products, or equipment.

- B. Shop drawings shall not be reproductions of Contract Documents but shall be original drawings. Do not copy or submit manufacturer's standard information sheets as the basis for shop drawings. Submit drawings, drawn to accurate scale, specifically prepared for this Project. Highlight, encircle, or otherwise distinctively indicate deviations from the Contract Documents. Standard information prepared without specific reference to the Project is unacceptable as shop drawings.
- C. Unless otherwise specified in individual specification Sections, submittals specified in this Section shall be made electronically to the address specified by the Owner. In addition, submit one (1) hardcopy per shop drawing sheet. Unless a greater number of hardcopies is otherwise specifically requested by Owner, hardcopy drawings submitted in excess of the number specified will be discarded without review.
- D. Owner's review comments will be noted on the electronic copy of said shop drawings and returned to Contractor. Contractor shall make and distribute all copies required for his purposes.
- E. References: Shop drawings shall be referenced to applicable Construction Drawings and specification Sections using the identical reference marks/numbers established by the Owner and his consultants.

1.05 PRODUCT DATA

- A. Product Data are illustrations, schedules, performance charts, graphs, and/or facts, printed descriptions, brochures, catalog cuts, diagrams, graphic depictions, pictures, manufacturer's color or finish charts, and other such information furnished by the Contractor to describe a manufactured material, product, assembly, or system for some portion of the Work. Where product data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings".
- B. Unless otherwise specified in individual specification sections, submit one (1) electronic copy of brochure material.
- C. Mark each copy to show applicable choices and options. Where printed product data includes information on several products, some of which are not required, strike through all information that does not pertain to the required product(s).
- D. References: Product Data shall be referenced to applicable construction drawings and specification Sections using the identical reference marks/numbers established by the Architect and his consultants.

1.06 SAMPLES

- A. Samples are physical examples of individual materials, products, equipment, devices, and items (collectively "materials"), or assemblies of materials furnished by the Contractor for incorporation into the Project. Samples include natural and manufactured or fabricated materials. Samples are not imitations or simulations of anything else and are made of the actual material(s) to be incorporated into the Project. Submit samples as may be required by the Owner to determine whether the kind, quality, construction, workmanship, finish, color, and other characteristics of the materials proposed by the Contractor conform to the required characteristics of the various parts of the Work.

- B. Within 15 days of Award of Contract, the Contractor shall deliver to the Owner two (2) complete collections of all samples (of sufficient size to establish general visual effect) required by individual Sections for a color, texture, pattern, or other finish (collectively, "color") selection by the Owner, as well as two (2) samples of any item which has been specified in individual Sections with color selection already made. A comprehensive list of all samples delivered shall be included and shall cross-reference each sample to the appropriate Section number. Upon receipt of a complete collection of such samples the Owner will, with reasonable promptness and after receiving any required Owner approval, document the necessary selections, and deliver to the Contractor a schedule of the selections made.
- C. **Except as indicated elsewhere in this Section, the color selection process will not begin until all samples required by Paragraph 1.06.B are properly submitted, and color selection will otherwise not be made on an individual basis.** Samples other than those described in Paragraph 1.06.B shall be submitted as part of, and concurrently with, all other submittals required under a given Section.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION

PART 1 - GENERAL

1.01 PROJECT RECORD DOCUMENTS

- A. Job Site Documents: Maintain at the job site, one (1) record copy of the following:
 - 1. Drawings
 - 2. Project Manual
 - 3. Addenda
 - 4. Reviewed and Accepted Shop Drawings and Product Data Submittals
 - 5. Change Orders
 - 6. Other Modifications to Contract
 - 7. Field Test Records
- B. Do not use record documents for construction purposes. Maintain documents in clean, dry, legible condition, apart from documents used for construction.
- C. Record Information: Label each record document "Project Record" in 2" high printed letters. Mark all information with contrasting color using indelible ink. Keep each record current. Do not permanently conceal any work until required information is recorded.
- D. Record following information on the Record Drawings:
 - 1. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure
 - 2. Field changes of dimension and detail
 - 3. Changes by addendum, change order, or field order
 - 4. Details not on original contract drawings
- E. Record following information in the Record Project Manual:
 - 1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment in each section actually installed
 - 2. Changes by addendum, change order, or field order
 - 3. Other matters not originally specified
- F. Maintain Shop Drawings / Product Data Submittals as record documents: Record changes made after review by all parties.

1.02 SUBSTANTIAL COMPLETION

- A. Preparation: Contractor shall submit written certification that project, or designated portion of project, is substantially complete and request a Punch List Observation by the Owner. Attached to said request shall be the Contractor's own Punch List describing incomplete work or work requiring correction.
- B. Observation: Upon receipt of the Contractor's request for Punch List Observation, the Owner will visit the site for purposes of determining Substantial Completion.
- C. Should the Owner determine that the work is substantially complete, he will prepare, if necessary, a Punch List of deficiencies in addition to those listed on the Contractor's Punch List that need to be corrected before Final Observation. The Owner may then issue a Certificate of Substantial Completion with the deficiencies noted.

- D. Should the Owner determine that the work is not substantially complete, he will notify the Contractor, in writing, stating reasons. After Contractor completes work, he shall resubmit certification and request for Punch List Observation.

1.03 FINAL OBSERVATION AND ACCEPTANCE

- A. Preparation: Prior to the Final Observation by the Owner, the Contractor shall submit written certification that:
 - 1. Project has been inspected for compliance with Contract Documents.
 - 2. Work has been completed in accordance with Contract Documents.
 - 3. Equipment and systems have been tested in the presence of Owner's Representative and are operational.
 - 4. Project is completed and ready for Final Observation.
- B. Observation: After receipt of written certification that project is complete, the Owner shall visit the site for purposes of determining final completion of the work.

1.04 CONTRACT CLOSEOUT SUBMITTALS

- A. See Supplementary Conditions.
 - B. Evidence of Payments and Release of Liens:
 - 1. Affidavit of Payment of Debts and Claims: AIA G706.
 - 2. Affidavit of Release of Liens: AIA G706A.
 - 3. Consent of Surety to Final Payment: AIA G707.
 - E. Inspection Certificates: Each subcontractor shall, upon completion of the work, secure in triplicate all certificates from any State or local governing body having jurisdiction in dictating that the work is in strict accordance with applicable codes and deliver same to the Contractor for transmittal to the Owner.
 - F. Spare Parts and Materials: As specified in individual Sections. Deliver to Owner stating amounts of materials delivered (number of gallons, cases, etc.). Provide evidence of delivery to Owner by signed receipt.
 - G. Miscellaneous Keys, Switches, Etc.: At the completion of the Project, all loose keys for hose bibs, adjustment keys and wrenches for door closers and panic hardware, keys for electric switches, electrical panels, etc., shall be accounted for, labeled, and turned over to the Owner. Provide evidence of delivery to Owner by signed receipt.
 - H. Sales and Use Tax Certificates. Refer to Document 00 72 00,
 - I. Asbestos Containing Material: Provide a letter certifying that to the best of Contractor's knowledge and belief, no asbestos containing materials have been incorporated into this project.
 - J. Record Documents: At completion of project, deliver Record Documents (as defined in Article 1.01, Paragraph A of this Section) to Owner with transmittal letter containing date, project title and number, contractor's name and address, title and number of each record document. Include certification letter that each document is complete and accurate. Contractor or his authorized representative shall sign submittal.
- 1.05 FINAL COMPLETION AND FINAL PAYMENT
- A. Submit final Application for Payment to the Owner in accordance with the requirements of the General and Supplementary Conditions. Application shall not be submitted until all contract closeout requirements have been met.

- B. Application shall reflect all adjustments:
 - 1. Original Contract sum
 - 2. Additions and deductions resulting from:
 - a. Change orders
 - b. Unit prices
 - c. Allowances
 - d. Deductions for uncorrected work
 - e. Deductions for reinspection fees (see below)
 - f. Other adjustments
 - 3. Total Contract Sum, as adjusted
 - 4. Previous payments
 - 5. Sum remaining due

1.06 WARRANTIES MANUAL

- A. Upon completion of the work, the Contractor shall deliver to the Owner a written warranty addressed to the Owner, properly signed and notarized, warranting that the Contractor shall remedy any defects due to faulty materials or workmanship and pay for consequential damage resulting therefrom, which appear in his work within a period of one (1) year from the Date of Substantial Completion and in accordance with the terms of any special warranties (in excess of one year) as specified in individual Sections of the Specification. The Owner shall give notice of observed defects to the Contractor with reasonable promptness during the warranty period.
- B. Submit special warranties as specified in individual Sections of the Specifications. All warranties shall include the name and address of the Contractor, subcontractor or supplier, the project name, and the item(s) being warranted. Warranties specified under individual Sections of the Specification for periods longer than specified above shall be submitted as stated above and shall include payment for consequential damage due to faulty materials or workmanship for full duration of warranty.
- C. Submit to the Owner for his approval one (1) copy, indexed, in hard-cover three-ring binder. After initial copy is reviewed and approved, Contractor will then provide one (1) additional copies of the approved version, for a total of two (2) hard copies, plus one additional electronic copy (in .pdf format). Submit hard copies in separate, hard-cover, three-ring binders.
 - 1. Index with tab dividers for each individual Specification Section, where warranty information is required by that Section.
 - 2. 8-1/2" x 11" in size.
 - 3. The Electronic version of the manual shall contain hyperlinked bookmarks that correspond to the tab dividers of the hard copy version as described above.

1.10 MECHANICAL SERVICE AND MAINTENANCE

- A. Contractor shall include four (4) complete service and maintenance calls plus emergency calls spaced at reasonable intervals throughout one (1) year warranty period. During each service and maintenance call, check the following:
 - 1. Safety devices on each piece of equipment
 - 2. Lubrication of moving parts and lubricate where required
 - 3. Adjust V belt drives
- B. In addition to service calls, the Contractor shall meet with the Owner's representative and Mechanical Engineer at the Building at eleven (11) months following Date of Substantial Completion to review warranty items and performance of HVAC systems.

1.11 POST-CONSTRUCTION INSPECTION

Prior to expiration of one (1) year from Date of Substantial Completion, the Owner and Contractor will inspect project to determine whether corrective work is required. Contractor will

be notified in writing of all deficiencies. Contractor must correct noted deficiencies within ten (10) days of receipt of notification.

PART 2 - PRODUCTS
PART 3 - EXECUTION
Not Used.
END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Demolition and removal of selected portions of building or structure.
3. Salvage of existing items to be reused or recycled.
4. Disposal of items not noted to be saved or reinstalled.
5. Securing exposed utilities.
6. Shoring and bracing.
7. Clean up.

C. Referenced Standards/Minimum Criteria:

1. Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this project.
2. Refrigerant Recovery Technician Qualifications: Certified by an EPA approved certification program.
3. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
4. Standards: Comply with ANSI A10.6 and NFPA 241.
5. Pre-demolition Conference: Conduct conference at Project site. Review methods and procedures related to selective demolition including, but not limited to, the following:
 - a. Inspect and discuss condition of construction to be selectively demolished.
 - b. Review structural load limitations of existing structure.
 - c. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
 - d. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
 - e. Review areas where existing construction is to remain and requires protection.

D. Submittals Required:

1. Schedule of Selective Demolition Activities: Indicate the following:
 - a. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's on-site operations are uninterrupted.
 - b. Interruption of utility services. Indicate how long utility services will be interrupted.
 - c. Coordination for shutoff, capping, and continuation of utility services.
 - d. Locations of proposed dust-and-noise control temporary partitions and means of egress.
 - e. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed work.
 - f. Means of protection for items to remain and items on path of waste removal from building.
2. Inventory: After selective demolition is complete, submit a list of items that have been removed and salvaged.
2. Pre-demolition Photographs/Video: Show existing conditions of adjoining construction and site improvements including finish surfaces that might be misconstrued as damaged caused by selective demolition operations.

E. Restrictions/Critical Criteria:

1. Owner may occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.

2. Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage during selective demolition operations.
3. Service/System Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished. Contractor shall arrange and pay for disconnections, removal and capping of utility services within areas of demolition.
 - a. Arrange to shut off indicated utilities with utility companies.
 - b. If services/systems are required to be removed, relocated, or abandoned, before proceeding with selective demolition provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
 - c. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.
 - d. Identify service lines and capping locations on project record documents.

1.02 PROJECT CONDITIONS

Asbestos Containing Materials: No asbestos containing materials are known to exist in the areas to be demolished. If the Contractor discovers materials which he suspects to contain asbestos, he shall cease work in the area and notify the Owner, who will issue further instructions.

PART 2 - PRODUCTS

2.01 ITEMS TO BE REMOVED AND REINSTALLED

- A. Materials, specialty items, equipment, casework, systems, doors, frames, hardware and other components scheduled or noted to be reused on other portions of the work, shall be carefully removed and stored at the site for later reinstallation. Damage caused during removal, storage, or reinstallation shall be repaired to the satisfaction of the Owner, at no cost to the Owner.
 1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match new equipment.
 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
 3. Protect items from damage during transport and storage.
 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

2.02 ITEMS TO BE REMOVED AND SALVAGED FOR THE OWNER

- A. The following items shall be removed and salvaged for the Owner's use:
 1. Televisions fixed to the walls.
 2. VCR's fixed to the walls.
 3. Any Markerboards not indicated to be reinstalled.
 4. Door hardware.
- B. After salvage and removal the following procedures shall be utilized:
 1. Clean salvaged items.
 2. Pack or crate items after cleaning. Identify contents or containers.
 3. Store items in a secure area until delivery to Owner.
 4. Transport items to Owner's storage area designed by Owner or as indicated on Drawings.
 5. Protect items from damage during transport and storage.
- C. The Owner reserves the right to reject items which are designated to be salvaged and turned over to the Owner. In that event, Contractor shall dispose of items rejected by Owner.

2.03 ITEMS TO BE REMOVED BY OWNER

Items that are removed prior to the start of demolition will remain the property of the Owner.

2.04 DISPOSITION OF REMOVED ITEMS

Items indicated to be removed and not indicated to be salvaged or reinstalled shall become the property of the Contractor.

2.05 EXISTING ITEMS TO REMAIN:

Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Owner, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Protection: Erect weatherproof enclosures over new exterior openings in existing building to protect building interior until new finish materials are installed.
- B. Shoring and Bracing: Provide necessary temporary shoring and bracing to support and protect portions of existing building during demolition operations. Such shoring shall be left in place until permanent supports have been installed. The Contractor shall be solely responsible for the design, safety, and adequacy of temporary shoring and bracing and its ability to carry the load for which intended.
- C. Cease operations and notify Owner immediately if safety of structure appears to be endangered. Take precautions to properly support structure. Do not remove supports until safety is restored.

3.02 BUILDING DEMOLITION

- A. Demolish in an orderly and careful manner as required to accommodate new work. Protect existing foundations and supporting structural members. Cut concrete floors to a straight line with a saw before removing.
- B. Repair demolition performed in excess of that required at no cost to the Owner.

3.03 DISPOSITION OF REMOVED ITEMS

Items and materials indicated to be removed and not indicated to be salvaged or reused shall become the property of the Contractor. Items and materials indicated as such shall be removed by the Contractor to an approved licensed landfill, to a facility designated for acceptance of the specific material, or to the Contractor's own storage facility.

3.04 CLEANING

The Contractor shall at all times during the demolition keep the premises free from accumulations of waste material or rubbish caused by his employees or work. At the completion of the work, Contractor shall remove rubbish, tools, and surplus materials. Leave the premises clean and ready for subsequent work.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Rough Hardware
 - 2. Framing Lumber

- B. Related Sections:
 - 1. Finish Carpentry: Section 06 20 00
 - 2. Custom Casework: Section 06 41 00

1.02 QUALITY ASSURANCE

- A. Reference Standards:
 - 1. Wood Framing: Comply with requirements of International Building Code and "National Design Specification for Wood Construction", latest edition, as published by American Forest and Paper Association.
 - 2. Lumber: Comply with Standard Grading Rules for Western Lumber, latest edition, published by Western Wood Products Association. Each piece of lumber shall be grade stamped.
 - 3. Plywood: Comply with U.S. Product Standard PS 1-07 for Construction and Industrial Plywood. Each panel shall be identified with the grade trademark of the APA- Engineered Plywood Association.
 - 4. Treated Wood: Comply with the Standards of the American Wood Preservers Association (AWPA) as referenced herein.

1.03 DELIVERY, STORAGE AND HANDLING

Store material off the ground and cover with waterproof covering.

PART 2 - PRODUCTS

2.01 ROUGH HARDWARE

- A. Provide necessary bolts, screws, nails, clips, plates, straps, hangers, etc., required for the completion of rough carpentry. Hardware shall be correct material of proper size and strength for the purpose intended and shall conform to the requirements of this Specification, the notes on the drawings, and all applicable building codes. Exterior hardware and items embedded in concrete or masonry or in contact with treated wood shall be galvanized.

- B. Anchor bolts indicated to be built into concrete or masonry for support of wood framing shall be provided under this Section and installed under Section 03 30 00 and 04 20 00.

2.02 FRAMING LUMBER

- A. Blocking and Furring:
 - 1. Hem-Fir, Spruce Pine-Fir
 - 2. Standard Grade or Better.

2.03 FIRE RETARDANT TREATMENT

- A. All framing lumber shall be fire retardant treated wood. It shall be Class A rated and shall have a flamespread of 25 or less when tested in accordance with ASTM E84. Fire retardant treated wood shall be kiln-dried after treatment to a maximum of 19% moisture content for lumber, and 15% for plywood..

- B. Acceptable Manufacturers and Products - Lumber:
 - 1. D-Blaze by Chemical Specialties Inc.
 - 2. Dricon by Hickson or Koppers
 - 3. Pyro-Guard by Hoover Treated Wood Products, Inc.
 - 4. or approved substitute

PART 3 - EXECUTION

3.01 EXAMINATION

Verify that surfaces to receive rough carpentry are prepared to required grades and dimensions.

3.02 INSTALLATION

- A. Install solid wood blocking in stud space within gypsum board partitions for attachment of wall stops, cabinets, and other wall mounted accessories. Contractor shall verify mounting requirements of cabinets and accessories to ensure adequate blocking is provided within partitions. (Minimum 8" wide 16 gauge sheet metal continuous across the face of studs is an acceptable alternative to wood blocking.)

END OF SECTION

SECTION 06 20 00 FINISH CARPENTRY

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes: Interior Trim

- B. Related Sections:
 - 1. Rough Carpentry: Section 06 10 00
 - 2. Prefinished Wood Doors: Section 08 14 29
 - 3. Painting: Section 09 91 00

1.02 QUALITY ASSURANCE

- A. Reference Standards:
 - 1. Conform to the Custom Grade and Installation requirements of the "Architectural Woodwork Quality Standards and Guide Specifications", current edition, as published by the Architectural Woodwork Institute.
 - 2. Conform to the Grading Standards of the National Hardwood Lumber Association

1.02 REFERENCES

- Reference Standards:
- 1. Conform to the Custom Grade and Installation requirements of the "Architectural Woodwork Quality Standards and Guide Specifications", current edition, as published by the Architectural Woodwork Institute.
 - 2. Conform to the Grading Standards of the National Hardwood Lumber Association

1.03 DEFINITIONS

Finish carpentry is generally defined as woodwork requiring a smooth finish and exposed to view but not considered as shelving, cabinets, counters, or casework.

1.04 SUBMITTALS

- A. Submit shop drawings for all items under this Section in accordance with Sections 01 33 00 and 01 33 23.

- B. Samples: Submit a complete set of plastic laminate samples including all available solids, matrix, nebulas and wood grains for Architect's color selection except metallic colors.

- C. Samples: Submit full range of PVC edge samples including solids, matrix, nebulas and wood grains for Architect's color selection (approximately 25 colors for 3mm edging).

1.05 DELIVERY, STORAGE AND HANDLING

Do not deliver material until the building or storage area is enclosed and sufficiently dry to prevent damage from excessive changes in moisture content.

PART 2 - PRODUCTS

2.01 INTERIOR TRIM MATERIAL

- A. All trim material shall be one of the following, as indicated on the drawings:
 - 1. Interior Trim – Transparent Finished (Stained): Wood species to match existing.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install all work required in this section per AWI Quality Standards, current edition.
- B. Interior Finish: Wherever possible, each length of finish shall be in single piece. No butt joints will be allowed except for long pieces or room molds which may be in two or more sections, when necessary, with beveled joints.
- C. Install interior finish level, plumb and true and tightly secure to backing with nails, screws, glue, etc. Blind nail wherever possible. Where surface nailing is necessary, use finish nails carefully set with nail punch. Finish bearing hammer marks, splits, cracks, mars or defects of any nature will be ordered replaced.
- D. Trim finishing against walls or ceiling shall be milled with extra width to permit scribing to wall or ceiling at job.
- E. Except where molded, all trim shall be milled with perfectly square edges. After erection the exposed edges shall be slightly rounded by sanding as directed.
- F. All finish shall be hand smoothed, ready for finish and absolutely free from machine or tool marks or any roughness whatever.

END OF SECTION

SECTION 07 92 00 JOINT SEALANTS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes: Provide sealant shown on the drawings, specified herein, and where specified under other sections. Where referenced as "caulk" or "caulking", the material shall be joint sealant as specified in this Section.

- B. In general, seal openings shown on the drawings and at other locations requiring joint sealant to seal visually and against infiltration from air and water, including, but not limited to, the following:
 - 1. Masonry control joints
 - 2. Isolation joints, between structure and other elements
 - 3. Joints at penetrations through walls, decks, and floors by piping, and other service and equipment
 - 4. Joints between items of equipment and other construction
 - 5. Open joints between dissimilar materials as required to close and conceal jointing of the work
 - 6. Construction and expansion joints, joints between dissimilar materials; joints around door frames, and other penetrations and openings in the exterior wall; interior walls as detailed or specified
 - 7. Space between base cabinets backsplash and wall

1.03 SUBMITTALS

- A. Product Data: Submit product data of each material intended for use. Indicate location of application. Submit UL listing data for joint sealant assemblies in fire-resistive construction.

- B. Color Samples: Submit color chart for each type of sealant in accordance with Sections 01 33 00 and 01 33 23.

- C. Contract Closeout Submittals: Submit warranty specified under Article 1.07.

1.04 QUALITY ASSURANCE

- A. Applicator Qualifications: Application by qualified sealant contractor in business for at least five (5) years prior to this installation, employing skilled tradesmen for the work.

- B. Manufacturer's Technical Representative: Obtain materials from manufacturers who will, if required, send a qualified technical representative to project site, for the purpose of advising the installer of proper procedures and precautions for the use of the materials.

1.05 DELIVERY, STORAGE AND HANDLING

Deliver in original, unopened containers and store in an area not subject to extreme heat or cold.

1.06 JOB CONDITIONS

Environmental Requirements: Do not apply exterior sealants during wet weather or when the outside temperature is below 40 degrees F. Do not apply interior sealants when the inside temperature is below 60 degrees F.

1.07 WARRANTY

Furnish a two (2) year warranty in writing to replace joint sealant that fails during the warranty period at no cost to the Owner. Submit two (2) copies of written warranty agreeing to repair or replace sealants which fail to perform as air-tight and watertight joints; or which fail in joint

adhesion, cohesion, abrasion resistance, weather resistance, extrusion resistance, migration resistance, stain resistance, or general durability; or which appear to deteriorate in any other manner not clearly specified as an inherent quality of the material by submitted manufacturer's data.

PART 2 - PRODUCTS

2.01 NON-RATED JOINT BACKING MATERIAL

- A. Non-Fire Rated: Size joint backing material for minimum 30% compression when inserted in the joint. Material shall be round rod or semi-circular type.

- B. Acceptable Manufacturers and Type:
 - 1. Dow Chemical Company, Ethafoam
 - 2. BASF (Sonneborn), Sonofoam
 - 3. Backer Rod Manufacturing, Inc., Denver Foam
 - 4. or approved substitute

2.04 BOND BREAKER TAPE

Polyethylene tape or other plastic tape as recommended by the sealant manufacturer to be applied to sealant-contact surfaces where bond to the substrate or joint filler must be avoided for proper performance of sealant. Provide self-adhesive tape wherever applicable.

PART 3 - EXECUTION

3.01 EXAMINATION

Verification of Conditions: Applicator shall be responsible for inspecting work prior to application of work under this Section. If joint or space to receive work is not according to detail and cannot be put into proper condition to receive the work by specified methods, notify the Contractor in writing, or assume responsibility for and correct any unsatisfactory caulking and sealing resulting.

3.02 PREPARATION

- A. Preparation of Surfaces: Clean surfaces in accordance with joint sealant manufacturer's recommendations. Remove dirt, incompatible coatings, moisture, and other substances that would interfere with bond of sealant. Mask edges, if required, to protect adjoining surfaces and produce a straight finish line.

- B. Do not proceed with installation of sealant over joint surfaces which have been painted, lacquered, waterproofed, or treated with water repellent or other treatment or coating. Remove coating or treatment joint surfaces before installing sealant.

- C. Priming: If required, prime surfaces that are to be sealed with manufacturer's recommended or standard primer, after the surfaces have been prepared as specified. Before use, check primers for discoloration and dirt pick-up on adjacent surfaces. If staining occurs, after exposure, take adequate measures to prevent the primer from being applied over the face of adjacent porous materials by masking or other suitable measures.

- D. Joint Backing: Joints which are to be sealed shall be of depth necessary to provide for the specified allowable thickness of sealant and the required backing where indicated and required by sealant manufacturer for fire-rated joint assemblies. Backing shall be type as specified and recognized for the allowable depth of the sealant. Size and shape of the backing shall be as required by the width of the joint and/or specified.

- E. Compress non-rated joint backing material a minimum of 30% when inserted in the joint. Backing material for the upper portion of joints shall be a round rod or semi-circular in cross-

section with the arc in contact with the sealant. Insert fire-rated joint backing material in accordance with UL listed system description.

- F. Install bond breaker tape wherever required by joint sealant manufacturer's recommendations to ensure that elastomeric sealants will perform properly.

3.03 APPLICATION

- A.. Sealant Joints: Apply sealants in continuous beads without open joints, voids, or air pockets, using a ratchet hand gun or mechanical powered gun. Confine sealants to joint areas with masking tapes or other precautions. Apply compounds in concealed compression joints accurately so that excess compound will not extrude from joints. Remove excess compound or sealant promptly as work progresses, and clean adjoining surfaces.
- B. In rough surfaces or joints of uneven widths, install sealant well back into joint. Recess equal to width of joint, or 3/8" minimum at non-rated joints in masonry. Use anti-tack agent where necessary to protect freshly-applied sealant from public traffic and dirt.
- C. Joints shall be slightly recessed as to facilitate a painter's line. Joints throughout construction shall be handtooled and finished. Work shall be done according to joint sealant manufacturer's printed instructions and specifications.
- D. Joints at Penetrations Through Walls, Decks, and Floors: Apply bead of sealant around piping, conduit, sleeving, and other penetrations through walls and floors. Install backing material as required to fully pack opening around penetration and apply sealant to specified thickness. Completely seal all joints of any penetration through sound isolation walls. Include perimeter joints and elements penetrating only one face of the sound wall.
- E. Workmanship: Employ only proven installation techniques, which will ensure that sealants will be deposited in uniform, continuous ribbons without gaps or air pockets, with complete "wetting" of the joint bond surfaces equally on opposite sides. Except as otherwise indicated, fill sealant rabbet to a slightly concave surface, slightly below adjoining surfaces. Where horizontal joints are between a horizontal surface and a vertical surface, fill joint to form a slight cove, so that joint will not trap moisture and dirt.
- F. Joint Sizes: Install sealants to depths as recommended by the sealant manufacturer and within the following general limitations:
 - 1. For normal moving joints sealed with elastomeric sealants but not subject to traffic, fill joints to a depth equal to 50% of joint width, but not more than 1/2" deep or less than 1/4" deep.
 - 2. For fire-rated joints, fill joints to a depth of 1/2" or as recommended by manufacturer of UL listed sealant material.
- G. Spillage: Do not allow sealants or compounds to overflow or spill onto adjoining surfaces, or to migrate into the voids of adjoining surfaces. Use masking tape or other precautionary devices to prevent staining of adjoining surfaces, by either the primer/sealer or the sealant/caulking compound.
- H. Remove excess and spillage of compounds promptly as the work progresses. Clean the adjoining surfaces by whatever means may be necessary to eliminate evidence of spillage. Do not damage the adjoining surfaces or finishes.

3.04 FIELD QUALITY CONTROL

Tests: Where directed by the Owner, cut out and remove a total of three samples consisting of the undisturbed sealant and back-up material from the joint. Samples shall be 6" in length. Reseal cut-out areas with the same materials.

3.05 CURING, PROTECTING AND CLEANING

- A. Cure sealants in compliance with joint sealant manufacturer's instructions and recommendations, to obtain high early bond strength, internal cohesive strength, and surface durability.
- B. The applicator shall advise the Contractor of procedures required for the protection of sealants and caulking compounds during the construction period, so sealants shall be without deterioration or damage (other than normal weathering) at the time of the acceptance.
- C. Protect surfaces from damage. Clean soiled surfaces immediately. Replace with new material any damaged material that cannot be cleaned.

END OF SECTION

DIVISION 8 DOOR AND WINDOWS
SECTION 08 11 13 HOLLOW METAL FRAMES

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes Items Shown on the Drawings and as Specified Including, But Not Limited to, the Following:
 - 1. Prime Coated Steel Frames

- B. Related Sections:
 - 1. Joint Sealants: Section 07 92 00
 - 2. Prefinished Wood Doors: Section 08 14 29
 - 3. Door Hardware: Section 08 71 00
 - 4. Glazing: Section 08 81 00
 - 5. Painting: Section 09 91 00

1.02 REFERENCE STANDARDS

- A. Steel Doors and Frames Must Meet Standards as Established by the Following References:
 - 1. Door and Hardware Preparation ANSI 115
 - 2. Life Safety Codes NFPA-1 (Latest Edition)
 - 3. Fire Doors and Windows NFPA-80 (Latest Edition)
 - 4. Steel Door Institute ANSI/SDI-100 (Latest Edition)
 - 5. Steel Door Institute SDI-117 "Manufacturing tolerances standard Steel Doors and Frames"

- B. Comply with ASTM Standards referenced within the text of this specification.

1.03 SUBMITTALS

- A. Shop Drawings: Submit shop drawings for items under this section in accordance with Sections 01 33 00 and 01 33 23. Include complete details of each door and frame type, door and frame elevations, installation requirements, door hardware preparation and reinforcement requirements, anchorage, and all accessory items.

- B. Product Data: Submit complete product data for each type of door and frame specified. Include all detail relating to construction, materials, core, and label compliance.

- C. Templates: Hardware templates for hardware mounted on hollow metal work shall be submitted by the hardware supplier directly to the hollow metal manufacturer immediately after approval of the hardware schedule. Failure to receive templates with reasonable promptness shall be reported to the Contractor.

- D. Door Schedule: Submit schedule of doors and frames using same reference numbers for details and openings as those on Contract Drawings. Indicate coordination of glazing frames and stops with glass requirements.

1.04 QUALITY ASSURANCE

- A. Regulatory Requirements: Provide UL label or other label acceptable to local building official on doors and frames indicated in the door schedule or on elevations to be fire rated.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Doors and Frames: Doors and frames shall be properly marked with door opening mark to correspond with Door Schedule.

- B. Deliver doors and frames cardboard-wrapped or crated to provide protection during transit and job storage. Provide additional protection to prevent damage to finish of factory-finished doors and frames.
- C. Inspect doors and frames on delivery for damage. Minor damages may be repaired provided refinished items match new work and are acceptable to Owner; otherwise, remove and replace damaged items as directed.
- D. Storage and Protection: Store doors and frames on edge, undercover protected from elements.
 - 1. Store frames in such a position as to prevent twisting.
 - 2. Place units on 4" high wood blocking.
 - 3. Avoid using nonvented plastic or canvas shelters that could contain humidity. If cardboard door wrappers become wet, remove immediately.
 - 4. Provide minimum 1/4" spaces between doors to promote air circulation.

1.06 JOB CONDITIONS

Installer must examine the conditions under which steel doors and frames will be installed and notify the Contractor in writing of any condition detrimental to the proper and timely completion of the work.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

Acceptable Manufacturers:

- 1. Amweld Building Products, Inc.
- 2. Gateway Metal Products
- 3. Curries Company
- 4. Pioneer Industries, Inc.
- 5. North Central Supply, Inc.
- 6. CECO Door Products
- 7. Elco Manufacturing, Inc.
- 8. Rocky Mountain Metals, Inc.
- 9. Southwestern Hollow Metal
- 10. Steelcraft Manufacturing Co.
- 11. or approved substitute

2.02 HOLLOW METAL MATERIALS

- A. Materials utilized for hollow metal doors and frames to be painted shall be commercial quality, level, cold-rolled steel conforming to ASTM A366 or hot-rolled, pickled, and oiled steel conforming to ASTM A569. Materials shall be free of scale, pitting, or surface defects. Gauge of steel as indicated in following articles.

2.03 HOLLOW METAL FRAMES

- A. Frames for wood doors indicated on the schedule or drawings to be steel shall be of design sections as detailed and assembled as specified below. Frames shall be pre-assembled in factory to the greatest extent possible allowing for shipping limitations.
- B. Frames in interior walls shall be 16 gauge steel, unless otherwise noted.
 - 1. Frames with door openings over 48" wide shall be fabricated from 14 gauge steel.
- C. Construction:
 - 1. Construct frames encompassing one or more doors with sidelights or transoms, and steel window walls, etc., in rigid units of a large size as practical to reduce to a minimum the

number of joints. Corners shall be mitered and continuously welded. All horizontal and vertical intersections, corners, joints, and connections which are exposed to weather shall be fully (continuously) welded, ground and finished smooth for the entire length of weather-exposed joint. Face only welds are only acceptable at interior conditions. The entire assembly shall be reinforced and braced as required to ensure absolute rigidity. Provide channel stiffening within and securely welded to frame member.

2. Provide thermal expansion joints as indicated or as required for specific assemblies.
- D. Machine frames for attachment of hardware, including mortising, reinforcing, drilling and tapping for hinges. Top hinge shall have 7 gauge, full throat reinforcement.
- E. Furnish anchors of type and number required for anchoring frames to structure, partitions, etc., as follows (wire anchors will not be allowed):
 1. 3 jamb anchors, plus one floor anchor, on jambs up to and including 7'-0" high
 2. 4 jamb anchors, plus one floor anchor, on jambs over 7'-0"
 3. 1 floor anchor on each jamb at metal stud partitions
- F. Provide such installation instructions as are necessary to ensure proper installation of anchors.
- G. Drill stop of lock jamb of each interior frame for installation of rubber door silencers where required under Section 08 71 00.
- H. Provide door and window frames in the design and configuration illustrated and which achieve the required fire-ratings. Hollow metal window frames in one-hour fire resistive construction shall be a forty-five (45) minute fire rated assembly.
- I. Reinforce frames to receive surface mounted hardware. Provide top hinge, 7 gauge full width reinforcement, for doors up to 36" in width. Add middle and bottom hinge reinforcement for doors over 36" wide. Provide high frequency hinge reinforcement at interior and exterior vestibule door frames.

2.04 MISCELLANEOUS ITEMS

- A. Provide closures, sub-sills, transom panels, fillers, etc., indicated on drawings. Gauges, materials, and construction shall match door and frame.
- B. Provide welded, blade-type steel door louvers in door panels and transoms as indicated on drawings. Louvers for exterior application shall have steel framed 1/4" galvanized hardware cloth screen secured to back of louver.

2.05 HOLLOW METAL FINISH

- A. Thoroughly clean hollow metal surfaces to be painted of grease, rust and scale. Chemically treat surfaces to ensure paint adherence. Apply filler to doors and frames where required to produce a smooth surface prior to application of primer. Apply one coat of manufacturer's standard rust-inhibitive primer. Allow primer to fully cure prior to shipment.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Frames:
 1. Set steel frames accurately in accordance with details, straight and free of twist with head level and jambs plumb. Rigidly anchor to walls and partitions and securely brace until surrounding work is completed. Provide deflection clearances at frame heads where indicated.
 2. Wherever possible leave spreader bars in place until frames are securely anchored.

3. Fill jambs with grout in accordance with Section 04 20 00 wherever frames occur in masonry walls. At exterior grout filled frames with continuous hinge or closer, field apply ½" thick strip of extruded polystyrene foamboard inside frame, continuous behind jamb face for length of mounting of continuous hinge or closer. Foamboard shall displace grout inside frame to allow for full mounting screw penetration.
4. Weld all field joints and intersections at jobsite as described in Article 2.03.

- B. Doors: Apply hardware in conformance with hardware manufacturer's templates and instructions. Hang doors to be free of binding with all hardware functioning properly.
- C. Miscellaneous Items: Install closures, transom panels, fillers, etc., as indicated.
- D. Sand smooth and repair any rusted or damaged paint prime coat areas. Apply compatible air drying paint primer to affected area.

3.02 ADJUSTING

At completion of job, adjust doors and hardware as required and leave in proper operating condition. Any door that warps, twists, or otherwise binds in the hollow metal frame during the warranty period shall be removed and replaced with a new door properly prepared to accept the specified hardware and completely finished to match the original door.

3.03 JOB FINISH

Paint hollow metal doors, frames, and glazing stops in accordance with Section 09 91 00.

END OF SECTION

SECTION 08 14 29 PREFINISHED WOOD DOORS

PART 1 - GENERAL

1.01 SUMMARY

1. Section Includes: Factory Finished Non-Rated Wood Doors

B. Related Sections:

1. Finish Carpentry: Section 06 20 00
2. Glazing: Section 08 81 00
3. Hardware: Section 08 71 00
4. Steel Doors and Frames: Section 08 11 13

1.02 REFERENCES

- A. Architectural Woodwork Quality Standards, latest Edition, as published by the Architectural Woodwork Institute (AWI) and Woodwork Institute (WI).
- A. Quality Standard: In addition to requirements specified, comply with WDMA I.S.1A (latest edition) standard for "Architectural Wood Flush Doors".

1.03 SUBMITTALS

- A. Shop Drawings: Submit shop drawings and product data for wood doors in accordance with Sections 01 33 00 and 01 33 23. Include indication of fire resistive and positive pressure compliance for rated openings.
- B. Quality Control Submittals: Hardware templates for hardware mounted on wood doors shall be submitted by the hardware supplier directly to the wood door manufacturer immediately after approval of the hardware schedule. Failure to receive templates with reasonable promptness shall be reported to the Contractor. Wood doors shall be pre-fit and pre-machined for hardware.
- C. Samples: Submit actual samples of available colors of factory finished wood doors for selection by Owner.
- D. Contract Closeout Submittals: Submit door warranty as specified in Article 1.06.

1.04 QUALITY ASSURANCE

- A. Reference Standards:
 1. Wood doors shall comply with AWI / WI Architectural Woodwork Standards (latest edition) Section 9, Custom Grade.
 - a. Performance Grade: Extra Heavy Duty
 2. Factory finish of wood doors shall comply with AWI / WI Architectural Woodwork Standards (latest edition) Section 5, Custom Grade.
- B. Obtain flush wood doors through one source from a single manufacturer.
- C. Low-Emitting Materials: Fabricate doors with adhesives and composite wood products that do not contain added urea formaldehyde.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Protect doors during transit, storage, and handling to prevent damage, soiling, and deterioration. Comply with requirements of referenced standard and manufacturer's written instructions.

1. Doors shall be delivered in manufacturer's standard packaging. Inspect for damage upon receipt.
 2. Comply with manufacturers requirements for delivery, storage, and handling of doors.
- B. Mark each door with individual opening numbers used on Shop Drawings. Use removeable tags or concealed markings.
- C. Delivery: Do not deliver doors until building is entirely enclosed and humidity in the building has reached average relative humidity to the locality.
- D. Storage: Stack doors flat and off the floor. Do not drag doors across one another.

1.06 WARRANTY

- A. General Warranty: Door manufacturer's warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Prefinished wood doors shall be warranted for the life of the installation to include reasonable cost of rehanging. Doors that are replaced during the one (1) year warranty period shall be rehung by the Contractor. After the building warranty has expired, replacement doors shall be furnished and installed by the door manufacturer. Submitt warranty on door manufacturer's standard form signed by the Manufacturer, Installer and Contractor.
- C. Doors shall be repaired or replaced which have warped (bow, cup, or twist) more than 1/4" in a 42" x 84" section or that show telegraphing of core construction in the face veneers exceeding 0.01" in a 3" span or do not comply with tolerances in referenced quality standard.

PART 2 - PRODUCTS

2.01 DOOR MANUFACTURERS

Acceptable Manufacturers:

1. Algoma Hardwoods, Inc.
2. Marshfield Door Systems, Inc.
3. Eggers Industries
4. V.T. Industries, Inc.
5. Oshkosh Architectural Door Co,
6. or approved substitute

2.02 NON-RATED SOLID CORE WOOD DOORS

- A. Manufacturer and Type:
1. Marshfield DPC-1 with Particle Board Core
 2. or equivalent of other acceptable manufacturer
- B. General: Non-rated wood doors shall be 1-3/4" thick, solid core construction with rails and stiles bonded to the core.
1. Width and height as indicated in the Door Schedule.
 2. Doors shall be 5 ply construction conforming to AWI Section 1300 with cross banding and solid particleboard core (PC-5 ME).
 3. Manufacture doors with 3/4" undercut to preserve full bottom rail.
 4. Doors shall be factory pre-machined for hardware including drilled pilot holes for screws.
- C. Veneers and Edge Strips: Doors shall have custom grade, book-matched face veneers of plain sliced Grade A Red Oak with running match assembly both sides.
1. Provide 1-3/8" matching vertical hardwood edges.

2. Veneer to be laminated to core in a hot-press method after core (with bonded rails and stiles) has been planed as a unit.
 - a. Submit one 8" x 10" sample of veneer-on-substrate illustrating expected range of component finish color and/or grain.
- E. General: Provide solid blocking or wide rails at all surface applied hardware, regardless of type of core required.

2.07 FACTORY FINISH

- A. Wood doors shall receive factory finish of water base stain and ultraviolet (UV) cured polyurethane sealer.
 1. Finish shall meet or exceed performance standards of AWI / WI Architectural Woodwork Standards (latest edition) System 11 - catalyzed polyurethane finish system, custom grade. System shall include initial wash coat of reduced sealer, transparent stain (color as selected by Owner), vinyl sealer, sanding, and topcoat (satin gloss).

PART 3 – EXECUTION

3.01 EXAMINATION

Before installation, verify that frames are proper size and type for the door and are installed as required for proper installation of doors.

3.02 INSTALLATION

- A. Installation shall be by skilled finish carpenters or factory authorized installers in accordance with AWI Quality Standards and NFPA 80 Standards.
 1. Tolerances shall comply with the requirements of NFP 80 and AWI / WI Architectural Woodwork Standards (latest edition) Section 9.
 2. Installation of factory finished wood doors shall not occur until just prior to substantial completion to avoid damage to door panels by adjacent construction operations.
- B. Hang doors to be free of binding with all hardware functioning properly.
- C. Installer shall be thoroughly familiar with the door manufacturer's warranty requirements and assure compliance with all provisions.
- D. Touch up and repair factory finishes in accordance with door manufacturer's recommendations using approved materials and methods.

END OF SECTION

SECTION 08 71 00 – DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes:
 - 1. Mechanical and electrified door hardware for:
 - a. Swinging doors.
 - 2. Field verification, preparation and modification of existing doors and frames to receive new door hardware.
- B. Exclusions: Unless specifically listed in hardware sets, hardware is not specified in this section for:
 - 1. Windows
 - 2. Cabinets (casework), including locks in cabinets
 - 3. Signage
 - 4. Toilet accessories
- C. Related Sections:
 - 1. Division 01 Section "Alternates" for alternates affecting this section.
 - 2. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
 - 3. Division 09 sections for touchup finishing or refinishing of existing openings modified by this section.

1.3 REFERENCES

- A. UL - Underwriters Laboratories
 - 1. UL 10B - Fire Test of Door Assemblies
 - 2. UL 10C - Positive Pressure Test of Fire Door Assemblies
 - 3. UL 1784 - Air Leakage Tests of Door Assemblies
 - 4. UL 305 - Panic Hardware
- B. DHI - Door and Hardware Institute
 - 1. Sequence and Format for the Hardware Schedule
 - 2. Recommended Locations for Builders Hardware
 - 3. Key Systems and Nomenclature

C. ANSI - American National Standards Institute

1. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties

1.4 SUBMITTALS

A. General:

1. Submit in accordance with Conditions of Contract and Division 01 requirements.
2. Highlight, encircle, or otherwise specifically identify on submittals deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.
3. Prior to forwarding submittal, comply with procedures for verifying existing door and frame compatibility for new hardware, as specified in PART 3, "EXAMINATION" article, herein.

B. Action Submittals:

1. Product Data: Product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Samples for Verification: If requested by Owner, submit production sample or sample installations of each type of exposed hardware unit in finish indicated, and tagged with full description for coordination with schedule.
 - a. Samples will be returned to supplier in like-new condition. Units that are acceptable to Owner may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.
3. Door Hardware Schedule: Submit schedule with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule as published by the Door and Hardware Institute. Indicate complete designations of each item required for each door or opening, include:
 - a. Door Index; include door number, heading number, and Architects hardware set number.
 - b. Opening Lock Function Spreadsheet: List locking device and function for each opening.
 - c. Type, style, function, size, and finish of each hardware item.
 - d. Name and manufacturer of each item.
 - e. Fastenings and other pertinent information.
 - f. Location of each hardware set cross-referenced to indications on Drawings.
 - g. Explanation of all abbreviations, symbols, and codes contained in schedule.
 - h. Mounting locations for hardware.
 - i. Door and frame sizes and materials.
 - j. Name and phone number for local manufacturer's representative for each product.
4. Key Schedule:
 - a. After Keying Conference, provide keying schedule listing levels of keying as well as explanation of key system's function, key symbols used and door numbers controlled.
 - b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.

- c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
 - d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
 - e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion.
 - 1) Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
 - f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.
5. Templates: After final approval of hardware schedule, provide templates for doors, frames and other work specified to be factory prepared for door hardware installation.
- C. Informational Submittals:
- 1. Qualification Data: For Supplier, Installer and Architectural Hardware Consultant.
 - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
 - 2. Certificates of Compliance:
 - a. Certificates of compliance for fire-rated hardware and installation instructions if requested by Owner or Authority Having Jurisdiction.
 - b. Installer Training Meeting Certification: Letter of compliance, signed by Contractor, attesting to completion of installer training meeting specified in "QUALITY ASSURANCE" article, herein.
 - 3. Product Test Reports: For compliance with accessibility requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by qualified testing agency, for door hardware on doors located in accessible routes.
 - 4. Warranty: Special warranty specified in this Section.
- D. Closeout Submittals:
- 1. Operations and Maintenance Data : Provide in accordance with Division 01 and include:
 - a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
 - b. Catalog pages for each product.
 - c. Name, address, and phone number of local representative for each manufacturer.
 - d. Parts list for each product.
 - e. Final approved hardware schedule, edited to reflect conditions as-installed.
 - f. Final keying schedule
 - g. Copies of floor plans with keying nomenclature
 - h. Copy of warranties including appropriate reference numbers for manufacturers to identify project.

1.5 QUALITY ASSURANCE

- A. Product Substitutions: Comply with product requirements stated in Division 01 and as specified herein.

1. Where specific manufacturer's product is named and accompanied by "No Substitute," including make or model number or other designation, provide product specified. (Note: Certain products have been selected for their unique characteristics and particular project suitability.)
 - a. Where no additional products or manufacturers are listed in product category, requirements for "No Substitute" govern product selection.
 2. Where products indicate "acceptable manufacturers" or "acceptable manufacturers and products", provide product from specified manufacturers, subject to compliance with specified requirements and "Single Source Responsibility" requirements stated herein.
- B. Supplier Qualifications and Responsibilities: Recognized architectural hardware supplier with record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this Project and that provides certified Architectural Hardware Consultant (AHC) available to Owner, and Contractor, at reasonable times during the Work for consultation.
1. Warehousing Facilities: In Project's vicinity.
 2. Scheduling Responsibility: Preparation of door hardware and keying schedules.
- C. Installer Qualifications: Qualified tradesmen, skilled in application of commercial grade hardware with record of successful in-service performance for installing door hardware similar in quantity, type, and quality to that indicated for this Project.
- D. Architectural Hardware Consultant Qualifications: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
1. For door hardware, DHI-certified, Architectural Hardware Consultant (AHC).
 2. Can provide installation and technical data to Owner and other related subcontractors.
 3. Can inspect and verify components are in working order upon completion of installation.
- E. Fire-Rated Door Openings: Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by Underwriters Laboratories, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.
- F. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
1. Air Leakage Rate: Maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.
- G. Means of Egress Doors: Latches do not require more than 15 lbf (67 N) to release latch. Locks do not require use of key, tool, or special knowledge for operation.
- H. Accessibility Requirements: For door hardware on doors in an accessible route, comply with governing accessibility regulations cited in "REFERENCES" article, herein.
1. Provide operating devices that do not require tight grasping, pinching, or twisting of wrist and that operate with force of not more than 5 lbf (22.2 N).

2. Maximum opening-force requirements:
 - a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf (22.2 N) applied perpendicular to door.
 - b. Sliding or Folding Doors: 5 lbf (22.2 N) applied parallel to door at latch.
 - c. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
 3. Bevel raised thresholds with slope of not more than 1:2. Provide thresholds not more than 1/2 inch (13 mm) high.
 4. Adjust door closer sweep periods so that, from open position of 70 degrees, door will take at least 3 seconds to move to 3 inches (75 mm) from latch, measured to leading edge of door.
- I. Keying Conference: Conduct conference at Project site to comply with requirements in Division 01.
1. Attendees: Owner, Contractor, Owner, Installer, Owner's security consultant, and Supplier's Architectural Hardware Consultant.
 2. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
 - a. Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 - b. Preliminary key system schematic diagram.
 - c. Requirements for key control system.
 - d. Requirements for access control.
 - e. Address for delivery of keys.
- J. Pre-installation Conference: Conduct conference at Project site or location as designated.
1. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 2. Inspect and discuss preparatory work performed by other trades.
 3. Review required testing, inspecting, and certifying procedures.
- K. Coordination Conferences:
1. Installation Coordination Conference: Prior to hardware installation, schedule and hold meeting to review questions or concerns related to proper installation and adjustment of door hardware.
 - a. Attendees: Door hardware supplier, door hardware installer, Contractor.
 - b. After meeting, provide letter of compliance to Owner, indicating when meeting was held and who was in attendance.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site.
- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package.
 1. Deliver each article of hardware in manufacturer's original packaging.
- C. Project Conditions:

1. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
 2. Provide secure lock-up for door hardware delivered to Project, but not yet installed. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- D. Protection and Damage:
1. Promptly replace products damaged during shipping.
 2. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work.
 3. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.
- E. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.
- F. Deliver keys to Owner by registered mail or overnight package service.

1.7 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete. Concrete, reinforcement, and formwork requirements are specified in Division 03.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Existing Openings: Where hardware components are scheduled for application to existing construction or where modifications to existing door hardware are required, field verify existing conditions and coordinate installation of door hardware to suit opening conditions and to provide proper door operation.
- D. Direct shipments not permitted, unless approved by Contractor.

1.8 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.
 1. Warranty Period: Years from date of Substantial Completion, for durations indicated.
 - a. Closers:
 - 1) Mechanical: 30 years.
 - b. Locksets:
 - 1) Mechanical: 3 years.
 - c. Key Blanks: Lifetime
 2. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.

1.9 MAINTENANCE

- A. Extra Materials: none required
- B. Maintenance Tools:
 - 1. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. The Owner requires use of certain products for their unique characteristics and particular project suitability to insure continuity of existing and future performance and maintenance standards. After investigating available product offerings Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute."
 - 1. Where "No Substitute" is noted, submittals and substitution requests for other products will not be considered.
- B. Approval of manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category shall be in accordance with QUALITY ASSURANCE article, herein.
- C. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.
- D. Hand of Door: Drawings show direction of slide, swing, or hand of each door leaf. Furnish each item of hardware for proper installation and operation of door movement as shown.
- E. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Owner's approval.

2.2 MATERIALS

- A. Fasteners
 - 1. Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation.
 - 2. Furnish screws for installation with each hardware item. Finish exposed (exposed under any condition) screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
 - 3. Provide concealed fasteners for hardware units exposed when door is closed except when no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work unless thru-bolts are required to fasten hardware securely. Review door specification and advise Owner if thru-bolts are required.
 - 4. Install hardware with fasteners provided by hardware manufacturer.

- B. Modification and Preparation of Existing Doors: Where existing door hardware is indicated to be removed and reinstalled.
 - 1. Provide necessary fillers, Dutchmen, reinforcements, and fasteners, compatible with existing materials, as required for mounting new opening hardware and to cover existing door and frame preparations.
 - 2. Use materials which match materials of adjacent modified areas.
 - 3. When modifying existing fire-rated openings, provide materials permitted by NFPA 80 as required to maintain fire-rating.
- C. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
 - 1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.

HINGES

- D. Provide five-knuckle, ball bearing hinges.
 - 1. Manufacturers and Products:
 - a. Scheduled Manufacturer and Product: Ives 5BB series
 - b. Acceptable Manufacturers and Products: Hager BB series, McKinney TAT4A series, Stanley FBB Series
- E. Requirements:
 - 1. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide:
 - a. Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches (114 mm) high
 - b. Interior: Standard weight, steel, 4-1/2 inches (114 mm) high
 - 2. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide:
 - a. Exterior: Heavy weight, bronze/stainless steel, 5 inches (127 mm) high
 - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
 - 3. 2 inches or thicker doors:
 - a. Exterior: Heavy weight, bronze or stainless steel, 5 inches (127 mm) high
 - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
 - 4. Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
 - 5. Where new hinges are specified for existing doors or existing frames, provide new hinges of identical size to hinge preparation present in existing door or existing frame.
 - 6. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
 - a. Steel Hinges: Steel pins
 - b. Non-Ferrous Hinges: Stainless steel pins
 - c. Out-Swinging Exterior Doors: Non-removable pins
 - d. Out-Swinging Interior Lockable Doors: Non-removable pins
 - e. Interior Non-lockable Doors: Non-rising pins

7. Width of hinges: 4-1/2 inches (114 mm) at 1-3/4 inch (44 mm) thick doors, and 5 inches (127 mm) at 2 inches (51 mm) or thicker doors. Adjust hinge width as required for door, frame, and wall conditions to allow proper degree of opening.
8. Doors 36 inches (914 mm) wide or less furnish hinges 4-1/2 inches (114 mm) high; doors greater than 36 inches (914 mm) wide furnish hinges 5 inches (127 mm) high, heavy weight or standard weight as specified.
9. Provide hinges with electrified options as scheduled in the hardware sets. Provide with sufficient number and wire gage to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component.
10. Provide mortar guard for each electrified hinge specified, unless specified in hollow metal frame specification.
11. Provide spring hinges where specified. Provide two spring hinges and one bearing hinge per door leaf for doors 90 inches (2286 mm) or less in height. Provide one additional bearing hinge for each 30 inches (762 mm) of additional door height.

2.3 CYLINDRICAL LOCKS – GRADE 1

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: Schlage ND Series

B. Requirements:

1. Provide cylindrical locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 1. Cylinders: Refer to "KEYING" article, herein.
2. Provide locksets able to withstand 1500 inch pounds of torque applied to locked outside lever without gaining access per ANSI/BHMA A156.2 Abusive Locked Lever Torque Test and cycle tested to 3 million cycles per ANSI/BHMA A156.2 Cycle Test.
3. Provide solid steel rotational stops to control excessive rotation of lever.
4. Provide completely re functionable lockset that allows lock function to be changed to over twenty other common functions by swapping easily accessible parts.
5. Provide locks with standard 2-3/4 inches (70 mm) backset, unless noted otherwise, with 1/2 inch latch throw. Provide proper latch throw for UL listing at pairs.
6. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
7. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
8. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
9. Provide electrified options as scheduled in the hardware sets.
10. Lever Trim: Solid cast levers without plastic inserts, and wrought roses on both sides.
 - a. Lever Design: Schlage Sparta.

2.4 KEYING

- #### A. Provide a factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.

B. Requirements:

1. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.

- a. Keying system as directed by the Owner. Match existing keyway.
- 2. Forward bitting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements shall be cause for replacement of cylinders/cores involved at no additional cost to Owner.
- 3. Provide keys with the following features.
 - a. Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
- 4. Identification:
 - a. Mark permanent cylinders/cores and keys with applicable blind code per DHI publication "Keying Systems and Nomenclature" for identification. Blind code marks shall not include actual key cuts.
 - b. Identification stamping provisions must be approved by the Owner.
 - c. Failure to comply with stamping requirements shall be cause for replacement of keys involved at no additional cost to Owner.
 - d. Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.
- 5. Quantity: Furnish in the following quantities.
 - a. Change (Day) Keys: 3 per cylinder/core.
 - b. Master Keys: 6.
 - c. Unused balance of key blanks shall be furnished to Owner with the cut keys.

2.5 DOOR CLOSERS

A. Manufacturers and Products:

- 1. Scheduled Manufacturer and Product: LCN 4040XP series.

B. Requirements:

- 1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
- 2. Provide door closers with fully hydraulic, full rack and pinion action with high strength cast iron cylinder, and full complement bearings at shaft.
- 3. Cylinder Body: 1-1/2 inch (38 mm) diameter with 3/4 inch (19 mm) diameter double heat-treated pinion journal.
- 4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
- 5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards.
- 6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck.
- 7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
- 8. Pressure Relief Valve (PRV) Technology: Not permitted.
- 9. Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: Powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A156.4 and ASTM B117, or has special rust inhibitor (SRI).

10. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

2.6 DOOR TRIM

A. Manufacturers:

1. Scheduled Manufacturer: Ives
2. Acceptable Manufacturers: Burns, Rockwood

B. Requirements:

1. Provide push plates 4 inches (102 mm) wide by 16 inches (406 mm) high by 0.050 inch (1 mm) thick and beveled 4 edges. Where width of door stile prevents use of 4 inches (102 mm) wide plate, adjust width to fit.
2. Provide push bars of solid bar stock, diameter and length as scheduled. Provide push bars of sufficient length to span from center to center of each stile. Where required, mount back to back with pull.
3. Provide offset pulls of solid bar stock, diameter and length as scheduled. Where required, mount back to back with push bar.
4. Provide flush pulls as scheduled. Where required, provide back-to-back mounted model.
5. Provide pulls of solid bar stock, diameter and length as scheduled. Where required, mount back to back with push bar.
6. Provide pull plates 4 inches (102 mm) wide by 16 inches (406 mm) high by 0.050 inch (1 mm) thick, beveled 4 edges, and prepped for pull. Where width of door stile prevents use of 4 inches (102 mm) wide plate, adjust width to fit.
7. Provide wire pulls of solid bar stock, diameter and length as scheduled.
8. Provide decorative pulls as scheduled. Where required, mount back to back with pull.

2.7 PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer: Ives
2. Acceptable Manufacturers: Burns, Rockwood

B. Requirements:

1. Provide kick plates, mop plates, and armor plates minimum of 0.050 inch (1 mm) thick as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
2. Sizes of plates:
 - a. Kick Plates: 10 inches (254 mm) high by 2 inches (51 mm) less width of door on single doors, 1 inch (25 mm) less width of door on pairs
 - b. Mop Plates: 4 inches (102 mm) high by 2 inches (51 mm) less width of door on single doors, 1 inch (25 mm) less width of door on pairs
 - c. Armor Plates: 36 inches (914 mm) high by 2 inches (51 mm) less width of door on single doors, 1 inch (25 mm) less width of door on pairs

2.8 DOOR STOPS AND HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer: Ives
 2. Acceptable Manufacturers: Burns, Rockwood
- B. Provide door stops at each door leaf:
1. Provide wall stops wherever possible. Provide convex type where mortise type locks are used and concave type where cylindrical type locks are used.
 2. Where a wall stop cannot be used, provide universal floor stops for low or high rise options.
 3. Where wall or floor stop cannot be used, provide medium duty surface mounted overhead stop.

2.9 SILENCERS

- A. Manufacturers:
1. Scheduled Manufacturer: Ives
 2. Acceptable Manufacturers: Burns, Rockwood
- B. Requirements:
1. Provide "push-in" type silencers for hollow metal or wood frames.
 2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
 3. Omit where gasketing is specified.

2.10 DOOR VIEWERS

- A. Manufacturers:
1. Scheduled Manufacturer: Ives
 2. Acceptable Manufacturers: Burns, Rockwood
- B. Provide appropriate door viewer for door type and rating with minimum of 180-degree view area.

2.11 FINISHES

- A. Finish: BHMA 626/652 (US26D); except:
1. Protection Plates: BHMA 630 (US32D)
 2. Door Closers: Powder Coat to Match
 3. Wall Stops: BHMA 630 (US32D)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance.

- B. Existing Door and Frame Compatibility: Field verify existing doors and frames receiving new hardware and existing conditions receiving new openings. Verify that new hardware is compatible with existing door and frame preparation and existing conditions.
- C. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Where on-site modification of doors and frames is required:
 - 1. Carefully remove existing door hardware and components being reused. Clean, protect, tag, and store in accordance with storage and handling requirements specified herein.
 - 2. Field modify and prepare existing door and frame for new hardware being installed.
 - 3. When modifications are exposed to view, use concealed fasteners, when possible.
 - 4. Prepare hardware locations and reinstall in accordance with installation requirements for new door hardware and with:
 - a. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.
 - b. Wood Doors: DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."
 - c. Doors in rated assemblies: NFPA 80 for restrictions on on-site door hardware preparation.

3.3 INSTALLATION

- A. Mounting Heights: Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.
 - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
 - 2. Custom Steel Doors and Frames: HMMA 831.
 - 3. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- B. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- C. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- D. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- E. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- F. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- G. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated or one hinge for every

30 inches (750 mm) of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.

- H. Intermediate Offset Pivots: Where offset pivots are indicated, provide intermediate offset pivots in quantities indicated in door hardware schedule but not fewer than one intermediate offset pivot per door and one additional intermediate offset pivot for every 30 inches (750 mm) of door height greater than 90 inches (2286 mm).
- I. Lock Cylinders: Install construction cores to secure building and areas during construction period.
- J. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.
- K. Door Closers: Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Closers shall not be visible in corridors, lobbies and other public spaces unless approved by Owner.
- L. Closer/holders: Mount closer/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.
- M. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.

3.4 FIELD QUALITY CONTROL

- A. Architectural Hardware Consultant: Engage qualified independent Architectural Hardware Consultant to perform inspections and to prepare inspection reports.
 - 1. Architectural Hardware Consultant will inspect door hardware and state in each report whether installed work complies with or deviates from requirements, including whether door hardware is properly installed and adjusted.

3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
 - 1. Spring Hinges: Adjust to achieve positive latching when door is allowed to close freely from an open position of 30 degrees.
 - 2. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
- B. Occupancy Adjustment: Approximately three months after date of Substantial Completion, Installer's Architectural Hardware Consultant shall examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors, door hardware, and electrified door hardware.

3.6 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items as necessary to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

3.7 DEMONSTRATION

- A. Provide training for Owner's maintenance personnel to adjust, operate, and maintain door hardware and door hardware finishes. Refer to Division 01 Section "Demonstration and Training."

3.8 DOOR HARDWARE SCHEDULE

- A. Locksets, exit devices, and other hardware items are referenced in the following hardware sets for series, type and function. Refer to the above-specifications for special features, options, cylinders/keying, and other requirements.
- B. Hardware Sets: Refer to the Drawings.

End of Section

SECTION 08 81 00 GLAZING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Glass and Glazing
 - 2. Glazing Materials

- B. Products Installed But Not Furnished Under This Section:
 - 1. Hollow Metal Window and Door Glazing Stops: Section 08 11 13

- C. Related Sections:
 - 1. Steel Doors and Frames: Section 08 11 13

1.02 REFERENCE STANDARDS

Comply with published standards of Glass Association of North America – Glazing Manual, latest edition, and all applicable manufacturer's recommendations.

1.03 SUBMITTALS

- A. Samples: Submit one 12" x 12" sample of each type of glass to Owner with label indicating name of glass manufacturer / supplier.

- B. Product Data: Submit product data as specified in Sections 01 33 00 and 01 33 23, establish specified design and performance characteristics for each type of glass.

- C. Contract Closeout Submittals: Submit written warranty specified under Article 1.07.

1.04 QUALITY ASSURANCE

- A. Regulatory Requirements: UL or Warnock-Hersey Classification is required for fire-rated impact safety glass. In addition, fire-rated impact safety glazing material shall comply with safety glazing requirements of CPSC 16 CFR Part 1201 and be permanently marked as required by local jurisdictions. Impact safety rated glass shall meet CPSC Category II criteria of 400 ft/lbs.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Schedule delivery to coincide with glazing schedules so minimal handling of glazing is required.

- B. Storage: Store glazing according to manufacturer's / supplier's printed instructions. Store in areas least subject to traffic or falling objects. Keep storage area clean and dry. Stack individual glazing panels on edge, leaned slightly against upright supports with separators between each panel.

1.06 PROJECT CONDITIONS

- A. Protection: Glass shall be completely covered during spray painting, plastering, or other construction operations that might cause damage to glass.

- B. Breakage: Contractor shall be responsible for all glass broken during shipment, storage and installation.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Suppliers - Tempered Glass:
 1. PPG Industries, Inc.
 2. Viracon, Inc.
 3. Oldcastle Glass
 4. AGC Flat Glass North, Inc
 5. Pilkington North America
 6. Guardian Industries
 7. Northwestern Industries, Inc.
 8. approved substitute

- B. Labels: Every individual piece of glass shall bear a label designating type, thickness and quality. Do not remove labels until observed by Owner.

2.02 GLASS TYPES

Glass types indicated on the drawings shall be one of the following types of glass. Glass thickness indicated below is nominal, performance requirements are minimal.

TYPE	DESCRIPTION
CT	1/4" clear tempered.

2.03 GLAZING

- A. Glazing Tape System: Closed cell, flexible, self-adhered, non-extruding polyvinyl chloride (PVC) foam as recommended by glass manufacturer.

- B. Setting Blocks, Shims, and Glazing Clips: Size and type as recommended by glass manufacturer.

PART 3 - EXECUTION

3.01 EXAMINATION

Before glazing, verify that frames are plumb and square with metal stops set for proper glass-to-stop face clearance. Report frame defects or unsuitable conditions to Contractor before proceeding.

3.02 PREPARATION

Openings shall be field measured before ordering neoprene gaskets or tempered glass products. Contractor shall bear sole responsibility for proper fit of field measured products.

3.03 INSTALLATION

- A. Stops: Glass is to be held in place with metal stops as detailed. Glazing frames or stops will be furnished under other sections of these Specifications. Carefully remove factory set stops already in place as necessary to permit the glazing. Stops shall be handled carefully and properly installed without damage to same.

- B. Glazing In Hollow Metal Frames (Exterior and Interior): The opening to be glazed must first be taped to prevent the glass from touching the metal in any direction. Center glass in glazing rabbet to maintain recommended clearances at perimeter on all four sides, inside and out. Rest glass panes on setting blocks as recommended by the glass manufacturer. Install shims or use shim tape as recommended to maintain clearance between stops and face of glass. Install glazing tape. Stop in with metal stops as specified above. Cover top of tape with joint sealant on exterior side of exterior windows in accordance with Section 07920. Leave sealant smooth and clean. Remove sealant from adjoining surfaces without damaging the finish.
 1. Cut glass with smooth, straight edges of full size required by the openings. Edge clearances shall comply with Flat Glass Marketing Association Standards.

- C. Allowable Tolerances: Maintain minimum glazing tolerance between glass faces and frame or metal stops as recommended by the Flat Glass Marketing Association. For 1/4" thickness glass, maintain 1/8" clearance between glass face and metal stops.

3.04 CLEANING

Leave glazing in a job-clean condition. Final cleaning shall be done under Section 01 74 23.

END OF SECTION

SECTION 09 21 00 GYPSUM BOARD PARTITIONS AND WALLS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Gypsum Board
 - 2. Partition Framing
 - 3. Acoustical Insulation
 - 4. Joint Treatment System, Trim, and Accessories

- B. Related Sections:
 - 1. Painting: Section 09 91 00
 - 2. Joint Sealants: Section 07 92 00

1.02 REFERENCE STANDARDS

- A. Comply with Gypsum Association Documents GA-216 "Recommended Specifications for Application and Finishing of Gypsum Board" and GA-214 "Levels of Gypsum Board Finish", latest editions.

- B. Comply with ASTM Standards referenced within the text of this specification.

1.03 SUBMITTALS

- A. Submit copies of manufacturer's product data and specifications with each material component and accessory plainly identified in accordance with Sections 01 33 00 and 01 33 23.

1.04 QUALITY ASSURANCE

- A. Gypsum board partitions and walls and shaftwall systems shall be identified in the product data submittal as complying with a fire-rated and listed wall assembly system as classified by Underwriters Laboratories, Inc. (UL) or other accredited independent testing laboratory for required fire-rated construction where indicated on drawings.

- B. Drywall shall not contain elemental sulfur, and shall have no detectable emissions of hydrogen sulfide.

1.05 DELIVERY, STORAGE AND HANDLING

Store materials in a clean, dry area until ready for use. Store gypsum panels in horizontal (flat) position. Steel framing and related accessories shall be stored and handled in accordance with the AISI "Code of Standard Practice".

1.06 PROJECT CONDITIONS

During gypsum panel finishing, maintain temperatures within the building within the range of 55 degrees to 70 degrees F. Provide adequate ventilation to carry off excess moisture.

1.07 SEQUENCING

Where partitions stop against bottom of ceiling grid system, install grid system and floor covering prior to stud erection.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Acceptable Manufacturers - Gypsum Board:
 - 1. Georgia-Pacific Corporation
 - 2. National Gypsum Company

3. United States Gypsum Company
4. Pabco Gypsum Co.
5. Domitar Gypsum Inc.
6. Eagle Gypsum Products
7. Louisiana-Pacific Corporation
8. American Gypsum
9. or approved substitute

B. Acceptable Manufacturers - Joint Treatment System, Trim, and Accessories:

1. Any acceptable manufacturer listed above
2. Hamilton Materials, Inc.
3. Clinch-On Products
4. Murco Wall Products
5. or approved substitute

C. Acceptable Manufacturers - Drywall Studs:

1. Any acceptable manufacturer listed above
2. Allied Studco, Inc.
3. CEMCO
4. Dietrich
5. Clark Western Steel Framing
6. Telling Industries
7. or approved substitute

D. Acceptable Systems and Manufacturers – Acoustical Insulation:

1. Owens Corning
2. CertainTeed
3. Johns-Manville
4. or approved substitute

2.02 DRYWALL STUDS AND RELATED COMPONENTS

- A. Studs: In conformance with ASTM C645, 3-5/8" depth, $F_y = 33$ ksi or greater, $M_{xa} = 1.60$ in-k or greater, except where partition height exceeds 11'-0", provide studs with $M_{xa} = 2.85$ in-k or greater. Provide double studs ($M_{xa} = 2.64$ in-k or greater) at both jambs of all partition openings (doors, sidelights, windows, pass-through, etc.) behind wall mounted shelving or cabinets, and behind wall mounted T.V. monitor brackets. Provide other stud depths where indicated on drawings.
- B. Stud Runners: In conformance with ASTM C645, 3-5/8" depth, $F_y = 33$ ksi or greater and $M_{xa} = 2.494$ in-k or greater. Provide runners to accommodate other stud depths where indicated on drawings.
- C. Cold-Rolled Channels: 1-1/2" depth, steel channels, black asphaltum painted; $F_y = 33$ ksi or greater and $M_{xa} = 1.22$ in-k.
- D. Furring Channels: In conformance with ASTM C645, 1-1/2" depth, 25 gauge (0.0188 design thickness), $F_y = 33$ ksi or greater.
- E. Resilient Channels: In conformance with ASTM C645, 1-1/2" depth, 25 gauge (0.0188 design thickness), $F_y = 33$ ksi or greater resilient furring channels.
- F. Stud Fasteners: Type S or Type S, #12 pan head screws.

2.03 GYPSUM BOARD AND RELATED MATERIALS

- A. Gypsum Board: USG Sheetrock Firecode (Type X) 5/8" thick, 48" wide, tapered edge, 1 hour fire-rated boards; or equivalent of other acceptable manufacturer conforming to ASTM C1396.
- B. Drywall Screws: USG Type S or Type S-12 (minimum 1" long) bugle head drywall screws or equivalent of other acceptable manufacturer. Use proper type for gauge of stud or framing. Provide USG Durock steel screw (1-1/4" long) with anti-corrosive coating for cement board applications; or equivalent of other acceptable manufacturer.
- C. Edge Trim: USG Beadex Brand No. B4 paper faced metal L -shaped angle edge trim without back flange; or equivalent of other acceptable manufacturer.
- D. Joint Treatment System: USG Sheetrock Joint Tape, cross-fiber paper reinforcing tape, with USG Sheetrock All Purpose Joint Compound Ready Mixed; or equivalent of other acceptable manufacturer conforming to ASTM C475.
- E. Adhesive: Ohio Sealants, Inc. Formula #38 Adhesive; or equivalent of other acceptable manufacturer.
- D. Control Joints: USG Sheetrock Brand No. 093 roll-formed zinc with tape-protected 1/4" joint opening; or equivalent of other acceptable manufacturer.
- G. Corner Bead: USG Beadex Brand Micro Bead paper faced metal outside corner bead; or equivalent of other acceptable manufacturer.

2.09 ACOUSTICAL INSULATION

- A. Owens Corning Sound Attenuation Batts; or equivalent of other acceptable manufacturer.
 - 1. 3" thickness, unfaced glass fiber acoustical insulation complying with ASTM C665, Type 1.
 - 2. Widths to fit stud spacing.

PART 3 - EXECUTION

3.01 ERECTION OF DRYWALL STUD PARTITIONS

- A. Align partitions accurately according to partition layout. Anchor runner channels to concrete slabs with concrete stub nails or powder-activated anchors at 24" on center. Anchor runner channels to ceiling where occurs with stove bolts. Install headers where required to receive runners where studs extend above ceiling system.
- B. Position studs vertically in runners, spacing studs 16" on center, maximum. Anchor studs to top and bottom runners with stud fasteners. Locate studs no more than 2" from frame jambs, abutting partitions, corners, etc. Anchor studs to frame anchor clips by bolt or screw attachment. Install headers over openings as recommended by the manufacturer.
- C. Provide diagonal bracing at head of stud walls that terminate above the ceiling. Bracing shall consist of 1-1/2" cold-rolled channels bent to V shape or studs extending at 45 degrees from partition head to structure above. Locate bracing 4'-0" on center, maximum.

3.02 MISCELLANEOUS FRAMING AND FURRING

- A. Provide necessary framing and furring for special framing at recesses, specialty items, etc.
- B. Install furring channels over back-up material. Position channels 16" on center vertically or horizontally as indicated. Use powder-activated fasteners or stub nails at 24" on center along alternating flanges. Shim channels plumb as required.

- C. Install resilient channels horizontally at 16" on center and screw attach to each support. Provide channel at top and bottom of wall and around all openings.

3.03 INSTALLATION OF GYPSUM BOARD

- A. Apply vapor barrier over face of insulation and beneath gypsum board at exterior furred walls where unfaced batts are utilized. Cover joints of vapor barrier with pressure sensitive tape.
- B. Apply gypsum board panels according to manufacturer's recommendations for fire-resistive construction, if required. Abutting ends and edges of panels shall occur over stud flanges or furring. Joints on opposite sides of partitions shall not occur over the same stud. Install bottom of gypsum board panels 5/8" above concrete floors.
- C. Apply board to studs or furring with drywall screws spaced 12" on center in the field of the board and 8" on center staggered along abutting edges.
- D. Where indicated, apply gypsum board directly to masonry or concrete substrate using adhesive according to manufacturer's instructions.
- E. Apply metal edge trim and corner bead according to manufacturer's recommendations at gypsum board edges that are exposed or abut other materials.
- F. Finish joints, trim, and fastener dimples as recommended by manufacturer of joint treatment system and sand smooth to provide level of finish as follows:
 1. "Level 5" finish surface at skylight shafts and where indicated.
 2. "Level 4" finish surface at all other exposed gypsum board partitions and walls.
 3. "Level 1" finish surface where concealed.
- G. Install control joints in gypsum board partitions and walls in accordance with referenced Gypsum Association Document GA-216. Runs between control joints shall not exceed 30'-0" on center.

3.04 ACOUSTICAL INSULATION

Install at all gypsum board partitions.

END OF SECTION

SECTION 09 51 00 SUSPENDED CEILING SYSTEMS

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Suspended Ceiling Systems with Lay-in Panels
 - 2. Light Fixture and Cabinet Heater Protection

1.02 REFERENCE STANDARDS

- A. Install acoustical materials in accordance with the requirements listed for job conditions in the current Acoustical Materials Association Bulletin. Comply with ASTM Standards referenced within the text of this specification.

1.03 SYSTEM PERFORMANCE REQUIREMENTS

- A. Acoustical: 3/4" mineral fiber flush lay-in panels shall have a minimum noise reduction coefficient (NRC) rating of 0.70 in accordance with ASTM C423. The completed suspended acoustical grid ceiling system shall have a Ceiling Attenuation Class (CAC) rating of not less than 40 in accordance with ASTM E1414.
- B. Fire: Panels and suspension system shall be Class A listed and rated a minimum of one-hour where indicated. The completed fire-rated assembly shall comply with one-hour fire resistance ratings test conducted by Underwriters Laboratories, Inc. (UL), or other recognized independent testing laboratory.

1.04 SUBMITTALS

- A. Product Data: Submit manufacturer's catalog data indicating systems proposed for installation including details of light fixture protection and certification of fire resistance assembly required to comply with Article 1.03. Also submit specific requirements and data for hold-down clips.
- B. Samples: Submit sample for each type of lay-in panel and ceiling grid meeting the requirements of this Specification.

1.06 DELIVERY, STORAGE AND HANDLING

Deliver in manufacturer's original, unopened packaging and store in a clean, dry area until ready for use.

1.07 MAINTENANCE

Extra Materials: Provide the Owner with two (2) full packages of each type of lay-in ceiling panel used on the project at the completion of the job.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturers - Lay-in Ceiling Panels:
 - 1. Armstrong World Industries
 - 2. CertainTeed
 - 3. United States Gypsum Company
 - 4. approved substitute
- B. Acceptable Manufacturers - Suspended Grid Systems:
 - 1. Armstrong World Industries
 - 2. Chicago Metallic Corporation
 - 3. United States Gypsum Company

4. CertainTeed
5. approved substitute

2.02 SUSPENDED CEILING SYSTEMS

Suspended Ceiling Systems listed in the finish schedule will be one of the following types. Refer to specific paragraphs of this Section for component specifications.

A. SCS -1: (2'x4' rated)

1. Suspension System: T & T suspension system
2. Module: 24" x 48"
3. Fire Rating: One Hour
4. Lay-In Panels: 3/4" mineral fiber panels, Armstrong Fine Fissured Square Edge, or equivalent of other acceptable manufacturer. NRC 0.70. Light Reflectance 0.85.

2.03 SUSPENSION SYSTEM

A. Commercial quality cold-rolled steel T & T system consisting of the following:

1. Main tee runners and cross tees shall be nominal 1" wide exposed face and 1-1/2" web height. Finish exposed surfaces with factory applied baked enamel, white color. Provide cross tees to form 24" x 48" or 24" x 24" grid.
2. Provide hold-down clips as necessary to achieve specified fire rating, in Lobbies and Corridors where ceiling height is 9'-0" or less, and in Vestibules with doors to exterior, subject to wind uplift.
3. Edge molding shall be channel or angle shaped section fabricated of 0.25" thick electro-galvanized cold-rolled steel with factory applied baked enamel, white color. Provide factory outside corners radiused to accommodate bullnose CMU.

B. Hanger Wires: No. 12 galvanized steel wire.

C. Tie Wires: No. 18 galvanized steel wire.

D. Cold-Rolled Channels: 16 gauge galvanized steel channels, 1-1/2" deep with 9/16" flanges.

2.04 ACOUSTICAL BLANKETS (FOR USE IN RETURN AIR PLENUMS)

USG Thermafiber Acoustical Foil Faced Attenuation Blankets, 3" thickness.

2.05 LIGHT FIXTURE AND CABINET UNIT HEATER PROTECTION

Use protection system complying with one-hour fire resistance laboratory tests conducted by Underwriters Laboratories, Inc., or other recognized testing laboratory applicable to the Roof - Ceiling Assembly and the Acoustical Ceiling System. USG Thermafiber Light Fixture Protection Kit or acceptable equivalent of other manufacturer.

PART 3 - EXECUTION

3.01 INSTALLATION OF SUSPENSION SYSTEM

A. 2' x 4' Grid Suspension System:

1. Twist-tie and suspend hanger wires from bottom chord of steel joists or cold-rolled channel supports at joist spacing or maximum of 48" on center, whichever is less. Install hanger wires as required to provide a maximum deflection of 1/360 of the span and provide level ceiling within 1/8" in 12'-0". Hanger wires shall be no more than one in six out of plumb unless countersloping wires or horizontal bracing is provided. Suspension hanger wires shall not press against ductwork or piping. Attach main runners to hanger wires. Install main tee runners at 48" on center.

2. Install additional hanger wires to main runner and cross tees at intersections adjacent to light fixtures or combination damper / diffusers and in acceptance with manufacturer's installation criteria. Coordinate with mechanical subcontractor for specific number of hanger wires required. Suspension system construction shall comply with UL listing for fire-rated assembly provided. Suspension system shall also conform to the installation requirements of ASTM C636.
3. To complete a 24" x 48" grid, install cross tees 24" on center at right angles to main tee runners. Install additional cross tees to form 24" x 24" grid. Lock cross tees into sides of main tee runners. Main tee runners and cross tees shall be straight in alignment and flush at intersections. Install metal edge molding wherever the grid abuts walls, columns, and other vertical surfaces. Frame around openings. Main tee runner and metal edge molding pieces shall not be less than 24" long when spliced in a straight run.
4. Provide hold-down clips at lay-in panels as required in Article 2.03.

B. Reflected Ceiling Plan: Attention is directed to the reflected ceiling plan drawings which shall be followed for the layout of the suspension grid. Any deviation from this drawing must be approved by the Owner.

3.02 INSTALLATION OF LAY-IN PANELS

Install panels in accordance with manufacturer's instructions. Where required, cut units to fit. Install lay-in panels flush in grid. Panels shall be lying flat within grid system.

3.03 LIGHT FIXTURE AND CABINET UNIT HEATER PROTECTION

For fire resistant assembly, install box, tent, or flat cover light fixtures and cabinet unit heaters for fire-rated protection applicable to the ceiling assembly being provided. Install per manufacturer's recommendation.

3.04 FINAL APPEARANCE

On completion, panels and grid shall be clean and free from defects. Remove and replace dirty, defaced, scarred, or otherwise defective panels and grid. Touch up of scarred panels will not be acceptable.

END OF SECTION

SECTION 09 61 16 EPOXY VAPOR SEALER

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes: Vapor emission and alkalinity control system (Epoxy Vapor Sealer) for application to designated areas of interior concrete slab.

1.02 SUBMITTALS

- A. Product Data: Submit manufacturer's product data on all materials specified in this Section in accordance with Section 01 33 00.
- B. Quality Control Submittals: Submit in accordance with Section 01 33 00
 1. Submit manufacturer's installation instructions, including detailed slab preparation measures.
 2. Submit certificates required under Article 1.03.
 3. Submit manufacturer's warranty as stated in Article 1.07.
- C. Contract Closeout Submittals: Submit specified warranty in accordance with Section 01 77 00.

1.03 QUALITY ASSURANCE

Qualifications: Installer shall be approved by the manufacturer and have an installation crew fully trained and qualified to install the specified sealant material.

1.04 DELIVERY, STORAGE AND HANDLING

As required by the manufacturer.

1.05 PROJECT CONDITIONS

Environmental Requirements: Before beginning work, building shall be warm, dry and well ventilated. Maintain substrate temperature at temperature recommended by the manufacturer.

1. Adequate ventilation shall be maintained by the General Contractor.

1.06 WARRANTY

Manufacturer warrants that conditions set forth for maximum vapor transmission and alkalinity (at the surface of the concrete slab on grade sub-strate) will be maintained throughout the life of the resilient floor covering beneath which the sealer is applied. Refer to Section 09650 for limits of vapor transmission. Limits for alkalinity as defined by manufacturer of the resilient flooring adhesive. Warranty shall include non-pro-rated initial dollar limit warranty covering material and labor replacement cost of epoxy vapor sealer, and resilient flooring material and adhesive.

PART 2 - PRODUCTS

2.01 EPOXY VAPOR SEALER

- A. Acceptable Manufacturers and Systems:
 1. Advanced Moisture Control, Inc. - Vapor-Green FC
 2. Koester Warterprofing Systems - Koester VAP I 2000 System
 3. or approved substitute
- B. Sealer System: Koester VAP I 2000 System , or acceptable equivalent of other manufacturer.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verification of Conditions: Examine substrate for excessive moisture content and unevenness which would prevent application of epoxy vapor sealer. Report unsatisfactory conditions to Contractor in writing with copy to Owner.
- B. Acceptance: Do not proceed with installation of sealer until defects have been corrected except where correction is indicated under Preparation. Beginning of installation means acceptance of existing substrate.

3.02 PREPARATION

- A. Shot blast all floors to receive specified sealer as recommended by the sealant manufacturer.
- B. Provided clean uncontaminated, absorbtive, and sound surface. Do not acid etch.

3.03 INSTALLATION

- A. Apply Epoxy Vapor Sealer as recommended by manufacturer. Protect during specified curing period from traffic, topical water, and contaminants.
- B. Following installation and curing of sealant, seal all joints and cracks in concrete floor. Refer to Section 07 92 00.

3.04 CLEANING

Remove all materials and debris and leave the completed surface clean and dry.

END OF SECTION

SECTION 09 65 00 RESILIENT FLOORING

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Vinyl Composition Tile
 - 2. Rubber Base
 - 3. Vinyl Edging
 - 4. Adhesive

- B. Related Sections:
 - 1. Epoxy Sealer: Section 09 61 16
 - 2. Carpeting: Section 09 68 00

1.02 SUBMITTALS

- A. Samples: Submit to the Owner a full set of resilient flooring samples scheduled to be used for the project. Samples shall be complete and up to date. Colors will not be selected until all samples are received by the Owner.

- B. Contract Closeout Submittals: Submit in accordance with Section 01 77 00. Submit specified warranties and manufacturer's maintenance instructions for each type of resilient flooring specified. Include recommended cleaning methods, materials, and frequency.

1.03 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the site in unopened containers and store protected in accordance with the manufacturer's directions and recommendations. Unless otherwise directed, store materials in original containers at not less than 70 degrees F. for not less than 24 hours immediately before installation.

1.04 PROJECT CONDITIONS

- A. Maintain temperature in space to receive resilient flooring between 70 degrees F. and 90 degrees F. for not less than 24 hours before and 48 hours after installation. Following 48 hour period, maintain minimum temperature of 55 degrees F. until completion of project.

- B. Verification of Conditions: Examine and test substrate for excessive moisture content (using Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride - ASTM F1869) and unevenness which would prevent execution and quality of flooring installation as specified. Submit copies of moisture test results conducted on concrete floor slabs to Owner.

1.05 WARRANTY

- A. Resilient flooring installer shall provide a written statement, in accordance with Section 01 77 00, that the installation is warranted for one (1) year and that he will, upon demand, repair or replace any resilient flooring that does not adhere properly and will correct any condition due to faulty installation during the warranty period. The warranty period shall commence at the Date of Substantial Completion.

- B. Provide one (1) year warranty from each flooring product manufacturer, commencing from the Date of Substantial Completion, agreeing to repair or replace the resilient flooring systems used on the project (including finish materials and adhesives) if system fails to perform (i.e., loss of adhesion, cupping, cracking, separation of joints, displacement, etc.) due to failure of materials, including without limitation, failure of adhesives.

- C. Using the Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride (ASTM F1869) the adhesives shall be warranted against failure when used on a substrate exhibiting the following maximum moisture contents.
 - 1. Up to and including **7.0 lbs.** per 1,000 S.F. in a 24 hour period for vinyl composition and rubber tile when tested at any time during the warranty period.

1.06 MAINTENANCE

- A. Extra Materials: Provide the Owner, at the completion of the project, the following items:
 - 1. Resilient flooring in the amount of 1% of each color and type used.
 - 2. Two cases of rubber base of each color and type used
 - 3. One gallon of each type of adhesive used

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturers - Vinyl Composition Tile:
 - 1. Armstrong
 - 2. Tarkett
 - 3. Mannington
 - 4. or approved substitute

- B. Acceptable Manufacturers - Rubber Base and Vinyl Edging:
 - 1. Azrock Floor Products
 - 2. Nora Rubber Flooring
 - 3. Johnsonite
 - 4. R.C. Musson Rubber Company
 - 5. Roppe Rubber Corporation
 - 6. Burke Industries
 - 7. Armstrong
 - 8. or approved substitute

2.02 VINYL COMPOSITION TILE

- A. Armstrong Standard Excelon, Imperial Texture Multicolor or equivalent of other acceptable manufacturer.
 - 1. 12" x 12" x 1/8"
 - 2. Owner shall have option to select from the full range of colors. Up to four (4) colors may be selected by Owner for use in different rooms or to create floor patterns (floor pattern to have 50% field color and 50% divided between up to three (3) other colors).
 - 3. Floor patterns will be furnished by Owner at time of color selections.

- B. 12" x 12" x 1/8" Armstrong "Slip Retardant" Safety Zone. Patterns and colors as indicated.

2.03 RUBBER BASE

- A. 1/8" thick rubber base, 4" high (6" high at toilets where rubber base is scheduled).
 - 1. Provide base with top and toe cove at resilient flooring; provide top and bottom cove base at carpeting.
 - 2. Factory-formed external and internal corners are not allowed. Use rolled-goods wherever possible.
 - 3. Up to three (3) colors may be selected by Owner.

- B. At Stairs where treads and risers abut finished walls instead of painted steel stringer, provide rubber skirt cut to fit tight to rise and run. Coved top edge shall match slope of stair stringer.

- 2.04 VINYL EDGING
- A. Provide vinyl edging at all exposed edges of resilient flooring and / or carpeting. Johnsonite CTA-XX series or equivalent of other acceptable manufacturer.
 - 1. Provide vinyl transition/joiner, 2-1/2" wide, Johnsonite CTA-XX-K, or equivalent of other acceptable manufacturer, at transition between carpet and resilient flooring.
 - 2. Provide vinyl transition/joiner, 2-1/2" wide, Johnsonite CTA-XX-J, or equivalent of other acceptable manufacturer, at transition between carpet sealed concrete floor.
 - 3. Up to three (3) colors as selected by Owner.
- 2.05 MOISTURE VAPOR CONTROL - CONCRETE SLAB-ON-GRADE SEALER:
- A. At designated concrete slabs, reference Epoxy Concrete Sealer as specified in Section 09 61 16.
- 2.06 ADHESIVE
- A. Provide adhesives required by the manufacturer of the material being installed to achieve specified warranty requirements. Adhesive for vinyl edging and base shall be a type not affected by heat. Clear spread adhesives are not permitted.
- 2.07 LATEX UNDERLAYMENT COMPOUND
- As approved by resilient floor manufacturer, compatible with adhesive to be used for installation of flooring materials.

PART 3 - EXECUTION

- 3.01 EXAMINATION
- A. Do not proceed with installation or resilient flooring until unacceptable conditions have been corrected. Commencement of flooring installation by the Contractor indicates acceptance of the moisture content and finish of the concrete floor.
- 3.02 PREPARATION
- A. Surface Preparation:
 - 1. Level uneven concrete floor joints or other irregularities by filling with latex underlayment compound.
 - 2. Sand leveled areas to provide a completely level surface. Any required grinding or chipping of concrete will be at the expense of the Contractor.
 - 3. Thoroughly clean concrete floors before applying floor coverings.
 - 4. Remove rough spots and any foreign matter that might be evident through the floor covering.
 - 5. Prime concrete floors as recommended by the manufacturer of the flooring material.
 - B. Verify compatibility of the floor covering mastic with previously applied curing compound, if any.
- 3.03 APPLICATION OF ADHESIVES
- A. Mix and apply adhesives in accordance with manufacturer's instructions. Provide safety precautions during mixing and applications as recommended by adhesive manufacturer. Apply uniformly over surfaces.
 - B. Cover only that amount of area that can be covered by flooring material within the recommended working time of the adhesive.
 - C. Remove any adhesive that dries or films over. Do not soil walls, bases, or adjacent areas with adhesives. Promptly remove any spillage.

- D. Apply adhesives with notched trowel or other suitable tool. Clean trowel and rework notches as necessary to ensure proper application of adhesive.

3.05 INSTALLATION

- A. Complete installation of resilient flooring in strict accordance with the recommendations and specifications of the manufacturer. Make joints straight, tight and flush. Tightly cement to floor.
- B. Coordinate layout of each floor area between walls so cuts on opposite sides of the area are of equal width. Where tile with a directional pattern is used, all tile shall run in same direction in a given room. Confer with Owner for direction of tile. Owner will furnish layout of multi-color floor patterns following color selections.
- C. Rubber base shall be tightly cemented to wall with butt joints 1/16" or less in width. Install base in toe space of cabinets. Install continuously around outside and inside corners with joints a minimum of 24" away from corners on both sides. Preformed corners are not allowed.
- D. Install vinyl edging at exposed edges of carpet and resilient flooring surfaces, and at transitions between carpet and resilient flooring. Install edging directly under doors where differing floor materials meet.

3.06 CLEANING

- A. Upon completion, remove loose, cracked, chipped, stained, or otherwise defective resilient flooring or base and replace in a satisfactory manner. Clean surfaces using only cleaners approved by the flooring product manufacturer. Remove mastic cement from adjoining work with particular care to not damage such work.
- B. Allow a minimum of seven (7) days for resilient flooring to adhere tightly before dry mopping and buffing.

3.07 PROTECTION

- A. Protect finished work from damage by subsequent construction operations. Where possible, lock rooms following cleaning of flooring.

END OF SECTION

SECTION 09 68 00 CARPETING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Modular Carpet
 - 2. Carpet Accessories and Adhesive
 - 3. Vinyl Edging

- B. Related Sections: Resilient Flooring: Section 09 65 00

1.02 SYSTEM DESCRIPTION

Performance Requirements: Carpeting shall meet the minimum requirements of the following Flame Retardant Tests. Test results shall be provided for each type carpeting provided.

Flame Resistance (Pill Test):	Passes (CPSC FF-1-70 - ASTM D2859)
Smoke Density:	Less than 450 (ASTM E662)
Flooring Radiant Panel:	Class 1 (ASTM E648)

1.03 SUBMITTALS

- A. Product Data: Submit complete specifications for carpet. Submit manufacturer's written recommended installation procedures for each type of carpet. Include product data of manufacturer recommended adhesives.

- B. Samples: Submit two 18" x 18" size samples of carpet type specified for Owner's selection.

- C. Quality Control Submittals: Submit test results in accordance with Articles 1.02 and 3.01.

- D. Contract Closeout Submittals:
 - 1. Maintenance Data: Submit carpet manufacturer's recommended maintenance program written specifically for this project in accordance with Section 01000.
 - 2. Warranty: Submit manufacturer and installation warranties specified in Article 1.07.

1.04 QUALITY ASSURANCE

- A. Carpet installer must have a minimum of five (5) years experience on installations of similar size and complexity. The installation crew must be fully qualified to install the type of carpet to be furnished.

- B. Carpet materials shall be from a single dye lot. Variations in color or texture shall be grounds for rejection and replacement with new acceptable material at no cost to the Owner.

1.05 DELIVERY, STORAGE AND HANDLING

Deliver carpet in original mill wrapping or cartons with each carton having register number tags attached or register number stenciled on bale and intact. Store under cover in well-ventilated spaces as soon as delivered. Protect from damage, dirt, stains, and moisture. Protect adhesive and accessories in original unopened containers. Protect adhesives from freezing.

1.06 PROJECT CONDITIONS

- A. Existing Conditions: Carefully check dimensions and other conditions and be responsible for proper fitting of carpet in areas designated.

- B. Verification of Conditions: Examine and test substrate for excessive moisture content (using Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride - ASTM F1869) and unevenness which would prevent execution and quality of carpet installation as specified. Submit copies of moisture test results conducted on concrete floor slabs to Owner.

1.07 WARRANTY

- A. Provide Manufacturer's lifetime warranty against flaws in material or manufacture. Warranty shall provide for carpet replacement if excessive wear occurs within the ten year period. Excessive wear is defined as greater than 10% loss of face weight.
- B. Contractor shall provide written warranty which agrees to repair or replace defective materials and workmanship of carpeting work, including specified tuft bind, any loss of adhesion to the sub-floor, and any frayed, open, or raveled seams. In addition, to replace and reinstall any carpet which does not provide an acceptable, wrinkle-free appearance, and to correct any condition due to faulty installation which may appear within two years of the date of final acceptance of the project.

1.08 MAINTENANCE

- A. Carpet: Furnish Owner with 2% extra stock of each color and type used.
- B. Adhesive: Furnish Owner with one (1) extra gallon of each type of carpet adhesive used.

PART 2 – PRODUCTS

2.01 CARPET (CPT 1)

- A. Acceptable Carpets: Where indicated on the Finish Schedule
 1. Interface "Cubic" 50cm x 50cm carpet tiles
 2. Product No.: 1380102500
 3. Color: As selected by Owner from full range of available colors.
 4. or approved substitute
- B. Color: A maximum of three (3) colors per carpet type may be selected.

2.03 ADHESIVES

Adhesive recommended by carpet manufacturer capable of withstanding three (3) pounds of moisture emanating from concrete slab per thousand square feet area during a 24-hour period. Provide manufacturer's recommended seam cement.

2.04 VINYL EDGING AND RUBBER BASE

As specified in Section 09 65 00.

2.05 LATEX UNDERLAYMENT COMPOUND

As approved by carpet manufacturer, compatible with adhesive to be used for installation of carpet.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verification of Conditions: Examine substrate for excessive moisture content and unevenness that would prevent execution and quality of carpet installation as specified. Submit copies of moisture test results conducted on concrete floor slabs to Owner.
- B. Do not proceed with installation of carpet until unacceptable conditions have been corrected.

Commencement of installation of the carpet by the Contractor indicates acceptance of the moisture content and finish of the concrete floor.

3.02 PREPARATION

- A. Level uneven floor joints or other irregularities in substrate by filling with latex underlayment compound. Sand leveled areas to provide a completely level surface. Any required grinding or chipping of concrete shall be at the expense of the Contractor. Remove rough spots and foreign matter which may be evident through the carpet.
- B. Thoroughly clean and damp mop concrete floor slabs and allow to dry before applying adhesive.

3.03 APPLICATION OF CONCRETE SEALER

- A. Concrete Slab-on-Grade: Apply to concrete floor slabs only if tests show moisture in excess of manufacturer's acceptable standard, if application of sealer is approved by carpet manufacturer, and approved by Owner. Concrete sealing will be paid for by Owner on a time and material basis by Change Order, providing Owner has approved of this measure.
- B. Sealer Application: Method and quantity of sealer application shall be in strict accordance with concrete sealer manufacturer's instructions.

3.04 INSTALLATION

- A. The modular carpet shall be laid out in a "shuffle pattern" . Verify with Owner prior to installation.
- B. Follow recommended procedures for installation furnished by the manufacturer. Carpet material for this project shall be adhered directly to the floor. Unsatisfactory installation resulting from work performed shall be rejected and shall result in the removal and reinstallation of carpet at the expense of the installer. Particular attention should be paid to manufacturer's recommendations for application of adhesives, seaming, and cross jointings.
- C. Remove adhesives and seam cement from the face of the carpet immediately.
- D. Install carpet over recessed electrical floor box covers in rooms scheduled to receive carpet.
- E. Cut carpeting around floor cleanouts, floor boxes and other objects where access is required.

3.05 CLEANING

- A. After installation is complete, clean up dirt and debris, remove spots, and clean carpet with cleaning agents recommended by the manufacturer. Remove loose threads with sharp scissors. Clean carpet with vacuum cleaner.
- B. Remove rubbish, wrapping paper, and scrap material from the job site. Leave excess pieces of usable carpet with the Owner for future use.

3.06 PROTECTION

Following cleaning of carpet, completely cover carpet with heavy protective paper or polyethylene sheeting. Leave protective covering in place until work in area is completed and permission for removal is granted by Owner.

END OF SECTION

SECTION 09 91 00 PAINTING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes: Exterior surfaces of metal not specifically excluded shall be painted. Interior surfaces not specifically excluded shall be painted or natural finished. Refer to Room Finish Schedule.
- B. Work Not Requiring Painting or Finishing: In addition to material obviously not requiring paint such as glass, flooring, etc., the following surfaces shall not be painted:
 - 1. Surfaces indicated by the finish schedule to remain unfinished
 - 2. Factory finished surfaces except those indicated in Article 3.07
 - 3. Prefinished metal roofing, siding, and flashing
- C. Related Sections:
 - 1. Finish Carpentry: Section 06 20 00
 - 2. Steel Doors and Frames: Section 08 11 13
 - 3. Prefinished Wood Doors: Section 08 14 29

1.02 SUBMITTALS

- A. Samples: Make paint and stain samples as requested by the Owner. Remake samples as necessary until all color samples are approved. Approval is for color only.
- B. Color Schedule: The Owner will provide a color schedule in four (4) copies to the Contractor listing paint colors selected. (Paint color selections will be made in conjunction/ coordination with all other color selections required for the project.) Color selections will be made by the Owner from color systems of Sherwin-Williams or Kwal-Howells. If materials of other manufacturers are used, colors must match selected colors and samples will be required by the Owner. Paint color selections will refer to base coats only and may be subject to minor alterations prior to application of final coat; no final coat shall be applied until authorized by the Owner.

Contractor shall not purchase paint for final coat until colors are approved by the Owner.

- C. Quality Control Submittals:
 - 1. Submit a letter to the Owner listing the brand, quality and technical specification of each different material intended for use on the project. Materials shall be cross referenced to coating systems specified in Articles 3.04 and 3.05. Materials shall be approved by the Owner before ordering.
 - 2. Submittal letter must specifically address the product compliance with Green Seal Standard GS-11 for interior paints and coatings. Refer to Article 2.01, Paragraph A, 3 for additional information.
- D. Closeout Submittals:

Furnish coating maintenance instructions including care and cleaning instructions and touchup procedures.

1.03 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials required for painting in unbroken packages bearing the brand and name of manufacturer. Order materials sufficiently in advance to be on the job when needed and deliver at the building in sufficient quantities so the work will not be delayed. No claim by the Contractor concerning unsuitability of any material specified or his inability to produce first-class work with the same, will be entertained.

- B. Storage and Mixing: A room or space will be assigned in which to mix or store painting materials. No empty containers of any sort or description bearing the name or brand of any manufacturer shall be brought upon the premises for mixing of paint unless labels are canceled and containers are closely marked as to contents. The paint storage area shall be open for periodic observation by the Owner to verify only approved materials are being used.

1.04 PROJECT CONDITIONS

- A. Environmental Requirements: Do not apply exterior paint in extreme cold, frosty, foggy, or damp weather. Paint only when the exterior temperature is 50 degrees F. or higher. Ensure that all surfaces to be painted are absolutely dry. In no case will exterior painting be allowed while dust is blowing.
- B. Existing Conditions: Spaces must be clean before interior painting is started. Do not paint in rooms or spaces where rubbish has accumulated or while rubbish is being removed. Painting shall not be allowed in dusty rooms. Do not remove rubbish while finish is fresh. Surfaces to which finish is to be applied shall be dry and clean. The space in which paint is being applied must be maintained at a constant temperature and humidity, as required by the manufacturer of the product being utilized.

1.05 MAINTENANCE

At the completion of project, turn over to the Owner one (1) full gallon of each paint and stain color and type used, along with the color number or formula for each type. Epoxy and high performance coatings are not included to be turned over to the Owner, however, submit color number or formula of paint color and type.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. General:
 - 1. Products not specified by name shall be of manufacturers named in Paragraph B listed below and meet standards required for LEED Certification, refer to item 3 below.
 - 2. Provide primers and undercoat paint produced by the same manufacturer of the finish coats.
- B. Acceptable Manufacturers: The following manufacturers will be acceptable for use on the work:
 - 1. For Paint, Stain, and Varnish:
 - Sherwin-Williams
 - Kwal Paint Co.
 - Pittsburgh (PPG)
 - PPG - Glidden Professional Paints
 - Benjamin Moore
 - AFM Safecoat
 - Kelly-Moore Paint Co.

PART 3 - EXECUTION

3.01 EXAMINATION

Examine surfaces scheduled to receive paint and finishes for conditions that will adversely affect execution, permanence, or quality of work. Surfaces shall be put into an acceptable condition through preparatory work as specified in Article 3.02. Do not proceed with surface preparation or coating application until conditions are suitable.

3.02 PREPARATION

- A. Protection: Furnish and lay drop cloths or mask off areas where painting is being done to protect floors and adjacent work from damage during painting and finish operation. Where it becomes necessary to remove temporary coverings placed by other trades, replace same in

proper manner. Remove soiled rags and waste from the building every night. Do not allow to accumulate.

1. Be responsible for damage caused by painting to work of other trades, repairing same to the satisfaction of the Owner. Replace materials damaged to such an extent that they cannot be restored to their original condition.

B. Surface Preparation:

1. General: Sand finishes on wood and metal surfaces between coats to assure smoothness and adhesion of subsequent coats. Use extra fine sandpaper to avoid cutting the edges when sanding. Apply putty or spackling compound after surfaces are primed and primer is dry. Bring filler material flush with adjoining surfaces. Surfaces shall be dry, clean and smooth before starting work. Fill cracks, holes or checks full and make smooth before finish is applied to surfaces. Fill cracks that occur after walls are sized.
2. Interior Wood Surfaces to be Painted: Touch-up sap and knots with an approved sealer or primer. Fill voids with putty after primer is dry.
3. Interior Ferrous Metal: Remove foreign material from unprimed metal with wire brush and dust clean.
4. Shop Primed Metals: Touch-up shop primed metals with material similar to the original shop-applied primer. Sand and dust primer on hollow metal work before finish painting to remove grease and dirt film from surfaces. Shop primer must be compatible with finish coats described herein.
5. Interior and Exterior Zinc Coated Metal (galvanized surfaces): Wash with lacquer thinner and prime as specified.
6. Interior Wood to be Clear Finished: Sand as required. Fill voids and nail holes after first coat is dry using a filler compatible with the finish system and matching color.
7. Exterior Ferrous Metal: Remove foreign material from unprimed metal with wire brush and dust clean.
8. Primed Structural Elements: Where shop primed structural elements are exposed, are to be field painted, and are less than 20 feet above finish floor, special attention must be given to preparation of the shop primed surface. Runs, sags, and other irregularities in the shop applied primer must be sanded smooth and touched up with matching color and type primer before application of finish coat.
9. At all other surfaces not covered in the items listed above, make all necessary surface preparation, testing, and sample preparation to insure successful coverage and performance.

3.03 WORKMANSHIP

- A. Substrate Surface: The application of the first coat by Contractor does not relieve him of the responsibility for the base. If the surfaces are not in proper shape for painting; repair, rebuild, or refinish before proceeding with the work. Do not apply coats on damp or wet surfaces. Contractor will be held responsible for poor work caused by improper surface finish or condition.
- B. Application: Spread materials evenly without runs, excessive brush marks, or sagging of materials.
- C, Roller Application: Where paint is rolled on, use a fine nap roller so a nearly flat or orange peel texture is obtained.
- D, "Mirror" Finish: Where latex coatings are applied to primed metal, spray application or special application techniques may be required to obtain acceptable smooth finish. Review application procedure with Owner and obtain approval before proceeding.

3.04 COATING SYSTEM - INTERIOR

The products specified for each of the following systems are manufactured by Sherwin-Williams (unless otherwise noted). Products of other acceptable manufacturers listed under Article 2.01,

Paragraph B, may be utilized if they match or exceed the Technical Specification of the listed product, and gain the approval of the Architect.

A. **Woodwork - Painted:**

First coat	ProMar 200 Zero VOC Primer, 0g/L VOC
Second coat	Latex Semi-Gloss, Pro Industrial Acrylic, B66-650 Series, 0 g/L VOC
Third coat	Latex Enamel Semi-Gloss, Pro Industrial Acrylic B66-650 Series, 0 g/L VOC

B. **Woodwork - Stained:**

First coat	Transparent wood stain, Wood Classics, A49W800 Series, 250 g/L VOC
Second coat	Clear finish, Wood Classics WB Polyurethan A68, <350 g/L VOC
Third coat	Clear finish, Wood Classics WB Polyurethan A68, <350 g/L VOC

C. **Ferrous, Zinc Coated or Factory-Primed Metals - Painted:**

First coat	Pro Industrial Pro-Cryl Universal Primer B66-310 Series, <100 g/L VOC (prepare zinc coated metal as recommended by manufacturer).
Second coat	Latex Semi-Gloss, Pro Industrial Acrylic, B66-650 Series, 0 g/L VOC
Third coat	Latex Semi-Gloss, Pro Industrial Acrylic, B66-650 Series, 0 g/L VOC

D. **Hollow Metal Frames and Doors - Painted:**

First coat	Factory-prime coat (sanded), touch-up repairs, scrapes, or any bare metal with Pro Industrial Pro-Cryl Universal Primer B66-310 Series <100 g/L VOC
Second coat	Latex Semi-Gloss, Pro Industrial Acrylic, B66-650 Series, 0 g/L VOC
Third coat	Latex Semi-Gloss, Pro Industrial Acrylic, B66-650 Series, 0 g/L VOC

E. **Gypsum Board - Painted:**

First coat	Suitable latex primer, ProMar 700 Primer/Finish, <50 g/L VOC
Second coat	Latex, Eggshell, Pro-Mar 200 Zero VOC, B26-2600 Series, 0 g/L VOC
Third coat	Latex, Eggshell, Pro-Mar 200 Zero VOC, B26-2600 Series, 0 g/L VOC

Painting Subcontractor shall meet with the Owner before application to review application technique and desired finish.

3.07 MISCELLANEOUS REQUIREMENTS

- A. Mechanical Piping and Ductwork: Wherever exposed insulated pipe or ductwork occurs in rooms where walls or ceilings are finished, cover insulation jacket with one coat sealer and two coats flat paint.
1. Wherever exposed uninsulated piping or ductwork occurs in rooms where walls or ceilings are finished, piping or ductwork shall be painted as called for under ferrous, zinc coated, or factory-primed metals. Identification markings will be applied by mechanical subcontractor under Division 23.

- B. Grilles, Registers and Louvers: Grilles, registers, and louvers shall be painted, colors as selected by Owner, thoroughly covering surfaces that are visible after installation. After installation, touch up screws and scuffed spots or repaint as required to achieve a uniform paint job.
- C. Job Finished Woodwork: Spread finish evenly and thoroughly brush out. Sand work between coats with 150 grit or finer sandpaper. Finish the upper and lower edges of job-finished wood doors the same as the face. This work shall be done after doors have been fitted and are ready for final hanging.
- D. Electrical Wiremold, Plugmold, and Exposed Conduit: Paint to match surface on which installed.
- E. Colors Accent: The Owner may select accent colors (contrasting bright colors) for interior painted walls or ceilings. Where accent colors are selected, apply extra coats of paint required to obtain a completely opaque surface. Make allowance for this requirement in base bid. Additional labor or materials used for this purpose will not be allowable as an extra cost.
- F. Sanding: Lightly sand work between coats with 150 grit or finer sandpaper (as recommended by manufacturer) where multiple coats of gloss finish are applied.

3.08 CLEANING

At the completion of work, remove surplus materials, staging, and rubbish. Clean paint, clear finish, and stains from floors, glass, walls, and hardware. Leave the premises in clean condition.

END OF SECTION

SECTION 10 14 00 IDENTIFYING DEVICES

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes: Interior ADA Unframed Tactile Signs

1.02 SUBMITTALS

- A. Shop Drawings: Provide shop drawings and signage schedule in accordance with Sections 01 33 00 and 01 33 23.
- B. Samples: Submit full range of colors for Owner's selection.
- C. Sample Sign: Submit actual sample of each sign type for approval.

PART 2 - PRODUCTS

2.01 ADA COMPLIANT TACTILE SIGNS

- A. Acceptable Manufacturers:
 - 1. Signage Inc.
 - 2. Best Manufacturing Co.
 - 3. ASI Sign Systems
 - 4. SignWorks, LLC
 - 5. Platte Valley Signs
 - 6. Communication Industries, Inc.
 - 7. Leisure Time Products
 - 8. Division Ten Signage Corp.
 - 8. Exact Sign Systems
 - 9. Gordon Sign Company
 - 10. SignWorks LLC
 - 11. Avalanche Sign Manufacturing
 - 12. Precision Sign company
 - 13. or approved substitute
- B. General Signage Description:
 - 1. Raised numbers, letters, pictograms, and Braille shall be precision routed "Time-Bond System utilizing manufacturer's standard solid color material, surface painted not allowed. Changeable message signs shall have acrylic backplate mounted on clear Plexiglas coverplate over changeable message slots. Changeable message slots shall be formed by solid color spacers on backplate. Exposed surfaces of all sign types shall have solid color as selected by Owner. Text and background shall be contrasting colors, matte finish with 70% contrast between letters and background color.
 - 2. Backplate: .125 acrylic.
 - 3. Faceplate: .080 clear matte acrylic.
 - 4. Corners: 1/2" machine radiused.
 - 5. Paint: Sign faceplate painted subsurface a custom matte color. Color to be selected by Owner.
 - 6. Raised Text: Routed, time-bond system using manufacturer's standard solid color letter material. Grade II Braille, raster beads set into faceplate. Lettering to be raised 1/32" x 5/8" minimum height Helvetica Medium, upper case.
 - 7. Subsurface Lettering: Machine cut vinyl die cut Helvetica Medium text, applied subsurface to faceplate and backpainted.
 - 8. Changeable Message Strips: Printed by laser printer on heavy stock paper.

2.02 SIGN TYPES (ADA COMPLIANT TACTILE SIGNS)

- A. Changeable Message Signs:
 - 1. Size: 6" wide x 6" high.
 - 2. Braille: Grade 2, raster beads, text and numbers.
 - 3. Text Size: 1/32" raised, 1" high numbers and 5/8" high letters, Helvetica Medium, upper case, left justified.
 - 4. Changeable Message Strip: Single strip, 5/8" high letters.
 - 5. Quantity: Eighteen (18).
 - 6. Location: As shown on the drawings.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. ADA Compliant Tactile Signs:
 - 1. Install signs with adhesive foam tape and tamper resistant adhesive around perimeter in accordance with approved layout.
 - 2. Mount signs on wall so that tactile characters are 48" min AFF to the baseline of the lowest tactile character and 60" max. AFF measured to the baseline of the highest tactile character. Tactile signs shall be mounted on latch sided of a single door or to the right hand of pair of doors. If there is no room on the latch side of door, sign shall be mounted on the nearest adjacent wall.
 - 3. Sign shall be installed 9" from centerline of sign to the face of frame or installed so that a clear space of 18" x 18" min is provided beyond the arc of the doors at 45 degrees.
 - 4. Signs shall not be mounted on doors.
 - 5. Install printed changeable strips at all changeable message signs, text per approved shop drawings.

END OF SECTION