

PROJECT MANUAL

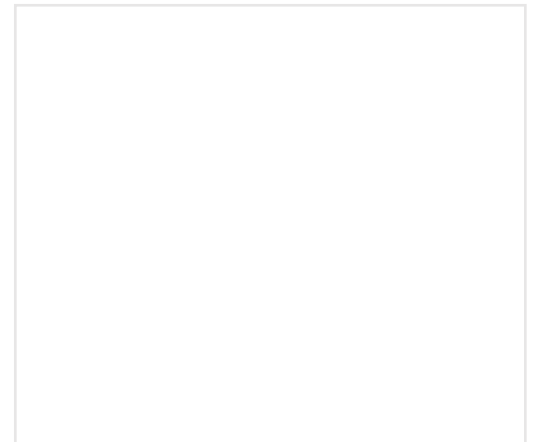
Sweet Home City Hall

Sweet Home, Oregon



3225 Main St.
Sweet Home, OR 97386

Project No.: 16158
Issue Date: 7/27/2018



PROJECT DIRECTORY

Sweet Home City Hall
Sweet Home, OR

OWNER:

City of Sweet Home
1140 12th Avenue
Sweet Home, OR 97386
Ph: (541) 367-8969
Attn: Ray Towry
Email: rtowry@ci.sweet-home.or.us

ARCHITECT:

Scott | Edwards Architecture LLP
2525 E Burnside Street
Portland, OR 97214
Ph: (503) 226-3617
Attn: Andrew Kraus
Email: andrew@seallp.com

STRUCTURAL ENGINEER:

WDY, Inc.
6443 SE Beaverton Hillsdale Hwy., #210
Portland, OR 97221
Attn: Dale Diloreto
Ph: (503) 203-8111
Email: dale@wdyi.com

CONTRACTOR:

TBD
-
-
Ph: -
Attn: -
Email: -

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**SECTION 00 11 13
ADVERTISEMENT FOR BIDS**

**Sweet Home City Hall
Sweet Home, OR**

The **City of Sweet Home** hereby extends an Invitation to General Contractors to bid on the **Sweet Home City Hall** project located in **Sweet Home, Oregon**.

Briefly, the Sweet Home City Hall project located in Sweet Home, Oregon, consists of selective exterior and complete interior renovations to an existing 12,590 sf, 1-story, Type 5-B construction, non-sprinklered office building. The full extent of the Work is described in the Drawings and Project Manual, dated 7-27-18.

Sealed bids for the construction of the Sweet Home City Hall project will be received at **Sweet Home City Hall, City Manager's Office, 1140 12th Avenue, Sweet Home, Oregon 97386** until **2:00 pm local time, Wednesday, August 22, 2018**.

Submittal of bid proposals shall be in a sealed envelope with identification plainly marked on the outside including bidder's name, project name, bid date and time. Bids shall be submitted on the prescribed Bid Form per Section 00 41 00 of the Project Manual and be accompanied by:

- First Tier Subcontractor Disclosure (two hours following bid opening)
- Bid Bond

Bid proposals shall be publicly opened and read aloud at **2:00 p.m. on August 22, 2018** at **Sweet Home City Hall, City Manager's Office, 1140 12th Avenue, Sweet Home, Oregon 97386**.

BIDDING DOCUMENTS

Bid Documents, including contract terms, conditions and specifications will be available for review and purchase beginning **July 30, 2018**. The Plan holders List will be managed by Precision Images, 900 SE Sandy Blvd., Portland, Oregon; Ph: (503) 274-2030, Fax: (503) 222-1879, www.precisionimages.com. All bidders wishing to be notified of addenda shall register their name, mailing address and fax number with one of the selected Plan Centers listed below:

- Precision Images – Virtual Plan Center
- Contractor Plan Center, Inc.
- DJC Project Center
- Salem Contractors Exchange
- Premier Builders Exchange
- Eugene Builders Exchange
- Douglas County Plan Center

Questions or requests for clarification shall be directed in writing to the Project Manager, Andrew Kraus, via email at: andrew@seallp.com, or by regular mail at: Scott Edwards Architecture 2525 E Burnside St, Portland, OR 97214. All written questions must be received by the Architect by 3:00 pm, prevailing local time, **August 15, 2018**, seven (7) calendar days prior to the Bid Due date. The Architect will determine appropriate responses, if any, and if necessary an Addendum will be issued to all plan holders of record at least three (3) calendar days prior to the Bid Due date. Any verbal response(s) obtained from any source by bidders will be considered informational and shall not be relied upon by bidders.

**SECTION 00 11 13
ADVERTISEMENT FOR BIDS**

**Sweet Home City Hall
Sweet Home, OR**

PRE-BID MEETING

A mandatory pre-bid meeting will be held at the project site, 3225 Main Street, Sweet Home, OR 97386, on **August 7, 2018, at 1:00 PM**, to review the building site, discuss the scope of work and discuss project requirements. Statements made by Owner representatives at the conference are not binding on the Owner, unless confirmed by written addendum.

BID GUARANTEE

A bid guarantee from each bidder equivalent to five percent (5%) of the bid price shall be included with the bid form. The bid guarantee shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid of assurance that the bidder will, upon acceptance of his bid execute such contractual documents as may be required within the time specified.

FIRST TIER SUBCONTRACTOR DISCLOSURE

All bidders must complete and submit the **First Tier Subcontractor Disclosure Form** per Oregon Revised Statutes (ORS) ORS 279C.370 as required by Section 00 45 21 of the Project Manual **by 4:00 p.m. on the day set for opening of bids**. The first tier Subcontractor Disclosure Form, if submitted separately, shall be submitted in a sealed envelope plainly marked on the outside with project name, bid date and time, "First Tier Subcontractor Disclosure Form", bidder's name and contractor's Oregon state CCB license number. The Owner must reject a bid as non-responsive if a bidder fails to submit the subcontractor disclosure form by the deadline.

RIGHT TO REJECT BIDS

The Owner reserves the right to waive minor informalities in the bids. In addition, the Owner may reject any bid proposal not in compliance with prescribed bidding procedures and may reject, for good cause, any and all bid proposals upon a finding of the Owner that it is in their interest to do so.

No bidder may withdraw a bid after the hour set for receipt of bids unless thirty (30) days have elapsed and the Owner has not let a contract.

INTENT TO AWARD / PROTEST PERIOD

Subsequent to opening of the bids and determination of a bid within the acceptable project budget, a **Notice of Intent to Award** will be emailed to the qualified low bidder with a copy to all other contractors submitting a bid. Bidders shall have seven (7) calendar days from the Notice of Intent to Award date within which to review the bid files (by appointment), request any clarifications, or submit a written protest. After the expiration of the seven (7) day period, and giving due consideration to any protest, the Owner shall proceed with the formal award of the Contract for Construction.

All award protests must be in writing and either mailed or hand-delivered to: City of Sweet Home, Attn: Ray Towry, 1140 12th Avenue, Sweet Hom, OR 97386 and received within the protest period. The Owner shall not consider any written protest received after this deadline.

AWARD OF CONTRACT

Award will be based on the sum as indicated on the Bid Form as well as inclusion of all required

**SECTION 00 11 13
ADVERTISEMENT FOR BIDS**

**Sweet Home City Hall
Sweet Home, OR**

forms.

PERFORMANCE AND PAYMENT BONDS

The successful bidder will provide performance and payment bonds each of 100% of the total contract price as required by 24 CFR 85.36(h). In lieu of a surety bond, the Owner, in its sole discretion, may permit bidder to submit cash, a cashier's check or certified check in an amount equal to the estimated total contract price.

PROJECT SCHEDULE

It is a condition of the Bid that all work on this project shall be completed no later than **150 calendar days** from Notice to Proceed (*Substantially complete February, 2019*), not including any extension in contract time authorized by approved Change Order. The anticipated construction start date is to be **September 4, 2018**. Submission of a Bid shall indicate Bidder agrees to pay as **liquidated damages**, the amount of five hundred dollars (\$500) per calendar day beyond said completion deadline, until all work is determined complete.

PREVAILING WAGE RATES

This project is a public works project. By signing the bid, the bidder agrees to comply with the provisions of ORS 279C.800-870.

State of Oregon Bureau of Labor and Industries (BOLI) Prevailing Rate of Wage apply to all work on this project including work performed by Subcontractors.

These wage rates are included in Section 00 73 43 of the Project Manual.

ADDENDA

All addenda will be posted on the plan center's website. Additionally, plan centers will notify its potential bidders registered of all addenda.

END OF SECTION

**SECTION 00 11 21
PLAN CENTERS**

PART 1 GENERAL

1.1 DESCRIPTION

- A. This section describes the locations where Contract Documents may be reviewed during the bidding period.

1.2 PLAN CENTERS

A. **Precision Images - Virtual Plan Center**

www.precisionimages.com

Go to: "Virtual Plan Center"

Go to: "Precision Images Plan Room"

Go to: "Sweet Home City Hall"

B. **Contractor Plan Center, Inc.**

www.contractorplancenter.com

5468 SE International Way

Milwaukie, OR 97222

Ph: (503) 650-0148

C. **DJC Project Center**

www.djcoregon.com/projectcenter

921 SW Washington St., Suite 210

Portland, OR 97205

Ph: (503) 226-1311

D. **Premier Builders Exchange**

www.premierbx.com

63052 Layton Ave., Ste. 100

Bend, OR 97701

Ph: (541) 389-0123

E. **Salem Contractors Exchange**

www.sceonline.org

2256 Judson St. SE

Salem, OR 97302

Ph: (503) 632-7957

F. **Eugene Builders Exchange**

www.ebe.org

2460 W 11th Avenue

Eugene, OR 97402

Ph: (541) 484-5331

G. **Douglas County Plan Center**

3076 NE Diamond Lake Blvd.

Roseburg, OR 97470

Ph: (541) 440-9030

**SECTION 00 11 21
PLAN CENTERS**

PART 2 PRODUCTS
NOT USED

PART 3 EXECUTION
NOT USED

END OF SECTION

**SECTION 00 21 00
INSTRUCTIONS TO BIDDERS**

PART 1 GENERAL

1.1 REQUIREMENTS

- A. The Instructions to Bidders, AIA Document A701, as modified by the Owner and Architect, is hereby incorporated into this Project Manual.

1.2 REFERENCE

- A. AIA Document A701. [See attached]
B. AIA Documents may be purchased from:
1. Oregon: AIA Portland
403 NW 11th Avenue
Portland, OR 97209
Ph: (503) 223-8757
www.aiaportland.org

1.2 RELATED SECTIONS SPECIFIED ELSEWHERE

- | | | |
|----|--|------------------|
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| B. | Plan Centers | Section 00 11 21 |
| C. | Instructions to Bidders | Section 00 21 00 |
| D. | Bid Form | Section 00 41 00 |
| E. | Bid Bond | Section 00 43 13 |
| F. | Pre-Bid Substitution Form | Section 00 43 25 |
| G. | First Tier Subcontractor Disclosure Form | Section 00 45 21 |
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| N. | Summary of Work | Section 01 11 00 |

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

DRAFT AIA® Document A701™ - 1997

Instructions to Bidders

for the following PROJECT:

(Name and location or address)

«Sweet Home City Hall
3225 Main Street
Sweet Home, OR 97386
SEA Project No. 16158

THE OWNER:

(Name, legal status and address)

«City of Sweet Home
1140 12th Avenue
Sweet Home, OR 97386

THE ARCHITECT:

(Name, legal status and address)

Scott|Edwards Architecture, L.L.P.
2525 E Burnside Street
Portland, OR 97214
t: 503-226-3617

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

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ARTICLE 1 DEFINITIONS

§ 1.1 Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement or Invitation to Bid, Instructions to Bidders, Supplementary Instructions to Bidders, the bid form, and other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and all Addenda issued prior to execution of the Contract. The Bidding Documents incorporated by this reference the City of Sweet Home City Hall Project Manual prepared by Scott|Edwards Architecture, L.L.P. Dated <7-27-2018> including but not limited to the proposed Contract Documents in the Project Manual.

§ 1.2 Definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201, or in other Contract Documents are applicable to the Bidding Documents.

§ 1.3 Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.

§ 1.4 A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.

§ 1.5 The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.

§ 1.6 An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

§ 1.7 A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment or services or a portion of the Work as described in the Bidding Documents.

§ 1.8 A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.

§ 1.9 A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment or labor for a portion of the Work.

ARTICLE 2 BIDDER'S REPRESENTATIONS

§ 2.1 The Bidder by making a Bid represents that:

§ 2.1.1 The Bidder has read and understands the Bidding Documents or Contract Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, and for other portions of the Project, if any, being bid concurrently or presently under construction.

§ 2.1.2 The Bid is made in compliance with the Bidding Documents.

§ 2.1.3 The Bidder has visited the site, become familiar with local conditions under which the Work is to be performed and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.

§ 2.1.3.1 The Bidder has become fully informed of the area(s) in which work is to be conducted, the methods necessary for delivery of materials, the limits of the working area and the limits of access to work areas.

§ 2.1.4 The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception.

ARTICLE 3 BIDDING DOCUMENTS

§ 3.1 COPIES

Intentionally deleted. Refer to Advertisement for Bids, Section 00 11 13, for information regarding obtaining copies of Bid Documents.

§ 3.1.3 Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

§ 3.1.4 The Owner and Architect may make copies of the Bidding Documents available on the above terms for the purpose of obtaining Bids on the Work. No license or grant of use is conferred by issuance of copies of the Bidding Documents.

§ 3.2 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

§ 3.2.1 The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and local conditions, and shall at once report to the Architect errors, inconsistencies or ambiguities discovered.

§ 3.2.2 Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request which shall reach the Architect at least seven days prior to the date for receipt of Bids.

§ 3.2.3 Interpretations, corrections and changes of the Bidding Documents will be made by Addendum. Interpretations, corrections and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them.

§ 3.3 SUBSTITUTIONS

§ 3.3.1 The materials, products and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.

§ 3.3.2 No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least seven (7) calendar days prior to the date for receipt of Bids. Each such request shall be submitted with a "Pre-Bid Substitution Request Form" identical to or comparable in content to the request form bound in the Project Manual, located in Specification Section 00 43 25, and shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including information noted on the request form and otherwise necessary for evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require, shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

§ 3.3.3 If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.

§ 3.3.4 No substitutions will be considered after the Contract award unless specifically provided for in the Contract Documents.

§ 3.4 ADDENDA

§ 3.4.1 Addenda will be transmitted to all who are known by the issuing office to have received a complete set of Bidding Documents.

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

§ 3.4.3 Addenda will be issued no later than three (3) days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

§ 3.4.4 Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the space provided therefore on the bid form.

ARTICLE 4 BIDDING PROCEDURES

§ 4.1 PREPARATION OF BIDS

§ 4.1.1 Bids shall be submitted on the forms included with the Bidding Documents.

§ 4.1.2 All blanks on the bid form shall be legibly executed in a non-erasable medium.

§ 4.1.3 Sums shall be expressed in both words and figures. In case of discrepancy, the amount written in words shall govern.

§ 4.1.4 Interlineations, alterations and erasures must be initialed by the signer of the Bid.

§ 4.1.5 All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change."

§ 4.1.6 The Bidder shall make no stipulations on the bid form nor qualify the Bid in any manner.

§ 4.1.7 Each copy of the Bid shall state the legal name of the Bidder and the nature of legal form of the Bidder. The Bidder shall provide evidence of legal authority to perform within the jurisdiction of the Work. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.

§ 4.2 BID SECURITY

§ 4.2.1 Each Bid shall be accompanied by a bid security in the form and amount required if so stipulated in the Instructions to Bidders. The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and will, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. The amount of the bid security shall not be forfeited to the Owner in the event the Owner fails to comply with Section 6.2. The bid security shall equal **five (5) percent** of the proposed contract.

§ 4.2.2 If a surety bond is required, it shall be written on AIA Document A310, Bid Bond, unless otherwise provided in the Bidding Documents, and the attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of the power of attorney.

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

§ 4.3 SUBMISSION OF BIDS

§ 4.3.1 All copies of the Bid, the bid security, if any, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name and address and, if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.

§ 4.3.2 Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.

§ 4.3.3 The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

§ 4.3.4 Oral, telephonic, telegraphic, facsimile or other electronically transmitted bids will not be considered.

§ 4.4 MODIFICATION OR WITHDRAWAL OF BID

§ 4.4.1 A Bid may not be modified, withdrawn or canceled by the Bidder during the stipulated time period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting a Bid. The stipulated time period that bids may not be modified, withdrawn, or canceled without forfeiture of Bid Bond is **(60) sixty calendar days** from the date and time designated for the Bid.

§ 4.4.2 Prior to the time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder. Written confirmation over the signature of the Bidder shall be received, and date- and time-

stamped by the receiving party on or before the date and time set for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.

§ 4.4.3 Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.

§ 4.4.4 Bid security, if required, shall be in an amount sufficient for the Bid as resubmitted.

ARTICLE 5 CONSIDERATION OF BIDS

§ 5.1 OPENING OF BIDS

At the discretion of the Owner, if stipulated in the Advertisement or Invitation to Bid, the properly identified Bids received on time will be publicly opened and will be read aloud. An abstract of the Bids may be made available to Bidders.

§ 5.2 REJECTION OF BIDS

The Owner shall have the right to reject any or all Bids. A Bid not accompanied by a required bid security or by other data required by the Bidding Documents, or a Bid which is in any way incomplete or irregular is subject to rejection.

§ 5.2.1 The Owner's right to reject any or all Bids shall be subject only to the Owner's judgment of what is in the Owner's own best interest. In any case where the Owner must procure the work by competitive bids, the Owner rejects all bids, and the Owner doesn't abandon the work, the Owner may call for new bids.

§ 5.2.1.1 The Owner may disqualify any bidder if, at any time, it finds:

- .1 The bidder has been convicted for the commission of a criminal offense as an incident in obtaining or attempting to obtain a public or private contract or subcontract, or in the performance of such contract or subcontract;
- .2 The bidder has been convicted under state or federal statutes of embezzlement, theft, forgery bribery, falsification or destruction of record, receiving stolen property or any other offense indicating a lack of business integrity or business honesty that currently, seriously, and directly affects the bidder's responsibility as a contractor;
- .3 The bidder has been convicted under state or federal antitrust statutes; or
- .4 The bidder has violated a contract provision that is regarded by the Owner to be so serious as to justify disqualification.

§ 5.2.1.2 The Owner may disqualify any low bidder if, at any time, it finds:

- .1 The bidder does not have available the appropriate financial, material, equipment, facility and personnel resources and expertise, or in the alternative, the ability to obtain those resources and expertise indicating the capability to meet all contractual responsibilities;
- .2 The bidder does not have a satisfactory record of performance;
- .3 The bidder does not have a satisfactory record of integrity;
- .4 The bidder is not qualified legally to contract with the public contracting agency.

§ 5.3 ACCEPTANCE OF BID (AWARD)

§ 5.3.1 After the Owner determines that a contract is to be awarded, the contract will be awarded at his discretion on the basis of the following:

- .1 The lowest responsible Bidder or the Bidder selected in Owner's sole discretion from among the lowest responsible Bidders if there are more than one lowest responsible Bidders that submit tie bids.

Please note: The "lowest responsible Bidder" will be the lowest Bidder who has substantially complied with all bidding requirements and procedures and who has not been disqualified by the Owner.

§ 5.3.2 The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.

ARTICLE 6 POST-BID INFORMATION

§ 6.1 CONTRACTOR'S QUALIFICATION STATEMENT

Bidders to whom award of a Contract is under consideration shall submit to the Architect, upon request, a properly executed AIA Document A305, Contractor's Qualification Statement, unless such a Statement has been previously required and submitted as a prerequisite to the issuance of Bidding Documents.

§ 6.2 OWNER'S FINANCIAL CAPABILITY

The Owner shall, at the request of the Bidder to whom award of a Contract is under consideration and no later than seven days prior to the expiration of the time for withdrawal of Bids, furnish to the Bidder reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. Unless such reasonable evidence is furnished, the Bidder will not be required to execute the Agreement between the Owner and Contractor.

§ 6.3 SUBMITTALS

§ 6.3.1 The Bidder shall, as soon as practicable or as stipulated in the Bidding Documents, but in no case no later than five (5) calendar days after notification of selection for the award of a Contract, furnish to the Owner through the Architect in writing:

- .1** a designation of the Work to be performed with the Bidder's own forces;
- .2** names, addresses, telephone numbers and fax numbers of the manufacturers, products, and the suppliers of principal items or systems of materials and equipment proposed for the Work; and
- .3** names, addresses, telephone numbers and fax numbers of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.

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

§ 6.3.3 Prior to the execution of the Contract, the Architect will notify the Bidder in writing if either the Owner or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objection to a proposed person or entity, the Bidder shall, at the Bidder's option, (1) withdraw the Bid or (2) submit an acceptable substitute person or entity with an adjustment in the Base Bid or Alternate Bid to cover the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder. In the event of disqualification, bid security will not be forfeited.

§ 6.3.4 Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.

ARTICLE 7 PERFORMANCE BOND AND PAYMENT BOND

§ 7.1 BOND REQUIREMENTS

§ 7.1.1 The Owner requires the Bidder and reserves the right to require subcontract bidders to furnish performance bonds and payment bonds in the form as set forth herein and in amounts as set forth under the General Conditions. The Owner shall not be held responsible for any costs for any subcontractor bonds unless the Owner, prior to the execution of the Owner-Contractor Agreement, requires Bidders, in writing, to furnish such bonds from designated subcontractors. Should any bonds be furnished by subcontract bidders, or be required by any Bidder to be furnished by any subcontract Bidder, without written request by the Owner prior to the execution of the Owner-Contractor Agreement, such costs for any said bonds shall be at the expense of the Bidder and shall not be included in the Bid sum.

The performance bond and payment bond shall be documented on AIA Document A312 and shall be for **100% each of the contract price.**

§ 7.2 TIME OF DELIVERY AND FORM OF BONDS

§ 7.2.1 The Bidder shall deliver the required bonds to the Owner not later than three days following the date of execution of the Contract. If the Work is to be commenced prior thereto in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Section 7.2.1.

§ 7.2.2 Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond and Payment Bond. Both bonds shall be written in the amount of the Contract Sum.

§ 7.2.3 The bonds shall be dated on or after the date of the Contract.

§ 7.2.4 The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

ARTICLE 8 FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

Unless otherwise required in the Bidding Documents, the Agreement for the Work will be written on AIA Document A101, Standard Form of Agreement Between Owner and Contractor Where the Basis of Payment Is a Stipulated Sum, and AIA Document A201, General Conditions of the Contract for Construction” both as amended in substantial conformance with the Project Manual including but not limited to the proposed Supplements contained in the Project Manual.



**SECTION 00 41 00
BID FORM**

TO: **City of Sweet Home**
1140 12th Avenue
Sweet Home, OR 97386
- - hereinafter called the "Owner"

FOR PROJECT: **Sweet Home City Hall**
3225 Main Street
Sweet Home, OR 97386
- - hereinafter called the "Project"

As described by the ARCHITECT: **Scott | Edwards Architecture, LLP**
2525 E Burnside St.
Portland, Oregon 97214
- - hereinafter called the "Architect"

In consideration of being awarded a contract for construction I/We, the undersigned, having read all the requirements of this call for bids, together with all information contained in the Contract Documents for this Project, agree to provide all material and labor necessary for, and incidental to, the completion of the Project in accordance with said Contract Documents for a BASE BID, STIPULATED LUMP SUM OF:

_____ Dollars (\$ _____).

The undersigned acknowledges that the base bid indicated above includes _____ Dollars (\$ _____) for the cost of the Performance and Payment Bond as required by Section 01 61 13.

The undersigned hereby agrees to complete the BASE BID construction in all respects and subject to the provisions for liquidated damages stipulated in the General Conditions, Supplementary Conditions and Contract for Construction, within **(150)** consecutive calendar calendar days of receipt of Notice to Proceed and for the Stipulated Sum stated above.

ADDENDA

The undersigned hereby acknowledges receipt of the following addenda and has included them in his/her BID.

Addendum No. ___ Dated _____. Addendum No. ___ Dated _____.

Addendum No. ___ Dated _____. Addendum No. ___ Dated _____.

The undersigned certifies, and in the case of a joint Bid each party thereto certifies as to its own organization, that this Bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

The undersigned understands that the following additional form must be submitted within TWO HOURS following the Bid Date and Time for the Bid to be complete. The Owner must reject a bid as non-responsive if a bidder fails to submit the following additional form:

- First Tier Subcontractor Disclosure Section 00 45 21 of the Project Manual
- Bid Bond Section 00 43 13 of the Project Manual

**SECTION 00 43 13
BID BOND**

PART 1 GENERAL

1.1 REQUIREMENTS

- A. The Bid Bond, AIA Document A310, 1970 edition, is hereby incorporated into this Project Manual by reference.

1.2 REFERENCE

- A. AIA Document A310, 1970 edition. [Attached by reference]
B. AIA Documents may be purchased from:
1. Oregon: AIA Portland
403 NW 11th Avenue
Portland, OR 97209
Ph: (503) 223-8757
www.aiaportland.org

1.3 RELATED SECTIONS SPECIFIED ELSEWHERE

- | | | |
|----|--|------------------|
| A. | Invitation for Bids | Section 00 11 13 |
| B. | Plan Centers | Section 00 11 21 |
| C. | Instructions to Bidders | Section 00 21 00 |
| D. | Bid Form | Section 00 41 00 |
| E. | Bid Bond | Section 00 43 13 |
| F. | Pre-Bid Substitution Form | Section 00 43 25 |
| G. | First Tier Subcontractor Disclosure Form | Section 00 45 21 |
| H. | Contract for Construction | Section 00 52 00 |
| I. | Performance Bond & Payment Bond | Section 00 61 13 |
| J. | General Conditions | Section 00 72 00 |
| K. | Supplementary General Conditions | Section 00 73 00 |
| L. | Prevailing Wage Rates | Section 00 73 43 |
| M. | State of Oregon – Public Contracting Clauses | Section 00 73 73 |
| N. | Summary of Work | Section 01 11 00 |

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

**SECTION 00 43 25
PRE-BID SUBSTITUTION REQUEST FORM**

TO: **SCOTT | EDWARDS ARCHITECTURE, LLP**
2525 E Burnside Street
Portland, Oregon 97214
Email: andrew@seallp.com

All pre-bid substitution requests shall be submitted in either PDF format via email ~~–or–~~ by hard copy via mail/delivery to the address listed above.

PROJECT: **Sweet Home City Hall**

We hereby submit for your consideration the Product described below as a substitute for the specified product indicated: (See also Section 01 25 00 for additional information)

1. SPECIFIED PRODUCT:

Name: _____

Section: _____ Paragraph: _____

2. PROPOSED SUBSTITUTION:

a. Brand Name: _____

b. Model/Catalog No: _____

c. Manufacturer: _____

d. _____

[address/city/state/zip code]

[phone]

e. Nearest Distributor: _____

[address/city/state/zip code]

[phone]

f. Substitute product affects adjacent Work in the following way:

3. SUPPORTING DATA:

a. Attached data included product description, specifications, drawings, photographs, performance and test data adequate for evaluation of the request: applicable portions of the data are clearly identified.

**SECTION 00 43 25
PRE-BID SUBSTITUTION REQUEST FORM**

- b. Attached data also includes description of changes to Contract Documents which proposed substitution will require for its proper installation.

4. **CERTIFICATION**

The undersigned certifies that the following paragraphs, unless modified on attachments, are correct:

- a. The proposed substitution does not affect dimensions shown on Drawings.
- b. The undersigned will pay for changes to the building design, including engineering design, detailing and construction costs caused by the requested substitution.
- c. The proposed substitution will have no adverse affect on the other trades, the construction schedule, or specified warranty requirements.
- d. Maintenance and service parts will be locally available for the proposed substitution.
- e. **The proposed substitution meets or exceeds the requirements established by the referenced specifications and/or the product specified therein in all respects except at listed below:**

5. **SUBMITTED BY:**

Firm: _____

[address / city / state / zip code]

Phone: [_____] Fax: [_____]

By: _____ Title: _____
[please type or print]

Signature: _____

6. **ACCEPTANCE/REJECTION:**

Acceptable substitution items will be covered by an Addendum issued to all bidders.

7. **ARCHITECT'S ACTION:**

The following is for use by the Architect:

____ Accepted ____ Accepted with exceptions as noted.
____ Not Accepted ____ Received after deadline.

Remarks: _____

By: _____ Date: _____

**SECTION 00 43 25
PRE-BID SUBSTITUTION REQUEST FORM**

For: **Scott | Edwards Architecture, LLP**

END OF SECTION

SECTION 00 45 21
FIRST TIER SUBCONTRACTOR DISCLOSURE FORM

The Owner may reject a Bid if the Bidder fails to disclose information about certain first-tier subcontractors when the contract value is greater than \$100,000. Specifically, when the contract amount of a first-tier subcontractor furnishing labor or labor and materials would be greater than or equal to: (i) 5% of the total contract price, but at least \$15,000, or (ii) \$350,000 regardless of the percentage of the total contract price.

The Bidder must disclose the required information about that subcontract either in its bid submission or within two hours after bid closing, by completing the attached form.

If the Bidder will not be using any subcontractors that are subject to the above disclosure requirements, the Bidder is required to indicate "*NONE*" on the attached form.

Compliance with the disclosure and submittal requirements of this rule is a matter of responsiveness. Bids that are submitted by bid closing, but for which the disclosure submittal has not been made by the specified deadline, are not responsive and shall not be considered for contract award.

Substitution of affected first-tier subcontractors shall be made only after approval in writing from the Owner.

**SECTION 00 45 21
FIRST TIER SUBCONTRACTOR DISCLOSURE FORM**

Project Name: Sweet Home City Hall – Sweet Home, Oregon

Bid Closing Date & Time: **August 22, 2018 @ 2:00 PM LOCAL TIME**

Bidding Contractor Name: _____

CCB Number: _____

Firm Name	Category of Work to be Performed
Address	CCB Number
City, State, Zip	Subcontract Amount
Firm Name	Category of Work to be Performed
Address	CCB Number
City, State, Zip	Subcontract Amount
Firm Name	Category of Work to be Performed
Address	CCB Number
City, State, Zip	Subcontract Amount
Firm Name	Category of Work to be Performed
Address	CCB Number
City, State, Zip	Subcontract Amount
Firm Name	Category of Work to be Performed
Address	CCB Number

**SECTION 00 45 21
FIRST TIER SUBCONTRACTOR DISCLOSURE FORM**

City, State, Zip	Subcontract Amount
Firm Name	Category of Work to be Performed
Address	CCB Number
City, State, Zip	Subcontract Amount
Firm Name	Category of Work to be Performed
Address	CCB Number
City, State, Zip	Subcontract Amount
Firm Name	Category of Work to be Performed
Address	CCB Number
City, State, Zip	Subcontract Amount

Add additional pages if necessary.

**SECTION 00 52 00
CONTRACT FOR CONSTRUCTION**

PART 1 GENERAL

1.1 REQUIREMENTS

- A. The Contract for Construction, Standard Form Agreement Between Owner and Contractor, AIA Document A101, as modified by the Owner and Architect, is hereby incorporated into this Project Manual.

1.2 REFERENCE

- A. Standard Form Agreement Between Owner and Contractor, AIA Document A101. [Attached herewith]
- B. AIA Documents may be purchased from:
1. Oregon: AIA Portland
 403 NW 11th Avenue
 Portland, OR 97209
 Ph: (503) 223-8757
 www.aiaportland.org

1.3 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- | | | |
|----|--|------------------|
| A. | Invitation for Bids | Section 00 11 13 |
| B. | Plan Centers | Section 00 11 21 |
| C. | Instructions to Bidders | Section 00 21 00 |
| D. | Bid Form | Section 00 41 00 |
| E. | Bid Bond | Section 00 43 13 |
| F. | Pre-Bid Substitution Form | Section 00 43 25 |
| G. | First Tier Subcontractor Disclosure Form | Section 00 45 21 |
| H. | Contract for Construction | Section 00 52 00 |
| I. | Performance Bond & Payment Bond | Section 00 61 13 |
| J. | General Conditions | Section 00 72 00 |
| K. | Supplementary General Conditions | Section 00 73 00 |
| L. | Prevailing Wage Rates | Section 00 73 43 |
| M. | State of Oregon – Public Contracting Clauses | Section 00 73 73 |
| N. | Summary of Work | Section 01 11 00 |

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

DRAFT AIA® Document A101™ - 2017

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum

AGREEMENT made as of the «**■**» day of «**■**» in the year «**■**»
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

«City of Sweet Home
1140 12th Avenue
Sweet Home, OR 97386

and the Contractor:
(Name, legal status, address and other information)

«**»«**»**»
«**»**
«**»**
«**»****

for the following Project:
(Name, location and detailed description)

»Sweet Home City Hall
3225 Main Street
Sweet Home, OR 97386
SEA Project No. 16158

The Architect:
(Name, legal status, address and other information)

Scott|Edwards Architecture, L.L.P.
2525 E Burnside Street
Portland, OR 97214
t: 503-226-3617

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

The parties should complete A101™-2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201™-2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

ELECTRONIC COPYING of any portion of this AIA® Document to another electronic file is prohibited and constitutes a violation of copyright laws as set forth in the footer of this document.

TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
- 2 THE WORK OF THIS CONTRACT
- 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
- 4 CONTRACT SUM
- 5 PAYMENTS
- 6 DISPUTE RESOLUTION
- 7 TERMINATION OR SUSPENSION
- 8 MISCELLANEOUS PROVISIONS
- 9 ENUMERATION OF CONTRACT DOCUMENTS

EXHIBIT A INSURANCE AND BONDS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others. The Work shall also include maintaining in good order and marked currently two (2) sets of Record Documents (or “as-builts”) to precisely record locations of systems not limited to structural members, plumbing, electrical, communications, HVAC, and other utilities whose location will be difficult to determine after completion, as well as field changes and selections either not shown on the Drawings and Specifications or constructed at locations different than specified in the Drawings and Specifications. Contractor shall demonstrate compliance with this requirement upon every application for payment. Contractor shall deliver both sets prior to and as a condition of Final Completion.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:

(Check one of the following boxes.)

The date of this Agreement.

A date set forth in a notice to proceed issued by the Owner.

Established as follows:

(Insert a date or a means to determine the date of commencement of the Work.)

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work:

(Check one of the following boxes and complete the necessary information.)

[] Not later than () calendar days from the date of commencement of the Work.

[] By the following date:

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date
<input type="text"/>	<input type="text"/>

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

§ 3.3.4 Contractor shall be responsible for posting and recording Notices of Substantial Completion for the Work in accordance with ORS 87.045 within 3 days of the Architect certifying Substantial Completion.

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be (\$), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

Item	Price
<input type="text"/>	<input type="text"/>

§ 4.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement. *(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)*

Item	Price	Conditions for Acceptance
<input type="text"/>	<input type="text"/>	<input type="text"/>

§ 4.3 Allowances, if any, included in the Contract Sum: *(Identify each allowance.)*

Item	Price
<input type="text"/>	<input type="text"/>

§ 4.4 Unit prices, if any: *(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)*

Item	Units and Limitations	Price per Unit (\$0.00)
<input type="text"/>	<input type="text"/>	<input type="text"/>

§ 4.5 Liquidated damages, if any: *(Insert terms and conditions for liquidated damages, if any.)*

<< >>

§ 4.6 Other:

(Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.)

<< >>

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

<< >>

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the <> day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the <> day of the <> month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than <> (<>) days after the Architect receives the Application for Payment.

(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.4.1 As a condition of each progress and the final payment, Contractor shall provide to Owner in a form acceptable to Owner partial and final releases and waivers of claims from Contractor, each subcontractor, and every material or equipment supplier on whose labor or materials any part of the pay request is based. The releases will apply to all work performed through the payment date and may be conditional upon payment of the amount of the pay request.

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 In accordance with AIA Document A201™–2017, General Conditions of the Contract for Construction, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.6.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.6.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201–2017;

- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017; and
- .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

« »

§ 5.1.7.1.1 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

« »

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

« »

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:

(Insert any other conditions for release of retainage upon Substantial Completion.)

« »

§ 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201–2017.

§ 5.1.9 Except with the Owner’s prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 Final Payment

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor’s responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment has been issued by the Architect.
- .3 the conditions for Final Payment specified in the General Conditions Article 9.10.2 have been satisfied including but not limited to an affidavit from Contractor that all indebtedness related to the Work has been paid, evidence that insurance will remain in effect, consent of any surety, and final and complete releases and waivers of claim from Contractor, all subcontractors, and all material and equipment suppliers.

§ 5.2.2 Provided that the conditions set forth in 5.2.1 are met, the Owner’s final payment to the Contractor shall be made Seventy-five (75) days after Substantial Completion and the posting and recording of Notices of Substantial Completions as required in 3.3.

§ 5.3 Interest

Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

(Insert rate of interest agreed upon, if any.)

«» % «»

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker.
(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

«»
«»
«»
«»

§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows:

(Check the appropriate box.)

[] Arbitration pursuant to Section 15.4 of AIA Document A201–2017

[] Litigation in a court of competent jurisdiction

[] Other *(Specify)*

«»

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2017.

§ 7.1.1 If the Contract is terminated for the Owner’s convenience in accordance with Article 14 of AIA Document A201–2017, then the Owner shall pay the Contractor a termination fee as follows:

(Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner’s convenience.)

«»

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 The Owner’s representative:

(Name, address, email address, and other information)

«»

<< >>
<< >>
<< >>
<< >>
<< >>

§ 8.3 The Contractor's representative:
(Name, address, email address, and other information)

<< >>
<< >>
<< >>
<< >>
<< >>
<< >>
<< >>

§ 8.4 Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.

§ 8.5 Insurance and Bonds

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A101™–2017 Exhibit A, and elsewhere in the Contract Documents.

§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A201–2017, may be given in accordance with Exhibit __ - Architect's **Electronic Document Release**:
(If other than in accordance with AIA Document E203–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

<< >>

§ 8.7 Other provisions:

<< >>

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor
- .2 AIA Document A101™–2017, Exhibit A, Insurance and Bonds
- .3 AIA Document A201™–2017, General Conditions of the Contract for Construction
- .4 Architect's standard Electronic Document Release, attached hereto as Exhibit ____.
(Insert the date of the E203-2013 incorporated into this Agreement.)

<< >>

.5 Drawings

Number	Title	Date
<< >>		

.6 Specifications

Section	Title	Date	Pages
<< >>			

.7 Addenda, if any:

Number	Date	Pages
« »		

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

.8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

[« »] AIA Document E204™–2017, Sustainable Projects Exhibit, dated as indicated below:
(Insert the date of the E204-2017 incorporated into this Agreement.)

« »

[« »] The Sustainability Plan:

Title	Date	Pages
« »		

[« »] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
« »			

.9 Other documents, if any, listed below:

(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201™–2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor’s bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

« »

This Agreement entered into as of the day and year first written above.

« »

OWNER *(Signature)*

« »« »

(Printed name and title)

« »

CONTRACTOR *(Signature)*

« »« »

(Printed name and title)

SECTION 00 61 13
PERFORMANCE BOND AND PAYMENT BOND

PART 1 GENERAL

1.1 REQUIREMENTS

- A. The Performance and Payment Bond, AIA Document A312, 1984 edition, is hereby incorporated into this Project Manual by reference.

1.2 REFERENCE

- A. AIA Document A312, 1984 edition. [Attached by reference]
- B. AIA Documents may be purchased from:
 - 1. Oregon: AIA Portland
 403 NW 11th Avenue
 Portland, OR 97209
 Ph: (503) 223-8757
 www.aiaportland.org

1.3 RELATED SECTIONS SPECIFIED ELSEWHERE

- | | | |
|----|--|------------------|
| A. | Invitation for Bids | Section 00 11 13 |
| B. | Plan Centers | Section 00 11 21 |
| C. | Instructions to Bidders | Section 00 21 00 |
| D. | Bid Form | Section 00 41 00 |
| E. | Bid Bond | Section 00 43 13 |
| F. | Pre-Bid Substitution Form | Section 00 43 25 |
| G. | First Tier Subcontractor Disclosure Form | Section 00 45 21 |
| H. | Contract for Construction | Section 00 52 00 |
| I. | Performance Bond & Payment Bond | Section 00 61 13 |
| J. | General Conditions | Section 00 72 00 |
| K. | Supplementary General Conditions | Section 00 73 00 |
| L. | Prevailing Wage Rates | Section 00 73 43 |
| M. | State of Oregon – Public Contracting Clauses | Section 00 73 73 |
| N. | Summary of Work | Section 01 11 00 |

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

**SECTION 00 72 00
GENERAL CONDITIONS**

PART 1 GENERAL

1.1 REQUIREMENTS

- A. The General Conditions, AIA Document A201, as modified by the Owner and Architect, is hereby incorporated into this Project Manual.

1.2 REFERENCE

- A. AIA Document A201. [Attached herewith]
B. AIA Documents may be purchased from
1. Oregon: AIA Portland
403 NW 11th Avenue
Portland, OR 97209
Ph: (503) 223-8757
www.aiaportland.org

1.3 RELATED SECTIONS SPECIFIED ELSEWHERE

- | | | |
|----|--|------------------|
| A. | Invitation for Bids | Section 00 11 13 |
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| J. | General Conditions | Section 00 72 00 |
| K. | Supplementary General Conditions | Section 00 73 00 |
| L. | Prevailing Wage Rates | Section 00 73 43 |
| M. | State of Oregon – Public Contracting Clauses | Section 00 73 73 |
| N. | Summary of Work | Section 01 11 00 |

PART 2 PRODUCTS
NOT USED

PART 3 EXECUTION
NOT USED

END OF SECTION

DRAFT AIA® Document A201™ - 2017

General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

«Sweet Home City Hall
3225 Main Street
Sweet Home, OR 97386
SEA Project No. 16158

THE OWNER:

(Name, legal status and address)

«City of Sweet Home
1140 12th Avenue
Sweet Home, OR 97386

THE ARCHITECT:

(Name, legal status and address)

Scott|Edwards Architecture, L.L.P.
2525 E Burnside Street
Portland, OR 97214
t: 503-226-3617

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- 1 GENERAL PROVISIONS
- 2 OWNER
- 3 CONTRACTOR
- 4 ARCHITECT
- 5 SUBCONTRACTORS
- 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
- 7 CHANGES IN THE WORK
- 8 TIME
- 9 PAYMENTS AND COMPLETION
- 10 PROTECTION OF PERSONS AND PROPERTY
- 11 INSURANCE AND BONDS

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, Guide for Supplementary Conditions.

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- 12 UNCOVERING AND CORRECTION OF WORK
- 13 MISCELLANEOUS PROVISIONS
- 14 TERMINATION OR SUSPENSION OF THE CONTRACT
- 15 CLAIMS AND DISPUTES



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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding or proposal requirements.

§ 1.1.2 The Contract

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants, or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

§ 1.1.3 The Work

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 The Project

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

§ 1.1.5 The Drawings

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.8 Initial Decision Maker

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

§ 1.1.9 The Project Manual The Project Manual is a volume assembled for the Work which may include the bidding requirements, sample forms, Conditions of the Contract and Specifications. Within three days of receipt of documents, the Contractor shall check his copies of the Project Manual with the Index bound therein to be sure that they are complete.

§ 1.1.10 Additional Abbreviations and Definitions

Additional abbreviations and definitions are covered under Sections 01 42 16 and 01 42 19, in the Sections of Divisions 21, 22, 23, 26, 27, 28, 31, 32 and 33, and on the Drawings.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

§ 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

§ 1.8 Building Information Models Use and Reliance

Architect shall use Autodesk AutoCAD (Computer-Aided Design) or Revit Building Information Modeling (“BIM”) as a design tool, only. The CAD file or BIM model shall not be a Construction Document. Construction Documents shall be delivered by Architect and its Consultants as a traditional two-dimensional set of plans. Architect shall share its CAD file or BIM model with Owner or Contractor for their convenience, and subject to Architect’s standard Electronic Document Release, attached hereto as Exhibit ___ and incorporated for reference.

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in the Architect’s standard Electronic Documents Release shall be at the using or relying party’s sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner’s approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term “Owner” means the Owner or the Owner’s authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic’s lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner’s interest therein.

§ 2.2 Information and Services Required of the Owner

§ 2.2.1 Prior to commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner’s obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.

§ 2.2.2 Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner’s obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner’s ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Contractor’s request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor’s reasonable costs of shutdown, delay and start-up, plus interest as provided in the Contract Documents.

§ 2.2.2.1 The Owner shall pay the general fire & life safety and structural plan checking fee, general building permit fee, and system development charges (SDC) required by City, County or State Building Departments. All subcontract plan check and permit fees, and all Bidder designed and engineered system plan check and permit fees will be the responsibility of the Contractor.

§ 2.2.3 After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.4 Where the Owner has designated information furnished under this Section 2.2 as “confidential,” the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose “confidential” information, after seven (7) days’ notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose “confidential” information to its employees, consultants, sureties, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

§ 2.3.2 The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.3 If the employment of the Architect terminates, the Owner shall employ a successor to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

§ 2.3.4 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.3.5 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner’s control and relevant to the Contractor’s performance of the Work with reasonable promptness after receiving the Contractor’s written request for such information or services.

§ 2.3.6 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor two (2) copies of the Contract Documents and Project Manuals for purposes of making reproductions pursuant to Section 1.5.2. Additional sets will be furnished at the cost of reproduction, postage and handling.

§ 2.4 Owner’s Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

§ 2.5 Owner’s Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and the Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner’s expenses and compensation for the Architect’s additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term “Contractor” means the Contractor or the Contractor’s authorized representative.

§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect’s administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.4, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Architect may require. It is recognized that the Contractor’s review is made in the Contractor’s capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

§ 3.2.2.1 Notwithstanding the provisions of 3.2.2 above, the Contractor shall endeavor to discover any errors, omissions, or inconsistencies in the Contract Documents or with field conditions, to the best of his knowledge and capability, and to the generally accepted level of competence for the construction industry in the geographic location of this project, so as to avoid any adverse impact on either time or cost to the Project.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.

§ 3.2.3.1 Notwithstanding the provisions of 3.2.3 above, the Contractor shall, to the best of his knowledge and capability, and to the generally accepted level of competence for the construction industry in the geographic location of this project, be responsible to perform all Work under this Contract in accordance with all applicable building codes and regulations.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor’s notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to Section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor’s best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques,

sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.1.1 Refer to Project Manual Section 01 11 00, Owner Furnished Work, for additional requirements.

§ 3.4.2 Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect and in accordance with a Change Order.

§ 3.4.2.1 After the Contract has been executed, the Owner and the Architect will consider a request for the substitution of products in place of those specified only under the conditions set forth in Section 01 25 00, "Product Substitutions".

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.5 Warranty

§ 3.5.1 The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

§ 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 Permits, Fees, Notices and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 3.7.1.1 All fees except as specified above under subparagraph 2.2.2.1 shall be included in the Contract and shall be paid by Contractor. Contractor is to secure all certificates of inspection and of occupancy as required by the public authority. Each Subcontractor shall secure and pay for all special permits, fees and licenses for his work. Deliver all permits and certificates to Owner at completion.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may submit a Claim as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents,

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. The superintendent shall be satisfactory to the Owner and shall not be changed except with the consent of the Architect, unless the superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

§ 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project.

§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Architect's approval. The Architect's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect.

§ 3.10.4 The Contractor and all Subcontractors, suppliers and manufacturers shall schedule materials, deliveries and installations to conform with the Contractor's progress schedule, and provisions to this effect shall be included in all subcontracts. The Contractor shall schedule and coordinate the work of all Contractors on the project through the use of a CPM schedule, under the conditions set forth in Section 01 32 00 "Construction Schedules and Reports".

§ 3.10.5 The Contractor shall furnish and pay for preparation of the CPM schedule, based on Contractor input as set forth herein above including monthly updating thereof, and include costs for same in the Base Bid.

§ 3.10.6 The construction schedule shall be organized with line items and their order to match the Index of this Project Manual.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Architect and Owner, and delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Architect, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Architect.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design

professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

§ 3.12.11 The method, type, and number of shop drawings and samples are to be submitted as set forth in the Project Manual, Section 01 33 00; conform thereto.

§ 3.13 Use of Site

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.14 Intentionally deleted. Provisions for cutting and patching are included in the Project Manual, Section 01 73 29; conform thereto. Any references to Paragraph 3.14 elsewhere in the Contract Documents shall be read as referring to the same subject matter in Section 01 73 29.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

The Contractor shall provide the Owner and Architect with access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner or Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect.

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce

other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 4 ARCHITECT

§ 4.1 General

§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

§ 4.1.2 Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld.

§ 4.2 Administration of the Contract

§ 4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect issues the final Certificate for Payment. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

§ 4.2.3 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of, and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 4.2.4 Communications

The Owner and Contractor shall include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.5 Based on the Architect's evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 4.2.6 The Architect has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.7.1 Review of submittals is only for general conformance with the design concept of the Project and general compliance with the information given in the Contract Documents. The review does not affect the Contractor's responsibility to perform all Construction Contract requirements with no change in contract price or time. Any action shown by the Architect is subject to the requirements of the plans, specifications and other Contract Documents. The Contractor is responsible to confirm and correlate dimensions at the site, for information that pertains to the fabrication processes, for the means, methods, techniques, procedures, sequences and quantities necessary to complete the Construction Contract and for coordination of the work of all trades and satisfactory performance of its work. The review by the Architect is undertaken solely to satisfy Architect's obligations, if any, to the Owner and shall not give rise to any claim by the Contractor or other parties against the Architect or Owner.

§ 4.2.8 The Architect will prepare Construction Change Directives, and may order minor changes in the Work as provided in Section 7.4. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.9 The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.

§ 4.2.10 If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 4.2.11 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.12 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions rendered in good faith.

§ 4.2.13 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.14 The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term “Subcontractor” is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term “Subcontractor” does not include a Separate Contractor or the subcontractors of a Separate Contractor.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term “Sub-subcontractor” is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, but in no case later than seven (7) days, shall notify the Owner and Architect of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Architect may notify the Contractor whether the Owner or the Architect (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor’s Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner or Architect makes reasonable objection to such substitution.

§ 5.2.5 Within ten (10) days of execution of the Contract for Construction, the Contractor shall provide the Owner with copies of all Subcontractor agreements with a contract value of \$20,000.00 or greater. These Subcontractor agreements shall match those submitted on the First-Tier Subcontractor Disclosure Form in the Project Manual, Section 00 45 21.

§ 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor’s Work that the Contractor, by these Contract Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each Separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, Separate Contractors, and the Owner until subsequently revised.

§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

§ 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5.

§ 6.2.5 The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.2.6 Should claims, other disputes and/or matters in question between the Contractor and a separate contractor arise the Contractor shall resolve such matters with the separate contractor by agreement or otherwise. If such separate contractor sues the Owner and/or the Architect on account of any damage alleged to have been caused by the Contractor, the Owner and/or Architect shall notify the Contractor who shall defend such proceedings at the Contractor's expense. If any judgment or award of any kind results against the Owner or Architect, whether or not the Contractor, having been notified, defends the proceedings, the Contractor shall pay or satisfy it and shall reimburse the Owner and/or Architect for all expenses, attorney's fees, court or arbitration costs which the Owner and/or Architect incurred, including actual cost expenditures in defense which may not be costs allowed in court or arbitration.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Architect will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Contractor, and Architect. A Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument prepared by the Contractor and signed by the Owner, Contractor, and Architect stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

§ 7.2.2 Change Orders shall be prepared on AIA Document G701.

§ 7.2.3 The Contractor shall submit quotations in response to Architect's request for proposal in a timely fashion so as to avoid delay in the construction schedule and, in no case later than 14 days from initial receipt of the request.

§ 7.2.4 Contractor, and subcontractors through the Contractor, shall set forth documentation in accordance with applicable provisions of Paragraph 8.3 covering disruptions or delays, if any, to be caused in the Work due to change orders.

§ 7.3 Construction Change Directives

§ 7.3.1 A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Architect;
- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
- .5 Costs of supervision and field office personnel directly attributable to the change.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change subject to the following schedule:

- .1 For the Contractor, for Work performed by the Contractor's own forces, 10 percent of the cost.
- .2 For the Contractor, for Work performed by the Contractor's Subcontractor, 10 percent of the amount due the Subcontractor.
- .3 For each Subcontractor or Sub-subcontractor involved, for Work performed by that Subcontractor's or Sub-subcontractor's own forces, 10 percent of the cost.

- .4 For each Subcontractor, for Work performed by the Subcontractor's Sub-subcontractors, 5 percent of the amount due the Sub-subcontractor.
- .5 Cost to which overhead and profit is to be applied shall be determined in accordance with Subparagraph 7.3.6.
- .6 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials and Subcontracts. Labor and materials shall be itemized in the manner prescribed above. Where major cost items are Subcontracts, they shall be itemized also. In no case will a change involving over \$500.00 be approved without such itemization.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Architect determines, in the Architect's professional judgment, to be reasonably justified. The Architect's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Architect will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay

authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts, and the Architect determines, justify delay, then the Contract Time shall be extended for such reasonable time as the Architect may determine.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

§ 8.3.4 The Contractor and the Contractor's surety shall be liable for and shall pay the Owner the sums hereinafter stipulated as liquidated damages for each calendar day of delay beyond the said Contract Time. **Liquidated damages shall be five hundred dollars (\$500) per calendar day until all work is determined complete.**

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Architect before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Architect. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Architect and supported by such data to substantiate its accuracy as the Architect may require, and unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

§ 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner or Architect require, such as copies of requisitions, and releases and waivers of liens from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Architect, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.1.2 Retainage will be withheld at a rate of **five (5) percent**.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials, and equipment relating to the Work.

§ 9.4 Certificates for Payment

§ 9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data in the Application for Payment, that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Architect. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.4.3 The Owner will make payments to the Contractor on account of the contract as follows:

- .1 Monthly in accordance with the General Conditions.
- .2 Thirty days after completion and final acceptance by the Owner, the balance due under the Contract, provided the work be then fully completed and the Contract fully performed.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.
- .8 Failure to present affidavit pertaining to wages paid as required by the Contract Documents.
- .9 Delay by the Contractor.

§ 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.

§ 9.5.3 When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.4 If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Contractor shall reflect such payment on its next Application for Payment.

§ 9.6 Progress Payments

§ 9.6.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Architect.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 9.7 Failure of Payment

If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within ten (10) days after the date established in the Contract Documents, the amount certified by the Architect then the Contractor

may, upon ten (10) additional days' notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the Contractor's list, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, and the Contractor has met all prerequisite items specified in Section 01 77 00 and has provided to Owner an occupancy permit issued by the Building Department having jurisdiction, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.8.6 Should re-inspections be required because of failure of the Work to comply with claims of status of completion made by the Contractor, then the Owner will incur costs for these unexpected additional services. It is agreed that the Owner shall have the right to deduct the cost for such services from the final payment due the Contractor, subject to the following limitations:

- .1 That the Owner's claims for unnecessary re-inspections apply only to the period beginning with the Contractor's notice of substantial completion, and ending on the date of final acceptance;
- .2 That the definition of unnecessary inspections, and the cost for same shall be as set forth in Division 1 of this Project Manual, Section 01 77 00, entitled "Contract Closeout".

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The

stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees. Additional provisions pertaining to final acceptance of the Project and release of retainage are specified in Section 01 77 00 of this Project Manual; conform thereto.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1** employees on the Work and other persons who may be affected thereby;
- .2** the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
- .3** other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

§ 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

§ 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials and Substances

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or

polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner and Architect of the condition.

§ 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor and the Architect will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions of this Agreement. Insurance coverages shall be not less than the following:

- | | | |
|----|--|--------------------------|
| A. | Workman's Compensation:
Employer's Liability: | Statutory
\$1,000,000 |
| B. | Commercial General Liability:
All categories:
\$1,000,000 each occurrence
\$2,000,000 general aggregate | |

Except:
Products and completed operations hazard:
\$2,000,000

- C. Commercial Automobile Liability:
Combined Bodily Injury and Property Damage:
\$1,000,000 combined single limit (CSL) each accident
- D. Excess Liability (Umbrella):
Combined Bodily Injury and Property Damage:
\$2,000,000 aggregate

The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, its officers and employees, the Architect, and Architect's consultants shall be named as additional insureds under the Contractor's commercial general liability policy **under coverage as broad as I.S.O. Forms CG 2010 or CG 2032, or their equivalent.** This insurance will include a severability of interest (cross liability clause). The Contractor's policy shall be designated as primary for both defense and indemnity, and any Owner's policies shall be excess."

§ 11.1.1.1 Liability Insurance shall include all major divisions of coverage and be on a comprehensive basis including:

1. Premises Operations (including X, C and U coverages as applicable).
2. Independent Contractor's Protective.
3. Products and Completed Operations.
4. Personal Injury Liability with Employment Exclusion deleted.
5. Contractual, including specified provision for Contractor's obligation under Paragraph 3.18.
6. Owned, non-owned and hired motor vehicles.
7. Broad Form Property Damage including Completed Operations.

§ 11.1.1.2 The General Liability coverages are to be provided by a Commercial General Liability Policy on an occurrence form. Claims made policies will not be accepted. General Liability insurance may be arranged under a single policy for the full limits required or by a combination of underlying policies with the balance provided by an excess or umbrella liability policy.

§ 11.1.1.3 The Contractor shall not commence work under this Contract until he has obtained all the insurance required herein and such insurance has been approved by the Owner, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been so obtained and approved. Approval of the insurance by the Owner shall not relieve or decrease the liability of the Contractor herein.

§ 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.1.4 **Notice of Cancellation or Expiration of Contractor's Required Insurance.** Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

§ 11.2.2 **Failure to Purchase Required Property Insurance.** If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform the Contractor in writing prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.3 **Notice of Cancellation or Expiration of Owner's Required Property Insurance.** Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

§ 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Architect and Architect's consultants; and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The

Owner waives all rights of action against the Contractor and Architect for loss of use of the Owner's property, due to fire or other hazards however caused.

§11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.5.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

§ 13.3 Rights and Remedies

§ 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No action or failure to act by the Owner, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Architect

timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. Independent laboratory or Special Inspector's tests for certain items of work will be paid for by the Owner as set forth under Section 01 45 00. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Architect's services and expenses, shall be at the Contractor's expense.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

§ 13.4.5 If the Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing

portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner and the Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Initial Decision Maker, upon application, and this obligation for payment shall survive termination of the Contract.

§ 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

§ 15.1.2 Time Limits on Claims

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. No claim shall be valid unless so made. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled construction.

§ 15.1.7 Waiver of Claims for Consequential Damages

The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit, except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 Initial Decision

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

§ 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

§ 15.2.6.1 Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days after receipt thereof, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 Intentionally deleted.

§ 15.3 Mediation

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation. The parties shall attempt to mutually agree on a choice of mediator. If the parties are unable to so agree, a party may request that the then presiding judge of the Judicial District having jurisdiction appoint a mediator who shall be a lawyer having at least five years' experience with construction law. A copy of any such request to the presiding judge shall be provided to the other party to the Contract. A request for mediation shall be made in writing and delivered to the other party to the Contract. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order.

§ 15.3.3 Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.

§ 15.3.4 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 Binding Dispute Resolution

§ 15.4.1 Any Claim arising out of or related to the Contract, except Claims relating to aesthetic effect and except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.6, shall, after decision made by the Initial Decision Maker or 30 days after submission of the Claim to the Initial Decision Maker, be subject to binding dispute resolution. Prior to binding dispute resolution, the parties shall endeavor to resolve disputes by mediation in accordance with the provisions of Section 15.3.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 Intentionally deleted.

§ 15.4.3 Intentionally deleted.

Intentionally deleted.

§ 15.5 Attorney Fees

Except for the mediation provided for in paragraph 4.5, if any party institutes any suit, action or other proceeding, to enforce any covenant or agreement hereof, the prevailing party shall be entitled to recover such sum of money as the court may adjudge reasonable as attorney's fees in such suit, action or other proceeding, including any appeals taken by either party in such suit, action or proceeding.

SECTION 00 73 13
SUPPLEMENTARY GENERAL CONDITIONS
to AIA Document A201 (2017 edition)

The following conditions are in addition to the “General Conditions of the Contract for Construction”, AIA Document A201 and the “Contract for Construction”, AIA Document A201, including all modifications contained in this Project Manual.

1. Prohibition on the Use of Lead-Based Paint *(Contracts and subcontracts residential for construction or rehabilitation)*

The use of lead-based paint on any interior or exterior surface is prohibited.

2. Public Works Bond

In accordance with ORS 279C.830(3) and before starting work on the Project, Contractor shall file a \$30,000 Public Works Bond with the Oregon Construction Contractors Board.

Contractor shall include a requirement in every subcontract which requires the subcontractor to file a \$30,000 Public Works Bond with the Oregon Construction Contractors Board in accordance with ORS 279C.830(3)(b) and before starting work on the Project.

3. Oregon Prevailing Wage Laws

Contractor shall pay each worker employed in the performance of this contract not less than the wage rate for the type of work being performed as set forth in either the Oregon Prevailing Wage set forth in the “Prevailing Wage Rates for Public Works Contracts in Oregon”.

Contracts must include a provision that if the contractor fails to pay for labor and services, the agency can pay for them and withhold these amounts from payments to the contractor. There must also be a provision that the contractor must pay daily, weekly, weekend and holiday overtime as required.

**SECTION 00 73 43
PREVAILING WAGE RATES**

PART 1 GENERAL

1.1 REQUIREMENTS

- A. State of Oregon Bureau of Labor and Industries (BOLI) Prevailing Rate of Wage and PWR Apprenticeship Rates apply to all work on this project including work performed by Subcontractors. The reporting and review standards are set by the BOLI standards. Contractors must comply with all requirements currently published by the agency relative to minimum wage rates and labor standards.
- B. BOLI Fee: The Owner shall be responsible to pay a fee to the Bureau of Labor and Industries pursuant to the provisions of ORS 279C.825. The fee is one-tenth of one percent of the price of this Contract, but not less than \$250 nor more than \$7,500 regardless of the Contract price.
 - Contact: Contract Fee Section
Prevailing Wage Rate Unit
Bureau of Labor and Industries
800 NE Oregon Street, #1045
Portland, OR 97232-2180
- C. The contractor shall use the attached amended payroll report form that satisfies both BOLI and federal labor standards.
- D. Every contract and subcontract must contain a provision that states the workers will be paid not less than the applicable prevailing wage rate for the type of work being performed. ORS 279C.830(1)(c); OAR 839-025-0020(3)

1.2 REFERENCE

- A. **BOLI:** The State of Oregon Bureau of Labor and Industries, Prevailing Wage Rates for Public Works Contracts in Oregon, effective **July 1, 2018**. Electronic copies of this document can be obtained at the following website:

https://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx

1.3 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- | | | |
|----|--|------------------|
| A. | Invitation for Bids | Section 00 11 13 |
| B. | Plan Centers | Section 00 11 21 |
| C. | Instructions to Bidders | Section 00 21 00 |
| D. | Bid Form | Section 00 41 00 |
| E. | Bid Bond | Section 00 43 13 |
| F. | Pre-Bid Substitution Form | Section 00 43 25 |
| G. | First Tier Subcontractor Disclosure Form | Section 00 45 21 |
| H. | Contract for Construction | Section 00 52 00 |
| I. | Performance Bond & Payment Bond | Section 00 61 13 |
| J. | General Conditions | Section 00 72 00 |
| K. | Supplementary General Conditions | Section 00 73 00 |
| L. | Prevailing Wage Rates | Section 00 73 43 |
| M. | State of Oregon – Public Contracting Clauses | Section 00 73 73 |
| N. | Summary of Work | Section 01 11 00 |

**PART 2 PRODUCTS
NOT USED**

**SECTION 00 73 43
PREVAILING WAGE RATES**

PART 3 EXECUTION
NOT USED

END OF SECTION

PREVAILING WAGE RATES

for

Public Works Contracts in Oregon



OREGON BUREAU OF LABOR AND INDUSTRIES

**Brad Avakian
Commissioner
Bureau of Labor and Industries**

Effective: July 1, 2018

BRAD AVAKIAN
COMMISSIONER



CHRISTIE HAMMOND
DEPUTY COMMISSIONER

BUREAU OF LABOR AND INDUSTRIES

July 1, 2018

In January and July of each year, the Bureau of Labor and Industries publishes the prevailing wage rates that are required to be paid to workers on non-residential public works projects in the state of Oregon. Quarterly updates are published in April and October.

A separate publication, entitled "[Definitions of Covered Occupations for Public Works Contracts in Oregon](#)," provides occupational definitions used to classify the duties performed on public works projects.

These publications are available electronically on the bureau's website at www.oregon.gov/boli. In order to contain costs and preserve limited budget resources, BOLI is no longer automatically mailing copies of these publications to contracting agencies, contractors, and other interested parties. Those on the agency's mailing list will receive an email notification whenever the publications are amended in the future. One complimentary hard copy of each PWR publication is available upon request by emailing BOLI at pwremail@boli.state.or.us or calling 971-673-0838. Additional copies are available at cost, plus postage.

Also available on the bureau's website is a link to the federal Davis-Bacon rates. This link is posted in order to assist contractors and public agencies in determining which rates to pay on projects in Oregon subject to BOTH the state PWR and federal Davis-Bacon Act. The higher of the wage rates must be paid on such projects.

Unless specifically exempted by state law, prevailing wage rates are the minimum wages that must be paid to all workers employed on all public works. These rates are determined using data collected from a statewide construction industry wage survey of occupations and crafts performing commercial building and heavy and highway construction in 14 geographic regions of the state.

ORS 279C.830 requires that the applicable wage rates be incorporated into all bid specifications for public works contracts subject to the PWR law. A statement incorporating the applicable prevailing wage rate publication and any amendments thereto or Davis-Bacon wage rate determination into the specifications *by reference* will satisfy these requirements. Such reference must include the title of the applicable wage rates publication or determination and the date of the publication or determination as well as the date of any applicable amendments. A provision that prevailing wage rates must be paid must also appear in the contract.

Generally, the rates in effect at the time the bid specifications are first advertised are those that apply for the duration of the project. There are some exceptions to this rule. For example, if during the bidding process, the prevailing wage rates change, the public agency has the option of amending the bid specifications to reflect such changes. If a Construction Manager/General Contractor (CM/GC) is used on the project, the rates in effect at the time the CM/GC contract becomes a public works contract are the applicable rates to be used for the duration of the project. (See OAR 839-025-0020 for more information.) Note that the applicable rates for purposes of compliance with the federal Davis-Bacon Act may be different than the applicable rates for purposes of compliance with Oregon's prevailing wage rate laws. The effective federal rates will be those as determined under 29 CFR 1.6.

If you have any questions regarding application of the state PWR law or the applicable rates to be paid on any project, contact the bureau's Prevailing Wage Coordinator in Portland at (971) 673-0839.

Brad Avakian
Commissioner
Bureau of Labor and Industries

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BOLI forms necessary to comply with ORS 279C.800 through ORS 279C.870 may be found in the back of this booklet. Contractors are encouraged to use and keep on file the forms provided as master copies for use on future prevailing wage rate projects.

All of the information in this booklet can be accessed and printed from the Internet at: www.oregon.gov/BOLI

Pursuant to ORS 279C.800 to ORS 279C.870, the prevailing wage rates contained in this booklet have been adopted for use on public works contracts in Oregon. Additional copies of this booklet are available at cost, plus postage.

HOW TO LOOK UP A RATE

1. When was the project first advertised for bid?

For purposes of compliance with Oregon's prevailing wage rate laws, the rates in effect at the time the bid specifications are first advertised are those that apply for the duration of the project. (See OAR 839-025-0020(6) for information about projects using a CM/GC.)

2. What type of work is being performed by the employee?

Using the booklet, [Definitions of Covered Occupations](#) find the definition that most closely matches the actual work being performed by the worker. If you have any questions about work classifications, contact BOLI at the number below.

3. Where is the work being performed – what region?

Find the occupation in the correct region pages associated with the county where the project construction is taking place.

4. Is there a rate listed next to the classification?

If so, use it. The prevailing wage rate is made up of an hourly base rate and an hourly fringe rate; it is the combination of these two amounts that must be paid to the worker.

5. If the book directs you to "See Appendix," go to the back of the book and use the rate listed in the Appendix pages. It may include a group number, shift differential, hazard pay and/or zone pay which are added to the hourly base rate.

6. Apprentices must be paid the full fringe rate in those regions where the appendix rate does not apply. However, if the book directs you to "See Appendix," and the worker is registered in a bona fide apprenticeship program, you may contact BOLI at (971) 673-0839 for the applicable hourly fringe rate.

7. If you still don't know CALL BOLI at (971) 673-0839.

For specific information or questions regarding the prevailing wage law, you may obtain a "Prevailing Wage Rate Laws" handbook by contacting the nearest Oregon Bureau of Labor and Industries office listed below. An order form is in the back of this booklet.

BOLI Office Locations

Eugene	1400 Executive Parkway, Suite 200 Eugene, OR 97401	(541) 686-7623
Portland	800 NE Oregon St., #1045 Portland, OR 97232	(971) 673-0761
Salem	3865 Wolverine St. NE, Bldg. E-1 Salem, OR 97305	(503) 378-3292

PUBLIC WORKS BONDS

EVERY CONTRACTOR AND SUBCONTRACTOR who works on public works projects subject to the prevailing wage rate (PWR) law is required to file a **\$30,000** "**PUBLIC WORKS BOND**" with the Construction Contractor's Board (CCB). (ORS 279C.836) This includes flagging and landscaping companies, temporary employment agencies, and sometimes sole proprietors.

- This bond is to be **USED EXCLUSIVELY FOR UNPAID WAGES** determined to be due by the Bureau of Labor and Industries (BOLI).
- The bond **MUST** be filed **BEFORE STARTING WORK** on a prevailing wage rate project.
- The bond is in effect **CONTINUOUSLY** (do not have to have one per project).
- **BEFORE PERMITTING A SUBCONTRACTOR TO START WORK** on a public works project, **CONTRACTORS MUST VERIFY** their subcontractors have either filed the bond, or have elected not to file a public works bond due to a bona fide exemption.
- A public works bond is in addition to any other required bond the contractor or subcontractor is required to obtain.

Exemptions:

- Allowed for a disadvantaged business enterprise, a minority-owned business, woman-owned business, a business that a service-disabled veteran owns or an emerging small business certified under ORS 200.055, for the first FOUR years of certification;
 - Exempt contractor must still file written verification of certification with the CCB, and give the CCB written notice that they elect not to file a bond.
 - The prime contractor must give written notice to the public agency that they elect not to file a public works bond.
 - Subcontractors must give written notice to the prime contractor that they elect not to file a public works bond.
- For projects with a total project cost of \$100,000 or less, a public works bond is not required. (Note this is the total project cost, not an individual contract amount.)
- Emergency projects, as defined in ORS 279A.010(f).

ORS 279C.830(2) requires:

That the **specifications** for every contract for public works shall contain a provision stating that the contractor and every subcontractor must have a public works bond filed with the CCB before starting work on the project, unless otherwise exempt.

Every contract awarded by a contracting agency shall contain a provision requiring the contractor:

- To have a public works bond filed with the CCB before starting work on the project, unless otherwise exempt;
- To include in every subcontract a provision requiring the subcontractor to have a public works bond filed with the CCB before starting work on the project unless otherwise exempt.

Every subcontract that a contractor or subcontractor awards in connection with a public works contract must require any subcontractor to have a public works bond filed with the Construction Contractors Board before starting work on the public works project, unless otherwise exempt.

PWR SURVEY WAGE RATE APPEAL PROCESS

- 1) Anyone wishing to challenge or appeal a survey rate determination should submit their request in writing to the commissioner.
- 2) The appeal should include:
 - a) a complete description of the “problem,” including the affected trade(s), and documentation or evidence (if available) supporting why the rate determination is incorrect
 - b) recommendations for how the rate could be more accurately determined.
- 3) The written appeal will be reviewed by the Wage and Hour Division which will recommend to the commissioner a course of action and proposed time frame for addressing the issue (such as a recommendation that further information be obtained, an investigation or study of the matter be conducted, a rate amendment or correction be issued, the next survey be modified, etc.).
- 4) The commissioner will review the division’s recommendation and either approve, disapprove or modify the recommendation. (The PWR Advisory Committee may be consulted in some matters as deemed appropriate by the commissioner.)
- 5) The requesting party will be notified of the commissioner’s decision.

PWR REQUIRED POSTINGS

ALL CONTRACTORS AND SUBCONTRACTORS

PREVAILING WAGE RATES

Each and every contractor and subcontractor engaged in work on a public works must post the applicable prevailing wage rates for that project in a conspicuous place at the work site so workers have ready access to the information. ORS 279C.840(4); OAR 839-025-0033(1).

DETAILS OF FRINGE BENEFIT PROGRAMS

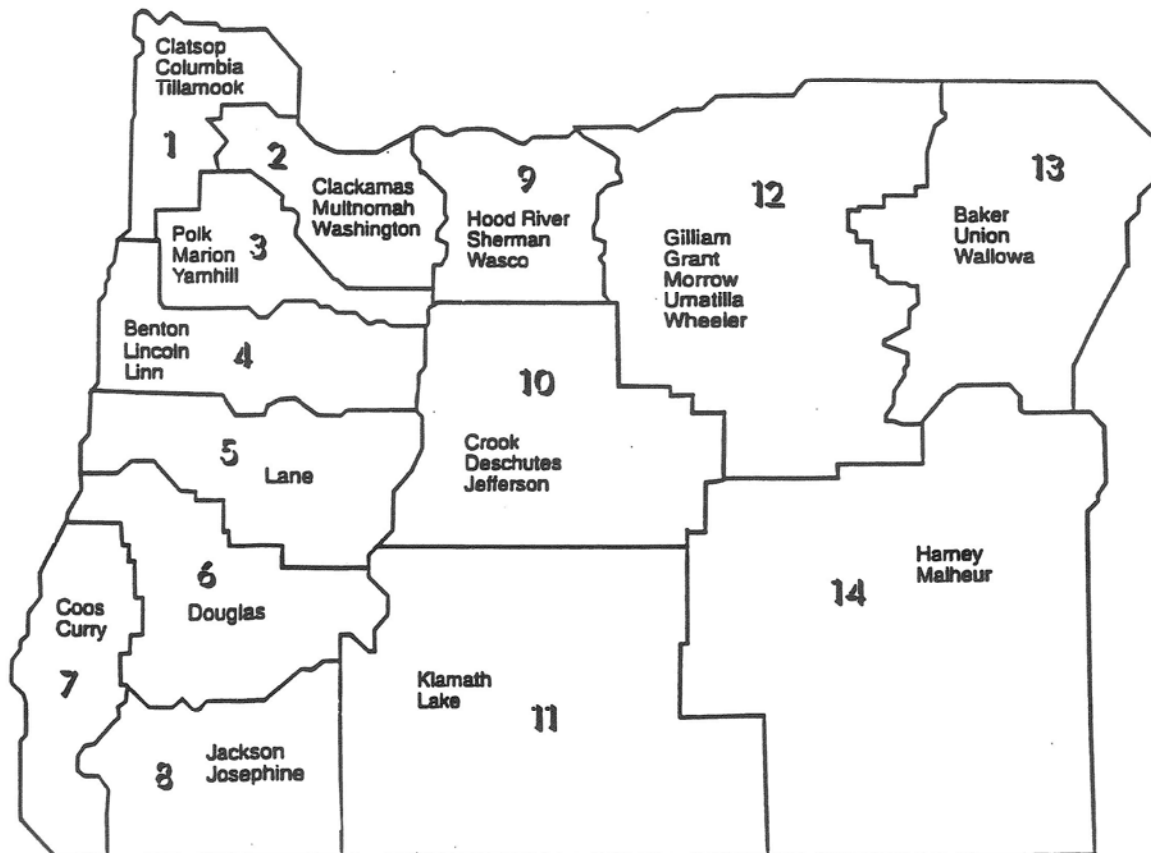
When a contractor or subcontractor provides for or contributes to a health and welfare plan or a pension plan, or both, for the contractor or subcontractor's employees who are working on a public works project, the details of all fringe benefit plans or programs must be posted on the work site. The posting must include a description of the plan or plans, information about how and where claims can be made and where to obtain more information. The notice must be posted in a conspicuous place at the work site in the same location as the prevailing wage rates (see above). ORS 279C.840(5); OAR 839-025-0033(2)

WORK SCHEDULE

Contractors and subcontractors must give workers the regular work schedule (days of the week and number of hours per day) in writing, before beginning work on the project. Contractors and subcontractors may provide the schedule at the time of hire, prior to starting work on the contract, or by posting the schedule in a location frequented by employees, along with the prevailing wage rate information and any fringe benefit information. If an employer fails to give written notice of the worker's schedule, the work schedule will be presumed to be a five-day schedule. The schedule may only be changed if the change is intended to be permanent and is not designed to evade the PWR overtime requirements. ORS 279C.540(2); OAR 839-025-0034.

PREVAILING WAGE RATES OCCUPATIONS BY REGIONS

PREVAILING WAGE RATE REGIONS



REGION #4
 Benton, Lincoln and Linn Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	\$33.92	\$23.34
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter (See Carpenter Group 5)	See Appendix	See Appendix
Carpenter Group 1 & 2	See Appendix	See Appendix
Cement Mason	See Appendix	See Appendix
Diver	See Appendix	See Appendix
Diver Tender	See Appendix	See Appendix
Dredger	\$41.31	\$13.90
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	See Appendix	See Appendix
Drywall Taper (See Painter & Drywall Taper)	See Appendix	See Appendix
Electrician	See Appendix	See Appendix
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$24.53	\$10.02
Fence Erector (Metal)	\$20.50	\$5.09
Flagger (See Labor Group 3)	See Appendix	See Appendix
Glazier	See Appendix	See Appendix
Hazardous Materials Handler/Mechanic	See Appendix	See Appendix
Highway and Parking Striper	\$26.11	\$8.20
Ironworker	See Appendix	See Appendix
Laborer Group 1	See Appendix	See Appendix
Laborer Group 2	See Appendix	See Appendix
Laborer Group 3	See Appendix	See Appendix
Landscape Laborer/Technician	\$18.14	\$4.68
Limited Energy Electrician	\$30.03	\$10.49
Line Constructor	See Appendix	See Appendix
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2	\$29.32	\$10.68
Painter	\$22.00	\$8.46
Piledriver	\$35.17	\$15.01
Plasterer and Stucco Mason	See Appendix	See Appendix
Plumber/Pipefitter/Steamfitter	See Appendix	See Appendix
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #4

Benton, Lincoln and Linn Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	See Appendix	See Appendix
Sheet Metal Worker	\$32.82	\$13.17
Soft Floor Layer	See Appendix	See Appendix
Sprinkler Fitter	\$33.70	\$12.93
Tender to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	See Appendix	See Appendix
Tender to Plasterer and Stucco Mason	\$26.12	\$12.29
Testing, Adjusting, and Balancing (TAB) Technician	\$34.14	\$13.04
Tilesetter/Terrazzo Worker: Hard Tilesetter	See Appendix	See Appendix
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver – All Groups	\$21.77	\$6.53

APPENDIX

JULY 1, 2018

Collectively Bargained Rates

(To be used only when referred to in the Regions pages 6-33)

JULY 1, 2018 APPENDIX

*The Appendix rates are Collectively Bargained Rates to be used **ONLY** for Regions/Trades specified in pages 6 through 33. Refer to pages 6 through 33 **BEFORE** using rates in this section.*

Rates in this section may include premium pay such as shift differential, hazard pay and/or a zone pay differential which is added to the hourly base rate.

Using the booklet, [Definitions of Covered Occupations](#), find the definition and group number, if applicable, that most closely matches the actual work being performed by the worker.

Asbestos Worker/Insulator	38
Boilermaker	38
Bricklayer/Stonemason	38
Bridge and Highway Carpenter (See Carpenter Group 5)	38
Carpenter	38
Cement Mason	39
Diver	39
Diver Tender	39
Dredger	40
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	40
Drywall Taper (See Painter & Drywall Taper)	45
Electrician	41
Elevator Constructor, Installer and Mechanic	43
Glazier	43
Hazardous Materials Handler	43
Highway/Parking Striper	43
Ironworker	43
Laborer	44
Limited Energy Electrician	44
Line Constructor	45
Marble Setter	45
Millwright Group 1 & 2 (See Carpenter Group 3 & 4)	38
Painter	45
Piledriver (See Carpenter Group 6)	38
Plasterer and Stucco Mason	46
Plumber/Pipefitter/Steamfitter	46
Power Equipment Operator	47
Rofer	48
Sheet Metal Worker	48
Soft Floor Layer	49
Sprinkler Fitter	49
Tender to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	49
Tender to Plasterer and Stucco Mason	49
Testing and Balancing (TAB) Technician	50
Tilesetter/Terrazzo Worker: Hard Tilesetter	50
Tile, Terrazzo, and Marble Finisher	50
Truck Driver	50
MAP: Power Equipment Operator, Zone 1	51

TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE	TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE
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ASBESTOS WORKER/INSULATOR

48.67 22.12

Firestop Containment **32.37 15.70**

BOILERMAKER **38.60 29.04**

BRICKLAYER/STONEMASON

38.00 19.83

(This trade is tended by "Tenders to Mason Trades")

(Add \$1.00 per hour to Fringe for Refractory repair work)

CARPENTER

Zone A (Base Rate)

Group 1	37.67	16.80
Group 2	37.82	16.80
Group 3	38.20	16.80
Group 4	38.38	16.80
Group 5	38.20	16.80
Group 6	38.74	16.80

Zone Differential for Carpenters
(Add to Zone A Base Rate)

Zone B	1.25 per hour
Zone C	1.70 per hour
Zone D	2.00 per hour
Zone E	3.00 per hour
Zone F	5.00 per hour
Zone G	10.00 per hour

Zone A: Projects located within 30 miles of the respective city hall of the cities listed.

Zone B: More than 30 miles but less than 40 miles.

Zone C: More than 40 miles but less than 50 miles.

Zone D: More than 50 miles but less than 60 miles.

Zone E: More than 60 miles but less than 70 miles.

Zone F: More than 70 miles but less than 100 miles.

Zone G: More than 100 miles.

CARPENTER (continued)

Reference Cities for Group 1 and 2 Carpenters

Albany	Goldendale	Madras	Roseburg
Astoria	Grants Pass	Medford	Salem
Baker City	Hermiston	Newport	The Dalles
Bend	Hood River	Ontario	Tillamook
Brookings	Klamath Falls	Pendleton	Vancouver
Burns	La Grande	Portland	
Coos Bay	Lakeview	Port Orford	
Eugene	Longview	Reedsport	

Group 3
(Millwright Group-I)

Group 4
(Millwright Group-II)

Zones for Groups 3 and 4 Carpenter are determined by the distance between the project site and **either**

- 1) The worker's residence; **or**
- 2) City Hall of a reference city listed for the appropriate group shown, whichever is closer

Reference Cities for Group 3 and 4 Carpenters

Eugene	Medford	Portland	Vancouver
Longview	North Bend	The Dalles	

Group 5
(Bridge & Highway
Carpenter)

Group 6
(Piledriver)

Zones for Groups 5 and 6 Carpenter are determined by the distance between the project site and **either**

- 1) The worker's residence; **or**
- 2) City Hall of a reference city listed for the appropriate group shown, whichever is closer

Reference Cities for Group 5 and 6 Carpenters

Bend	Longview	North Bend
Eugene	Medford	Portland

Note: All job or project locations shall be computed (determined) on the basis of road miles and in the following manner. A mileage measurement will start at the entrance to the respective city hall, facing the project (if possible), and shall proceed by the normal route (shortest time, best road) to the geographical center on the highway, railroad, and street construction projects (end of measurement). On all project contracts, the geographical center where the major portion of the construction is located, shall be considered the center of the project (end measurement).

TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE	TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE
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CARPENTER (continued)

Welders receive \$1.75/hour above their group's rate with an eight (8) hour minimum.

When working with creosote and other toxic, treated wood and steel material, workers shall receive \$.25/hour premium pay for minimum of eight (8) hours.

When working in sheet pile coffer dams or cells up to the external water level, Group 6 workers shall receive \$.15/hour premium pay for minimum of eight (8) hours.

CEMENT MASON

(This trade is tended by "Concrete Laborer")

Zone A (Base Rate)

Group 1	32.10	20.17
Group 2	32.80	20.17
Group 3	32.80	20.17
Group 4	33.50	20.17

Zone Differential for Cement Mason
(Add to Basic Hourly Rate)

Zone A	3.00 per hour
Zone B	5.00 per hour
Zone C	10.00 per hour

Zone A: Projects located 60-79 miles of the respective city hall of the Reference Cities listed below.

Zone B: Projects located 80-99 miles of the respective city hall of the Reference Cities listed below.

Zone C: Projects located 100 or more miles of the respective city hall of the Reference Cities listed below.

Reference Cities for Zones A-C (Cement Mason)

Bend	Eugene	Portland	The Dalles
Corvallis	Medford	Salem	Vancouver

When a contractor takes current employees to a project that is located more than 59 miles from the city hall of the Reference City that is closest to the contractor's place of business, Zone Pay is to be paid for the distance between the city hall of the identified Reference City and the project site.

"Contractor's place of business" shall include not only contractor's principal place of business but also contractor's area office(s) that support contractor's operations in a geographical region. Such area office(s) shall not include project offices(s) established for the duration of a particular project.

CEMENT MASON (continued)

Note: All miles are to be determined on the basis of road miles using the normal route (shortest time – best road), from the city hall of the Reference City closest to the contractor's place of business and the project.

DIVER & DIVER TENDER

Zone 1 (Base Rate)

DIVER	86.89	16.83
DIVER TENDER	42.89	16.83

- 1) For those workers who reside within a reference city below, their zone pay shall be computed from the city hall of the city wherein they reside.
- 2) For those workers who reside nearer to a project than is the city hall of any reference city below, the mileage from their residence may be used in computing their zone pay differential.
- 3) The zone pay for all other projects shall be computed from the city hall of Portland.

Zone Differential for Diver/Diver Tender
(Add to Zone 1 Base Rate)

Zone 2	.85 per hour
Zone 3	1.25 per hour
Zone 4	1.70 per hour
Zone 5	2.00 per hour
Zone 6	3.00 per hour
Zone 7	5.00 per hour

Zone 1: Projects located within 30 miles of city hall of the reference cities listed.

Zone 2: More than 30 miles, but less than 40 miles.

Zone 3: More than 40 miles, but less than 50 miles.

Zone 4: More than 50 miles, but less than 60 miles.

Zone 5: More than 60 miles, but less than 70 miles.

Zone 6: More than 70 miles, but less than 100 miles.

Zone 7: More than 100 miles from the city hall of employee's home local.

Reference Cities for Diver/Diver Tender

Astoria	Klamath Falls	Newport	Roseburg
Bend	Longview	North Bend	Salem
Eugene	Medford	Portland	The Dalles

TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE	TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE
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DIVER & DIVER TENDER (continued)

Note: All job or project locations shall be computed (determined) on the basis of road miles and in the following manner. A mileage measurement will start at the entrance to the respective city hall, facing the project (if possible), and shall proceed by the normal route (shortest time, best road) to the geographical center on the highway, railroad, and street construction projects (end of measurement). On all project contracts, the geographical center where the major portion of the construction is located, shall be considered the center of the project (end measurement).

Depth Pay and Enclosure Pay are added to the Divers' Basic Hourly Rate to obtain the Total Hourly Rate for the Diver.

Basic Hourly Rate	+	Hourly Depth Pay	+	Hourly Enclosure Pay	=	Diver Total Hourly Pay Rate
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Diver Depth Pay:

<u>Depth of Dive</u>	<u>Hourly Depth Pay</u>
50-100 ft.	\$1.00 per foot over 50 feet
101-150 ft.	\$1.50 per foot over 100 feet
151-200 ft.	\$2.00 per foot over 150 feet

Depth shall be figured from the surface to the actual depth where the diving work is being performed.

Diver Enclosure Pay (working without vertical escape):

Distance Traveled

<u>In the Enclosure</u>	<u>Hourly Enclosure Pay</u>
5-50ft.	\$0.50/hr. up to \$4.00 maximum per day
50-100ft.	\$1.13/hr. up to \$9.00 maximum per day
100-150ft.	\$2.13/hr. up to \$17.00 maximum per day
150-200ft.	\$4.63/hr. up to \$37.00 maximum per day
200-300ft.	\$4.63/hr. up to \$37.00 maximum per day, plus \$0.40 per foot traveled in enclosure.
300-450ft.	\$4.63/hr. up to \$37.00 maximum per day, plus \$0.80 per foot traveled in enclosure.
450-600ft.	\$4.63/hr. up to \$37.00 maximum per day, plus \$1.60 per foot traveled in enclosure.

DREDGER

Zone A (Base Rate)

Leverman (Hydraulic & Clamshell)	45.96	14.35
Assistant Engineer (Watch Engineer, Mechanic Machinist)	42.80	14.35
Tenderman (Boatman Attending Dredge Plant) Fireman	41.31	14.35
Fill Equipment Operator	40.14	14.35
Assistant Mate	37.44	14.35

Zone Differential for Dredgers
(Add to Zone A Base Rate)

Zone B	3.00 per hour
Zone C	6.00 per hour

Zone mileage based on road miles:

- Zone A: Center of jobsite to no more than 30 miles from the city hall of Portland.
- Zone B: More than 30 miles but not more than 60 miles.
- Zone C: Over 60 miles.

DRYWALL, LATHER, ACOUSTICAL CARPENTER & CEILING INSTALLER

Zone 1 (Base Rate)

1. DRYWALL INSTALLER	37.96	16.51
2. LATHER, ACOUSTICAL CARPENTER & CEILING INSTALLER	37.96	16.51

Zone Differential for Drywall, Lather, Acoustical Carpenter & Ceiling Installer

(Add to Zone 1 Base Rate)

Zone mileage based on road miles:

Zone 2	31-40 miles	.85 per hour
Zone 3	41-50 miles	1.25 per hour
Zone 4	51-60 miles	1.70 per hour
Zone 5	61-70 miles	2.00 per hour
Zone 6	71-100 miles	3.00 per hour
Zone 7	101 or more	5.00 per hour

TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE
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TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE
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DRYWALL, LATHER, ACOUSTICAL CARPENTER & CEILING INSTALLER (continued)

The correct transportation allowance shall be based on road mileage from the City Hall of the local union having jurisdiction of the job or other transportation reference cities herein listed.

Reference Cities for Drywall, Lather, Acoustical Carpenter & Ceiling Installer

Albany	Coquille	Medford	Roseburg
Astoria	Eugene	Newport	Salem
Baker	Grants Pass	North Bend	Seaside
Bandon	Hermiston	Pendleton	The Dalles
Bend	Klamath Falls	Portland	Tillamook
Brookings	Kelso-Longview	Reedsport	Vancouver

ELECTRICIAN

Area 1

Electrician	29.46	13.72
Cable Splicer	32.19	13.70

Reference Counties Area 1

Malheur

Area 2

Electrician	43.50	20.54
Cable Splicer	45.68	20.60

Reference Counties Area 2

Baker	Grant	Umatilla	Wallowa
Gilliam	Morrow	Union	Wheeler

Add 50% of the base rate when workers are required to work under the following conditions:

1. Under compressed air with atmospheric pressure exceeding normal pressure by at least 10%.
2. From trusses, swing scaffolds, bosun's chairs, open platforms, unguarded scaffolds, open ladders, frames, tanks, stacks, silos and towers where the workman is subject to a direct fall of (a) more than 60 feet or (b) into turbulent water under bridges, powerhouses or spillway faces of dams.

ELECTRICIAN (continued)

Area 3

Electrician	37.55	17.43
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Reference Counties Area 3

Coos Curry	Douglas (a) Lane (a)	Lincoln
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(a) Those portions of Lane and Douglas lying **west** of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County.

Shift Differential

1 st Shift "day"	Between the hours of 8:00am and 4:30pm	8 hours pay for 8 hours work
2 nd Shift "swing"	Between the hours of 4:30pm and 1:00am	8 hours pay for 8 hours work plus 17% for all hours worked
3 rd Shift "Graveyard"	Between the hours of 12:30am and 9:00am	8 hours pay for 8 hours work plus 31% for all hours worked.

When workers are required to work under compressed air or where gas masks are required, or to work from trusses, all scaffolds including mobile elevated platforms, any temporary structure, bosun's chair or on frames, stacks, towers, tanks, within 15' of the leading edges of any building at a distance of:

50 – 75 feet to the ground	Add 1 ½ x the base rate
75+ feet to the ground	Add 2 x the base rate

High Time is not required to be paid on any permanent structure with permanent adequate safeguards (handrails, mid-rails, and toe guards). Any vehicle equipped with outriggers are exempted from this section.

OREGON DETERMINATION 2018-02

TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE	TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE
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ELECTRICIAN (continued)

Area 4

Electrician	41.85	18.95
Cable Splicer	46.04	19.07
Lighting Maintenance/ Material Handlers	19.02	9.82

Reference Counties Area 4

Benton	Jefferson	Marion
Crook	Lane (b)	Polk
Deschutes	Linn	Yamhill (c)

(b) That portion of Lane County lying **east** of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County.

(c) South half

Shift Differential

1 st Shift "day"	Between the hours of 8:00am and 4:30pm	8 hours pay for 8 hours work
2 nd Shift "swing"	Between the hours of 4:30pm and 1:00am	8 hours pay for 8 hours work plus 17% for all hours worked
3 rd Shift "Graveyard"	Between the hours of 12:30am and 9:00am	8 hours pay for 8 hours work plus 31.4% for all hours worked.

Area 5

Electrician	42.60	24.05
Electrical Welder	46.86	24.18
Material Handler/ Lighting Maintenance	24.28	15.97

Reference Counties Area 5

Clackamas	Hood River	Tillamook	Yamhill (d)
Clatsop	Multnomah	Wasco	
Columbia	Sherman	Washington	

(d) North Half

ELECTRICIAN (continued)

Shift Differential

1 st Shift "day"	Between the hours of 8:00am and 4:30pm	8 hours pay for 8 hours work
2 nd Shift "swing"	Between the hours of 4:30pm and 1:00am	8 hours pay for 8 hours work plus 17.3% for all hours worked
3 rd Shift "Graveyard"	Between the hours of 12:30am and 9:00am	8 hours pay for 8 hours work plus 31.4% for all hours worked.

Zone Pay for Area 5 Electrician and Electrical Welder

(Add to Basic Hourly Rate)

Zone mileage based on air miles:

Zone 1	31-50 miles	1.50 per hour
Zone 2	51-70 miles	3.50 per hour
Zone 3	71-90 miles	5.50 per hour
Zone 4	Beyond 90	9.00 per hour

There shall be a 30-mile free zone from downtown Portland City Hall and a similar 15-mile free zone around the following cities:

Astoria	Seaside	Tillamook
Hood River	The Dalles	

Further, the free zone at the Oregon coast shall extend along Hwy 101 west to the ocean Hwy 101 east 10 miles if not already covered by the above 15-mile free zone.

Area 6

Electrician	32.69	16.52
Lighting Maintenance and Material Handlers	16.97	9.76

Reference Counties Area 6

Douglas (e)	Jackson	Klamath
Harney	Josephine	Lake

(e) That portion of Douglas County lying **east** of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County.

TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE	TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE
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ELECTRICIAN (continued)

	<u>Shift Differential</u>	
1 st Shift "day"	Between the hours of 8:00am and 4:30pm	8 hours pay for 8 hours work
2 nd Shift "swing"	Between the hours of 4:30pm and 1:00am	8 hours pay for 8 hours work plus 7.5% for all hours worked
3 rd Shift "Graveyard"	Between the hours of 12:30am and 9:00am	8 hours pay for 8 hours work plus 15% for all hours worked.

When workers are required to work under compressed air or to work from trusses, scaffolds, swinging scaffolds, bosun's chair or on building frames, stacks or towers at a distance of 50 to 90 feet from the ground or supporting structures shall be paid 1-1/2 times the base rate of pay.

ELEVATOR CONSTRUCTOR, INSTALLER AND MECHANIC

Area 1

Mechanic	52.41	38.46
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Reference Counties Area 1

Baker	Umatilla	Union	Wallowa
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Area 2

Mechanic	52.63	38.61
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Reference Counties Area 2

All remaining Counties

<u>GLAZIER</u>	37.17	20.55
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(Add \$1.00 to base rate if safety belt is required by State safety regulations)

(Add \$4.00 to base rate for work done from a non-motorized single-man bosun chair)

HAZARDOUS MATERIALS HANDLER

24.53	12.18
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HIGHWAY/PARKING STRIPER

35.02	12.00
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Shift Differential

(Add \$1.85 to base rate for shifts that start between 3:00pm and 4:00am)

IRONWORKER

<u>Zone 1 (Base Rate):</u>	36.21	24.66
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Zone Differential for Ironworker
(Add to Basic Hourly Rate)

Zone 2	4.38/hr. or \$35.00 maximum per day
Zone 3	7.50/hr. or \$60.00 maximum per day
Zone 4	10.00/hr. or \$80.00 maximum per day

- Zone 1: Projects located within 45 miles of city hall in the reference cities listed below.
- Zone 2: More than 45 miles, but less than 60 miles.
- Zone 3: More than 60 miles, but less than 100 miles.
- Zone 4: More than 100 miles.

Note: Zone pay for Ironworkers shall be determined using AAA road mileage computed from the city hall or dispatch center of the reference cities listed below or the residence of the employee, whichever is nearer to the project.

Reference Cities and Dispatch Center

Medford	Portland
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The Local Union Office
2505 Dupertail St., Suite C
Richland, WA 99352

TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE	TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE
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LABORER

Zone A (Base Rate):

Group 1	29.70	13.82
Group 2	30.81	13.82
Group 3	25.77	13.82

Note: A Hazardous Waste Removal Differential must be added to the base rate if work is performed inside the boundary of a Federally Designated Hazardous Waste Site. A Group 1 base rate is used for General Laborer on such a site. For further information on this, call the Prevailing Wage Rate Coordinator at (971) 673-0839.

Zone Differential for Laborers
(Add to Zone A Base Rate)

Zone B	.85 per hour
Zone C	1.25 per hour
Zone D	2.00 per hour
Zone E	3.00 per hour
Zone F	5.00 per hour

Zone A: Projects located within 30 miles of city hall in the reference cities listed.

Zone B: More than 30 miles but less than 40 miles.

Zone C: More than 40 miles but less than 50 miles.

Zone D: More than 50 miles but less than 80 miles.

Zone E: More than 80 miles but less than 100 miles.

Zone F: More than 100 miles.

Reference Cities for Laborer

Albany	Burns	Hermiston	Roseburg
Astoria	Coos Bay	Klamath Falls	Salem
Baker City	Eugene	Medford	The Dalles
Bend	Grants Pass	Portland	

Note: All job or project locations shall be computed (determined) on the basis of road miles and in the following manner. A mileage measurement will start at the entrance to the respective city hall, facing the project (if possible), and shall proceed by the normal route (shortest time, best road) to the geographical center on the highway, railroad, and street construction projects (end of measurement). On all other project contracts, the geographical center where the major portion of the construction is located, shall be considered the center of the project (end measurement).

LIMITED ENERGY ELECTRICIAN

Area 1

20.00 9.85

Reference Counties Area 1

Malheur

Area 2

31.50 18.35

Reference Counties Area 2

Baker	Grant	Umatilla	Wallowa
Gilliam	Morrow	Union	Wheeler

Area 3

28.65 15.36

Reference Counties Area 3

Coos	Douglas (a)	Lincoln
Curry	Lane (a)	

(a) Those portions of Lane and Douglas lying **west** of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County.

Area 4

31.13 14.43

Reference Counties Area 4

Benton	Jefferson	Marion
Crook	Lane (b)	Polk
Deschutes	Linn	Yamhill (c)

(b) That portion of Lane County lying **east** of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County.

(c) South half

Area 5

35.03 19.65

Reference Counties Area 5

Clackamas	Hood River	Tillamook	Yamhill (d)
Clatsop	Multnomah	Wasco	
Columbia	Sherman	Washington	

(d) North Half

TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE
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TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE
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POWER EQUIPMENT OPERATOR

Zone 1 (Base Rate)

Group 1	41.65	14.35
Group 1A	43.73	14.35
Group 1B	45.82	14.35
Group 2	39.74	14.35
Group 3	38.59	14.35
Group 4	37.51	14.35
Group 5	36.27	14.35
Group 6	33.05	14.35

(Group 4 Tunnel Boring Machine Mechanic add \$10.00/hour hyperbaric pay)

Note: A Hazardous Waste Removal Differential must be added to the base rate if work is performed inside the boundary of a Federally Designated Waste Site. For information on this differential, call the Prevailing Wage Rate Coordinator at (971) 673-0839.

(Add \$0.40 to the base rate for any and all work performed underground, including operating, servicing and repairing of equipment)

(Add \$0.50 to the base rate per hour for any employee who works suspended by a rope or cable)

(Add \$0.50 to the base rate for employees who do "pioneer" work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation)

Shift Differential

Two-Shift Operations:

On a two shift operation, when the second shift starts after 4:30 p.m., second-shift workers shall be paid the base hourly wage rate plus 5% for all hours worked.

When the second shift starts at 8:00 p.m. or later, the second-shift workers shall be paid at the base hourly wage rate plus 10% for all hours worked.

Three-Shift Operations:

On a three-shift operation, the base hourly wage rate plus five percent (5%) shall be paid to all second-shift workers for all hours worked, and the base hourly wage rate plus ten percent (10%) shall be paid to all third shift workers for all hours worked.

Zone Pay Differential for Power Equipment Operator
(Add to Zone 1 Base Rate)

Zone 2	3.00 per hour
Zone 3	6.00 per hour

POWER EQUIPMENT OPERATOR (continued)

For projects in the following metropolitan counties:

Clackamas	Marion	Washington
Columbia	Multnomah	Yamhill

See map on page 51 for Zone 1 of this classification

- (A) All jobs or projects located in Multnomah, Clackamas and Marion counties, West of the western boundary of Mt. Hood National Forest and West of Mile Post 30 on Interstate 84 and West of Mile Post 30 on State Hwy 26 and West of Mile Post 30 on Hwy 22 and all jobs located in Yamhill County, Washington County and Columbia County shall receive Zone 1 pay for all classifications.
- (B) All jobs or projects located in the area outside the *identified boundary* above, but less than 50 miles from the Portland City Hall shall receive Zone 2 pay for all classifications.
- (C) All jobs or projects located more than 50 miles from the Portland City Hall, but outside the identified border above, shall receive Zone 3 pay for all classifications.

Reference cities for projects in all remaining counties:

Albany	Coos Bay	Grants Pass	Medford
Bend	Eugene	Klamath Falls	Roseburg

- (A) All jobs or projects located within 30 miles of the respective city hall of the above mentioned cities shall receive Zone 1 pay for all classifications.
- (B) All jobs or projects located more than 30 miles and less than 50 miles from the respective city hall of the above mentioned cities shall receive Zone 2 for all classifications.
- (C) All jobs or projects located more than 50 miles from the respective city hall of the above mentioned cities shall receive Zone 3 pay for all classifications.

Note: All job or project locations shall be computed (determined) on the basis of road miles and in the following manner. A mileage measurement will start at the entrance to the respective city hall, facing the project (if possible), and shall proceed by the normal route (shortest time-best road) to the geographical center on the highway, railroad, and street construction projects (end of measurement). On all other project contracts, the geographical center where the major portion of the construction is located, shall be considered the center of the project (end measurement).

TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE	TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE
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ROOFER

Area 1

Rofer	33.23	18.77
Handling coal tar pitch	36.55	18.77
Remove fiberglass insulation	36.55	18.77

Reference Counties Area 1

Baker	Gilliam	Multnomah	Washington
Clackamas	Grant	Sherman	Wheeler
Clatsop	Hood River	Tillamook	
Columbia	Jefferson	Wasco	

Area 2

Rofer	27.30	17.29
Handling coal tar pitch	29.30	17.29
Remove fiberglass insulation	28.80	17.29

Reference Counties Area 2

Benton	Douglas	Lake	Marion
Coos	Harney	Lane	Polk
Crook	Jackson	Lincoln	Yamhill
Curry	Josephine	Linn	
Deschutes	Klamath	Malheur	

Area 4

Roofers	27.48	12.73
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Reference Counties Area 4

Umatilla	Union	Wallowa
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(Add \$2.00 to basic hourly rate for employees working with irritable bituminous materials)

(Add \$2.00 to basic hourly rate for employees removing fiberglass insulation)

Area 5

Roofers	27.43	12.78
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Reference County for Area 5

Morrow

(Add \$3.00 to base rate for employees working with irritable and pitch bituminous materials)

SHEET METAL WORKER

Area 1

39.42	21.12
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Reference Counties Area 1

Benton	Grant	Multnomah	Washington
Clackamas	Hood River	Polk	Wheeler
Clatsop	Lincoln	Sherman	Yamhill
Columbia	Linn	Tillamook	
Gilliam	Marion	Wasco	

(Add \$1.00 to base rate for work performed on any swinging platform, swinging chair or swinging ladder)

(Add \$1.00 to base rate for work where a worker is exposed to resins, chemicals or acid)

Area 2

26.66	18.26
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Reference Counties Area 2

Baker	Malheur
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(Add \$1.75 to base rate for work performed in an area where epoxy resins or other injurious chemicals are being applied)

Area 3

36.90	21.17
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Reference Counties Area 3

Morrow	Umatilla	Union	Wallowa
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(Add \$1.00 to base rate for work where it is necessary to wear a chemically activated type face mask)

Area 4

32.63	19.06
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Reference Counties Area 4

Douglas	Lane
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(Add \$1.00 to base rate for work performed on any swinging platform, swinging chair or swinging ladder)

(Add \$1.00 to base rate for work where a worker is exposed to resins, chemicals or acid)

TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE	TRADE	HOURLY BASE RATE	HOURLY FRINGE RATE
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TESTING AND BALANCING (TAB) TECHNICIAN

Air-Handling Equipment, Ductwork

See **SHEET METAL WORKER**

Water Distribution Systems

See **PLUMBER/PIPEFITTER/STEAMFITTER**

TILESETTER/TERRAZZO WORKER: Hard Tilesetter

33.00 18.33

(This trade is tended by "Tile, Terrazzo, & Marble Finisher")

(Add \$1.00 to base rate when working with a safety belt)

(Add \$1.00 to base rate if work involves epoxy, furnane, alklor or acetylene black grouting)

TILE, TERRAZZO, AND MARBLE FINISHER

1. TILE, TERRAZZO FINISHER

25.29 13.24

(Add \$1.00 to base rate when working with a safety belt)

(Add \$1.00 to base rate if work involves epoxy, furnane, alklor or acetylene black grouting)

2. BRICK AND MARBLE FINISHER

25.29 13.37

(Add \$1.00 to base rate for Refractory work)

TRUCK DRIVER

Zone A (Base Rate)

Group 1	27.94	14.37
Group 2	28.06	14.37
Group 3	28.19	14.37
Group 4	28.46	14.37
Group 5	28.68	14.37
Group 6	28.85	14.37
Group 7	29.05	14.37

TRUCK DRIVER (continued)

Zone differential for Truck Drivers
(Add to Zone A Base Rate)

Zone B	.65 per hour
Zone C	1.15 per hour
Zone D	1.70 per hour
Zone E	2.75 per hour

Zone A: Projects within 30 miles of the cities listed.
 Zone B: More than 30 miles but less than 40 miles.
 Zone C: More than 40 miles but less than 50 miles.
 Zone D: More than 50 miles but less than 80 miles.
 Zone E: More than 80 miles.

Reference Cities

Albany	Eugene	Madras	Reedsport
Astoria	Goldendale	Medford	Roseburg
Baker	Grants Pass	McMinnville	Salem
Bend	Hermiston	Newport	The Dalles
Bingen	Hood River	Ontario	Tillamook
Brookings	Klamath Falls	Oregon City	Vancouver
Burns	LaGrande	Pendleton	
Coos Bay	Lakeview	Portland	
Corvallis	Longview	Port Orford	

Note: All job or project locations shall be computed (determined) on the basis of road miles and in the following manner. A mileage measurement will start at the entrance to the respective city hall, facing the project (if possible), and shall proceed by the normal route (shortest time-best road) to the geographical center on the highway, railroad, and street construction projects (end of measurement). On all other project contracts, the geographical center where the major portion of the construction is located, shall be considered the center of the project (end measurement).

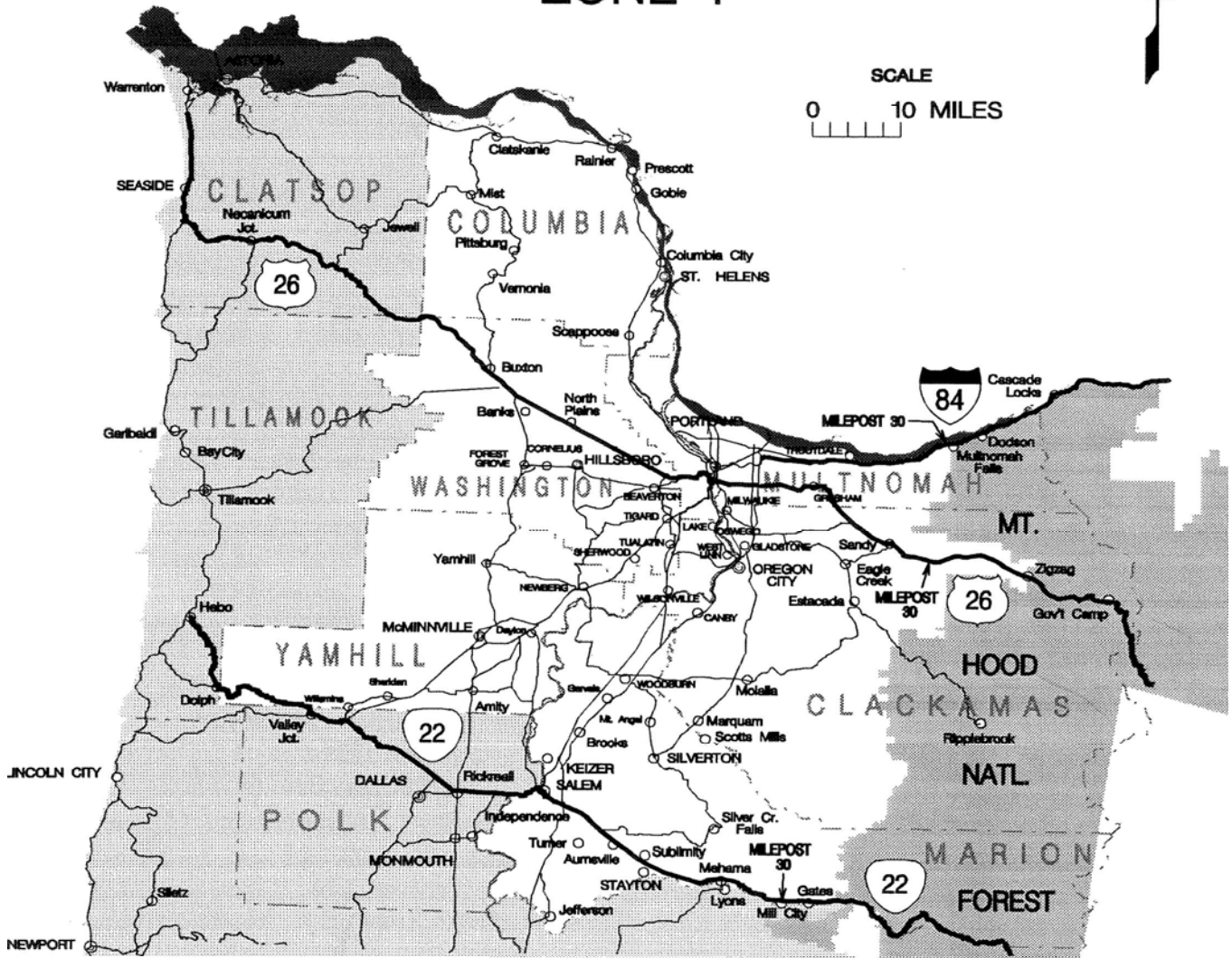
POWER EQUIPMENT OPERATOR

ZONE 1



SCALE

0 10 MILES



**LIST OF CONTRACTORS INELIGIBLE
TO RECEIVE PUBLIC WORKS CONTRACTS
PUBLICATION DATE: JULY 1, 2018**

To: All Oregon Contracting Agencies

Pursuant to ORS 279C.860, contractors on this list are ineligible to receive public works contracts subject to the Prevailing Wage Rate Law. These contractors and subcontractors, as well as any firm, corporation, partnership or association in which the contractor or subcontractor has a financial interest are ineligible to receive public works contracts until removed from this list.

If you have questions regarding the list or for the most current information regarding persons ineligible to receive prevailing wage contracts, please contact the Prevailing Wage Rate Coordinator in Portland at (971) 673-0839.

	<u>CONTRACTOR NAME</u>	<u>DATE PLACED</u>	<u>REMOVAL DATE</u>
1.	A D Traffic Control Services, LLC 309 S. McLoughlin Blvd. Oregon City, OR 97045	August 24, 2015	August 23, 2018
2.	A2Z Flagging LLC 731 N Hayden Meadows Dr, #107 Portland, OR 97217	May 2, 2017	May 1, 2020
3.	Beaver Flagging 2239 Dakota Street Eugene, OR 97404	November 25, 2009	November 24, 2019
4.	Christy C. Beaver 2570 River Road Eugene, OR 97404	November 25, 2009	November 24, 2019
5.	Kimberly Bell-Eddy 8535 Woodard Ave SE Salem, OR 97317	January 12, 2016	January 11, 2023
6.	Russ Brotnov 22905 S Stormer Rd Estacada, OR 97023	January 5, 2017	January 4, 2020
7.	BSD OR WA. LLC 2951 NW Division St., Ste110 Gresham, OR 97030	February 11, 2016	February 10, 2019
8.	Bill Butler 4355 SE 10 th Drive Gresham, OR 97080	January 22, 2016	January 21, 2019
9.	Cameron Creations Steven Cameron Nancy Cameron PO Box 2 Lowell, OR 97452	May 25, 2000	Not to be Removed
10.	Angela Canell 6020 NE 33 rd Circle Vancouver, WA 98661	May 2, 2017	May 1, 2020
11.	Carpentry Plus, Inc. P O Box 998 Boring, OR 97009-0998	January 5, 2017	January 4, 2020

**LIST OF CONTRACTORS INELIGIBLE
TO RECEIVE PUBLIC WORKS CONTRACTS
PUBLICATION DATE: JULY 1, 2018**

	<u>CONTRACTOR NAME</u>	<u>DATE PLACED</u>	<u>REMOVAL DATE</u>
12.	Concrete Works, Inc. 2425 Fischer Rd NE Salem, OR 97305	June 15, 2017	June 14, 2020
13.	Kelly Cunningham 4355 SE 120 th Drive Gresham, OR 97080	January 22, 2016	January 21, 2019
14.	Randall D. David 35491 Laura Lane SE Albany, OR 97321	January 15, 2016	January 14, 2019
15.	Amanda Dawn Denton Olsen-Smith PO Box 1058 Willamina, OR 97080	February 11, 2016	February 10, 2019
16.	DNB Painting, Inc. 35491 Laura Lane SE Albany, OR 97321	January 15, 2016	January 14, 2019
17.	GNC Construction Services, LLC 309 S. McLoughlin Blvd. Oregon City, OR 97045	July 21, 2015 July 21, 2018	July 20, 2018 July 20, 2021
18.	Eugene Graeme 169 SE Cody Lane Madras, OR 97741	July 3, 2017	July 2, 2027
19.	Armond Harper 4071 N Mississippi Ave., Apt. A Portland, OR 97227	May 30, 2017	May 29, 2020
20.	Kim Bell Flagging, Inc. 8535 Woodard Ave SE Salem, OR 97317	January 12, 2016	January 11, 2023
21.	Peter G. Lupachev aka Peter Lupachov 4536 SE Stark Street Portland, OR 97239	November 2, 2015	November 1, 2018
22.	Mountain View Flagging, Inc. 1122 NE 122 nd Ave Portland, OR 97230	September 26, 2016	September 25, 2019
23.	Sang In Nam dba Cornerstone Janitorial Services 130 NE Danbury Ave Hillsboro, OR 97124	September 20, 2016	Not to be Removed
24.	Noland Enterprises, Inc. 601 NW McDonald Road Prineville, OR 97754	June 6, 2016	June 5, 2019

**LIST OF CONTRACTORS INELIGIBLE
TO RECEIVE PUBLIC WORKS CONTRACTS
PUBLICATION DATE: JULY 1, 2018**

	<u>CONTRACTOR NAME</u>	<u>DATE PLACED</u>	<u>REMOVAL DATE</u>
25.	Debbie Noland 601 NW McDonald Road Prineville, OR 97754	June 6, 2016	June 5, 2019
26.	James Noland 601 NW McDonald Road Prineville, OR 97754	June 6, 2016	June 5, 2019
27.	A.J. Olsen-Smith aka Alex James Olsen-Smith aka Alex J. Olsen PO Box 1058 Willamina, OR 97080	February 11, 2016	February 10, 2019
28.	Orcanco Commercial Construction, Inc. 4355 SE 10 th Drive Gresham, OR 97080	January 22, 2016	January 21, 2019
29.	Peter Construction, Inc. dba Peters Construction, Inc. 4522 SW Water Ave., Suite 110 Portland, OR 97239	November 2, 2015	November 1, 2018
30.	Phoenix Construction Group, Inc. 309 S. McLoughlin Blvd. Oregon City, OR 97045	August 24, 2015 August 24, 2018	August 23, 2018 August 23, 2021
31.	Portland Flagging, LLC dba A D Traffic Control Services 309 S. McLoughlin Blvd. Oregon City, OR 97045	August 24, 2015	August 23, 2018
32.	Portland Safety Equipment, LLC 309 S. McLoughlin Blvd. Oregon City, OR 97045	August 24, 2015 August 24, 2018	August 23, 2018 August 23, 2021
33.	Bernadine Raiford 424 NE Shaver Street Portland, OR 97212	September 26, 2016	September 25, 2019
34.	SBG Construction Services LLC 309 S. McLoughlin Blvd. Oregon City, OR 97045	August 24, 2015 August 24, 2018	August 23, 2018 August 23, 2021
35.	Cassie Seeley 7991 Little Rd. SE Aumsville, OR 97325-9497	July 13, 2017	July 12, 2020
36.	Kenya Smith 309 S. McLoughlin Blvd. Oregon City, OR 97045	July 21, 2015	July 20, 2018
37.	Alan Tatom 168 Clearwater Avenue NE Salem, OR 97301	July 10, 2015	July 9, 2025

**LIST OF CONTRACTORS INELIGIBLE
TO RECEIVE PUBLIC WORKS CONTRACTS
PUBLICATION DATE: JULY 1, 2018**

	<u>CONTRACTOR NAME</u>	<u>DATE PLACED</u>	<u>REMOVAL DATE</u>
38.	Tri-Star Flagging, LLC 309 S. McLoughlin Blvd. Oregon City, OR 97045	August 24, 2015	August 23, 2018
39.	Phillip Walker 580 Market Street NE Salem, OR 97301	July 10, 2015	July 9, 2025
40.	WCI Construction LLC 169 SE Cody Lane Madras, OR 97741	July 3, 2017	July 2, 2027
41.	Evan Williams 309 S. McLoughlin Blvd. Oregon City, OR 97045	February 29, 2016	February 28, 2019
42.	WWJD Traffic Control, Inc. 168 Clearwater Avenue NE Salem, OR 97301	July 10, 2015	July 9, 2025

**BRAD AVAKIAN, COMMISSIONER
OREGON BUREAU OF LABOR AND INDUSTRIES**

PREVAILING WAGE RATE FORMS

WH-38	Certified Payroll Form
WH-39	Public Works Fee Information Form
WH-40	Public Works Fee Adjustment Form
WH-81	Notice of Public Works
WH-118	Planned Public Improvement Summary
WH-119	Capital Improvement Cost Comparison Estimate



BUREAU OF LABOR AND INDUSTRIES, PREVAILING WAGE RATE UNIT

**INSTRUCTIONS FOR COMPLETING THE PREVAILING WAGE RATE
PAYROLL/CERTIFIED STATEMENT FORM (WH-38)**

The Payroll/Certified Statement form (WH-38) may be used by contractors for reporting their payroll as required by ORS 279C.845 on public works projects subject to the Prevailing Wage Rate (PWR) Law. Although this form has not been officially approved by the U.S. Department of Labor (US DOL), it is designed to meet the requirements of the federal Davis-Bacon Act. For projects associated with the U.S. Department of Housing and Urban Development (HUD), contact the public agency (owner) associated with the project for assistance with payroll reporting.

Contractors are not required to use the WH-38 form in reporting their payroll; however, the contractor must provide all of the information contained in the form, including the certified statement on page two. The certified statement must be signed by the contractor, certifying the accuracy of the information reported on the payroll, including representations pertaining to the provision of fringe benefits to employees by third parties, and must be submitted with each weekly payroll report. Detailed instructions concerning the preparation of the form follow:

Complete the top third of the form. Be sure to enter the date the contract was first advertised for bid. If you are not sure of this date, contact the public agency (owner) associated with the project. The "Payroll No." is a US DOL requirement and represents the number of weeks the contractor performed work on the project.

Column 1 – NAME AND ADDRESS: The employee's full name must be shown on each payroll submitted. The employee's address must also be shown on the first payroll submitted. The address need not be shown on subsequent payrolls submitted unless the address changes. The US DOL requires an employee identification number for each individual employee, on each payroll submitted. This number may be, but does not have to be, the last four digits of the employee's social security number.

Column 2 – CLASSIFICATION: For assistance in determining the correct classification, use the Bureau of Labor and Industries' (BOLI's) publication "Definitions of Covered Occupations for Public Works Contracts in Oregon." On the WH-38, list the classification that is most descriptive of the work actually performed by the employee. Give the group number for those classifications that include such information. Indicate which workers are apprentices, if any, and give their current percentage, classification, and group number when applicable. If an employee works in more than one classification, use the highest rate for all hours worked, or use separate line entries to show hours worked and hourly rates for each classification.

Column 3 – DAY AND DATE: Enter the day of the week (M, T, W, Th, F, S, and Sn) in the top row of boxes, and the corresponding date below.

HOURS WORKED EACH DAY: Enter the total number of straight time hours worked in the row marked "ST." Generally, hours worked over 8 in a day or work performed on Saturdays, Sundays, and legal holidays should be entered as overtime ("OT") hours worked. Contractors who have adopted and followed a written work schedule of four consecutive ten-hour days (Monday through Thursday or Tuesday through Friday) may enter hours worked over 10 in a day as overtime hours. For more information on overtime requirements, see the Contractor Responsibilities section of BOLI's publication, "*Prevailing Wage Rate Laws*."

Check the correct work schedule box to indicate the employee's weekly work schedule: 5/8 or 4/10. Enter the employee's regular hourly schedule for the week being reported next to the "Reg. Hrly. Schd: _____ to _____." For example: 7:00 a.m. to 4:30 p.m.

Column 4 – TOTAL HOURS: Enter separately the total number of straight time and overtime hours worked by the employee (in each classification, if applicable) on the PWR project during the week. The total number of straight time hours worked should be entered in the lower box ("ST"); the total number of overtime hours worked should be entered in the top box ("OT").

Column 5 – HOURLY BASE RATE: Enter the hourly base rate (plus zone pay, if any) and the hourly overtime rate (plus zone pay, if any) paid to the employee in the appropriate straight time and overtime boxes. (Payment of not less than one and one half times the base rate of pay, including zone pay but not including fringe benefits, is required to be paid for overtime hours pursuant to ORS 279C.540). Generally, use the appropriate prevailing wage rates in effect at the time the contract was first advertised for bid by the public agency. If this date is not known, or if the project was not advertised for bid, contact the public agency (owner) associated with the project for assistance with applicable rates.

Column 6 – HOURLY FRINGE BENEFIT AMOUNT PAID AS WAGES TO THE EMPLOYEE: Enter hourly fringe benefit amounts paid directly to the employee as wages. (For overtime hours worked, it is not necessary to pay time and one half for the fringe benefit portion of the prevailing wage rate.)

Column 7 – GROSS AMOUNT EARNED: Enter the gross amount earned for work on the PWR project during the week. If part of the employee's wages for the pay period were earned on projects other than the project described on the WH-38, or if the employee is paid less often than on a weekly basis, enter in column 7 first the gross amount earned on the PWR project for the week, then the total gross amount earned for the pay period. For example: \$567.84 / \$1,267.27.

Column 8 – ITEMIZED DEDUCTIONS, FICA, FED, STATE, ETC.: Enter deductions withheld from wages for the pay period. All deductions must be in accordance with the provisions of ORS 652.610 (and as defined in Regulations, Part 3 (29 CFR Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. Stat. 967, 76 Stat. 357; 40 U.S.C 276c) on projects subject to Davis-Bacon Act). For projects subject to the Davis-Bacon Act, itemize the deductions.

Column 9 – NET WAGES PAID: Enter the total amount of net wages actually paid to the employee for the pay period. This figure can be calculated by subtracting the total deductions reported in Column 8 from the gross amount of wages for the pay period reported in the bottom portion of Column 7.

Column 10 – HOURLY FRINGE BENEFITS PAID TO BENEFITS PARTY, PLAN, FUND OR PROGRAM: Enter the hourly amount of fringe benefits paid to each individually approved party, plan, fund, or program, for each employee. List these amounts separately on the lines provided. Any contractor who is making payments to approved parties, plans, funds or programs in amounts less than the required hourly fringe benefit is obligated to pay the difference directly to the employee as wages in lieu of fringe benefits, and to show that amount in Column 6 of this form. For information on how to calculate hourly fringe benefit credits, see Appendix A in the BOLI's publication, "Prevailing Wage Rate Laws."

Column 11 – NAME OF BENEFIT PARTY, PLAN, FUND OR PROGRAM: Enter the name of the party, plan, fund, or program that corresponds to the amount paid as an hourly fringe benefit in Column 10.

CALCULATION CHECK

In order to determine whether the wages and fringe benefits paid are sufficient to meet prevailing wage rate requirements, the following check may be performed:

1. For each classification listed in column 2, compute the sum of:
 - a) the hourly base rate of pay shown in Column 5,
 - b) the hourly fringe benefit amount paid as wages to employee shown in Column 6, and
 - c) the hourly fringe benefits paid to benefit party, plan, fund or program shown in Column 10.
2. This sum must equal or exceed the total of the hourly base rate (including zone pay) and the hourly fringe benefit rate for that classification as listed in the appropriate issue of BOLI's publication, Prevailing Wage Rates for Public Works Contracts in Oregon.

IF YOU HAVE QUESTIONS REGARDING COMPLETION OF THIS FORM, CONTACT THE PREVAILING WAGE RATE UNIT OF THE BUREAU OF LABOR AND INDUSTRIES AT (971) 673-0838.

NOTE: PAYROLL/CERTIFIED STATEMENTS ARE ONLY REQUIRED TO BE SUBMITTED TO THE PUBLIC AGENCY ASSOCIATED WITH THE PROJECT.

**CERTIFIED PAYROLL AND OTHER FORMS ARE AVAILABLE ON OUR WEBSITE:
WWW.OREGON.GOV/BOLI**



CONTRACT FEE SECTION
PREVAILING WAGE RATE UNIT
BUREAU OF LABOR AND INDUSTRIES
800 N.E. OREGON ST., #1045
PORTLAND, OR 97232-2180
PHONE: (971) 673-0852
FAX: (971) 673-0769

For Office Use Only: Project DB #: _____

PUBLIC WORKS FEE INFORMATION FORM

For use by public agencies that have contracted with a contractor on a public works project regulated by ORS 279C.800 to 279C.870, in compliance with ORS 279C.825. Also for use by public agencies that are a party to a public works project pursuant to ORS 279C.800(6)(a)(B), (C) (D) or (E).

PUBLIC AGENCIES: Please complete and mail this form to BOLI at the above address, along with the public works fee of one-tenth of one percent of the contract price (contract amount x .001), payable to BOLI. **The minimum fee is \$250.00; the maximum fee is \$7,500.00.** Without the following completed information, the bureau may be unable to properly credit you for payment received.

PUBLIC AGENCY: _____ **AGENCY #:** _____

AGENCY MAILING ADDRESS: _____

CITY, STATE, ZIP: _____

AGENCY CONTACT PERSON: _____ **PHONE:** (____) _____

PROJECT MANAGER NAME: _____ **PHONE:** (____) _____

PROJECT NAME: _____

CONTRACT NAME (if part of larger project): _____

PROJECT LOCATION: _____

PROJECT NO: _____ **DATE CONTRACT FIRST ADVERTISED:** _____

DATE CONTRACT AWARDED: _____ **CONTRACTOR CCB#:** _____

CONTRACTOR BUSINESS NAME (DBA): _____

CONTRACTOR ADDRESS: _____

CITY, STATE ZIP _____

CONTRACT AMOUNT: \$ _____ **FEE AMOUNT DUE/PAID: \$** _____

If less than \$50K, is it part of a larger project? yes no **Contract amount x .001 = fee due**

(Please duplicate this form for future use.)



CONTRACT FEE SECTION
PREVAILING WAGE RATE UNIT
BUREAU OF LABOR AND INDUSTRIES
800 N.E. OREGON ST., #1045
PORTLAND, OR 97232-2180
PHONE: (971) 673-0852
FAX: (971) 673-0769

For Office Use Only:

Project DB #: _____

PUBLIC WORKS FEE ADJUSTMENT FORM

**THIS FORM TO BE USED FOR RECONCILIATION OF FEES UPON COMPLETION OF
PUBLIC WORKS PROJECTS**

(As required by ORS 279C.825 and OAR 839-025-0210)

PUBLIC AGENCIES: Complete and mail this form to BOLI at the above address after completion of the public work project and not less than 30 days after the final progress payment is made to the contractor. Public agencies are required to determine the final contract price, including all change orders or other adjustments to the original contract price, and to calculate the adjusted prevailing wage rate fee based on the revised contract price. Documentation must be included to support the final contract price. Documentation of the final contract price may consist of change orders or other contract documents substantiating the amount of the contract. The prevailing wage rate fee of one-tenth of one percent (.001) shall be applied to the final contract price, with credit taken for fees already submitted. The public agency must submit any additional fee payable to BOLI, or submit any request for refund, with this adjustment form. **THE MINIMUM FEE IS \$250.00; THE MAXIMUM FEE IS \$7,500.00. NO ADDITIONAL FEE IS REQUIRED TO BE PAID, AND REFUNDS WILL NOT BE MADE, IF THE BALANCE DUE OR THE REFUND DUE IS LESS THAN \$100.00.**

PUBLIC AGENCY: _____ **AGENCY #:** _____

AGENCY CONTACT PERSON: _____ **PHONE :**() _____

MAILING ADDRESS: _____

PROJECT NAME: _____

CONTRACT NAME (if part of larger project): _____

PROJECT NUMBER: _____ **PROJECT LOCATION:** _____

CONTRACTOR/BUSINESS NAME (DBA): _____

CONTRACTOR CCB#: _____ **DATE AWARDED:** _____

FINAL CONTRACT/PROJECT AMOUNT: _____ **FINAL FEE DUE:** _____

(Include all change orders and adjustments to the contract price)
.001)

(Final Contract amount X

ORIGINAL CONTRACT AMOUNT: _____ **INITIAL FEE PAID:** _____

(Original Contract amount X .001)

TOTAL ADJUSTMENT: _____ **BALANCE DUE*:** _____

or

REFUND DUE*: _____

*Final contract fee less initial fee paid

Sample Calculation:			
Final Contract Amount:	\$ 400,000.00	Final Fee Due:	\$ 400.00
Original Contract Amount:	- 300,000.00	Initial Fee Paid:	- 300.00
Total Adjustment:	\$ 100,000.00	Additional Amount Due:	\$ 100.00

(Please duplicate this form for future use)



**BUREAU OF LABOR AND INDUSTRIES
NOTICE OF PUBLIC WORKS**
(For use by public agencies in complying with ORS 279C.835)

For Office Use Only:
Project DB #: _____

NOTE: ORS 279C.835 requires that public contracting agencies include with this form a copy of the disclosure of first-tier subcontractors submitted pursuant to ORS 279C.370.

PUBLIC AGENCY INFORMATION

Agency Name: _____
Agency Division: _____ Agency # (if known): _____
Address: _____
City, State, Zip: _____
Email Address: _____
Agency Representative: _____ Phone: _____

SECTION A: To be completed when a public agency awards a contract to a contractor for a public works project, including CM/GC projects. (See reverse for public works projects in which no public agency awards a contract to a contractor.)

CONTRACT INFORMATION:

Project Name: _____
Contract Name (if part of larger project): _____
Project #: _____ Contract #: _____
Project Manager Name: _____ Phone: _____ Fax: _____
Project Location (Street(s), City): _____ Project County: _____
Contract Amount: \$_____ If under \$50,000, is this contract part of a larger project? YES NO
If yes, total project amount: \$_____
Will project use federal funds that require compliance with the Davis-Bacon Act? YES NO
Date Contract Specifications First Advertised for Bid (if not advertised, date of RFP or first contact with contractor): _____
OR If CM/GC Contract, Date Contract Became a Public Works Contract (see OAR 839-025-0020(6)): _____
Date Contract Awarded: _____ Date Work Expected to Begin: _____ Date Work Expected to be Complete: _____

PRIME CONTRACTOR INFORMATION:

Name: _____
Address: _____
City, State Zip: _____ Phone: _____
Construction Contractors Board Registration #: _____
Name of Bonding Company: _____
Address: _____
Agent Name: _____ Phone: _____
Payment Bond #: _____

Copy of first-tier subcontractors attached (see NOTE above).

Signature of agency representative completing form: _____
Printed Name: _____ Phone: _____ Date: _____
Email Address: _____

THIS FORM WILL BE RETURNED TO THE PUBLIC AGENCY FOR CORRECTION AND RESUBMITTAL IF INCOMPLETE.

Complete this page for public works projects in which NO PUBLIC AGENCY AWARDS A CONTRACT TO A CONTRACTOR. Complete the CONTRACT INFORMATION AND SECTION B, C, D or E, whichever applies to the project.

CONTRACT INFORMATION:

Name of Project Owner: _____ Phone: _____
Project Name: _____ Project #: _____
Project Location (Street(s), City): _____ Project County: _____
Total Project Cost: \$ _____ Amount of Public Funds Provided for the project: \$ _____
Name(s) of Public Agency(ies) Providing Public Funds: _____
Will project use federal funds that require compliance with the Davis-Bacon Act? YES NO
Date Work Expected to Begin: _____ Date Work Expected to be Complete: _____

SECTION B: To be completed when a project is a public works pursuant to ORS 279C.800(6)(a)(B) (a project for the construction, reconstruction, major renovation or painting of a road, highway, building, structure or improvement of any type **that uses \$750,000 or more of funds of a public agency**).

Date the public agency or agencies committed to the provision of funds for the project: _____

SECTION C: To be completed when a project is a public works pursuant to ORS 279C.800(6)(a)(C) (a project for the construction of a privately owned road, highway, building, structure or improvement of any type **that uses funds of a private entity and in which 25 percent or more of the square footage of the completed project will be occupied or used by a public agency**).

Total square footage of privately owned road, highway, building, structure or improvement: _____

Percent of total square footage of the completed project that will be occupied or used by a public agency: _____

Date the public agency or agencies entered into an agreement to occupy or use the completed project: _____

SECTION D: To be completed when a project is a public works pursuant to ORS 279C.800(6)(a)(D) (a project that includes the construction or installation of a **device, structure or mechanism that uses solar radiation** on public property, regardless of project cost or whether the project uses funds of a public agency).

Date the public agency entered into an agreement for the project: _____

SECTION E: To be completed when a project is a public works pursuant to ORS 279C.800(6)(a)(E) (a project for the construction, reconstruction, major renovation or painting of a road, highway, building, structure, or improvement of any type that occurs, with or without using funds of a public agency, **on real property that the Oregon University System or an institution in the Oregon University System owns**).

Date the public agency entered into an agreement for the project: _____

Signature of agency representative completing form: _____

Printed Name: _____ Phone: _____ Date: _____

Email Address: _____

THIS FORM WILL BE RETURNED TO THE PUBLIC AGENCY FOR CORRECTION AND RESUBMITTAL IF INCOMPLETE.

RETURN THIS COMPLETED FORM TO:

Prevailing Wage Rate Unit • Bureau of Labor and Industries • 800 NE Oregon Street, #1045 • Portland, OR 97232-2180
Telephone (971) 673-0852 • FAX (971) 673-0769 • pwremail@boli.state.or.us



PUBLIC IMPROVEMENT PROJECT COST ANALYSIS

Contracting Agency: _____ Project Name/Number: _____

Department: _____ Estimated Construction Period: _____

ESTIMATED CONTRACTOR COSTS

Item Description	Estimated Quantity	Unit Cost	Total Estimated Cost Per Item	
TOTAL OF ALL CONTRACTOR COSTS				\$

ESTIMATED CONTRACTING AGENCY COSTS

Labor	Equipment	Administration and Overhead	Tools and Materials	Cost of Any Contracts Agency Must Enter	Quality Control Testing	Any Other Necessary and Related Costs	
TOTAL OF ALL PUBLIC AGENCY COSTS							\$

The above-named agency has determined that this project can be performed at the least cost by: _____ Agency _____ Contractor (check one)

ORS 279C.305 requires that not less than 30 days prior to adoption of its budget for the subsequent budget period, or before starting to construct a public improvement, each contracting agency shall prepare and file with the Commissioner of the Bureau of Labor and Industries a list of every public improvement that the contracting agency plans to fund in the budget period, identifying each improvement by name and estimating the total on-site construction costs. The list must also state whether the contracting agency intends to perform the construction through a private contractor. If the contracting agency intends to use the contracting agency's own equipment or personnel to perform construction work on a public improvement, and the estimated value of the construction work that the contracting agency intends to perform with the contracting agency's own equipment or personnel exceeds \$200,000 (or \$125,000 if the public improvement involves the resurfacing of highways, roads or streets at a depth of two or more inches), the contracting agency shall file with the commissioner not later than 180 days before construction begins on the public improvement an analysis that shows that the contracting agency's decision conforms to the state's policy that contracting agencies make every effort to construct public improvements at the least cost to the contracting agency. Public agencies are required to keep and preserve a full, true and accurate account of the costs of performing the work, including all categories of costs described in ORS 279C.305(3)(b). The final account of the costs is a public record. Form WH-118 (Planned Public Improvement Summary) may be used to list planned public improvements. This form (WH-119) may be used to report the agency's cost analysis.

Completed forms should be mailed to: _____
 Prevailing Wage Rate Unit
 Wage and Hour Division, #1045
 Bureau of Labor and Industries
 800 N.E. Oregon St.
 Portland, OR 97232-2180
 (Name of Agency Official)

_____ (Signature of Agency Official)

The 2018 edition of the **Prevailing Wage Rate Laws Handbook** are now available. One complimentary hard copy of each Prevailing Wage Rate (PWR) publication is available upon request by emailing BOLI at pwremail@boli.state.or.us or calling (971) 673-0838. Additional copies are available at cost, plus postage.

In addition to providing this and other PWR publications, the Bureau of Labor and Industries' PWR Unit regularly offers free, informational seminars for both public agencies and contractors. The current schedule is available online at <http://www.oregon.gov/boli/WHD/PWR/docs/pwrsched.pdf>.

Prior to responding below, please consider that all PWR-related information is available online at <http://www.oregon.gov/BOLI/WHD/PWR/Pages/index.aspx>. If you are interested in receiving the handbook and/or being included on our mailing lists for future seminar notifications, please complete the form below and return it to the bureau's PWR Unit. You may mail this form to the address on the opposite side of the form, or fax it to (971) 673-2372.

-
- Please send me the 2018 edition of the **Prevailing Wage Rate Laws Handbook**.
 - Please add me to the mailing list to receive information about BOLI PWR seminars.
 - Please add me to the e-mailing list to receive information about BOLI PWR seminars.

AGENCY OR CONTRACTOR BUSINESS NAME and PHONE NUMBER (Required)

AGENCY OR CONTRACTOR BUSINESS E-MAIL ADDRESS (Please print clearly)

MAILING ADDRESS

CITY, STATE, ZIP

NAME OF REPRESENTATIVE and PHONE NUMBER if different from above.

place
stamp
here

BOLI - PREVAILING WAGE RATE UNIT
800 NE OREGON #1045
PORTLAND, OR 97232

SECTION 00 73 73
State of Oregon - PUBLIC CONTRACTING CLAUSES

PART 1 GENERAL

1.1 REQUIREMENTS

- A. This is a Public Improvement Project utilizing public funds and is subject to all regulations of the State of Oregon Public Contracting Code, ORS 279A and 279C unless specifically amended by the General and Supplementary Conditions for the Project.
1. For convenience, special attention is herein brought to the following public contracting clauses:
- a. ORS 279C.800 – 870: This project is subject to Prevailing Wage Rates promulgated by the Oregon Bureau of Labor and Industries (BOLI). See also Section 00826 of the Project Manual.
 - b. ORS 279C.845: Contractors are required to submit certified payroll reports each month. Contractors failing to submit the required reports will be subject to an additional withholding, above any other retainage promulgated by ORS 279C.555, of 25 percent of any amount earned. Once the certified payroll reports have been submitted, the public agency must pay the 25 percent withheld within 14 days per ORS 279C.845 (7).
 - c. ORS 279C.836: Requires that all independent contractors working on qualifying public works projects with a contract price that exceeds \$100,000, must obtain and file with the Oregon Construction Contractors Board (CCB) a public works bond with a corporate surety authorized to do business in Oregon for the amount of \$30,000 before starting work on a contract or subcontract for a public works project.
 - d. House Bill 2895 (1999): Contractors currently listed by the Oregon Construction Contractors Board (CCB) as 'not qualified to hold public contracts' are not eligible to work on this project.
 - e. Public Works Bond: In accordance with ORS 279C.830(3) and before starting work on the Project, Contractor shall file a \$30,000 Public Works Bond with the Oregon Construction Contractors Board.
Contractor shall include a requirement in every subcontract which requires the subcontractor to file a \$30,000 Public Works Bond with the Oregon Construction Contractors Board in accordance with ORS 279C.830(3)(b) and before starting work on the Project.
 - f. ORS 279C.515 / OAR 839-025-0020(2)(a): If the Contractor fails to pay for labor and services as required by this Contract, the Owner can pay for them directly and withhold these amounts from payments to the Contractor.
 - g. The Contractor must pay daily, weekly, weekend and holiday overtime as required by ORS 279C.540 / OAR 839-025-0020(2)(b).
 - h. The Contractor must give written notice to workers of the number of hours per day and days per week they may be required to work per OAR 839-025-0020(2)(c).
 - i. The Contractor must make prompt payment for all medical services for which the contractor has agreed to pay, and for all amounts for which the contractor collects or deducts from worker's

SECTION 00 73 73
State of Oregon - PUBLIC CONTRACTING CLAUSES

wages per ORS 279C.530 / OAR 839-025-0020(3).

- B. Contractor / Subcontractor Form:
Pursuant to Section 00 72 00, General Conditions, each subcontract between General Contractor and Sub-contractor or Sub-contractor and lower tier sub-contractors shall contain the attached "Addendum to Contract between Contractor and Subcontractor. [attached]

1.2 REFERENCE

- A. State of Oregon Revised Statutes (ORS) - 2007
1. Chapters 279, 279A and 279C.; available on-line at:
a. <http://www.leg.state.or.us/ors/>

1.3 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

A.	Invitation for Bids	Section 00 11 13
B.	Plan Centers	Section 00 11 21
C.	Instructions to Bidders	Section 00 21 00
D.	Bid Form	Section 00 41 00
E.	Bid Bond	Section 00 43 13
F.	Pre-Bid Substitution Form	Section 00 43 25
G.	First Tier Subcontractor Disclosure Form	Section 00 45 21
H.	Contract for Construction	Section 00 52 00
I.	Performance Bond & Payment Bond	Section 00 61 13
J.	General Conditions	Section 00 72 00
K.	Supplementary General Conditions	Section 00 73 00
L.	Prevailing Wage Rates	Section 00 73 43
M.	State of Oregon – Public Contracting Clauses	Section 00 73 73
N.	Summary of Work	Section 01 11 00

PART 2 **PRODUCTS**
NOT USED

PART 3 **EXECUTION**
NOT USED

END OF SECTION

ADDENDUM TO CONTRACT BETWEEN CONTRACTOR AND SUBCONTRACTOR

Pursuant to the General Conditions of the Contract for Construction - Attachment 'A', Clause A.2; each subcontract between General Contractor and Sub-contractor or Sub-Contractor and lower tier sub-contractors shall have attached thereto a fully executed copy of this addendum.

Contract

Date: _____

Contractor: _____

Address: _____

Project: **Sweet Home City Hall**
3225 Main Street, Sweet Home, OR 97386

The parties, having executed a contract for: _____ in the amount of \$ _____ in the construction of the above-identified project acknowledge and agree that:

1. This is a Public Improvement Project utilizing public funds and is subject to all regulations of the State of Oregon Revised Statutes (ORS) Public Contracting Code, ORS 279A and 279C. The Contractor shall comply with all regulations contained therein unless specifically amended by the General and Supplementary Conditions for the Project.
2. For convenience, special attention is herein brought to the following public contracting clauses:
 - a. ORS 279C.800 – 870: This project is subject to Prevailing Wage Rates promulgated by the Oregon Bureau of Labor and Industries (BOLI). See also Sections 00 73 43 and 00 73 73 of the Project Manual.
 - b. ORS 279C.845: Contractors are required to submit certified payroll reports each month. Contractors failing to submit the required reports will be subject to an additional withholding, above any other retainage promulgated by ORS 279C.555, of 25 percent of any amount earned. Once the certified payroll reports have been submitted, the public agency must pay the 25 percent withheld within 14 days per ORS 279C.845 (7).
 - c. ORS 279C.836: Requires that all independent contractors working on qualifying public works projects with a contract price that exceeds \$100,000, must obtain and file with the Oregon Construction Contractors Board (CCB) a public works bond with a corporate surety authorized to do business in Oregon for the amount of \$30,000 before starting work on a contract or subcontract for a public works project.

The Subcontractor certifies that:

- a. The subcontractor is an independent contractor in compliance with ORS Chapter 701;
- b. The subcontractor is currently registered with the Oregon Construction Contractors Board (CCB) in a class appropriate for the work to be performed under this subcontract and;
- c. Pursuant to Oregon House Bill 2895 (1999): the undersigned subcontractor, or any of its principals, are not listed by the Oregon Construction Contractors Board (CCB) as 'not qualified to hold public contracts'.

Contractor Signature:

Subcontractor Signature:

(Title/Date)

(Title/Date)

DIVISION 1**GENERAL REQUIREMENTS**

01 11 00	Summary of Work
01 25 00	Product Substitution
01 26 00	Modification Procedures
01 29 00	Application for Payment
01 29 73	Schedule of Values
01 31 00	Coordination
01 31 19	Project Meetings
01 32 00	Construction Schedules and Daily Reports
01 33 00	Submittals
01 33 50	Bidder Designed and Engineered Systems
01 42 16	Explanations and Definitions
01 42 19	Reference Specifications and Standards
01 45 00	Quality Control
01 56 00	Temporary Facilities & Security Controls
01 60 00	Materials and Equipment
01 61 16	Special Requirements – Sustainable Building Practices
01 71 23	Field Engineering
01 73 29	Cutting and Patching
01 74 00	Cleaning and Waste Management
01 77 00	Contract Closeout
01 78 23	Operation and Maintenance Data
01 78 36	Warranties
01 78 39	Project Record Documents

**SECTION 01 11 00
SUMMARY OF WORK**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. The Sweet Home City Hall project located in Sweet Home, Oregon consists of complete renovation of an existing 12,590 sf, one-story, non-sprinklered, Type 5-B construction building. The Work includes the furnishing of labor, materials, and equipment for the construction of all work as described in the Drawings and Project Manual including, but not limited to general construction, HVAC, plumbing, electrical, fire protection systems, and installation of all owner furnished/contractor installed items.
- B. The Contractor's scope of work shall include all permits, licenses, labor, materials, equipment, and related expenses necessary to complete the Project to the satisfaction of the Owner, the Architect, all governmental agencies having jurisdiction, and all Utilities serving the Project except:
 - 1. The Owner or his representative will file the General Building Construction Documents with the required building department and pay for their plans review and the General Building permit and General Systems development assessments.
 - a. General Systems assessments refers to jurisdictional charges levied to a project for general community development and not related to work specific to the project site. Project specific Work or fees such as water meter fees, tap fees, utility extensions, road improvements or other similar work, required by the jurisdiction or serving utility, are the responsibility of the Contractor under this Contract.
 - b. All sub-trade plans review and permit fees are the responsibility of the Contractor under this Contract.
- C. All project work as outlined in the Contract Documents, which includes but is not limited to general construction and coordination with installation of all owner furnished items as specified in this Section.
- D. On all Bidder Designed work, the Contractor shall provide complete design and documentation as required for submission to and approval of Architect, Governing Building Departments or Other Authorities having jurisdiction, and Owner. Refer to Section 01 33 50.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. General Conditions Division 0
- B. General Requirements Division 1

1.3 GENERAL REQUIREMENTS

- A. Safety Requirements:
 - 1. Associated General Contractor's of America, Inc. "Manual of Accident Prevention in Construction", Workman's Compensation Board "Safety Code for Construction Work", and the Occupational Safety and Health Act (OSHA) requirements, as applicable, apply to Work specified herein.

1.4 CONTRACTOR'S USE OF PREMISES

- A. The Contractor shall coordinate with, and receive prior authorization from, the Owner for use of the site. It is intended that the Contractor shall have unlimited use of the Project Site for the duration of the Project Work except:

**SECTION 01 11 00
SUMMARY OF WORK**

1. Work hours shall abide by all local jurisdiction noise and construction ordinances.
 2. Additionally, all work hours shall be approved by the Owner.
- B. Contractor shall secure any authorization as required from local transportation authorities for hauling, diversions and/or temporary closure of public right of ways required for completion of the Work.
- C. Procure use of additional storage and work areas as required.
- D. Premises shall not be used for wasting or disposal of any material not specifically shown or specified by the Contract Documents to be reused on site.

1.5 PRECONSTRUCTION MEETING

- A. A pre-construction meeting shall be held at a time and place as prescribed by the Architect after the Contract is awarded and before issuance of the Notice to Proceed. At the pre-construction meeting, the Contractor shall provide the Owner with a schedule for progress of the project. In addition to the Prime Contractor, all major Sub-contractors will be required to attend the pre-construction meeting. All Contractors (Prime and Subs) shall each provide the names and phone numbers of at least two contacts that can make decisions in case of an emergency.

1.6 HAZARDOUS MATERIALS

- A. Hazardous materials are not known to exist at this project site.
- B. The Contractor is solely responsible to properly protect workers. If the Contractor suspects any additional materials within the work area contain hazardous materials, notify the Owner and architect to allow arrangements to be made for their safe removal prior to execution of work under this Contract.

1.7 WORK BY OWNER

- A. Work by Owner:
1. The following general items will be provided by the Owner, or the Owner's independent vendor or contractor. The Contractor shall anticipate, and in some cases, coordinate and/or provide installation for Work by Owner:
 - a. See Drawings.

**PART 2 PRODUCTS
NOT USED**

**PART 3 EXECUTION
NOT USED**

END OF SECTION

**SECTION 01 25 00
PRODUCT SUBSTITUTIONS**

PART 1 GENERAL

1.1 DESCRIPTION

- A. This section establishes the evaluation parameters and procedures for product substitutions for this project.

1.2 GENERAL

- A. Architect will be initial judge of acceptability of any proposed substitution, working with the Owner.
- B. Only approved substitutions may be used on Contract Work.
- C. Each request for substitution approval shall include:
 - 1. Identity of product for which substitution is requested; include Specification Section and paragraph number.
 - 2. Identity of substitution; include complete product description, drawings, photographs, performance and test data, and any other information necessary for evaluation.
 - 3. Quality comparison of proposed substitution with specified product.
 - 4. Changes in other Work required because of substitution.
 - 5. Effect on Contractor's Construction Schedule.
 - 6. Cost of proposed substitution compared with specified product.
 - 7. Any required license fees or royalties.
 - 8. Availability of maintenance service.
 - 9. Source of replacement materials.
 - 10. EPD and/or HPD per Section 01 61 16.

1.3 SUBSTITUTIONS DURING BIDDING PERIOD

- A. No request for substitution will be considered unless written request has been submitted on the Substitution Request Form, and has been received by Architect at least seven (7) calendar days prior to bid opening.
- B. Requests submitted will not be individually acknowledged.
- C. Architect will issue Addenda prior to bid opening listing all approved substitutions.

1.4 SUBSTITUTIONS AFTER CONTRACT AWARD

- A. Approval will be granted only when:
 - 1. Specified product cannot be delivered without Project delay; or,
 - 2. Specified product has been discontinued; or,
 - 3. Specified product has been replaced by superior product; or,
 - 4. Specified product cannot be guaranteed as specified; or,
 - 5. Specified product will not perform properly; or,
 - 6. Specified product will not fit within designated space; or,
 - 7. Specified product does not comply with governing codes; and,
 - 8. Substitution will be clearly in Owner's interest.
- B. Architect will issue Change Order authorizing approved substitutions and revising Contract sum when appropriate.

1.5 CONTRACT COMPLIANCE

- A. Substitution approval does not relieve Contractor from responsibility for proper execution of the Work and for compliance with other Contract requirements.
 - 1. The listing of a manufacturer or, manufacturer's series of products, as acceptable does not imply automatic approval of individual items of the

**SECTION 01 25 00
PRODUCT SUBSTITUTIONS**

manufacturer. It is the sole responsibility of the Contractor to ensure that any submittal made are for devices that meet or exceed the specifications included in this Project Manual or shown on Drawings.

PART 2 PRODUCTS
NOT USED

PART 3 EXECUTION
NOT USED

END OF SECTION

**SECTION 01 26 00
MODIFICATION PROCEDURE**

PART 1 GENERAL

1.1 DESCRIPTION

- A. This section describes the process and procedures involved in modifying the Contract Requirements.

1.2 RESPONSIBLE PARTIES

- A. Immediately following Contract execution, Owner and Contractor shall identify who, within their respective organizations, will be responsible for executing Change Orders.

1.3 RELATED WORK SPECIFIED ELSEWHERE

- | | |
|------------------------------------|------------------|
| A. General Conditions | See Division 0 |
| B. Supplemental General Conditions | See Division 0 |
| C. Submittals | Section 01 33 00 |
| D. Contract Closeout | Section 01 77 00 |

1.4 REQUESTS FOR INFORMATION (RFI)

- A. Definition.
1. Means a written form submitted by the Contractor requesting additional information or clarification from the Architect on a portion of the Contract Documents.
- B. Contractor's Responsibility.
1. The Contractor shall carefully study the Contract Documents to assure that the requested information is not available therein. Wherever possible, the Contractor shall provide an answer or suggested solution to the request. Where feasible, drawings or sketches should be used. RFI's shall be submitted on a form designated for that purpose and clearly state the project name and RFI sequential number. RFI's must be legible and able to be clearly reproduced through faxing.
 2. Each RFI shall address only one issue.
 3. The Contractor shall transmit a copy to the Owner and the Architect.
 4. The Contractor shall maintain a current master list of all RFI's.
- C. Subcontractor's or Supplier's Responsibility.
1. All RFI's regardless of origination shall be processed to the Architect through the General Contractor. The General Contractor shall log all RFI's, regardless of origination, with consistent sequential numbering. The General Contractor shall first attempt to answer the RFI. If unable to answer the RFI, it can then be forwarded to the Architect.
- D. Architect's Responsibility.
1. The Architect may elect not to answer RFI's which request information readily available in the Contract Documents. The Architect shall have fourteen (14) calendar days from the date of receipt to respond to the Contractor.
- E. Contractor's Additional Responsibility.
1. If the Contractor believes that the Architect's response to an RFI will result in a modification to the Contract amount or time, the Contractor will consider the response a Construction Change Proposal (CCP) request.

**SECTION 01 26 00
MODIFICATION PROCEDURE**

1.5 ARCHITECTS SUPPLEMENTAL INSTRUCTIONS (ASI) OR REVISION (REV)

- A. Definition.
 - 1. Means written, instruction, or interpretation to Contractor, executed in a form designated by Architect, and signed by Architect, which authorizes minor changes in Work not altering Contract Sum and/or Contract Time.
 - 2. **Unless issued specifically as a Construction Change Directive (CCD), all ASI's or REV's are to be considered Construction Change Proposal (CCP) requests if, in the Contractor's opinion, they will constitute a change in either Contract amount or time.**
- B. Contractor's responsibility.
 - 1. The Contractor shall review and distribute all ASI's or REV's to all affected subcontractor's and suppliers.
 - 2. The Contractor shall maintain a master list of all received ASI's or REV's with the Contract Documents stating the ASI/REV number, date received, and status and, review this list at each project meeting.
 - 3. **If the Contractor believes that the ASI or REV will require a modification to the Contract amount or time, the Contractor will immediately initiate it as a Construction Change Proposal (CCP) request.**

1.6 CONSTRUCTION CHANGE PROPOSAL (CCP)

- A. Definition.
 - 1. Means a written proposal prepared by the Contractor for changes to Contract Sum and/or Contract Time for proposed change to the Work.
- B. Proposals will include:
 - 1. Detailed description of change, including change location and products.
 - 2. Supplementary or revised Drawings and Specifications.
 - 3. When appropriate, projected time span for making change, and specific statement as to whether or not overtime work is authorized.
 - 4. When appropriate, specific time period during which requested price will be considered valid.
- C. **Such proposals are for information only, and is not an instruction or authorization to execute the change or an order to stop Work in progress.**
- D. Contractor's responsibility.
 - 1. The Contractor shall provide sufficient quantitative data as may be required by the Architect and Owner to substantiate all proposed changes to the Contract amount. Justify each change in Contract time in accordance with Section 01 32 00 - Construction Schedule.
 - 2. The Contractor shall maintain a master list of all CCP's with the Contract Documents stating the CCP sequential number, date received, and status and, review this list at each project meeting.
 - 3. Each Construction Change Proposal shall address only one issue.
- E. Architect's Responsibility.
 - 1. Upon receipt, the architect will review the CCP and make recommendations to the Owner.
- F. Owner's Responsibility.
 - 1. Within a timely period after receiving the CCP, the Owner shall review and either reject or approve the proposed changes to the Contract amount and/or time.

**SECTION 01 26 00
MODIFICATION PROCEDURE**

- G. Inclusion in Change Order.
 - 1. If the CCP is approved by the Owner, the items approved shall be included in the next Change Order.

- 1.7 CONSTRUCTION CHANGE DIRECTIVE (CCD)
 - A. Definition.
 - 1. See General Conditions and Supplemental General Conditions of the Contract for Construction.
 - B. In lieu of or in addition to Proposal Request, Architect, with the **Owner's approval signature thereon**, may issue a written Construction Change Directive for Contractor to proceed with change for subsequent inclusion in future Change Order.
 - C. Construction Change Directive will describe Work changes with proposed basis for adjustment in Contract Sum and/or Contract Time.
 - D. The Owner will sign and date Construction Change Directive as authorization for Contractor to proceed with changes.
 - E. The Contractor shall, if he concurs, sign and date Construction Change Directive to indicate agreement with specified terms.
 - F. The Contractor shall provide final quotation of changes in Contract Sum and/or Contract Time within fourteen (14) days of the completion of the authorized work.

- 1.8 CONSTRUCTION CHANGE ORDERS (CO)
 - A. Definition.
 - 1. See General Conditions and Supplemental General Conditions of the Contract for Construction.
 - B. General:
 - 1. The Contractor will prepare each Change Order in quadruplicate for signature by Contractor, Owner and Architect.
 - 2. Change Order will describe Work changes with attachments of any revised Contract Documents, which define details of change.
 - 3. Change Order will adjust Contract Sum and/or Contract Time.
 - 4. Work covered by a Change Order is authorized to begin only after signature by Contractor, Owner, Architect and the Funding Agency.
 - 5. **Approved Change Orders shall be included on next monthly Payment Request.**
 - 6. The Contractor shall maintain a master list of all Change Orders with the Contract Documents stating the C.O. number, date, and status and, review this list at each project meeting.
 - C. LUMP-SUM/CHANGE ORDERS
 - 1. Change Order contents will be based on either agreed Construction Change Directive or:
 - a. Architect's Proposal Request and Contractor's responsive proposal as mutually agreed between Owner and Contractor.
 - b. Contractor's change proposal as recommended by Architect, and as mutually agreed between Owner and Contractor.
 - D. UNIT PRICE CHANGE ORDERS
 - 1. Change Order contents will be based on either agreed Construction Change Directive or:
 - a. Architect's definition of required changes.

**SECTION 01 26 00
MODIFICATION PROCEDURE**

- b. Contractor's change proposal as recommended by Architect.
 - c. Survey of completed work.
 - 2. Unit Price amounts shall be either:
 - a. Those stated on Bid Form or in Agreement, if any.
 - b. Those mutually agreed upon between Owner and Contractor.
 - 3. When quantities of items affected by Change Order can be determined prior to start of work:
 - a. Owner and Architect will sign and date Change Order as authorization for Contractor to proceed with changes.
 - b. Contractor shall sign and date Change Order to indicate agreement with specified terms.
 - E. TIME-AND-MATERIAL CHANGE ORDERS
 - 1. Owner will issue Construction Change Directive directing Contractor to proceed with changes.
 - 2. Within fourteen (14) days of completion of change, Contractor shall submit itemized accounting of change with supporting data.
 - 3. Architect will determine allowable cost of such work, as provided in Contract General Conditions.
 - 4. Architect will sign and date Change Order to establish change in Contract Sum and/or Contract Time.
 - 5. Owner and Contractor will sign and date Change Order to indicate their agreement with specified terms.
 - F. CORRELATION OF CHANGE ORDERS WITH CONTRACTOR'S OTHER SUBMITTALS
 - 1. Upon approval of a Change Order:
 - a. Revise Schedule of Values and subsequent Application for Payment forms to record each change as separate item of work, and to record adjusted Contract Sum.
 - b. Revise construction schedule to reflect each change in Contract Time.
 - 2. Upon completion of Change Order Work, record pertinent changes in record documents.
- 1.9 DOCUMENTATION OF PROPOSALS AND CLAIMS
- A. Support quotation of each Unit Price proposal, which has not been previously established, and each lump sum proposal with sufficient substantiating data to allow Architect to evaluate quotation.
 - 1. With each quotation, submit the following cost and time data:
 - a. Labor required
 - b. Equipment required
 - c. Products required
 - 1) Quantity required, Purchase source, Unit cost
 - d. Taxes, insurance, and bonds
 - e. Credit for deleted work, similarly documented.
 - f. Overhead and profit.
 - g. Justification for any change in Contract Time.
 - B. Support each claim for additional costs, and for work done on time-and-material basis with documentation as required for lump-sum proposal, plus the following information.

**SECTION 01 26 00
MODIFICATION PROCEDURE**

- a. Name of Owner's authorized agent who ordered work, and date of order.
 - b. Dates and times of work performed, and by whom.
 - c. Time records, including summary of hours worked, and hourly rates.
 - d. Receipts and invoices for the following:
 - 1) Equipment used, including dates and time of use.
 - 2) Products used, including quantities.
 - 3) Subcontracts
- C. Document requests for product substitutions as specified in Section 01 25 00.

PART 2 PRODUCTS
NOT USED

PART 3 EXECUTION
NOT USED

END OF SECTION

SECTION 01 29 00
APPLICATION FOR PAYMENT

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. This section describes the process and procedures for applying for payment.

1.2 RELATED SECTIONS

- | | | |
|----|-------------------------|------------------|
| A. | Summary of Work | Section 01 11 00 |
| B. | Modification Procedures | Section 01 26 00 |
| C. | Submittals | Section 01 33 00 |
| D. | Materials & Equipment | Section 01 60 00 |
| E. | Contract Closeout | Section 01 77 00 |

1.3 FORMAT AND DATA REQUIRED

- A. Submit itemized applications typed on AIA Document G702, Application and Certificate for Payment.
- B. Application for payment line items should correspond to items listed on Schedule of Values in Section 01 29 73.

1.4 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT

- A. Application Form:
1. Fill in required information.
 2. Fill in summary of dollar values to agree with respective totals indicated on continuation sheets.
 3. Execute certification with signature of responsible officer of contracting firm.
- B. Continuation Sheets:
1. Identify each major item of work by number and title matching those listed in Table of Contents of this Project Manual.
 2. Fill in scheduled dollar value for each item.
 3. Fill in dollar value in each column for each scheduled line item when work has been performed or products stored.
 4. Round off values to nearest dollar.
 5. List each Change Order, executed prior to date of submission, at end of continuation sheets. Include Change Order number and brief description.

1.5 SUBCONTRACTOR PAYMENT

- A. After the first request for payment, each subsequent request shall be accompanied by a notarized affidavit stating that all subcontractors and suppliers have been paid less earned retainage as their interests appeared in the last payment received. Include partial lien releases for Work that has been completed and previously paid for by the Owner.
- B. No application for payment by the Contractor shall be processed unless accompanied by the affidavit.

1.6 SUBSTANTIATING DATA

- A. Submit, when requested by Architect, backup information to justify line item amounts. Provide one copy of data with cover letter for each copy of submittal. Include Application number and date, and line item by number and date, and line item by number and description.

SECTION 01 29 00
APPLICATION FOR PAYMENT

1.7 PAYMENT FOR PRODUCTS STORED OFF THE PROJECT SITE

- A. When delay or added cost to Owner can be avoided by storing products off site, Owner may make payment to Contractor for said products provided that Contractor shall:
1. Locate storage facilities within 50 miles of project site, or within 50 miles of Architect's office.
 2. Make storage facilities available for Architect's visual inspection.
 3. Segregate and label stored products for specified project.
 4. Assume all risk for loss.
 5. Assume responsibility for exceeding product "shelf life".
 6. Protect stored products and provide applicable insurance against their damage, discoloration, and theft, listing the Owner and any mortgagee as additional named insured.
 7. Submit itemized inventory and Schedule of Values for stored products together with Certificate of Insurance.
 8. Submit payment requests to Owner as part of Contractor's regular progress payment request.
 9. Reimburse Owner for damages sustained if stored products are not delivered to jobsite when needed.
 10. Submit to Owner, with copy to Architect, a written waiver of lien insuring Owner against claims for unpaid storage costs.
 11. Upon receipt of payment from Owner prepare and issue to Owner with a copy for Architect and any mortgagee, a bill-of-sale for stored products.

PART 2 **PRODUCTS**
NOT USED

PART 3 **EXECUTION**
NOT USED

END OF SECTION

**SECTION 01 29 73
SCHEDULE OF VALUES**

END OF SECTION

**SECTION 01 31 00
COORDINATION**

PART 1 GENERAL

1.1 CONTRACT CONDITIONS

- A. Drawings and general provisions of Contract, and Division 1 Specification Sections, apply to this Section.

1.2 RELATED SECTIONS

- A. Summary of Work Section 01 11 00
- B. Submittals Section 01 33 00
- C. Quality Control Section 01 45 00
- D. Temporary Facilities Section 01 56 00
- E. Materials and Methods Section 01 60 00
- F. Cutting and Patching Section 01 73 29
- G. Contract Closeout Section 01 77 00

1.3 CONTRACTOR'S RESPONSIBILITIES

- A. Coordinate Project Manual with Drawings to insure all materials, equipment, and labor necessary for the project completion are included. Failure of any Contractor or Subcontractor to fully acquaint themselves with both the Drawings and Project Manual requirements shall not relieve them from performing the work required by the Contract Documents.
 - 1. Consult with Architect to obtain interpretations. Assist in resolution of questions or conflicts which may arise.
- B. All materials to be new, free from defects in bearing strength, durability, or appearance, of best commercial quality for purpose specified.
- C. Adequately protect active utilities from damage and remove or relocate as indicated or specified. Remove and plug or cap inactive or abandoned utilities encountered during the work. If not specified or otherwise provided, cap such utility lines at least three feet outside of new buildings or as required by local regulations.

1.4 COORDINATING WORK WITH WORK OF OTHERS

- A. Coordinate and make certain that where work of either party is dependent upon the other party, the work first performed is properly placed, installed, aligned, and finished as required to permit the proper installation of the following work.
- B. If the other work in any way interferes with the Contractor's work so notify the other party sufficiently in advance so that the other party has reasonable time to make necessary adjustments.
- C. If the Contractor's work in any way interferes with the other party's work, so notify the other party as soon as possible. The Contractor shall modify its schedule as reasonably necessary to accommodate the other party's work.

1.5 CLOSE-OUT DUTIES

- A. Mechanical and Electrical Equipment Start-up:
 - 1. Coordinate check-out of utilities, operational systems, and equipment.
 - 2. Verify full operation of all systems as designed.
 - 3. Assist in initial start-up and testing.
- B. At completion of work of each sub-contract, conduct inspection to assure that:
 - 1. Work is acceptable.
 - 2. Specified cleaning has been accomplished.

**SECTION 01 31 00
COORDINATION**

3. Temporary facilities and debris have been removed from site.
- C. Substantial Completion:
1. See Section 01 77 00 Contract Closeout for complete list of Substantial Completion prerequisites and requirements.
 2. Conduct inspection and prepare list of work to be completed or corrected.
 3. Assist Architect in inspection.
 4. Supervise correction and completion of work as established in Architect's inspection reports.
- D. Final Completion:
1. See Section 01 77 00 Contract Closeout for complete list of Final Completion prerequisites and requirements.
 2. Assist Architect in inspection.
 3. Contractor is responsible to obtain and post a Certificate of Occupancy from the permit jurisdiction prior to final completion.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01 31 19
PROJECT MEETINGS

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. This section describes the meeting requirements for this project.

1.2 GENERAL

- A. Owner's Representative or Architect will schedule and administer a pre-construction meeting.
- B. The Contractor will schedule and administer weekly progress meetings, and specially called meetings throughout the progress of the Work, and will:
1. Prepare meeting agenda.
 2. Distribute notice of each specially called meeting, four days in advance of meeting date.
 3. Preside at meetings.
 4. Record the minutes; include all significant proceedings and decisions.
 5. Reproduce and distribute copies of minutes within 3 days after each meeting to:
 - a. All meeting participants
 - b. Architect
 - c. Owner's Representative
- C. Contractor shall make physical arrangements for meetings.
- D. Representatives of Contractor, subcontractors, and suppliers attending meetings shall be qualified and authorized to act on behalf of entity each represents.

1.3 RELATED SECTIONS SPECIFIED ELSEWHERE

- | | | |
|----|------------------------------------|------------------|
| A. | Modification Procedures | Section 01 26 00 |
| B. | Schedule of Values | Section 01 29 73 |
| C. | Construction Schedules and Reports | Section 01 32 00 |
| D. | Submittals | Section 01 33 00 |
| E. | Quality Control | Section 01 45 00 |

1.4 PRECONSTRUCTION MEETING

- A. A Preconstruction Meeting will be scheduled by Owner's Representative or Architect within 15 days after date of Notice to Proceed.
- B. Location: Central site, convenient for all parties, designated by Owner's Representative.
- C. Attendance:
1. Owner's Representative
 2. Architect
 3. Contractor's Superintendent and Project Manager.
 4. Others as appropriate
- D. Minimum Agenda:
1. Distribution and discussion of:
 - a. List of major subcontractors and suppliers
 - b. Projected construction schedules
 - c. Cash flow projection
 - d. Proposed schedule of values
 2. Critical work sequencing.
 3. Major equipment deliveries and priorities.

SECTION 01 31 19
PROJECT MEETINGS

4. Project coordination.
 5. Designation of responsible personnel.
 6. Procedures and processing of:
 - a. Field decisions
 - b. Proposal requests
 - c. Submittals
 - d. Change Orders
 - e. Applications for Payment
 7. Adequacy of Contract Documents distribution.
 8. Procedures for maintaining record documents
 9. Use of premises:
 - a. Office, work, and storage areas
 - b. Owner's requirements
 10. Construction facilities, controls, and construction aids.
 11. Temporary utilities
 12. Safety and first-aid procedures.
 13. Hazardous materials
 14. Security procedures
 15. Housekeeping procedures.
- E. Contractor shall record discussion and distribute to all attendees.

1.5 PROGRESS MEETINGS

- A. Weekly meetings shall be held at the jobsite to coordinate the Work, answer questions, and resolve problems.
- B. The following shall attend:
 1. Owner's Representative
 2. Architect, attending on a **bi-monthly (twice per month)** basis.
 3. Architect's professional consultants as required by progress of Work
 4. General Contractor's Superintendent, Project Engineer, and Project Manager.
- C. Others with interest in Project may attend and shall attend when invited.
- D. Minimum Agenda:
 1. Review and approval of previous meeting minutes.
 2. Review Work progress since previous meeting.
 3. Field observations, problems, conflicts.
 4. Problems which impede construction schedule.
 5. Review off-site fabrication and delivery schedules.
 6. Corrective measures and procedures to regain projected schedule.
 7. Revisions to Construction Schedule.
 8. Progress schedule, during succeeding work period.
 - a. 3-week schedule, submitted weekly
 9. Coordination of schedules.
 10. Review submittal schedules; expedite as required.
 11. Maintenance of quality standards; expedite as required.
 12. Pending changes and substitutions.
 13. Review proposed changes for:
 - a. Effect on Construction Schedule and on completion date.
 - b. Effect on other Project Contracts.
 14. Other business.

SECTION 01 31 19
PROJECT MEETINGS

1.6 PRE-INSTALLATION CONFERENCES

- A. When specified in individual specification section, Contractor will:
1. Convene pre-installation conference at Project site prior to commencing work.
 2. Require attendance:
 - a. Contractor.
 - b. Representative of each trade specified.
 - c. Architect.
 - d. Owner's Representative.
 3. Notify Architect and Owner's Representative at least five days in advance of meeting date.
 4. Prepare agenda, preside at conference, record minutes, and within three days after conference distribute copies of minutes to participants, with two copies to Architect.
 5. Review conditions of installation, preparation and installation procedures, compliance with manufacturer's instructions, and coordination with related work.

PART 2 **PRODUCTS**
NOT USED

PART 3 **EXECUTION**
NOT USED

END OF SECTION

SECTION 01 32 00
CONSTRUCTION SCHEDULES AND DAILY REPORTS

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. This section describes the requirements for construction schedules and reports for this project.

1.2 REQUIREMENTS

- A. **Concurrently with the execution of the Construction Contract, submit estimated progress schedules for the Work**, with sub-schedules of related activities which are essential to the schedule's progress.
- B. Revise schedules when appropriate.
- C. If Contractor fails to deliver Schedule on time or to properly update Schedule, Architect may withhold Progress Payment approval until such time as Contractor complies with these requirements.
- D. If, in Architect's or Owner's opinion, Work progress falls behind approved Schedule, Contractor shall take necessary action to regain lost time. Contractor shall increase Work amount, or number of shifts, or establish overtime operations, or all three, and submit for review Schedule revisions in which progress rate will be regained, all without additional cost to the Owner.
- E. Contractor's failure to comply with these requirements shall be grounds for determination that Contractor is not prosecuting Work with such diligence as will insure Project completion within specified time. Upon such determination Owner may terminate Contractor's right to proceed with Work, or any separable part thereof, in accordance with General Conditions.
- F. The Contractor and all sub-contractors, suppliers, and manufacturers shall schedule material deliveries and installations to conform with the Schedule, and provisions to this effect shall be included in all Subcontracts.
- G. Float Time is defined as the amount of time between the earliest start date and the latest start date, or between the earliest finish date and the latest finish date, of an activity or a chain of activities on the critical path of construction activities for the Work. Float Time is not for the exclusive use or benefit of either the Contractor or the Owner. However, if Float Time associated to one of the activities is used up (but not exceeded), first by either the Owner or the Contractor (or by a combination of each), no additional time will be given to the Contractor.

1.3 RELATED WORK SPECIFIED ELSEWHERE

- A. Summary of Work Section 01 11 00
- B. Project Meetings Section 01 31 19
- C. Submittals Section 01 33 00

1.4 SCHEDULES

- A. Forms:
 - 1. For Contractor's Construction Progress: **Critical Path Method (CPM) chart.**
 - 2. For Submittals, etc.: Include in Contractor's Construction Progress Schedule.
- B. Horizontal time scale: Identify first work day of each week.
- C. Scale and spacing: Allow space for notations and future revisions.

SECTION 01 32 00
CONSTRUCTION SCHEDULES AND DAILY REPORTS

- D. Headings: Include separate heading for each specification section title and section number listed in Project Manual Table of Contents.

1.5 SCHEDULE CONTENTS

- A. Contractor's Construction Progress Schedule:
1. Show complete sequence of construction by activity.
 2. Show dates for beginning, and completion, of each major element of Work.
 3. Maximum length of scheduled activity: as required per CPM.
- B. Submittal Schedule for Shop Drawings, Product Data, and Samples:
1. Show dates for Contractor's submittals.
 2. Show dates submittals will be required for Owner-furnished products.
 3. Show dates approved submittals will be required from the Architect. Allow a reasonable amount of time for Architect and Architect's consultants review.
- C. Products Delivery Schedule:
1. Show delivery dates for products furnished by Owner.

1.6 SCHEDULE REVISIONS

- A. Indicate progress of each activity up to date of each Schedule submission.
- B. Show changes occurring since previous Schedule submission.
1. Major changes in scope.
 2. Activities modified since previous submission.
 3. Revised projections of progress and completion.
 4. Other identifiable changes.
- C. Provide a narrative report as needed to define:
1. Problem areas, anticipated delays, and related impact on Schedule.
 2. Corrective action recommended, and expected effect.
 3. The effect of changes on schedules of other Prime Contractors.

1.7 DAILY CONSTRUCTION REPORTS

- A. Prepare a daily construction log, recording the following information concerning events at the site.
1. List of subcontractors at the site.
 2. Approximate count of personnel at the site.
 3. High and low temperatures, general weather conditions.
 4. Accidents and unusual events.
 5. Meetings and significant decisions.
 6. Stoppages, delays, shortages, losses.
 7. Meter readings and similar recordings.
 8. Emergency procedures.
 9. Orders and requests of governing authorities.
 10. Change Orders received, implemented.
 11. Services connected, disconnected.
 12. Equipment or system tests and start-ups.
 13. Partial Completions, occupancies.
 14. Substantial Completions authorized.

1.8 SUBMISSIONS

- A. Submit project schedule at execution of Contract for Construction.

SECTION 01 32 00
CONSTRUCTION SCHEDULES AND DAILY REPORTS

- B. Submit revised Schedules with each Application for Payment.
- C. Submit two approved opaque copies of each submission for Architect's permanent use; submit one approved opaque copy to Owner's Representative.
- D. Submit duplicate copies of Daily Construction Reports to Architect and to Owner's Representative at weekly Progress Meeting.

1.9 DISTRIBUTION

- A. Distribute copies of reviewed Schedules to:
 - 1. Jobsite file
 - 2. Subcontractors
 - 3. Architect
 - 4. Owner's Representative
 - 5. Other concerned parties
- B. Instruct recipients to report promptly to Contractor, in writing, any problems anticipated by projections shown in Schedules.

PART 2 PRODUCTS
NOT USED

PART 3 EXECUTION
NOT USED

END OF SECTION

**SECTION 01 33 00
SUBMITTALS**

PART 1 GENERAL

1.1 DESCRIPTION

- A. This section describes the requirements for submittals for this project. The Architect will be obligated to review only those submittals required by the Contract Documents.

1.2 RELATED SECTIONS

- A. Definitions and additional requirements, see Division 1.
B. Special Requirements – Sustainable Building Practices Section 01 61 16

1.3 SPECIAL REQUIREMENTS

- A. Shop Drawings:
1. Contractor's Review
 - a. Contractor will identify shop drawing details by reference to specification section, drawing sheet, detail, schedule, or room number shown on Contract Drawings.
 2. Shop Drawing Sheet Size:
 - a. 8-1/2 x 11 inch, 11 x 17 inch, 24 x 36 inch, or 30 x 42 inch.
 - b. Do not mix sheet sizes with an individual submittal.
- B. Product Data:
1. Contractor's Review
 - a. Contractor will identify product data submittals by reference to specification section, drawing sheet, detail, schedule, or room number shown on Contract Drawings.
 2. Product Data Sheet Size:
 - a. 8-1/2 x 11 inch, 11 x 17 inch, 24 x 36 inch, or 30 x 42 inch.
 - b. Do not mix sheet sizes with an individual submittal.
 3. Clearly mark each copy to identify pertinent products.
 4. Show performance characteristics and capacities.
 5. Show dimensions and required clearances.
 6. Show wiring and piping diagrams, and controls.
 7. Manufacturer's standard schematic drawings and diagrams:
 - a. Modify to delete information not applicable to Work.
 - b. Supplement standard information to provide information specifically applicable to Work.
 8. Show sustainability characteristics and capabilities.
 9. When available, include EPD and HPD per Section 01 61 16.
- C. Samples:
1. Contractor's Review
 - a. Contractor will identify samples by reference to specification section, drawing sheet, detail, schedule, or room number shown on Contract Drawings.
 2. Size and Quantity: See respective specification sections.
 3. Show **full** range of color, texture and pattern.
 4. Deliver to Architect's office, unless otherwise specified.

1.4 CONTRACTOR'S RESPONSIBILITIES

- A. Review Shop Drawings, Product Data, and Samples prior to submission.
B. Determine and verify:

SECTION 01 33 00
SUBMITTALS

1. Field measurements.
 2. Field construction criteria.
 3. Catalog numbers and similar data.
 4. Conformance with Specifications.
- C. Comply with Contract Documents.
- D. Coordinate each submittal with requirements of the Work.
- E. Notify Architect in writing, at submission time, of any deviations in submittals from Contract Document requirements.
- F. Perform no Work or fabrication requiring submittal until return of submittal with Architect's or Engineer's stamp indicating 'No Exceptions Taken' or "Make Corrections Noted.

1.5 SUBMISSION REQUIREMENTS

- A. Make submittals in such sequence as to cause no Work delay.
- B. Submission methods:
1. Shop Drawings:
 - a. Submit digital PDF files via email to Architect. Reviewed documents will be returned to Contractor via email.
 2. Product Data:
 - a. Submit digital PDF files via email to Architect. Reviewed documents will be returned to Contractor via email.
 3. Samples:
 - a. Submit physical samples in number stated in respective specification section.
- C. Submitted documents and samples shall be of sufficient size to clearly illustrate:
1. Project title and names of Contractor, supplier, and manufacturer, all visible when drawings are folded.
 2. Project identification complete with specification section number.
 3. Field measurements, clearly identified as such.
 4. Applicable Standards, such as ASTM or Federal Specification numbers.
 5. Identification of deviations from Contract Documents.
 6. Identification of resubmittal revisions.
 7. At least 6 x 8 inch space on each page for Contractor's and Architect's stamps.
 8. Contractor's stamp, signed and certifying that products, field measurements, field construction criteria, and information submitted has been reviewed and accepted by Contractor as accurate and conforming with Contract Documents.
 9. Date for submittal to be reviewed and returned, with indication of priority.
 10. Functional characteristics of the product, with integrally related parts and attachment devices.

1.7 RESUBMISSION REQUIREMENTS

- A. Make any corrections or changes in submittals required by Architect and resubmit until approved.
- B. Shop Drawings and Product Data:
1. Revise initial drawings or data, and resubmit as specified for initial submittal.
 2. Identify any changes made other than those requested by Architect.
- C. Samples:

**SECTION 01 33 00
SUBMITTALS**

- 1. Submit new samples as required for initial submittal.
- D. Cost of Additional Review:
 - 1. Costs for third review and subsequent reviews of submittals will be payable by Contractor.

1.8 ARCHITECT'S RESPONSIBILITIES

- A. Review submittals with reasonable promptness. If multiple submittals or significantly large submittals are requested, the Architect will consult with Contractor regarding the establishment of prioritization of these submittals.
- B. Affix signatures and indicate approval, or requirements for resubmittal.
- C. Return submittals to Contractor for distribution, or resubmission.

PART 2 PRODUCTS
NOT USED

PART 3 EXECUTION
NOT USED

END OF SECTION

SECTION 01 33 50
BIDDER DESIGNED AND ENGINEERED SYSTEMS

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Bidder designed and engineered systems are defined as complete, operational systems, designed, engineered, provided and integrated into the overall project for their intended use.
- B. Bidder design and engineered components are defined as individual components or elements that are part of a specified system that require design and/or engineering as required to provide and integrate into the overall project for their intended use.
- C. On all Bidder Designed work, the Contractor shall provide complete design and documentation as required for submission to and approval of Architect and/or Engineer of Record, Governing Building Departments or Other Authorities having jurisdiction, and Owner.

1.2 RELATED SECTIONS

- A. Summary of Work Section 01 11 00
- B. Submittals Section 01 33 00
- C. Contract Closeout Section 01 77 00

1.3 GENERAL REQUIREMENTS

- A. Contractor is responsible to coordinate and assume or assign to Subcontractors complete responsibility for design, contract documents, calculations, submittals, permits, fabrication, transportation and installation.
 - 1. Contractor is responsible to submit and coordinate Bidder Design documents to Permit Jurisdiction for separate permit and/or inclusion under general building permit per deferred submittal procedures as required by IBC section 107.3.4.2
 - 2. Bidder Designed and Engineered Systems shall include all design, coordination with primary building design and architect/engineer of record intent, Contract Documents, calculations, submittals, permits, fabrication, transportation and installation.
 - 3. Bidder Designed and Engineered Components shall include design, coordination with primary building design and architect/engineer of record intent, Contract Documents, calculations, submittals, permits, fabrication, transportation and installation.

1.4 ARCHITECT AND ENGINEER OF RECORD

- A. The overall building's primary architect and engineer is the Architect or Engineer of Record for the building as referred to in IBC section 107.3.4.2.
 - 1. The Architect or Engineer of Record's review of Bidder Designed submittals shall be for design intent and shall not lessen nor shift responsibility from Contractor or assigned Subcontractor, to Owner nor Architect or Engineer of Record.
 - 2. The Owner is not responsible to pay for any delays, additional products, additional hours of work or overtime, restocking or rework required due to failure by Contractor or Subcontractor to coordinate their work with the work of other trades on Project or to provide Bidder Designed work in a timely manner to meet project schedule.

1.5 SPECIFIC REQUIREMENTS

SECTION 01 33 50
BIDDER DESIGNED AND ENGINEERED SYSTEMS

- A. Bidder Designed systems or components shown in Contract Documents produced by the Architect and/or Engineer of Record are shown for design intent.
- B. Intent is to have Bidder Design Entity responsible to design, provide, coordinate and install Bidder Designed system or components.
- C. Bidder Designed components attached to structural frame or supplemental to structural frame shall be designed for anticipated loads outlined on structural drawings or found in prevailing building code.
- D. Load reactions at interface between Bidder Designed components and structural frame shall be clearly defined to allow for a review by Engineer of Record.

1.6 SUBMITTALS

- A. Refer to Section 01 33 00, IBC Section 107.3.4.2., and each individual specification section for Bidder Designed systems and components.
- B. At a minimum, Bidder Design and Engineered submittals are required to include:
 - 1. Complete criteria
 - 2. Design assumptions
 - 3. Detail drawings technically describing system components.
 - 4. Calculations.
 - 5. Stamped by Bidder Designed system Engineer registered in project state.
 - 6. Instructions for fabrication, assembly, installation and interface with other trades.
 - 7. Applicable ICC/ICBO, UL, FM or other independent testing and/or trade listing as required by permit jurisdiction and/or architect or engineer of record.

PART 2 PRODUCTS

2.1 Bidder Designed Systems:

- A. See Cover Sheet of Drawings.

2.2 Bidder Designed Components:

- A. See individual specification sections of this Project Manual.

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01 42 16
EXPLANATIONS AND DEFINITIONS

PART 1 GENERAL

1.1 CONTRACT CONDITIONS

- A. Drawings, general provisions of Contract and Division 1 Specification Sections, apply to this Section.

1.2 DEFINITIONS:

- A. General Explanation: A substantial amount of the Specification language constitutes specific definitions for nominal terms found on the Drawings and in other Contract Documents. Certain terms used repetitiously through-out the Contract Documents are hereby defined as follows:
1. General Requirements: The provisions or requirements of the Division 1 sections. The General Requirements apply to the entire work of the Contract and, where so indicated, to other elements of work which are included in the Project.
 2. Indicated:
 - a. The term "Indicated" is a cross reference to details, notes or schedules on the drawings, other paragraphs or schedules in the Specifications, and similar means of recording requirements in the Contract Documents.
 - b. Where terms such as "shown", "noted" and "scheduled" are used, it is for the purpose of helping the reader locate the cross reference, and no limitation of location is intended, except as specifically noted.
 3. Directed, Requested, Etc.: Where not otherwise explained, terms such as "directed", "requested", "authorized", "selected", "approved", "required", "accepted", and "permitted" mean "directed by the Architect", etc. However, no such implied meaning will be interpreted to extend the Architect's responsibility into the Contractor's area of construction supervision.
 4. Installer: The person or entity engaged by the Contractor or his sub-contractor or sub-subcontractor for the performance of a particular unit of work at the project site, including installation, erection, application and similar required operations. It is a general requirement that installers be recognized experts in the work they are engaged to perform.
 5. Project Site: The space available to the Contractor for the performance of the work, either exclusively or in conjunction with others performing the work as part of the Project. The extent of the project site is shown on the Drawings.
 6. Testing Laboratory: An independent entity engaged to perform specific inspections or tests of the Work, either at the project site or elsewhere, and to report and interpret the results of those inspections or tests. See Section 01 45 00.
 7. Approve:
 - a. Where used in conjunction with the Architect's response to submittals, requests, applications, inquiries, reports, and claims by the Contractor, the meaning of the term "approved" will be held to the following limitations of the Architect's responsibilities and duties:
 - i. Review of submittals is only for general conformance with

SECTION 01 42 16
EXPLANATIONS AND DEFINITIONS

the design concept of the Project and general compliance with the information given in the Contract Documents. The review does not affect the Contractor's responsibility to perform all Construction Contract requirements with no change in contract price or time. Any action shown by the Architect is subject to the requirements of the plans, specifications and other Contract Documents. The Contractor is responsible to confirm and correlate dimensions at the site, for information that pertains to the fabrication processes, for the means, methods, techniques, procedures, sequences and quantities necessary to complete the Construction Contract and for coordination of the work of all trades and satisfactory performance of its work. The review by the Architect is undertaken solely to satisfy Architect's obligations, if any, to the Owner and shall not give rise to any claim by the Contractor or other parties against the Architect or Owner.

- b. In no case will "approval" by the Architect be interpreted as a release of the Contractor for responsibilities to fulfill requirements of the Contract Documents.
- 8. Extra Work: An item of work not provided for in the Contract as awarded but determined by the Architect as essential to the proper completion of the Contract within its intended scope.
- 9. Extra Work Order: A Change Order concerning the performance of work or furnishing of materials involving extra work.
- 10. Plans: The approved plans, profiles, typical cross sections, working drawings and supplemental drawings, or exact reproductions thereof, which show the location, character, dimensions and details of the Work to be done or contemplated under the Contract.
- 11. Furnish: Except as otherwise defined in greater detail, the term "furnish" is used to mean supply and deliver to the Project Site, ready for installation.
- 12. Provide: Except to the extent further defined, the term "provide" means to furnish and install, complete and ready for the intended use.

1.3 SPECIFICATION EXPLANATIONS:

- A. General: This series of explanations is provided to assist the user of these Specifications and associated Contract Documents to more readily understand the format, language, implied requirements and similar conventions of the content. None of these explanations will be interpreted to modify the substance of the requirements.
- B. Format Explanations: The format of the principal portions of Specifications can be described as follows, although other portions may not fully comply and no particular significance will be attached to such compliance or non-compliance:
 - 1. Titles: The Specifications are divided into Divisions, sub-divisions and Sections for convenience. The titles of these are not intended to imply a particular meaning or to fully describe the Work of each Division, sub-division or Section, and are not an integral part of the text which specifies the requirements.
 - 2. Each Section of Specification has been sub-divided into 3 "parts" for

SECTION 01 42 16
EXPLANATIONS AND DEFINITIONS

- uniformity and convenience (Part 1 - General, Part 2- Products, and Part 3 - Execution). These do not limit the meaning of and are not an integral part of the text which specifies requirements.
3. Imperative language is frequently used. Except as otherwise specified, requirements expressed imperatively are to be performed by the Contractor.
 4. Section Numbering: Used to facilitate cross references in the Contract Documents. The Sections are bound in numerical sequence; however, this sequence is not complete and the Table of Contents of the Specifications must be consulted to determine the numbers and names of specification sections in the Contract Documents.
 5. The pages of each Section are numbered independently for each Section. The Section number is shown with the page number at the bottom of each page.
 6. Paragraph numbers are in a self-explanatory format, and are purely for the purpose of facilitating subsequent references to specific text, for addenda, purchasing, sub-contracting, modifications, change orders, and similar references.
 7. Project identification is recorded at the bottom of each page to minimize misuse of the Specifications and confusion with other project Specifications.
- C. Specification Content: Because of the methods by which this project Specification has been produced, certain conventions of the text and content can be explained as follows:
1. Overlapping and conflicting requirements: Where compliance with two or more industry standards or sets of requirements is specified, and overlapping of those different standards or requirements establishes two different or conflicting minimums or levels of quality, the most stringent requirement (which is generally recognized to be also the most costly) is intended and will be enforced, unless specifically detailed language written into the Contract Documents (not by way of reference to an industry standard) clearly indicates that the less stringent requirement is to be fulfilled. Refer apparently-equal-but-different requirements, and uncertainties as to which of two levels of quality is the more stringent, to the Architect for a decision before proceeding.
 2. Minimum Quality/Quantity: In every instance, the quality level or quantity shown or specified is intended as the minimum for the work to be performed or provided. Except as otherwise specifically indicated, the actual work may either comply exactly with that minimum (within specified tolerances), or may exceed that minimum within reasonable limits. In complying with requirements, the indicated numeric values are either minimums or maximums as noted or as appropriate for the context of the requirements. Refer instances of uncertainty to the Architect for a decision before proceeding.
 3. Specialists, Assignments: In certain instances, the specification text requires (or at least implies) that specific work be assigned to certain specialist or expert entities, who must be engaged for the performance of those units of work. These are specified as, and must be recognized as, special requirements over which the Contractor has no choice or option. These assignments must not be confused with (and are not intended to

SECTION 01 42 16
EXPLANATIONS AND DEFINITIONS

interfere with) the normal application of regulations, union jurisdictions and similar conventions. One purpose of such assignments is to establish which party or entity involved in a specific unit of work is to be recognized as the "expert" for the indicated construction processes or operations. Nevertheless, the final responsibility for fulfillment of the entire set of requirements remains with the Contractor.

4. Trades, Names: Except as otherwise indicated, the use of trade titles such as "carpentry" in specification text, implies neither that the work must be performed by an accredited or unionized tradesman or the corresponding generic name (such as a carpenter), nor that the specified requirements apply exclusively to work by tradesmen of that corresponding generic name.
5. Abbreviations:
 - a. The Specifications are of abbreviated or streamlined type and frequently include incomplete sentences. Words such as "shall", "shall be", "Contractor shall", and similar mandatory phrases shall be supplied by inference in same manner as they are in a note on Drawings.
 - b. In the interest of brevity the Contract Documents frequently omit modifying words such as "all", "each", and "every" and articles such as "the", "a", and "an", but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.
 - c. Actual work abbreviations of a self-explanatory nature have been included in the text. These are generally defined in each Section at the first instance of use for each term so abbreviated.
 - d. Trade associations and general standards are frequently abbreviated; refer to Section 01 42 19 for a general listing of these abbreviations.
 - e. Singular words will be interpreted as plural and plural words will be interpreted as singular wherever applicable and the full context of the requirement so indicates.

1.4 DRAWING EXPLANATIONS

- A. Wherever a detail is referenced and drawn to describe a specific condition, the same or a similar detail shall be used in identical or similar conditions elsewhere on the Project even if not specifically referenced.
- B. Where the word "similar" (sim) occurs on the Drawings, it shall be interpreted in its general sense and not as meaning identical. All details shall be worked out in relation to their location and their connection with other parts of the Work.
- C. The figured or noted dimensions on the Drawings shall be used instead of measurements of the Drawings by scale, and shall be strictly complied with.
- D. No scale measurements of the Drawings shall be used as a dimension for any part of the work.

1.5 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

- A. Notwithstanding the provisions of Division 0, the Drawings and Specifications are complementary; and what is required by one shall be as binding as if required by all. In the event of conflicts or discrepancies between the two documents, the Contractor is responsible to obtaining clarification from the

SECTION 01 42 16
EXPLANATIONS AND DEFINITIONS

Architect. The Architect will render an interpretation consistent with the intent of the documents as complementary. The Contractor shall assume that any interpretation may favor the more stringent version of the Work and shall be responsible therefore.

PART 2 **PRODUCTS**
NOT USED

PART 3 **EXECUTION**
NOT USED

END OF SECTION

SECTION 01 42 19
REFERENCED SPECIFICATIONS & STANDARDS

PART 1 GENERAL

1.1 RELATED SECTIONS

A. General Conditions

1.2 REFERENCED SPECIFICATIONS & STANDARDS

- A. For products or workmanship specified by referenced specification or standard, comply with requirements of the specification or standard, except when more rigid requirements are specified or are required by governing codes.
- B. Except where a specific date is specified, the date of the referenced specification or standard is that in effect as of the bid opening date.
- C. Obtain a copy of all referenced specifications and standards, and maintain at jobsite during the specific work until Substantial Completion of the Project.

1.3 REFERENCED REGULATORY AGENTS

AA	Aluminum Association 1525 Wilson Blvd., Suite 600 Arlington, VA, 22209 703-358-2960
AAMA	American Architectural Manufacturer's Association 1827 Walden Office Sq., Suite 550 Schaumburg, IL 60173
AASHTO	American Association of State Highway Transportation Officials 444 North Capital Street, N.W. Suite 249 Washington, D.C. 20001
ACI	American Concrete Institute 38800 Country Club Drive Farmington Hills, MI 48331
ADAAG (ADA)	Americans With Disability Act Federal Register 28 CFR part 36. See also state adopted amendments to UBC.
AHA	American Hardwood Association 1210 W. Northwest Hwy Palatine, IL 60067
AISC	American Institute of Steel Construction One East Wacker Drive, Suite 700 Chicago, IL 60601
AISI	American Iron and Steel Institute 25 Massachusetts Ave., NW Suite 800 Washington, DC 20001
AITC	American Institute of Timber Construction 7012 S. Revere Parkway, Suite 140 Centennial, CO 80112
ALSC	American Lumber Standards Committee P.O. Box 210 Germantown, MD 20875
ANLA	American Nursery and Landscape Association 1200 G Street, NW, Suite 800 Washington, DC 20005

SECTION 01 42 19
REFERENCED SPECIFICATIONS & STANDARDS

ANSI	American National Standards Institute 25 West 43 rd . Street New York, NY 10036
APA	American Plywood Association 7011 S 19 th Street Tacoma, WA 98466
APA	Architectural Precast Association 6710 Winkler Rd., Suite 8 Fort Myers, FL 33919
ASA	American Standards Association (Now known as ANSI: see above)
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers. 1791 Tullie Circle, NE Atlanta, GA 30329
ASTM	American Society for Testing & Materials 100 Barr Harbor Dr. West Conshohocken, PA 19428
AWI	Architectural Woodwork Institute 46179 Westlake Dr., Suite 120 Potomac Falls, VA, 20165
AWPA	American Wood Preservers' Association 3246 Fall Creek Hwy. Suite 1900 Grandbury, TX 76049
AWS	American Welding Society 550 NW LeJeune Rd. Miami, FL 33126
BHMA	Builders Hardware Manufacturer's Association 355 Lexington Ave., 15 th floor New York, NY 10017
BIA	Brick Institute of America 1850 Centennial Park Dr., Suite 301 Reston, VA 20191
CISCA	Ceiling and Interior Systems Construction Association 1010 Jorie Blvd., Suite 30 Oak Brook, IL, 60523
CRSI	Concrete Reinforcing Steel Institute 933 N. Plum Grove Rd. Schaumburg, IL 60173
CS	Commercial Standards of the Commodities Division of the Department of Commerce U.S. Government Printing Office Washington, D.C. 20402
CTI	Ceramic Tile Institute of America 12061 West Jefferson Blvd. Culver City, CA 90230
DHI	Door and Hardware Institute 14170 Newbrook Dr., Suite 200 Chantilly, VA 20151
EIMA	EIFS Industry Members Association

SECTION 01 42 19
REFERENCED SPECIFICATIONS & STANDARDS

	513 West Broad St., Suite 210 Falls Church, VA, 22046
FGMA	Flat Glass Marketing Association (See GANA)
FM	Factory Mutual System 500 River Ridge Rd P.O. Box 9102 Norwood, MA, 02062
Fed Spec (FS)	Federal Specifications of the United States General Services Administration Specifications and Consumer Information Distribution Section 470 East L'Enfant Plaza, SW, Suite 8100 Washington, DC 20407
GA	Gypsum Association 6525 Belcrest Rd., Suite 480 Hyattsville, MD, 20782
GANA	Glass Association of North America 800 SW Jackson St., Suite 1500 Topeka, KS, 66612
HPVA	Hardwood Plywood and Veneer Association 1825 Michael Farraday Dr. P.O. Box 2789 Reston, VA 22190
IBC	International Building Code ("I"-codes) See ICC
ICBO	International Conference of Building Officials See ICC
ICC	International Code Conference - Los Angeles Division 3060 Saturn Street, Suite 100 Brea, CA 92821
IFC	International Fire Code - See IBC
IMC	International Mechanical Code - See IBC
LEED	Leadership in Energy & Environmental Design (LEED) (See USGBC)
MIA	Masonry Institute of America 22815 Frampton Ave Torrance, CA, 90501
NAAMM	National Association of Architectural Metals Manufacturers 800 Roosevelt Rd., Bldg. C, Suite 312 Glen Ellyn, IL, 60137
NBFU	National Bureau of Fire Underwriters 85 John Street New York, NY 10017
MBMA	Metal Building Manufacturers Association 111 Deer Lake Rd., Suite 100 Deerfield, IL, 60015
MFMA	Maple Flooring Manufacturer's Association 60 Revere, Drive, Suite 500 Northbrook, IL 60062
NEC	National Electric Code published by National Fire Protection

SECTION 01 42 19
REFERENCED SPECIFICATIONS & STANDARDS

	Association (See NFPA below)
NFPA	National Fire Protection Association 1 Battery March Park Quincy, MA 02169
NHLA	National Hardwood Lumber Association P.O. Box 34518 Memphis, TN 38184
NRCA	National Roofing Contractors Association O'Hara International Center 10255 W. Higgins Rd., Suite 600 Rosemont, IL 60018
NWCB	Northwest Wall and Ceiling Bureau 2825 Eastlake Ave., E Ste 350 Seattle, WA, 98102
NWWDA	National Wood Window and Door Association 1400 E. Touchy Ave., G-54 Des Plaines, IL 60018
OAR	Oregon Administrative Rules http://arcweb.sos.state.or.us/banners/rules.htm
ORS	Oregon Revised Statutes www.leg.state.or.us/ors
OSBCA	Oregon State Building Codes Agency 1535 Edgewater NW Salem, OR 97309
OSHD	Oregon State Highway Division - Dept. of Transportation 329 Transportation Bldg. Salem, OR 97310
OSSC	Oregon Structural Specialty Code. Oregon Amendments to IBC (see IBC above), published by State of Oregon. (see OSBCA above)
PCA	Portland Cement Association 5420 Old Orchard Rd. Skokie, IL 60077
PCI	Precast Prestressed Concrete Institute 200 W Adams St., Suite 2100 Chicago, IL 60606
PDCA	Painting and Decorating Contractors of America - Oregon 17675 SW Farmington Rd. Aloha, OR, 97007
PS	Product Standard of National Bureau of Standards US Department of Commerce US Government Printing Office Washington, DC 20402
SDI	Steel Deck Institute P.O. Box 25 Fox River Grove, IL 60021
SDI	Steel Door Institute 30200 Detroit Rd. Cleveland, OH 44145

SECTION 01 42 19
REFERENCED SPECIFICATIONS & STANDARDS

SIGMA	Sealed Insulating Glass Manufacturers Association 401 N. Michigan Ave., Suite 2400 Chicago, IL 60611
SJI	Steel Joist Institute 234 W Cheves St Florence, SC, 29501
SMACNA	Sheet Metal and Air Conditioning Contractors National Association, Inc. 4201 Lafayette Center Cr. P.O. Box 112130 Chantilly, VA 20151
TCA	Tile Council of America 100 Clemson Research Blvd. Anderson, SC 29625
UBC UBC Std	Uniform Building Code (<i>superseded - See IBC</i>) Uniform Building Code Standards, Volume III, published by ICB (See U.B.C. above)
UFC	Uniform Fire Code (<i>superseded - See IFC above</i>)
UMC	Uniform Mechanical Code (<i>superseded - See IMC above</i>)
USAS	United States of American Standards Institute (Now known as ANSI: see above)
USGBC	United States Green Building Council www.usgbc.org
UL	Underwriters Laboratories 2600 NW Lake Rd. Camas, WA, 98607
WCLIB	West Coast Lumber Inspection Bureau P.O. Box 23145 Portland, OR 97281
WH	Warnock Hersey 8431 Murphy Drive Middleton, WI 53562
WMMP	Wood Molding & Millwork Producers Association 507 First St. # B Woodland, CA 95695
WWPA	Western Wood Products Association Yeon Building 522 SW 5 th Ave. Suite 500 Portland, OR 97204

- 1.4 TRADE ASSOCIATION REFERENCES
A. See also specific Specification Sections.

PART 2 PRODUCTS
NOT USED

PART 3 PRODUCTS

**SECTION 01 42 19
REFERENCED SPECIFICATIONS & STANDARDS**

NOT USED

END OF SECTION

**SECTION 01 45 00
QUALITY CONTROL**

PART 1 GENERAL

1.1 DESCRIPTION

- A. Independent testing and inspecting services are to be furnished as specified in this Section and/or elsewhere in these Specifications and structural notes on the drawings.
- B. The following testing and inspecting is required:

Item	Reference
Concrete Reinforcement	Section 03 20 00
Cast-In-Place Concrete	Section 03 30 00
Structural Steel	Section 05 12 00
Metal Fabrications	Section 05 50 00
Other	Structural Notes, Permit Jurisdiction and other individual Sections of this Project Manual

1.2 RELATED WORK SPECIFIED ELSEWHERE:

- A. Requirements for testing may be described in various other sections of the Project Manual.

1.3 SELECTION AND PAYMENT FOR TESTING:

- A. Selection of testing laboratory: The Owner will select a pre-qualified independent testing laboratory.
- B. Payment for testing: The Owner will pay for laboratory testing and inspection services except as provided in paragraph 1.5A of this Section.

1.4 COORDINATION OF TESTS AND INSPECTIONS:

- A. Contractor shall initiate and coordinate testing and inspections required by the Contract Documents and Public Authorities having jurisdiction of the work.
- B. Notification: The Contractor shall notify the Owner sufficiently in advance of the manufacture of materials or products to be supplied by him which, by requirements of the Contract Documents, must be tested at the source of supply in order that the Owner may arrange for the testing.
- C. The Contractor shall sequence work in a manner to efficiently utilize testing agency time and travel.
 - 1. As part of the Contractor's obligation hereunder, the scheduling and sequencing of work requiring testing and inspection shall be done in a manner so as to minimize, to the greatest extent feasible, repeated trips to the project site or fabrication facility.

1.5 ALTERNATE INSPECTION

- A. The Architect shall have the right to require alternative inspection procedure other than as specified, when, in the Architect's judgment, other inspections are required to demonstrate compliance with the Contract requirements. Costs of such alternative inspections will be borne by the Owner if products are found to

**SECTION 01 45 00
QUALITY CONTROL**

comply; otherwise, costs shall be borne by the Contractor. Any assemblies which require re-testing due to non-compliance with Contract Documents or manufacturer's warranty requirements will be paid for by the Contractor.

1.6 REPORT DISTRIBUTION

A. Email a PDF of each test result report, signed and certified by the testing firm's supervising engineer. Distribution shall be as follows:

1. Owner
2. Architect
3. Contractor
4. Building Department

**PART 2 PRODUCTS
NOT USED**

**PART 3 EXECUTION
NOT USED**

END OF SECTION

**SECTION 01 56 00
TEMPORARY FACILITIES**

PART 1 GENERAL

1.1 REQUIREMENTS

- A. The Contractor shall provide at the jobsite:
 - 1. Temporary power required for Work.
 - 2. Temporary heating and cooling equipment required for Work.
 - 3. Temporary ventilation equipment required for Work.
 - 4. Temporary lighting required for Work.
 - 5. Temporary restroom facilities.
 - 6. Temporary 6 foot high wire mesh fence and gate around construction and staging areas.
 - 7. Temporary dump boxes for waste disposal and material recycling.
 - 8. Temporary fire extinguishers.
 - 9. Temporary field office equipped with a computer, internet connection, telephone, first aid cabinet, shop drawing and sample storage, and minimum 4 foot long table top for drawing review.
 - 10. Temporary buildings or trailers used for material and equipment storage with adequate ventilators, fire extinguishers, and temporary controls.
 - 11. Temporary security and life safety controls per OSHA and permit jurisdiction standards.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Coordination Section 01 31 00
- B. Field Engineering Section 01 71 23
- C. Cutting and Patching Section 01 73 29

1.3 DISRUPTION REQUIREMENTS

- A. Do not block access or egress to property or adjacent R.O.W. without prior approval from landowner, tenants and jurisdiction.

1.4 TRAFFIC REQUIREMENTS:

- A. Do not close or obstruct required traffic exit ways without written permission from Owner and authorities having jurisdiction.
- B. Provide alternate routes around closed and obstructed areas when required by Owner and authorities having jurisdiction.
- C. Obtain and pay all required parking/loading permits and fees.

1.5 DUST, NOISE & ODORS & LEAKAGE REQUIREMENTS:

- A. Dust and Leakage:
 - 1. Provide effective dust and/or moisture barriers as required to avoid any contamination or damage to existing facilities.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

SECTION 01 56 00
TEMPORARY FACILITIES

3.1 COMPLETION

- A. Site Control Work:
 - 1. Keep adjacent streets, parking areas, and loading areas clear.
- B. Removal of Temporary Facilities:
 - 1. Remove temporary facilities upon completion of Work.
 - 2. Restore exposed surfaces damaged by temporary facilities.

END OF SECTION

**SECTION 01 60 00
MATERIALS & EQUIPMENT**

PART 1 GENERAL

1.1 CONTRACT CONDITIONS

- A. Drawings and general provisions of Contract and Division 1 Specification Sections, apply to this Section.

1.2 GENERAL

- A. Materials and Equipment incorporated into Work shall:
 - 1. Conform to applicable specifications and standards.
 - 2. Comply with size, make, type, and quantity specified, unless otherwise approved in writing.
- B. Manufactured and Fabricated Products:
 - 1. Manufacture like parts of duplicate units to standard sizes and gauges, and to be interchangeable.
 - 2. Two or more items of same kind shall be identical, and by same manufacturer.
 - 3. Products shall be suitable for service conditions.
 - 4. Equipment shall comply with capacity, sizes, and dimensions shown or specified, unless otherwise approved in writing.
- C. Do not use materials or equipment for any purpose other than that for which designed or specified.

1.3 RELATED SECTIONS

- A. Summary of Work Section 01 11 00
- B. Product Substitutions Section 01 25 00
- C. Submittals Section 01 33 00
- D. Contract Closeout Section 01 77 00

1.4 CONTRACTOR'S OPTIONS

- A. For products specified only by referenced standard, select any product meeting standard.
- B. For products specified by naming several products, select any one complying with specifications.
- C. For products specified by naming one or more products and "or approved", select any one specified product or submit request for substitution as specified below.
- D. For products specified by naming one or more products without restricting the Contractor to use of these products only, select any one specified product or submit request for substitution as specified below.

1.5 INAPPROPRIATE PRODUCTS & METHODS

- A. If Contractor believes that any specified product, method, or system is inappropriate for use he shall, if possible, so notify Architect at least five (5) working days prior to bid opening, and if not possible such notice shall be given before performing Work in question.
- B. If notice of objection is not received within the time limits specified above, then Contractor agrees that the specified products, methods, and systems are appropriate for use on this Project.

1.6 PRODUCT SUBSTITUTIONS

- A. Refer to Section 01 25 00.

SECTION 01 60 00
MATERIALS & EQUIPMENT

1.7 QUANTITY OF PRODUCTS REQUIRED

- A. Whenever in specifications a product is referred to in singular number, such reference shall include as many such products as are shown on Drawings or are required to complete the Work.

1.8 PRODUCTS LIST

- A. Before Contractor's first request for payment, submit to Architect complete list of major products proposed for use; include proprietary product names, manufacturer's name, and installing subcontractor's name.

1.9 MANUFACTURER'S INSTRUCTIONS

- A. Perform Work in accord with manufacturer's instructions.
- B. Do not omit preparatory or installation procedures required by manufacturer, unless specifically modified or exempted by Contract Documents.
- C. When Contract Documents require Work to comply with manufacturer's instructions, obtain and distribute such instructions to parties performing work including two (2) copies to Architect. Maintain one (1) set at jobsite during installation and until acceptance.
- D. Handle, install, connect, clean, condition, and adjust products in strict accord with such instructions and in conformance with specified requirements.
- E. Should job conditions or specified requirements conflict with manufacturer's instructions, consult Architect for further instructions.
- F. Do not proceed with work without clear instructions.

1.10 TRANSPORTATION & HANDLING

- A. Arrange product deliveries in accord with Contractor's Construction Schedule; coordinate to avoid conflict with work and site conditions.
- B. Deliver products undamaged, in manufacturer's original containers or packaging, and with legible identifying labels intact.
- C. Immediately upon delivery, inspect shipments to assure compliance with Contract Documents and approved submittals and, assure that products are properly protected and undamaged.

1.11 STORAGE & PROTECTION

- A. Follow manufacturer's instructions.
- B. Maintain product identity labels intact.
- C. Store products subject to weather-damage in weathertight enclosures.
- D. Maintain storage room temperature and humidity within ranges required by manufacturer's instructions.
- E. Maintain reasonable protection against product theft and vandalism.
- F. Exterior Storage:
 - 1. Store fabricated products above ground, on blocking or skids; prevent product damage and discoloration.
 - 2. Cover products subject to deterioration with impervious sheet coverings; provide adequate ventilation to prevent condensation.
 - 3. Store loose granular materials in well-drained area on solid surface to prevent mixing with foreign matter.
- G. Inspection of Stored Products:
 - 1. Arrange storage to permit easy access for inspection.

SECTION 01 60 00
MATERIALS & EQUIPMENT

2. Make periodic inspections of stored products to assure that products are maintained as specified and are free from damage, discoloration, and deterioration.
- H. Protection after Installation:
1. Provide substantial coverings as necessary to protect installed products against damage and discoloration. Remove covering when no longer needed.

END OF SECTION

SECTION 01 61 16
SPECIAL REQUIREMENTS – SUSTAINABLE BUILDING PRACTICES

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes administrative requirements and procedures for compliance and documentation for the project's Sustainable Building Practices.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

- A. Specific material requirements Division 2 through 16
B. Submittals Section 01 33 00

1.3 REFERENCES

- A. Bay Area Air Quality Management District (BAAQMD); 939 Ellis Street, San Francisco, California 94109. Tel: (415) 771-6000. www.baaqmd.gov.
B. Bay Area Air Quality Management District:
1. BAAQMD Regulation 8, Rule 51- Adhesive and Sealant Products.
C. Green Seal; 1001 Connecticut Avenue, NW, Suite 827, Washington, DC 20036-5525. Tel: (202) 872-6400. Fax: (202) 872-4324. www.greenseal.org.
D. South Coast Air Quality Management District (SCAQMD); 21865 E. Copley Drive, Diamond Bar, CA 91765. Tel: (909) 396-2000. www.aqmd.gov.
E. Carpet and Rug Institute: CRI Green Label Testing Program
F. International Organization for Standardization (ISO); ISO Central Secretariat, BIBC II, Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland. Tel: +41 22 749 01 11. www.iso.org.
G. HPD Collaborative; 401 Edgewater Place, Suite 600, Wakefield, MA 01880. Tel: (781) 876-8871. www.hpd-collaborative.org.

1.4 DEFINITIONS

- A. Low emitting / Low toxic: Construction Materials and Methods that reduce the quantity of indoor air contaminants through limitations of VOC levels and alternate methods of application or installation. See Part 2 - Products and specific specification sections for acceptable standards and methods.
B. Volatile Organic Compound (VOC): Carbon compounds considered indoor air contaminants that are odorous, irritating, and/or harmful to the comfort and wellbeing of installers and occupants.
C. Environmental Product Declaration (EPD): An independently verified and registered document, per ISO 14025, that communicates transparent and comparable information about the life-cycle environmental impact of products.
D. Health Product Declaration (HPD): An independently verified and registered document that communicates transparent and unbiased framework for manufacturers and specialty industries to provide cost effective reporting of material product content and associated health information. (Preference is for HPDs that report material product to the 1000 ppm)

PART 2 PRODUCTS

- 2.1 Specific requirements for materials in respective Sections of Division 2 through 16.

SECTION 01 61 16
SPECIAL REQUIREMENTS – SUSTAINABLE BUILDING PRACTICES

2.2 VOC Limits: When available, all products used on this Project shall meet the following limitations for emission of Volatile Organic Compounds (VOC) (expressed as grams of VOC per liter, less water).

A. Adhesives, Sealants and Sealant Primers: VOC content at or below levels allowed by South Coast Air Quality Management District (SMAQMD) Rule #1168. Caulks and Sealants: VOC content at or below levels allowed by Bay Area Air Quality Management District (BAAQMD) Regulation 8, rule 51. Aerosol adhesives: VOC content at or below levels allowed by Green Seal Standard GC-36.

1.	Architectural Applications	VOC Limit
	Indoor Carpet Adhesives	50g/liter.
	Carpet Pad Adhesives	50g/liter.
	Outdoor Carpet Adhesives	150g.liter.
	Wood Flooring Adhesives	100g/liter.
	Rubber Floor Adhesives	60g/liter.
	Subfloor Adhesives	50g/liter.
	Ceramic Tile Adhesives	65g/liter.
	VCT & Asphalt Tile Adhesives	50g/liter
	Drywall & Panel Adhesives	50g/liter.
	Cove Base Adhesives	50g/liter.
	Multipurpose Construction Adhesives	70g/liter.
	Structural Glazing Adhesives	100g/liter.
	Single Ply Roof Membrane Adhesives	250g/liter.
2.	Specialty Applications	
	PVC Welding	510g/liter.
	CPVC Welding	490g/liter.
	ABS Welding	325g/liter.
	Plastic Cement Welding	250g/liter.
	Adhesive Primer for Plastic	550g/liter.
	Contact Adhesive	80g/liter.
	Special Purpose Contact Adhesive	250g/liter
	Structural Wood Member Adhesive	140g/liter.
	Sheet Applied Rubber Lining Operations	850g/liter.
	Top & Trim Adhesive	250g/liter.
3.	Substrate Specific Applications	
	Metal to Metal	30g/liter.
	Plastic Foams	50g/liter.
	Porous Material (except wood)	50g/liter.
	Wood	30g/liter.
	Fiberglass	80g/liter.
4.	Sealants	
	Architectural	250g/liter.
	Nonmembrane Roof	300g/liter.
	Roadway	250g/liter.
	Single-Ply Roof Membrane	450g/liter.
	Other	420g/liter.
5.	Sealant Primers	
	Architectural Non Porous	250g/liter.
	Architectural Porous	775g/liter.
	Modified Bituminous	500g/liter.

SECTION 01 61 16
SPECIAL REQUIREMENTS – SUSTAINABLE BUILDING PRACTICES

- | | | |
|----|--|----------------------------------|
| | Other | 750g/liter. |
| 6. | Aerosol Adhesives | |
| | General purpose mist spray | 65% VOCs by weight |
| | General purpose web spray | 55% VOCs by weight |
| | Special purpose aerosol adhesives (all types) | 70% VOCs by weight |
| | | |
| B. | Paints & Coatings: VOC content at or below levels allowed by Green Seal GS-11 Limits for Paints and Coatings, and Green Seal GS-47 Limits for Stains and Finishes. | |
| 1. | Paints and Coatings <u>excluding</u> water and colorants added at the point-of-sale: | VOC Limit |
| | Flat Topcoat | <50g/liter. |
| | Non-Flat Topcoat | <100g/liter. |
| | Primer or Undercoat | <100g/liter. |
| | Floor Paint | <100g/liter. |
| | Anti Corrosive Coating | <250g/liter. |
| | Reflective Wall Coating | <50g/liter. |
| | Reflective Roof Coating | <100g/liter. |
| 2. | Paints and Coatings <u>including</u> colorant added at the point-of-sale. | |
| | Flat Topcoat | <100g/liter. |
| | Non-Flat Topcoat | <150g/liter. |
| | Primer or Undercoat | <150g/liter. |
| | Floor Paint | <150g/liter. |
| | Anti Corrosive Coating | <300g/liter. |
| | Reflective Wall Coating | <100g/liter. |
| | Reflective Roof Coating | <150g/liter. |
| 3. | Stains and Finishes | |
| | Finish: Varnishes | <350g/liter. |
| | Finish: Conjugated Oil Varnish | <450g/liter. |
| | Finish: Laquer | <550g/liter. |
| | Finish: Clear Brushing Laquer | <680g/liter. |
| | Finish: Shellacs/Pigmented | <550g/liter. |
| | Finish: Shellacs/Clear | <730g/liter. |
| | Stains | <250g/liter. |
| | Sealer | <200g/liter. |
| | Waterproof Sealers | <250g/liter. |
| | Low Solids Coating | <120g/liter. |
| | | |
| C. | Flooring Systems: VOC content at or below levels allowed by Carpet and Rug Institute Green Label program for cushion. VOC content at or below levels allowed by Carpet and Rug Institute Green Label Plus program for carpet and carpet adhesives. | |
| | | Emission factor limit (mg/m2/hr) |
| 1. | Carpets | |
| | a. Total VOCs | 0.5 |
| | b. 4 – Phenylcyclohexane | 0.05 |
| | c. Formaldehyde | 0.03 |
| | d. Styrene | 0.41 |
| 2. | Cushion | |
| | a. Total VOCs | 1 |

SECTION 01 61 16
SPECIAL REQUIREMENTS – SUSTAINABLE BUILDING PRACTICES

- | | | | |
|----|----|--|------|
| | b. | BHT | 0.3 |
| | c. | Formaldehyde | 0.05 |
| | d. | 4 – Phenylcyclohexane | 0.05 |
| 3. | | Carpet Adhesives | |
| | a. | See Part 2.2.A of this Section. | |
| 4. | | Concrete, wood, bamboo and cork floor finishes | |
| | a. | See Part 2.2.B of this Section. | |
| 5. | | Tile setting adhesive and grout | |
| | a. | See Part 2.2.A of the Section. | |
| D. | | Composite Wood and Agrifiber products: Must contain no added urea-formaldehyde resins. | |

PART 3 EXECUTION

NOT USED

END OF SECTION

**SECTION 01 71 23
FIELD ENGINEERING**

PART 1 GENERAL

1.1 DESCRIPTION

- A. The work under each Section of the Project Manual shall include providing, installing and maintaining all scaffold, staging, planking, temporary shoring and/or bracing barricades and other protection devices necessary for safety and in strict conformity with applicable laws and ordinances. The work also includes the maintenance of protection devices so as not to interfere with or obstruct the work of other trades.

1.2 RELATED SECTIONS

- | | | |
|----|-----------------------|------------------|
| A. | Summary of Work | Section 01 11 00 |
| B. | Submittals | Section 01 33 00 |
| C. | Quality Control | Section 01 45 00 |
| D. | Temporary Facilities | Section 01 56 00 |
| E. | Materials and Methods | Section 01 60 00 |
| F. | Cutting and Patching | Section 01 73 29 |
| G. | Contract Closeout | Section 01 77 00 |

1.3 CONTRACTOR RESPONSIBILITY

- A. The Contractor shall be solely responsible for all necessary temporary or construction bracing, shoring or support for walls, floors or roof construction prior to completion of vertical and lateral bearing systems.
- B. The work under each Section of the Project Manual shall include providing all forms of protection as necessary to preserve the work of other trades and the public free from damage. These provisions shall be considered as though repeated under each separate Section of the Project Manual.
- C. It shall be the responsibility of the Contractor to be aware of and observe all safety requirements. Neither the Owner nor the Architect shall be liable for the failure of the Contractor to observe and comply with required safety requirements.
- D. See Section 01 11 00 - Summary of Work for additional requirements.

PART 2 PRODUCTS
NOT USED

PART 3 EXECUTION
NOT USED

END OF SECTION

**SECTION 01 73 29
CUTTING AND PATCHING**

PART 1 GENERAL

1.1 DESCRIPTION

- A. Perform all cutting, fitting, and patching, including any attendant excavation and backfill, required to complete Work and to:
 - 1. Make work fit properly together.
 - 2. Integrate with other work.
 - 3. Uncover work for installation of ill-timed work.
 - 4. Remove and replace defective and non-conforming work.
 - 5. Remove samples of installed Work for testing.
 - 6. Provide penetrations through non-structural surfaces for mechanical and electrical work.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Coordination Section 01 31 00
- B. Field Engineering Section 01 71 23

PART 2 PRODUCTS

2.1 MATERIALS

- A. Products similar to those specified elsewhere in this Project Manual:
 - 1. Follow those Specifications.
- B. Other Products:
 - 1. Follow Architect's instructions.

PART 3 EXECUTION

3.1 EXISTING CONDITIONS

- A. Inspect existing conditions and identify work subject to damage or movement caused by proposed cutting and patching.
- B. After uncovering, inspect conditions affecting performance of Work.
- C. Report unsatisfactory and questionable conditions to Architect.
- D. Do not proceed with Work until Architect provides further instructions.

3.2 PREPARATION

- A. Maintain adequate temporary support necessary to assure structural integrity of affected work.
- B. Protect other portions of project work against damage and discoloration.
- C. Protect Work exposed by cutting against damage and discoloration.

3.3 PERFORMANCE

- A. Provide proper surfaces for patching and finishing.
- B. Employ qualified installer or fabricator to perform cutting and patching for:
 - 1. Weather-exposed or moisture-resistant surfaces
 - 2. Sight-exposed finished surfaces
- C. Cut concrete and other rigid materials with masonry saw or core drill. Do not overcut corners.
- D. Restore cut or removed work with new products to provide work complete in

**SECTION 01 73 29
CUTTING AND PATCHING**

accordance with Contract documents. Maintain any original fire-resistance rating.

- E. Fit Work air-tight to pipes, sleeves, ducts, conduits, and other surface penetrations.
- F. Where patching occurs, refinish entire surface to provide even finish to match adjacent work.

3.4 CUTTING STRUCTURAL FRAMING

- A. Not permitted, unless shown on drawings or otherwise approved.

3.5 CLEANING AND REPAIRING

- A. Including Work of other trades, clean, repair and touch-up, or replace when directed, products which have been soiled, discolored, or damaged by work of this Section.
- B. Remove debris from project site upon work completion or sooner, if directed.

END OF SECTION

SECTION 01 74 00
CLEANING AND WASTE MANAGEMENT

PART 1 GENERAL

1.1 DESCRIPTION

- A. Maintain premises and public properties free from accumulations of waste, debris and rubbish, caused by operations.
- B. At completion of work, remove waste material, rubbish, tools, equipment, machinery and surplus materials, and clean all sight-exposed surfaces; leave project clean and ready for public occupancy and health department inspection.
- C. The Owner has established that this project shall generate the least amount of waste possible and that processes that ensure the generation of as little waste as possible shall be employed. Of the inevitable waste that is generated, as many of the waste materials as economically feasible shall be reused, salvaged or recycled such that the waste disposal in landfills shall be minimized.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Cleaning for a specified product or work specifically specified in the specification's section for that work.

1.3 COORDINATION

- A. Coordinate recycling efforts with any demolition and salvage work.
- B. Coordinate recycling, salvaging and/or reuse with subcontractors and provide subcontractors with copies of Waste Management Plan.
- C. Coordinate with local Regulatory Agencies regarding removal and disposal of any hazardous substances identified in the building or in the salvaged building materials. Obtain and pay for necessary permits, licenses and certificates and give notices as required during performance of construction waste management work.

1.4 ON-SITE MATERIAL SORTING AND STORAGE DURING CONSTRUCTION

- A. The General Contractor shall coordinate with local haulers to recycle/salvage the following (at minimum) materials on this project:
 - 1. Wood: clean dimensional wood, pallet wood, composite wood (plywood, MDF, etc.).
 - 2. Masonry, Concrete and stone rubble.
 - 3. Metals from banding, stud trim, ductwork, piping, rebar, roofing, other trim. Includes steel, iron, galvanized sheet steel, stainless steel, aluminum, copper, zinc, lead, brass and bronze.
 - 4. Gypsum Board (unpainted).
 - 5. Corrugated Cardboard, paper, packaging.
 - 6. Acoustical Ceiling Tile
 - 7. Light Fixtures and Electrical Equipment
 - 8. Plumbing Fixtures
 - 9. Glass, including window glass and beverage containers.
 - 10. Carpet and Pad: Offcuts and remainder greater than 1 sq. ft.: Set aside for reuse or donation.
 - 11. Plastics, including beverage containers.
 - 12. Ceramic, Stone or Quarry Tile: Half tiles and larger: Set aside for reuse or donation; broken tile, cutoffs smaller than ½ tile, and excess mortar and grout: Crush for use in mosaic, sub-base, or fill.
 - 13. Rigid Foam.
 - 14. Perlite products: If possible, return to manufacturer for recycling.
 - 15. Paint & Coatings: Set aside extra paint for future color matches or reuse

SECTION 01 74 00
CLEANING AND WASTE MANAGEMENT

by Owner. If local option exists, collect all waste paint by type and provide for delivery to recycling or collection facility

16. Field Office(s) waste, including office paper, aluminum cans, glass, plastic, and office cardboard.
- B. The General Contractor shall be required to recycle above wastes and shall provide the subcontractors, through the hauler, with on-site containers to facilitate recycling. A separate container shall be provided for non-recyclable materials. Recycling and waste bins areas are to be kept neat, clean and clearly marked. Protect bins from non-working hours contamination.
- C. The General Contractor is responsible for informing field personnel and subcontractors about the recycling program and shall continuously monitor the program to verify adherence to the program and proper separation of the waste. The materials to be recycled are to be handled, stored, protected from contamination and transported in a manner that meets requirements set by designated facility for acceptance.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Use only cleaning materials recommended by the manufacturer of the product to be cleaned.
- B. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 EXECUTION

3.1 DURING CONSTRUCTION

- A. Execute cleaning to ensure that grounds and public properties are maintained free from accumulations of waste materials and rubbish.
- B. Wet down dry materials and rubbish to lay dust and prevent blowing dust.
- C. At reasonable intervals during progress of work, clean site and public properties and dispose of waste materials, debris, and rubbish.
- D. Remove waste materials, debris, and rubbish from site and legally dispose of at public or private dumping and recycling areas off Owner's property.
- E. Vacuum clean interior building areas when ready to receive finish painting and continue vacuum cleaning on an as needed basis until building is ready for occupancy.
- F. Handle materials in a controlled manner with as few handlings as possible.
- G. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.
- H. Remove all visible manufacturer's labels, nameplates, or other identifying devices.

3.2 FINAL CLEANING

- A. Employ professional cleaning service for final cleaning of all areas prior to Owner's final inspection.
- B. In preparation for substantial completion or public occupancy and health department inspection, conduct final inspection of sight-exposed interior and exterior surfaces and of concealed spaces.
- C. Remove grease, dust, dirt, stains, and protective coverings from equipment and materials, from sight exposed interior and exterior finished surfaces; polish

SECTION 01 74 00
CLEANING AND WASTE MANAGEMENT

- surfaces so designed to shine on actual finish.
- D. Repair, patch and touch up marred surfaces to specified finish, to match adjacent surfaces.
 - E. Pressure clean all concrete and asphalt surfaces; rake clean other surfaces on grounds.
 - F. Replace air conditioning filters at construction completion.
 - G. Clean ducts, blowers and coils, if air conditioning units were operated without filters during construction.
 - H. Maintain cleaning until project or portion thereof, is occupied by Owner.

END OF SECTION

**SECTION 01 77 00
CONTRACT CLOSEOUT**

PART 1 GENERAL

1.1 DESCRIPTION

- A. This section includes the following contract closeout items:
 - 1. Description of Requirements
 - 2. Closeout Procedures
 - 3. Prerequisites to Substantial Completion
 - 4. Prerequisites to Final Acceptance

1.2 CONTRACT CONDITIONS

- A. Drawings and general provisions of Contract and Division 1 Specification Sections, apply to this Section.

1.3 RELATED SECTIONS

- | | |
|-----------------------------------|------------------|
| A. General Conditions | Division 1 |
| B. Submittals | Section 01 33 00 |
| C. Special Requirements | Section 01 61 16 |
| D. Cleaning and Waste Management | Section 01 74 00 |
| E. Operation and Maintenance Data | Section 01 78 23 |
| F. Warranties | Section 01 78 36 |
| G. Project Record Documents | Section 01 78 39 |

1.4 DESCRIPTION OF REQUIREMENTS

- A. Definitions: Project Closeout is term used to describe certain collective project requirements, indicating completion of Work, that shall be fulfilled near end of Contract time in preparation for Final Acceptance and occupancy of Work by Owner, as well as final payment to Contractor and normal termination of Contract.
- B. Time of Contract Closeout is directly related to "Substantial Completion", therefore, time of closeout may be either single time period for entire Work or series of time periods for individual elements of Work that have been certified as substantially complete at different dates. This time variation, if any, shall be applicable to other provisions of this Section.

1.5 CLOSEOUT PROCEDURES AT SUBSTANTIAL COMPLETION

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect's inspection.
- B. Provide submittals to Architect that are required by governing or other authorities.
- C. Architect will perform one Substantial Completion review and one Final Closeout review for each designated Phase of construction. Cost of additional Substantial Completion reviews and Final Closeout reviews required due to incomplete elements of Work shall be paid by Contractor, as follows:
 - 1. Owner will deduct Architect's compensation amount from Contractor's final payment as follows:
 - a. Principle's time at 130.00 per hour.
 - b. Architect's time at \$100.00 per hour.
 - c. Clerical and staff at three [3] times the hourly rate.
 - d. Charges will be made for necessary travel time, auto expense computed at \$0.54 per mile, and all other expenses incurred in

**SECTION 01 77 00
CONTRACT CLOSEOUT**

making inspections.

1.6 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual Specifications Sections.
- B. Deliver, as specific work is completed, to Project Site and place in location as directed by Owner; obtain receipt prior to substantial Completion.
- C. Provide spare construction materials in similar fashion as indicated in appropriate Sections of Specifications.

1.7 PREREQUISITES TO SUBSTANTIAL COMPLETION

- A. General: Complete following before requesting Architect's inspection for certification of Substantial Completion, either for entire Work or for portions of Work. List known exceptions in request.
 - 1. In progress payment request that coincides with, or is first request following date Substantial Completion is claimed, show either 100% completion for portion of Work claimed as "substantially complete", or list incomplete items, value of incomplete Work, and reason for Work being incomplete.
 - 2. Include supporting documentation for completion as indicated in these Contract Documents.
 - 3. Submit specific warranties, workmanship / maintenance bonds, maintenance agreements, final certifications and similar documents.
 - a. Include for Owner's review & acceptance procedures for Contractor's response to warranty items following final acceptance, including designated contact person & time limit for Contractor response.
 - 4. Submit air balancing reports to Architect and Owner's Representative.
 - 5. Deliver tools, spare parts, extra stock of material and similar physical items to Owner.
 - 6. Complete instruction of Owner's operating and maintenance personnel. Discontinue or change over and remove temporary facilities and services from Project Site, along with construction tools and facilities, mock-ups and, similar elements.
 - 7. Complete final cleanup requirements, including touch-up painting of blemished surfaces.
 - 8. Test fire and life safety systems in presence of Owner's Representative, Architect and permit jurisdiction officials.
 - 9. Obtain Governing Jurisdiction Certifications of Occupancy.
 - 10. Complete major punchlist items.
 - 11. Contractor shall submit copy of Contractor's Punchlist to Architect and Owner, clearly stating that building is ready for review with exception of items noted in Contractor's Punchlist.
- B. Review procedure: Upon receipt of Contractor's request for review, Architect will either proceed with review or advise Contractor of unfulfilled prerequisites.
- C. Following initial review, Architect will either prepare Certificate of Substantial Completion or will advise Contractor of Work which must be performed before Certificate will be issued. Architect will repeat review when requested and when assured that Work has been substantially completed. Contractor shall pay costs of repeat reviews. See paragraph 1.5, C.

**SECTION 01 77 00
CONTRACT CLOSEOUT**

D. Results of completed review will form initial "punchlist" for final acceptance.

1.8 **PREREQUISITES TO FINAL ACCEPTANCE**

- A. General: Complete following before requesting Architect's final inspection for certification of final acceptance and final payment as required by General Conditions. List known exceptions, if any, in request.
- C. Submit certified copy of Architect's final punchlist of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance and has been reviewed and dated by Architect.
- D. Submit consent of surety.
- E. Obtain Owner's acceptance of submitted procedures for Contractor's response to warranty items following final acceptance.
- F. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- G. Re-review procedure: Architect will re-review Work upon receipt of Contractor's notice that Work has not been completed, including punchlist items whose completion has been delayed because of circumstances that are acceptable to Architect.
- H. Upon completion of re-review, Architect will either prepare Certificate of Final Acceptance, or will advise Contractor of Work that is incomplete or of obligations that have not been fulfilled, but are required for Final Acceptance. If necessary, re-review procedure will be repeated.

PART 2 PRODUCTS
NOT USED

PART 3 EXECUTION
NOT USED

END OF SECTION

SECTION 01 78 23
OPERATIONS AND MAINTENANCE DATA

PART 1 GENERAL

1.1 REQUIREMENTS

- A. Compile product data and related information appropriate for Owner's maintenance and operation of products furnished under Contract.
 - 1. Prepare operation and maintenance data as specified in this Section and as referred to in other sections of the specification.
- B. Instruct Owner's personnel in maintenance of products and in operation of equipment and systems.

1.2 RELATED SECTIONS

- A. Contract Closeout Section 01 77 00
- B. Project Record Documents Section 01 78 39
- C. Testing and Balancing Division 22, 23 & 26

1.3 QUALITY ASSURANCE

- A. Preparation of data shall be done by personnel:
 - 1. Trained and experienced in maintenance and operation of described products.
 - 2. Skilled as technical writer to the extent required to communicate essential data.
 - 3. Competent to prepare required drawings.

1.4 FORM OF SUBMITTALS

- A. Prepare data in form of an instructional manual for use by Owner's personnel.
- B. Format:
 - 1. Size: 8 ½ inches by 11 inches.
 - 2. Type: Manufacturer's printed data, or neatly typewritten.
 - 3. Drawings:
 - a. Provide reinforced punched binder tab, bind in with text.
 - b. Fold larger drawings to size of text paper.
 - 4. Provide fly-leaf for each separate product or piece of operating equipment.
 - a. Provide typed description of product and major component parts of equipment.
 - b. Provide indexed tabs.
 - 5. Cover: Identify each volume with typed or printed title "Operating and Maintenance Instructions", including:
 - a. Title of Project.
 - b. Subject matter covered in the manual.
- C. Binders:
 - 1. Commercial quality three-ring binders with durable and cleanable plastic cover.
 - 2. Maximum ring size: 3", 'D' ring.
 - 3. When multiple binders are used, correlate the data into related consistent groupings.

1.5 CONTENT OF MANUAL

- A. Neatly typewritten table of contents for each volume, arranged in systematic order.

SECTION 01 78 23
OPERATIONS AND MAINTENANCE DATA

1. Contractor, name of responsible principal, address and telephone number.
 2. A list of each product required to be included, indexed to content of the volume.
 3. List, with each product, name, address and telephone number of:
 - a. Subcontractor or installer.
 - b. Maintenance contractor, as appropriate.
 - c. Local source of supply for parts and replacement.
 4. Identify each product by product name and other identifying symbols as set forth in Contract Documents.
- B. Product Data:
1. Include only those sheets which are pertinent to the specific product.
 2. Annotate each sheet to:
 - a. Clearly identify specific product or part installed.
 - b. Clearly identify data applicable to installation.
 - c. Delete references to inapplicable information.
- C. Drawings:
1. Supplement product data with drawings as necessary to clearly illustrate:
 - a. Relations of component parts of equipment and systems.
 - b. Control and flow diagram.
 2. Coordinate drawings with information in Contract Documents to assure correct and complete installation.
 - a. Do not use shop drawings as maintenance drawings.
- D. Written test, as required to supplement product data for the particular installation.
1. Organize in consistent format under separate heading for different procedure.
 2. Provide logical sequence of instructions for each procedure.
- E. Copy of each warranty, bond and service contract issued.
1. Proper procedures in event of failure.
 2. Instances which might affect validity of warranties or bonds.
- 1.6 MANUAL FOR MATERIALS AND FINISHES
- A. Submit two copies of complete manual in final form.
- B. For architectural products, applied materials and finishes:
1. Manufacturer's data, giving full information on products.
 - a. Catalog number, size and composition.
 - b. Color and texture designations.
 - c. Information required for reordering special manufactured products.
 2. Instructions for care and maintenance:
 - a. Manufacturer's recommendation for types of cleaning agents and methods.
 - b. Cautions against cleaning agents and methods which are detrimental to product.
 - c. Recommended schedule for cleaning and maintenance.
- C. For moisture-protection and weather exposed products:
1. Manufacturer's data, giving full information of products.
 - a. Applicable standards.
 - b. Chemical composition.
 - c. Details of installation.
 2. Instructions for inspection, maintenance and repair.

SECTION 01 78 23
OPERATIONS AND MAINTENANCE DATA

- D. Additional requirements for maintenance data as specified in respective sections of the Specification.

1.7 **MANUAL FOR EQUIPMENT AND SYSTEMS**

- A. Submit three (3) copies of complete manual in final form.
- B. For each unit of equipment and system as appropriate:
1. Description of unit and component parts.
 - a. Function, normal operating characteristics and limiting conditions.
 - b. Performance curves, engineering data and tests.
 - c. Complete nomenclature and commercial number of replaceable parts.
 2. Operating procedures:
 - a. Start-up, break-in, routine and normal operating instructions.
 - b. Regulation, control, stopping, shut-down and emergency instructions.
 - c. Summer and winter operating instructions.
 - d. Special operating instructions.
 3. Maintenance procedures:
 - a. Routine operations.
 - b. Guide to "Trouble-shooting".
 - c. Disassembly, repair and reassembly.
 - d. Alignment, adjusting and checking.
 4. Servicing and lubrication schedule.
 - a. List of lubricants required.
 5. Manufacturer's printed operating and maintenance instructions.
 6. Description of sequence of operation by control manufacturer.
 7. As installed control diagrams by controls manufacturer.
 8. Contractor's coordination drawings.
 9. As installed color coded piping diagrams.
 10. Charts of valve tag numbers, with location and function of each valve.
 11. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
 12. Other data as required under pertinent sections of the specification.
- C. For each electrical and electronic system as appropriate:
1. Description of system and component parts.
 - a. Function, normal operating characteristics and limiting conditions.
 - b. Performance curves, engineering data and tests.
 - c. Complete nomenclature and commercial number of replaceable parts.
 2. Circuit directories of panel board.
 - a. Electrical service.
 - b. Controls.
 - c. Communications.
 3. As installed color coded wiring diagrams.
 4. Operating procedures:
 - a. Routine and normal operating instructions.
 - b. Sequences required.
 - c. Special operating instructions.
 5. Maintenance procedures:
 - a. Routine operations.

SECTION 01 78 23
OPERATIONS AND MAINTENANCE DATA

- b. Guide to "Trouble shooting".
 - c. Disassembly, repair and reassembly.
 - d. Adjustment and checking.
 - 6. Manufacturer's printed operating and maintenance instructions.
 - 7. Other data as required under pertinent sections of the specification.
 - D. Prepare and include additional data when the need for such data become apparent during instruction of Owner's personnel.
 - E. Additional requirements for operating and maintenance data as specified in respective sections of the specification.
- 1.8 SUBMITTAL SCHEDULE
- A. Submit two (2) copies of preliminary draft of proposed formats and outlines of contents prior to start of work.
 - B. Submit one (1) copy of completed data in final form fifteen days prior to final inspection or acceptance.
 - 1. Copy will be returned after final inspection or acceptance with comments.
 - C. Submit specified number of copies of approved data in final form ten (10) days after final inspection or acceptance.
- 1.9 INSTRUCTION OF OWNER'S PERSONNEL
- A. Prior to final inspection or acceptance, fully instruct Owner's designated operating and maintenance personnel in operation, adjustment and maintenance of products, equipment and systems.
 - B. Operating and maintenance manual shall constitute the basis of instruction.
 - 1. Review contents of manual with personnel in full detail to explain all aspects of operations and maintenance.

PART 2 PRODUCTS
NOT USED

PART 3 EXECUTION
NOT USED

END OF SECTION

**SECTION 01 78 36
BUILDER'S WARRANTY**

PART 1 GENERAL

1.1 REQUIREMENTS

- A. Compile specified warranties.
- B. Compile specified service and maintenance contracts.
- C. Co-execute submittals when so specified.
- D. Review submittals to verify compliance with Contract Documents.
- E. Submit to Owner for review.

1.2 SUBMITTALS

- A. Warranties.
 - 1. Prepare in duplicate packets.
 - 2. Format:
 - a. Size 8 ½ inches by 11 inches, punch sheet for standard three-ring binder.
 - b. Identify each packet with types or printed title "Warranties", including:
 - a) Title of Project.
 - b) Name of Contractor.
 - c) Date of duration of warranty.
- B. Service and maintenance contracts executed by the respective manufacturer, supplier or subcontractor.
 - 1. Provide two (2) original signed copies for each contract.
 - 2. Provide the following information for each copy:
 - a. Table of contents, typed in orderly sequence.
 - b. Product or work item.
 - c. Firm, with name of principal, address and telephone number.
 - d. Scope.
 - e. Date of beginning of service and maintenance.
 - f. Duration of service maintenance contract.
 - g. Information for Owner's personnel on proper procedure in case of failure.
 - h. Instances which may affect the validity of the Contract.
 - i. Contractor, name of responsible principal, address and telephone number.
- C. Warranty: Submit warranty per attached Warranty Form.
- D. Binders: Commercial quality, three-ring, with durable and cleanable plastic covers.

1.3 TIME OF SUBMITTALS

- A. For equipment or component parts of equipment put into service during progress of construction: submit documents within ten (10) days after acceptance.
- B. Otherwise make submittals within ten days after Substantial Completion, prior to final request for payment.
- C. For items of work where acceptance is delayed materially beyond date of Substantial Completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

PART 2 PRODUCTS

**SECTION 01 78 36
BUILDER'S WARRANTY**

NOT USED

PART 3 **EXECUTION**
NOT USED

END OF SECTION

**SECTION 01 78 36
BUILDER'S WARRANTY**

**WARRANTY FORM
Building Components and/or Sub-trade**

Written guarantee shall be in the following form, on the subcontractor's, manufacturer's or material supplier's own letterhead:

Owner(s): **City of Sweet Home – Sweet Home, OR**

For good and valuable consideration, the undersign Warrantor hereby warrants to the Owner(s) identified above and to the successors or transferees, all of whom are hereby referred to as Owners that:

Warranty for: _____
Which we have provided in **Sweet Home City Hall – Sweet Home, OR**

Has/Have been done in accordance with the General Conditions of the Contract, Drawings and Specification and that the work as installed will fulfill the requirements included in the Specification. We agree to repair or replace any or all of our work, together with any other adjacent work which may be displaced by so doing, that may prove to be defective in its workmanship or material within a period of _____ year(s) from date of certification of Substantial Completion, or as may be considered per terms of the General Conditions of the Contract, of the above-mentioned Project; ordinary wear and tear and unusual abuse or neglect exempted.

In the event of our failure to comply with the above-mentioned conditions within a reasonable period of time, as determined by and after being notified in writing by the Owner, we, collectively or separately, do hereby authorize the Owner to proceed to have said defects repaired and made good at our expense, and we will honor and pay the costs and charges therefore upon demand.

This warranty shall be in addition to, and in no way reduce, all other rights and privileges which such Owners may have under any other law or instrument, and shall be binding on the Warrantor notwithstanding any provision to the contrary contained in the contract of purchase or any other instrument executed by the Owners.

Signed _____
(Material Supplies or General Contractor)

Countersigned _____
(Contractor if for Material Supplier)

Local Representative to contract for services:

Name _____

Address _____

Phone Number _____

END OF WARRANTY FORM

**SECTION 01 78 36
BUILDER'S WARRANTY**

**WARRANTY FORM
General Contractor**

Written guarantee shall be in the following form, on the Contractor's own letterhead:

Owner(s): **City of Sweet Home – Sweet Home, OR**

For good and valuable consideration, the undersign Warrantor hereby warrants to the Owner(s) identified above and to the successors or transferees, all of whom are hereby referred to as Owners that:

Warranty for: **GENERAL CONTRACTOR'S BUILDING WARRANTY**
For Project: **Sweet Home City Hall – Sweet Home, OR**

The Building, including appurtenances located on the property identified above, is constructed or improved in substantial conformity with the General Conditions of the Contract, Drawings and Specification and that the work as installed will fulfill the requirements included in the Specification. We agree to repair or replace any or all of the work, together with any other adjacent work which may be displaced by so doing, that may prove to be defective in its workmanship or material within a period of _____ year(s) from date of certification of Substantial Completion, or as may be considered per terms of the General Conditions of the Contract, of the above-mentioned Project; ordinary wear and tear and unusual abuse or neglect exempted.

In the event of our failure to comply with the above-mentioned conditions within a reasonable period of time, as determined by and after being notified in writing by the Owner, we, collectively or separately, do hereby authorize the Owner to proceed to have said defects repaired and made good at our expense, and we will honor and pay the costs and charges therefore upon demand.

This warranty shall be in addition to, and in no way reduce, all other rights and privileges which such Owners may have under any other law or instrument, and shall be binding on the Warrantor notwithstanding any provision to the contrary contained in the contract of purchase or any other instrument executed by the Owners.

Signed _____
(General Contractor)

Title _____

Local Representative to contract for services:

Name _____

Address _____

Phone Number _____

END OF WARRANTY FORM

SECTION 01 78 39
PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.1 REQUIREMENTS

- A. Maintain at the site one record copy of:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change orders and other modifications to the Contract.
 - 5. Architects bulletins or written instructions.
 - 6. Approved shop drawings, product data and samples.
 - 7. Field test records.
 - 8. Applicable reference standards and codes specified in individual sections of the specification.
 - 9. Construction completion schedule.

1.2 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Store documents and samples in Contractor's field office, apart from documents used for his construction.
- B. Provide files and racks for storage of documents.
- C. Provide storage space for samples.
- D. File documents in accordance with CSI's Master format.
- E. Maintain documents in a clean, dry, legible condition and in good order.
- F. Make documents and samples available for inspection upon request by Owners.

1.3 MARKING DEVICE

- A. Mark record information with colored pencil or pen on bond.

1.4 RECORDING

- A. Label each document: "Project Record" in neat large printed letters.
- B. Record information concurrently with construction progress.
 - 1. Do not conceal any work until required information is recorded.
- C. Drawings: Legibly mark to record actual construction:
 - 1. Depths of various elements of foundation in relation to finish floor data.
 - 2. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Location of internal utilities and appurtenances concealed in the construction, referenced to visible and accessible features of the structure.
 - 4. Field changes of dimension and detail.
 - 5. Changes made by Architect's Bulletins or by Change Order.
 - 6. Details not on original Contract drawings.
- D. Specification's Changes and Addenda: Legibly mark each Section to record:
 - 1. Manufacturer, trade name, catalog number and supplier or each product and item of equipment actually installed.
 - 2. Changes made by Architect's Bulletins or by Change Order.

1.5 SUBMITTAL

- A. Project Record documents shall be submitted as follows:
 - 1. One (1) hard copy of all marked up plans.
 - 2. All marked up plans shall be scanned to a PDF format and saved to CD

SECTION 01 78 39
PROJECT RECORD DOCUMENTS

- or DVD. Submit (1) copy of CD or DVD.
- B. At completion of project, deliver records to the Owner's project manager.
 - C. Accompany submittal with transmittal letter, in duplicate, certifying that each document as submitted is an up-to-date record of the "As-built" condition of the work, complete and accurate.

PART 2 PRODUCTS
NOT USED

PART 3 EXECUTION
NOT USED

END OF SECTION

DIVISION 2

EXISTING CONDITIONS

02 41 19

Selective Demolition

SECTION 02 41 19
SELECTIVE DEMOLITION

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Selective demolition of portions of the existing Construction; debris removal and disposal, substrate cleaning, tenant space security and public safety as affected by demolition work, and dust, noise, odor, and moisture control during the demolition process.
- B. Secure and pay for all public sub-trade permits and permits required to perform work under this Contract.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. General Conditions Division 0
- B. Field Engineering Section 01 71 23
- C. Cleaning and Waste Management Section 01 74 00
- D. Demolition Notes See Drawings

1.3 REGULATORY REQUIREMENTS

- A. Comply with applicable local codes and ordinances concerning demolition operations, recycling, and refuse removal.
 - 1. If more restrictive than the aforementioned local codes, comply with ANSI A10.6 "Safety Requirements for Demolition".

1.4 PRE-CONSTRUCTION MEETING

- A. Meet at the site with Owner and / or Architect's Representatives.
- B. Review location of existing service and utility lines.
- C. Review protection of existing adjacent surfaces to remain.

1.5 CONTRACTOR QUALIFICATIONS

- A. Contractor shall employ adequate number of skilled tradesmen, experienced in the various building subsystems to properly disassemble, mark and store system components scheduled to be salvaged without damage.

1.6 STRUCTURAL REQUIREMENTS

- A. Do not cut, drill, or otherwise damage structural framing members without approval of architect.
- B. Shoring and or temporary bracing is the responsibility of the Contractor.

1.7 SALVAGE

- A. Items noted on drawings to be "salvaged" or required for re-use in finished project, shall be carefully removed from in-place condition, taking care not to damage item and associated fasteners, placed in suitable temporary storage container, labeled as to content, and stored on site in an appropriate location as to avoid damage from continuing demolition work. These items shall remain on the property of the Owner.
- B. All surplus material not scheduled for salvage or reuse shall become property of the Contractor.

1.8 TRAFFIC REQUIREMENTS

- A. Provide alternate routes around closed and obstructed areas when required by Owner's Representative.

SECTION 02 41 19
SELECTIVE DEMOLITION

1.9 DISTURBANCE REQUIREMENTS

- A. Work under this contract shall be performed to limit disturbance from noise, dust, or interruption of utility services to times and levels approved in advance by the Owner.
 - 1. Coordinate any shut down of building utilities, communication and/or alarm systems required by this project with the Owner a minimum of 48 hours in advance of desired interruption.
 - 2. Coordinate demolition related to voice and data systems with Owner.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.1 PERFORMANCE

- A. Protection During Demolition:
 - 1. Protect adjacent surfaces, equipment, and facilities to remain, from damage during selective demolition and material removal.
 - 2. Install bracing and shoring prior to sawing structural components.
 - 3. Protect persons passing through and around demolition areas.
 - 4. Comply with IBC Section 3306 for pedestrian protection.

3.2 CORING AND SAWING:

- A. Saw concrete surfaces as indicated and required to receive new Work.
- B. Cut reinforcing bars in existing concrete during sawing operation until flush and without damage to the bond between concrete and reinforcing bars.
- C. Cut Work by methods least likely to damage existing exposed surfaces scheduled to remain.
- D. Prior to concrete coring or sawing, locate all subsurface utilities. All damaged utilities during coring and sawing shall be repaired per 3.4 below.

3.3 SELECTIVE DEMOLITION OF EXISTING BUILDING BY CONTRACTOR:

- A. Remove portions of existing construction and site improvements as indicated on Drawings and as required to receive new Work.
 - 1. **The limits of demolition shown on the Drawings are for general guidance only. The Contractor shall ascertain the full extent of demolition required to accommodate the new Work and produce a consistent and seamless appearance.**
- B. Utility lines and fixtures not scheduled for re-use shall be completely removed or, when approved by Architect, shall be capped behind line of new finishes per Building Code.
- C. When demolition of applied finishes is specified (carpet, sheathing, wall coverings, tile, etc.) the demolition will remove the finish and its bonding agent leaving a clean substrate.

SECTION 02 41 19
SELECTIVE DEMOLITION

1. Removal of adhesives shall be by mechanical means. Solvents and high VOC cleaners will not be used.
 - D. Provide adequate dust control throughout duration of demolition Work.
- 3.4 SAWING AND CORING
- A. Saw concrete surfaces indicated and as required to receive new Work.
 - B. Provide protection of all adjacent surfaces and adjacent tenant spaces outside work area including above and below.
 - C. Cut Work by methods least likely to damage existing exposed surfaces scheduled to remain.
- 3.5 REPAIR OF DAMAGED SURFACES, MATERIALS, AND EQUIPMENT:
- A. Repair damage to existing surfaces, materials, equipment, site improvements, utility lines, and adjacent property not scheduled for demolition to meet conditions existing prior to demolition operations.
 - B. Employ skilled personnel and subcontractors selected for new Work to repair damaged surfaces, materials, equipment, and utility lines.
- 3.6 DISPOSAL OF DEMOLISHED MATERIALS AND EQUIPMENT:
- A. Do not sell or burn demolished materials on site.
 - B. Transport debris to an approved and licensed land fill area or recycling center.
- 3.7 CONSTRUCTION WASTE MANAGEMENT
- A. See Section 01 74 00.
- 3.8 CLEANING OF SELECTIVE DEMOLITION AREAS:
- A. Broom clean interior surfaces daily during demolition Work.
 - B. At completion of demolition leave site in vacuumed clean condition, replace all temporary HVAC and general dust filter systems with new/clean filters.
 - C. Remove all temporary barricades.

END OF SECTION

DIVISION 3

CONCRETE

03 10 00

Concrete Formwork

03 20 00

Concrete Reinforcing

03 30 00

Cast-In-Place Concrete

03 35 00

Concrete Finishing

**SECTION 03 10 00
CONCRETE FORMWORK**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes all formwork for pouring of structural cast-in-place concrete.

1.2 RELATED SECTIONS

- A. Concrete Reinforcement Section 03 20 00
- B. Cast-in-Place Concrete Section 03 30 00
- C. Concrete Finishing Section 03 35 00
- D. Structural Notes See Drawings

1.3 STANDARDS

- A. Comply with the standards specified herein and listed in Section 01 42 19.
- B. Concrete formwork to meet the requirements of ACI 347, latest edition, "Recommended Practice for Concrete Formwork."
- C. Meet requirements of ANSI A 10.9, latest edition, "Safety Requirements for Concrete Construction and Masonry Work."

1.4 COORDINATION

- A. Coordinate the installation of all embedded accessories that are installed in this Section of work but furnished in other Sections.
- B. Notify respective trades and give opportunity to place embedded items before concrete is poured. Items provided by other trades for installation shall be properly set as indicated.
- C. Locate sleeves, pipes and conduits to avoid impairing strength of construction per A.C.I. 318.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Form board: At all surfaces use new plywood formboard coated with a non-corrosive chemical releasing agent which will not penetrate or stain the concrete surface or attract dirt or deleterious matter. Apply in strict conformance with manufacturer's printed directions.
 - 1. Permanently concealed surfaces: APA, Plyform with 'B' grade face.
 - 2. Permanently exposed surfaces: APA, Plyform grade MDO (Medium Density Overlay) or APA Plyform with 'B' grade face (new material only).
- B. Use flexible spring steel or laminated boards to form true radius bends as required.
- C. Formwork accessories: Dayton Superior, Meadow Burke, Watson Bowman or equal.
 - 1. Fixed metal washer snap ties, with 1" break back and fixed washer large enough to cover drilled holes in forms.
 - 2. 3/4" PVC preformed chamfer former strips.
 - 3. Preformed Control Joints: Dayton Superior "Screed Key Joint," or equal.
 - 4. Contraction Joints: Dayton Superior "Screed Key Joint," or equal.

**SECTION 03 10 00
CONCRETE FORMWORK**

PART 3 EXECUTION

3.1 PERFORMANCE

- A. Forms for concrete permanently exposed to view are to produce a surface at least as smooth and free of surface irregularities as produced by face veneer of new, MDO "Plyform" grade per APA product standard, latest edition.
- B. Forms for concrete concealed from view may have a surface with irregularities, honeycombing, bulges, depressions, not exceeding 3/16" in 12".
- C. Set and maintain screeds to insure completed top surface of floor slabs with no deviations from design surface in excess of levelness and flatness tolerance requirements specified.

3.2 GRADES, DIMENSIONS AND TOLERANCES

- A. Verify all grades, lines, levels, dimensions and conditions including openings as shown on Architectural, Structural, Civil, Mechanical and Electrical Drawings. Report errors and/or inconsistencies to the Architect before commencing work.
- B. Slope all slabs requiring drainage approximately 1/4" per ft. unless specifically otherwise shown.
- C. A local levelness and flatness tolerance:
 - 1. ACI F-Number equivalent: FF 50 / FL 30 (for slabs on grade)
 - 2. ACI F-Number equivalent: FF 30 (for elevated slabs)
 - 3. Overall general conformity from design grade of + or - 3/4" of final elevations shown on Drawings for slabs-on-grade.

3.3 ERECTION

- A. Construct and set all forms accurately to detail, line levels and size, adequately brace to make strong and unyielding. Make tight to prevent escape of mortar and avoid formation of fins.
- B. Form design, engineering, strength, construction and safety are the responsibility of the Contractor.
- C. Use fixed metal washer snap ties, with 1" break back and fixed washer large enough to cover drilled holes in forms.
- D. Reuse of badly patched or damaged form panels will not be permitted.
- E. Provide special forms, inserts, moldings, plaster molds, etc., as required to produce architectural feature indicated.
- F. Place corner fillets at all exposed concrete corners.
- G. Use no corner fillets where they will interfere with architectural details or where walls and partitions are built flush.
- H. Carefully locate and form all pits and leave all chases, openings and holes as required by mechanical and special equipment in concrete.
- I. Where shown and/or required, depress floor slabs. At areas of depression of slabs, provide minimum thickness or depth as noted for adjacent areas unless otherwise shown.
- J. Bevel or groove all wood nailing blocks to prevent loosening. All wood blocks to be pressure treated fir.
- K. Cast-In items: Provide embedded anchors, inserts, steel shapes, and lifting devices as shown on Shop Drawings and required for final application.
- L. Apply form release agents to surface of forms only. Do not contact imbedded items.
- M. Install plastic cone snap ties at exposed concrete in uniform, symmetrical pattern unless otherwise indicated on Drawings.

**SECTION 03 10 00
CONCRETE FORMWORK**

3.4 REMOVAL

- A. The sole responsibility of the removal of forms and for any resulting structural damage rests with the Contractor.
- B. Concrete members shall attain 80 percent of required 28 day strength before forms are removed.
- C. When removing forms, do not pry against architecturally finished concrete surfaces. Use only wood edges or other methods which will not damage surfaces to be finished.

END OF SECTION

**SECTION 03 20 00
CONCRETE REINFORCING**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes all reinforcement steel and welded wire fabric used in cast-in-place concrete at locations shown in Drawings and specified herein.

1.2 RELATED SECTIONS

- A. Submittals Section 01 33 00
- B. Quality Control Section 01 45 00
- C. Cast-in-place Concrete Section 03 30 00
- D. Structural Notes See Structural Drawings

1.3 STANDARDS

- A. Comply with the standards specified herein and listed in Section 01 42 19.
- B. Detail and place reinforcing steel per ACI 318 and 315, latest edition.

1.4 SUBMITTALS

- A. Submit Shop Drawings for review for all steel reinforcement per Section 01 33 00. All detailing shall be done in strict accordance with procedures outlined in the "Manual of Standard Practice for Detailing Reinforced Concrete Structures" ACI 315, latest edition.
- B. Shop Drawings shall show all dimensions necessary for fabrication and placing of reinforcing steel and accessories, without reference to the Project Drawings. Failure to comply with this requirement may result in rejection of Shop Drawings.
- C. Shop Drawings shall include schedules, bar lists, and details specifically indicated in ACI Manual 315.

1.5 INSPECTIONS

- A. Provide any special inspections per the requirements of Section 01 45 00.
- B. Notify Inspection Agency when reinforcing is ready for inspection at least 72 hours before placing concrete.

PART 2 PRODUCTS

2.1 MATERIAL

- A. All reinforcing steel shall be per ASTM A615, Standard Specifications for Deformed Billet-Steel Bars for Concrete Reinforcement.
- B. All reinforcing steel to be welded, shall be per ASTM A706, Standard Specifications for welded deformed billet-steel bars for concrete construction.
- C. All reinforcing steel shall have a minimum yield stress of 60,000 P.S.I. unless shown otherwise on Structural (S) drawings.
- D. All welded wire mesh (Symbol WWM) shall conform to ASTM Standard Specifications for Welded-Steel Fabric, ASTM A185.
- E. All reinforcing steel shall be unpainted, uncoated, free from rust or loose scale that will destroy or reduce bond.
- F. Galvanized chairs, spacers and bolsters per ACI 315. Provide plastic dipped items or all plastic items in contact with forms.

2.2 FABRICATION

**SECTION 03 20 00
CONCRETE REINFORCING**

- A. All reinforcing steel shall be fabricated in accordance with ACI 315. All hooks and bends shall conform to ACI Standards unless otherwise shown on the drawings.
- B. Fabrication shall be performed accurately to the dimensions shown on the Drawings. All bars shall be bent cold in a manner that will not injure the material.
- C. Make bend for stirrups and ties around pins having at least twice the thickness of the bars; for other bars, six times for 1" and smaller bars, eight times for larger bars. Straightening or rebending not allowed to an extent which will injure reinforcement.
- D. Reinforcement shall not be lapped at points of maximum stress. Splices in adjacent bars shall be staggered 4' minimum and away from areas of maximum stress. All laps shall be lapped sufficiently to transfer the full stress by bond. Laps shall be 58 bar diameters of larger bar with a minimum lap of 24". Do not carry reinforcement through expansion unless otherwise noted.

PART 3 EXECUTION

3.1 PLACEMENT

- A. Place reinforcement per ACI 318 and 315 and/or as specified herein.
- B. Firmly secure steel in position in the forms by suitable ties to prevent dislocation during placement of concrete; support steel securely by means of chairs or spacers. Provide in place bar supports per ACI 315.
- C. Except where otherwise noted, provide a cover of concrete over reinforcing per ACI 318 and as follows:
 - 1. Bottom of footings and earth forms: 3"
 - 2. Face of walls on backfill side or exposed to weather: 2"
 - 3. Interior wall faces and slabs not exposed to weather: 1-1/2"
 - 4. Center of slabs on grade: 1-1/2" minimum
from top or bottom
surface
 - 5. Foundation walls (not retaining): 1-1/2" maximum
from center of wall
- D. Clear distance between bars in no case shall be less than 1" nor less than 1-1/2 times maximum size of course aggregate.
- E. Lap welded wire mesh 12" minimum at all splices (at least one mesh spacing plus 2 inches).

END OF SECTION

SECTION 03 30 00
CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes the mixing and placing of normal weight cast-in-place concrete along with any miscellaneous related accessories.
- B. Curing and Drying of cast-in-place concrete slabs to meet requirements of finish material applications.

1.2 RELATED SECTIONS

- A. Submittals Section 01 33 00
- B. Quality Control Section 01 45 00
- C. Concrete Formwork Section 03 10 00
- D. Concrete Reinforcement Section 03 20 00
- E. Concrete Finishing Section 03 35 00
- F. Finish Materials Various Sections

1.3 STANDARDS

- A. All material and workmanship per "Specification for Structural Concrete" ACI 301, latest edition, ACI 318, latest edition, and prevailing building code.
- B. Ready mix concrete shall be mixed and delivered in accordance with ASTM Spec. C-94, latest edition.

1.4 QUALITY ASSURANCE

- A. Comply with the standards specified herein and listed in Section 01 42 19.
- B. The Contractor shall coordinate the following required tests per the requirements of Section 01 45 00.
 - 1. Not less than four (4) specimens shall be made by a Certified Concrete Inspector for each day's work or 50 cu. yards. Specimen shall be made and cured in accordance with ASTM Spec. C-31 and tested in accordance with ASTM Spec. C-39; one test at 7 days and two at 28 days. Hold fourth cylinder in case of low test or irregularities. Break with other two at 28 days if strength within acceptable limits.
 - 2. Slump tests shall be made when concrete is being placed.
 - 3. If concrete test cylinders are unsatisfactory, the concrete in place shall be checked with a "Schmitt" hammer. If found unsatisfactory after testing, replace all unsatisfactory concrete at no expense to Owner.
- C. Provide any special inspections per the requirements of Section 01 45 00.
- D. Slab Moisture Testing: Coordinate curing process with slab moisture/humidity requirements imposed by other sections of these specifications related to applied finishes.
 - 1. There shall be NO water allowed to be added to slab concrete mix from any of the following:
 - a. Moisture standing on under slab vapor barrier prior to pour.
 - b. Moist curing process.
 - c. Rain or other water sources subsequent to initial pour.

1.5 JOB CONDITIONS

- A. Freezing Weather: No work shall be done in weather when temperature falls below 40 degrees at any time during the 24 hours, except with Architect's approval. No accelerating or anti-freeze admixtures shall be used. Earth subgrade shall not be frozen when concrete is placed thereon.

SECTION 03 30 00
CAST-IN-PLACE CONCRETE

- B. Hot weather: Concrete placed during periods of hot weather, low humidity, or high winds, will be protected from the sun and wind. The recommendations of the Portland Cement Association Bureau Bulletin ST-93, "Hot Weather Concreting" and ST-95, "Curing of Concrete" shall be made a part of this Contract.

1.6 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.
- B. Submit mix designs to Architect for review.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Water: Shall conform to ASTM C-94.
- B. Concrete Aggregates: Shall conform to ASTM Spec. C-33 for reinforced concrete work. Shall be well graded and maximum size of 1-1/2". Size reduced to 3/4" when form is less than 4" and for slabs.
- C. Cements: Portland Cement shall conform to the ASTM Spec. C-150, Type I, Oregon, Ideal, Sun, Permanente, Calaveras.
- D. Fly Ash: Type C or F per ASTM Spec. C618-08a.
- E. Air Entraining Agent: Shall conform to ASTM C-260.
- F. Water Reducing Admixture: Conform to ASTM C-494.
- G. Prefomed Control Joints: Dayton Superior "Screed Key Joint," or equal.
- H. Contraction Joints: Dayton Superior "Screed Key Joint," or equal.
- I. Concrete Bonding Agent: Febond PVA, Weld-Crete approved. Used as per manufacturer's instruction.
- J. Liquid Curing Compound: BASF-Master Builders Solutions MasterKure, or equal.
- K. Non Shrink Leveling Grout: Meadows Sealtight 588 Precision Grout.
- L. Use of calcium chloride is not acceptable.

2.2 CONCRETE MIXES

- A. The proportions of aggregate to cement for concrete shall be such as to produce a mixture which will work readily into the corners and angles of the forms and around reinforcement without permitting the material to segregate or excess free water to collect on the surface. All concrete shall conform to ASTM Spec. C-94. Cement contents and ratios indicate a minimum only. Strength required to govern actual batch mixes.
- B. Mix materials in transit and up to time of discharge, a minimum of 10 minutes. No water shall be added to the concrete mix after the mix leaves the batch plant. Maximum elapsed time between adding water to mix and placing shall be one hour.
- C. All concrete shall have the following values:
 - 1. **3,500 psi, unless noted otherwise.**
 - 2. The Contractor shall be singularly responsible that such strengths are achieved.

PART 3 EXECUTION

SECTION 03 30 00
CAST-IN-PLACE CONCRETE

3.1 PLACING

- A. Prior to pouring foundations and slabs, schedule Structural Engineer and permit jurisdiction review and/or testing agency inspection where required by this Section and permit jurisdiction.
- B. Provide 1/8" wide x 3/4 depth, control joints in on-grade slabs at 16'-0" maximum o.c. unless otherwise noted on Drawings and/or as directed by the Architect, and at exterior slabs at 20'-0" o.c. each way maximum.
 - 1. Provide control joints in topping slab where joints in sub-slab exist. Notify architect where sub-slab control joints are discovered for final determination of topping slab location and configuration.
- C. Provide 1/2" wide x depth of slab isolation joints of asphalt impregnated fiber board, at all intersections of slabs and vertical faces not doweled together such as column pedestals, foundation walls, grade beams and as indicated on drawings.
- D. Do not run reinforcement or other fixed metal items, embedded in or bonded into concrete, continuously through expansion or contraction joints, unless otherwise noted.
- E. Concrete shall be handled from a ready-mix truck in such a way as to prevent separation of materials.
- F. Electrical or gasoline driven vibrator shall be used to effectively place concrete. Care must be taken not to over vibrate the concrete so as to cause separation of materials.
- G. All equipment and forms shall be cleaned. Forms shall be thoroughly wetted or oiled.
- H. Excess concrete shall be removed from all trenches and foundations.
- I. All base material for slabs on grade to be thoroughly wet immediately before concrete is placed during dry weather.
- J. All curing compound shall be stripped from slabs receiving additional finish materials.

3.2 GROUT LEVELER PLACEMENT

- A. Install per manufacturer's written instructions.

3.3 CURING

- A. Moist Curing: Moist cure all concrete by maintaining concrete continuously wet for a minimum (7) seven days from initial pour by:
 - 1. Continuous water fog spray.
 - 2. Moisture retaining cover of polyethylene film per ASTM C-171
 - 3. Moisture absorptive burlap fabric per AASTHTO M 182 maintained continuously wet.
- B. Chemical Curing: At exterior slabs, walks and curbs not receiving other coatings or finishes (i.e., hardeners, sealers, waterproofing, damproofing, paint, adhesives, grout, etc.) provide continuous coating of specified curing compound per manufacturers printed instructions.

3.4 DEFECTIVE WORK

- A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements. Surface defects that include honeycomb, rock pockets, indentations greater than 3/16 inch, cracks greater than 1/64" (0.016 inches)_wide, spalls, chips, air bubbles greater than 3/4 inch diameter, pinholes, bug holes, embedded debris, lift lines, sand lines, bleed lines,

SECTION 03 30 00
CAST-IN-PLACE CONCRETE

leakage from form joints, fins and other projections, form popouts, texture irregularities, and stains and other color variations that cannot be removed by cleaning.

- B. Remove and replace concrete surfaces which is defective (as defined previously) and /or show excessive shrinkage or cracks or which do not drain properly, as directed by the Architect or the Engineer, at Contractor's expense.

END OF SECTION

**SECTION 03 35 00
CONCRETE FINISHING**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes the finishing and repairing of all cast-in-place concrete.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- | | |
|---------------------------|------------------|
| A. Submittals | Section 01 33 00 |
| B. Cast-in-Place Concrete | Section 03 30 00 |
| C. Finish Materials | Various Sections |

1.3 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.
- B. Products List: Before ordering, submit detailed list of materials proposed for use on work.

1.4 WORKMANSHIP

- A. All work by experienced and approved cement finishers. Limit amount of slab poured in any period to area which can be finished with available crew. Test all slabs for level and/or drainage after same are sufficiently set. Where slabs are rough, show trowel marks, or are out of level due to poor finishing, curing or inaccurate screening, grind, refinish or replace same as directed by Owner or Architect.

1.5 GRADES, DIMENSIONS AND TOLERANCES - SLABS

- A. Slope all slabs requiring drainage approximately 1/4" per ft. unless otherwise shown.
- B. A local levelness and flatness tolerance of 1/8" in 10 foot maximum deviation from design surface will be permitted on concrete slabs with an overall general conformity from design grade of + or - 3/4" of final elevations shown on Drawings.
1. ACI F-Number equivalent: FF 50 / FL 30 (for slabs on grade)
 2. ACI F-Number equivalent: FF 50 (for elevated slabs)

1.6 MOISTURE / HUMIDITY CONTROL - SLAB DRYING

- A. Moisture Testing: Coordinate curing process with slab moisture/humidity requirements imposed by other sections of these specifications related to applied finishes.
1. There shall be NO water allowed to be added to slab concrete mix from any of the following:
 - a. Moisture standing on under slab vapor barrier prior to pour.
 - b. Moist curing process.
 - c. Rain or other water sources subsequent to initial pour.

1.7 QUALITY ASSURANCE

- A. Qualifications of manufacturers: Products used in the work of this Section shall be produced by manufacturers regularly engaged in manufacture of similar items and with a history of successful production acceptable to the Architect.
- B. Qualifications of installers: Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods needed for

**SECTION 03 35 00
CONCRETE FINISHING**

proper performance of the work of this Section.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Concrete Cleaner: Kemiko Neutra Clean.
- B. Patching Compounds: Two component cement based and acrylic polymer compound, 5,000 psi @ 28 days minimum. Burke Acrylic Patch, Epolith Patcher, or Sonopatch by Sonneborn.

PART 3 EXECUTION

3.1 EXTERIOR SLABS AND WALKS - BROOM FINISH

- A. Broom finish all exterior slabs, unless otherwise shown on Drawings or in Schedules.
- B. Screed, bull float, and provide with initial steel troweling. Areas receiving fine broom finish shall be double steel troweled prior to brooming. Before final set, broom and texture in outward direction (generally normal to that of traffic). For fine broom finish, use a fine (light coarse) wire type broom. All textures shall be uniform.
- C. Finish outside edges of all slabs and walks and edges of all exposed cold joints with edging tool. Score all exterior slabs (in pattern shown on Drawings) with scoring tool having a 3/8" minimum depth of cutter.

3.2 SLAB CURING

- A. See Section 03 30 00.

3.3 LEVELING/FILLING/PATCHING

- A. Slabs which exceed the stated grade tolerances must be leveled with an approved epoxy concrete floor leveling compound prior to installation of finish flooring material as part of concrete contract.
- B. Architecturally exposed slabs which exceed the stated grade tolerances must be replaced.
 - 1. Maximum surface pitting: 1/32" in any dimension.
 - 2. Maximum surface cracking: None.

END OF SECTION

DIVISION 5

METALS

05 12 00

Structural Steel

05 50 00

Metal Fabrications

**SECTION 05 12 00
STRUCTURAL STEEL**

PART 1 GENERAL

1.1 DESCRIPTION

- A. Work Included: Furnish, fabricate, mark for erection identification, pack, crate, or otherwise properly prepare for shipment, ship to the site and erect all structural steel indicated on the Drawings, described in these Specifications, or otherwise required for proper completion of the Work.

1.2 RELATED WORK DESCRIBED ELSEWHERE:

- | | | |
|----|------------------|---------------------|
| A. | Submittals | Section 01 33 00 |
| B. | Quality Control | Section 01 45 00 |
| C. | Structural Notes | Structural Drawings |

1.3 QUALITY ASSURANCE

- A. Comply with Section 01 42 19 and the following standards:
1. Erection, fabrication and identification shall conform to AISC Steel Construction Manual, AISC Seismic Provisions for Structural Steel, and IBC Chapter 22.
 2. Welding shall conform to ANSI/AWS D 1.1 specifications for Structural Steel Welding, latest edition.
 3. Welders will be certified.
 4. Fabricator must be designated as an AISC-Certified Plant and shall be registered with and approved by permit jurisdiction.
- B. Contractor shall coordinate and provide access for special inspection of all field welding or torquing to the satisfaction of governing authorities requirements and per Section 01 45 00 and Structural Notes.

1.4 SUBMITTALS

- A. General: Comply with the pertinent provisions of Section 01 33 00.
- B. Shop Drawings
1. The Contractor shall submit Shop Drawings including complete details and schedules for fabrication and shop assembly of members. Include details of cuts, connections, camber, holes, and other pertinent data. Indicate welds by AWS symbols, and show size, length and type of weld. Provide setting drawings, templates, and directions for installation of anchor bolts and other anchorages. Identify details by reference to sheet and detail number on the Drawings.
 2. Should the Contractor elect to change sequence of erection or other details of field erection, submit necessary revised Shop Drawings to the Architect for review.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Rolled steel sections minimum standard:
1. Wide Flange Shapes: ASTM A992, grade 50
 2. All other steel: ASTM A36
- B. Cold formed steel tubing: Comply with ASTM A 500, Grade B. $f_y=46\text{ksi}$
- C. Steel pipe: Comply with ASTM A 53, Type E or S, Grade B.
- D. All threaded rods: ASTM A36.

**SECTION 05 12 00
STRUCTURAL STEEL**

- E. No unidentified steel shall be used.

2.2 FASTENERS

A. Concrete Anchors:

1. Epoxy Anchors: Simpson SET-XP.
 - a. Unless noted, install threaded ASTM A193 B7 rods into clean, dry holes to embed depth as shown on drawings. Comply with manufacturer's ICBO report for hole diameter. If embed depths are not shown, use manufacturer's minimum depths. Fill hole with enough epoxy to fill all void spaces and insert rod with clockwise twisting motion.
 - b. Do not place when epoxy or concrete is less than 50 degrees F, unless cold weather products are utilized.
2. Expansion Anchors: Simpson Strong-Bolt 2.
 - a. Full bearing contact for 3-inch minimum around each anchor must be provided between the face of concrete and of concrete and the anchored assembly.
 - b. Do not cut main reinforcing or breakout back surface when drilling holes.
3. Screw Anchors: Simpson Titen HD.
4. Headed Concrete Studs: ASTM A108.

B. High Strength Bolts:

1. Bearing bolts: ASTM A325N or ASTM A490 as noted on the drawings. Install "snug" and torque to 50 ft. lbs. unless noted otherwise on Drawings.
2. Slip Critical bolts: ASTM A490SC. Install by "turn of the nut" method.

C. Welding:

1. Filler metals shall meet AWS A5 Specifications.
2. Electrodes shall be 70 ksi compatible with base metal, welding process and position. Low hydrogen electrodes for SMAW. Meet minimum toughness CVN value of 20 ft. lbs. at -20 degrees F for all welding of moment frames and full penetration welds. Do not mix weld electrodes that reduce the CVN value of welds.
3. GMAW field welding not allowed. GMAW shop welding using short circuiting transfer not allowed.
4. SMAW is not allowed to be placed over FCAW on pre-existing structural steel welded connections. Use only FCAW on pre-existing structural welds unless contractor provides material testing of existing structural welds to confirm SMAW was used.

D. Bearing Pads:

1. All Teflon slide bearings shall be Dynaion Slide Bearings by JVI, Inc.
2. All bearing pads shall be Masticord bearing pads by JVI, Inc.

2.3 FINISHING PRODUCTS

- A. Galvanizing: ASTM A123, ASTM A386 commercial class, hot dipped.
- B. Galvanizing repair: ASTM A780.
- C. Galvanized fasteners: ASTM A153
- D. Acrylic metal primer.
- E. All finish products shall be VOC per Section 01 61 16.

**SECTION 05 12 00
STRUCTURAL STEEL**

PART 3 EXECUTION

3.1 FABRICATION AND ERECTION

A. General:

1. All workmanship, details of construction, etc., except as otherwise indicated or specified, shall be in conformity with all applicable articles of the AISC "Specifications for Design, Fabrication, and Erection of Structural Steel for Buildings", AISC "Code of Standard Practice", and the applicable Building Codes. Make connections as indicated or detailed, on the drawings and the reviewed Shop and Erection Drawings.
2. All permanently exposed steel shall have smooth, clean surfaces with no identifying trademarks, names, etc., exposed to view. Grind all welds. Leave in condition for finish painting.
3. Gas-cutting: Do not use gas cutting torches for correcting fabrication errors in the structural framing. Cutting will be permitted only on secondary members as acceptable to the Architect. Finish gas-cut sections equal to a sheared appearance when gas-cutting permitted.

B. Fabrication:

1. Provide holes required for securing other work to structural steel framing, and for the passage of other work through steel framing members, as shown on the final Shop Drawings. Provide threaded nuts welded to framing, and other specialty items as shown to receive other work.
2. Cut, drill, or punch holes perpendicular to metal surfaces. Do not flame cut holes or enlarge holes by burning. Drill holes in bearing plates.
3. Make welds by the electric-arc process per AWS standards specified above.
4. Where weld size is not indicated, make weld full thickness of member. No splices, other than those indicated, will be permitted on any steel member except where written approval is obtained from the Architect. Evidence of an unauthorized splice will be cause for rejection.
5. Clean all steel work by wire brushing, or by other means selected by the fabricator, of loose millscale, loose rust, accessible weld slag or flux deposit, dirt and other foreign matter. Remove oil and grease deposits by solvent.
6. Fabrications intended to be permanently exposed to public view to be neatly fabricated, straight and true with all edges ground smooth and uniform.

C. Finish:

1. Structural Steel fabrications to be shipped to site finished as follows:
 - a. Fabrications permanently exposed to exterior or embedded in exterior masonry veneer - hot-dipped galvanized. Additionally, painted with one coat of shop applied primer compatible with finish coat as specified in Section 09 90 00.
 - b. Fabrications embedded in exterior concrete or masonry veneer to be hot-dipped galvanized.
 - c. Fabrications interior to the structure and intended to be finish field painted with conventional paint and permanently exposed to public view - two coats of shop applied primer compatible with finish coat as specified in Section 09 90 00. Each coat preceded by finish sanding of minimum 120 grit abrasive.
 - d. Fabrications interior to the structure not intended for public view –

**SECTION 05 12 00
STRUCTURAL STEEL**

- two coats shop applied primer.
2. Exceptions to finishes - Do not shop prime:
 - a. Surfaces embedded in concrete or mortar.
 - b. Surfaces to be field welded.
 - c. Surfaces to be high-strength bolted with slip-critical connections.
- D. Erection:
1. Erect all work to the proper lines and levels, plumb and true, and in correct relation to other work. Secure all parts in a rigid and substantial manner during construction.
 2. Provide temporary shoring and bracing members with connections of sufficient strength to bear imposed loads. Erection, means and methods, and temporary shoring and bracing is the sole responsibility of the Contractor.
 3. Provide temporary guy lines to achieve proper alignment of the structures as erection proceeds.
 4. Remove temporary connections and members when permanent members are in place and final connections are made.
 5. Prior to setting base plates clean concrete and masonry bearing surfaces free from bond-reducing materials, and then roughen to improve bond to surface. Clean the bottom surface of base and bearing plates.
 6. Bolts shall be located in the top of vertically slotted holes and the center of horizontally slotted holes, unless otherwise noted.
 7. Pack non-shrink grout per Section 03 30 00 solidly between bearing surfaces to ensure no voids remain.
 8. Provide inspection per 1.3 (B) above.

END OF SECTION

**SECTION 05 50 00
METAL FABRICATIONS**

PART 1 GENERAL

1.1 DESCRIPTION

- A. Work included: Provide all structural steel, miscellaneous metal and metal fabrications, complete, in place, as shown on the Drawings, specified herein, or needed for a complete and proper installation and not specifically called for under other Sections of this Project Manual.
- B. Finishing of all steel fabrications and fasteners intended to be permanently exposed to view.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Quality Control Section 01 45 00
- C. Painting Section 09 90 00

1.3 QUALITY ASSURANCE

- A. Standards: Comply with standards specified in this Section as listed in Section 01 42 19.
 - 1. Welding shall conform to AWS specifications for Structural Steel Welding Spec. D1.1, latest edition. Welding of reinforcing steel shall conform to AWS Specification AWS D12.1, Reinforcing Steel Welding Code, latest edition. All welders shall be certified.
 - 2. All cold-formed members, material and fabrication shall conform to applicable sections of IBC.
- B. Contractor shall coordinate and provide access for special inspection of all field welding or torquing to the satisfaction of governing authority's requirements and per Section 01 45 00.
- C. Contractor shall obtain all testing and special inspections as required by IBC and local jurisdiction amendments. Comply with the Statement of Special Inspections within the Structural Drawings along with any other special inspection requirements noted within the Bidder Design Drawings.

1.4 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.
- B. The contractor shall submit prior to fabrication Shop Drawings of all items proposed to be furnished and installed under this Section. Include plans, sections, elevations, and details as needed.
- C. Three samples of all finishes specified in part 2.4 below.

PART 2 PRODUCTS

2.1 GENERAL

- A. Metal surfaces, general: For fabrication of the work of this Section which will be exposed to view, use only those materials which are smooth and free from surface blemishes including pitting, seam marks, roller marks, rolled trade names, rust and roughness.

2.2 MATERIALS: (Minimum Standard Unless Noted Otherwise)

- A. Steel plates: ASTM A36.
- B. Steel bars and bar-sized shapes: ASTM A36.

SECTION 05 50 00
METAL FABRICATIONS

- C. Steel tubing, welded, or seamless: ASTM A500, Grade B, Fy=46 ksi.
- D. Steel pipe: ASTM A53, type E or S as selected, Grade B.
- E. Electrodes for steel welding: ASTM E-70XX series.
- F. Zink vent hole plugs: Bruce Reichelt Enterprises, The Steel Supply Company VHP-Z or equal.

2.3 FASTENERS

- A. Standards: All fasteners shall comply with the following unless specifically indicated otherwise on Structural Drawings.
 - 1. Anchor Bolts: Headed type w/ heavy hexagonal nuts, ASTM F1554 grade 55.
 - 2. Bolts and nuts: Regular hexagon-head type, ASTM A307, Grade A
 - 3. Threaded Rod: F1554 grade 55, galvanized.
 - 4. Lag bolts: Square-head type, Fed. Spec. FF-B-561.
 - 5. Machine screws: Cadmium plated steel, Fed. Spec. FF-S-92.
 - 6. Wood screws: Flat-head carbon steel, Fed. Spec. FF-S-111.
 - 7. Plain washers: Round, carbon steel, Fed. Spec. FF-W-92.
 - 8. Concrete Anchors: See Section 05 12 00.
 - 9. CMU Grouted Masonry anchorage devices: See Section 05 12 00.
 - 10. Toggle bolts: Tumble-wing type, Fed. Spec. FF-B-588, type, class and style as required.
 - 11. Lock washers: Helical spring type carbon steel, Fed. Spec. FF-W-84.

2.4 FINISHING PRODUCTS

- A. Galvanizing: ASTM A123, ASTM A386 commercial class, hot dipped.
- B. Galvanizing repair: ASTM A780.
- C. Galvanized fasteners: ASTM A153
- D. Acrylic metal primer.
- E. All finish products shall be VOC per Section 01 61 16.

PART 3 EXECUTION

3.1 FABRICATION AND ERECTION

- A. General:
 - 1. All workmanship, details of construction, etc., except as otherwise indicated or specified, shall be in conformity with all applicable articles of the AISC "Specifications for Design, Fabrication, and Erection of Structural Steel for Buildings", AISC "Code of Standard Practice", and the applicable Building Codes. Make connections as indicated or detailed, on the drawings and the approved Shop and Erection Drawings. All exposed steel shall have smooth, clean surfaces with no identifying trade marks, names, etc., exposed to view. Grind all welds. Leave in condition for finish painting.
 - 2. Gas-cutting: Do not use gas cutting torches for correcting fabrication errors in the structural framing. Cutting will be permitted only on secondary members as authorized by the Architect. Finish gas-cut sections equal to a sheared appearance when gas cutting permitted.
 - 3. Special care is to be taken for all metal fabrications intended to be permanently exposed to view while cutting, splicing, bending, drilling,

SECTION 05 50 00
METAL FABRICATIONS

punching and welding to produce accurate, square, clean, tight-fitting joints where shown on the Drawings.

- B. Fabrication:
1. Provide holes required for securing other work to structural framing, and for the passage of other work through steel framing members, as shown on the final Shop Drawings. Provide threaded nuts welded to framing, and other specialty items as shown to receive other work. Cut, drill, or punch holes perpendicular to metal surfaces. Do not flame cut holes or enlarge holes by burning. Drill holes in bearing plates.
 2. Make welds by the electric-arc process. Provide Special Inspections per Structural Drawings.
 3. Where weld size is not indicated, make weld full thickness of member. No splices, other than those indicated, will be permitted on any steel member except where written authorization is obtained from the Architect. Evidence of an unauthorized splice will be cause for rejection.
 4. Concealed fabrications: Clean all steel work by wire brushing, or by other means selected by the fabricator, of loose millscale, loose rust, accessible weld slag or flux deposit, dirt and other foreign matter. Remove oil and grease deposits by solvent.
 5. Exposed fabrications: Grind smooth all welds permanently exposed to public view. Remove all rust and scale by power tool clean to bare metal [SSPC-SP 11], or abrasive blasting to SSPC-SP5 commercial grade of cleanliness.
 6. Where fabrications are scheduled to be hot-dipped galvanized, provide vent holes as required to allow liquid zinc and pressure flow freely throughout confined spaces.
 7. Following any galvanized finishing, plug all vent holes with zinc plug and grind smooth, taking care not to damage galvanized coating.
- C. Finish:
1. Miscellaneous Steel fabrications to be shipped to site finished as follows:
 - a. Fabrications permanently exposed to exterior - hot-dipped galvanized. Additionally, painted with one coat of shop applied primer compatible with finish coat as specified in Section 09 90 00.
 - b. Fabrications embedded in exterior concrete or masonry - hot-dipped galvanized.
 - c. Fabrications interior to the structure and intended to be finish field painted with conventional paint and permanently exposed to public view - two coats of shop applied primer compatible with finish coat as specified in Section 09 90 00. Each coat preceded by finish sanding of minimum 120 grit abrasive.
 - d. Fabrications interior to the structure not intended for public view – two coats shop applied primer.
 2. Exceptions to finishes – Galvanize only, do not shop prime:
 - a. Surfaces embedded in concrete or mortar.
 - b. Surfaces to be field welded.
 - c. Surfaces to be high-strength bolted with slip-critical connections.
 3. Exceptions to finishes – Do not galvanize or shop prime:
 - a. Fabrications of aluminum or stainless steel.
- D. Erection:

**SECTION 05 50 00
METAL FABRICATIONS**

1. Erect all work to the proper lines and levels, plumb and true, and in correct relation to other work. Secure all parts in a rigid and substantial manner during construction.

END OF SECTION

DIVISION 6

WOOD AND PLASTICS

06 10 00

Rough Carpentry

06 20 00

Finish Carpentry

06 41 00

Custom Cabinetry

**SECTION 06 10 00
ROUGH CARPENTRY**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes the erection of miscellaneous framework using lumber, plywood and other sheathing materials; and all blocking and supports necessary to join the members and anchor the framework to other construction.
- B. Work in this section also includes the providing of backing and blocking for any wall-supported equipment supplied by other trades or the Owner.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Project Meetings Section 01 31 19
- B. Special Requirements Section 01 61 16
- C. Metal Fabrications Section 05 50 00
- D. Finish Carpentry Section 06 20 00

1.3 QUALITY ASSURANCE

- A. Comply with the product standards specified herein and in Section 01 42 19.
- B. Comply with the current edition and supplement to national design specification for wood construction.
- C. Plywood: APA E30K, APA Design Construction guide--residential and commercial, 1989. Product Standard PS 1-83 for Construction and Industrial Plywood or Performance Standards and Policies for Structural-Use-Panels, June 1988.

1.4 PRE-INSTALLATION CONFERENCE & MOCKUP

- A. Conduct a pre-installation conference as required by Section 01 31 19.
- B. Construct a mockup as required by Section 01 43 00.

PART 2 PRODUCTS

2.1 GRADE STAMPS

- A. Framing Lumber: Identify all framing lumber by the grade stamp of the West Coast Lumber Inspection Bureau.
- B. Plywood: Identify all plywood as to species, grade, and glue type by the stamp of the American Plywood Association.
- C. Pressure-Treated Lumber and Plywood: All materials used shall bear the Quality Control Marks with the following information:
 - 1. Symbol of Inspection Agency and Inspector Number.
 - 2. Symbol of Federal Housing Admin. Min. Property Standards.
 - 3. Preservative Symbol.
 - 4. Indicates lumber redried to 19% moisture content after treatment.
 - 5. Number of plant charge in which material was treated.
 - 6. Month and Year of Treatment.
 - 7. Name of Treating Company.
 - 8. Location of Treating Plant.
 - 9. Indicates Treatment only was specified.
- D. Other: Identify all other materials of this Section by the appropriate stamp of the agency listed in the reference standards, or by such other means as are approved by the Architect.

2.2 MATERIALS

- A. Lumber 2" and less in thickness shall have maximum moisture content of 19%,

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- K.D. or equal, 15% for plates, sills and header framing.
- B. All lumber specified or shown to be pressure treated (PT) to be KDAT, in specie and grade shown on Structural Drawings.
- C. All materials, unless otherwise specifically approved in advance by the Architect, shall meet or exceed the following:

ITEM:	DESCRIPTION:
1. Sills (on concrete)	Pressure treated, DFL or Hem Fir #2, 15% KDAT, AWWPA UC3.
2. Studs & Plates	DFL #2, KD.
3. Sawn Headers	DFL #2, KD.
4. Joists and Rafters	DFL #2, KD.
5. Posts, Built-up columns	DFL #2, KD.
6. Blocking, Bridging, Backing, etc.	DFL #2, KD.
7. Plywood	
a. Roof Sheathing	APA, PS 1, ICC-ES -108, Douglas-fir, C-D grade, exterior glue. See Structural Drawings for thickness and span rating.
b. Wall Sheathing	APA, PS 1, ICC-ES -108, Douglas-fir, C-D grade, exterior glue. See Structural Drawings for thickness and span rating.
c. Floor Sheathing	APA, PS 1, ICC-ES -108, Douglas-fir, C-D grade, exterior glue. See Structural Drawings for thickness and span rating.
8. Steel Hardware	See Section 05 50 00.
9. Bolts, Screws and Washers	See Section 05 50 00.
10. Nails	Common (except as noted), Fed. Spec. FF-N-11 (hot dipped galvanized or stainless steel (S/S) at all exterior locations or in contact with pressure treated (PT) lumber – Do not mix galvanized and S/S in contact with PT lumber).
11. Framing Connectors	Simpson with Z-MAX galvanized coating per ASTM A90, 1.85 oz. zinc, or stainless steel.
12. Pressure Treatment	
a. Non-visible	Pressure treatment to be waterborne type, as recommended and in strict conformance with the American Wood Preservers Association (AWPA) Standard U1 – Commodity Specification A or F, for intended Use Category Type (UC), location

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- | | |
|---------------------------|---|
| | and wood specie. |
| 13. Wood Preservative | Match pressure treatment solution. (For field cut ends of PT members) |
| 14. Construction Adhesive | Low VOC per Section 01 61 16. |
| 15. Sill Sealer | Polyethylene foam gasket. |

2.3 OTHER MATERIALS

- A. All other materials not specifically described but required for a complete and proper installation as indicated on the Drawings, shall be new, suitable for intended use, and subject to the review of the Architect.

PART 3 EXECUTION

3.1 GENERAL

- A. Frame as required for the installation and support of plumbing and pipes, ducts and conduit.
- B. Provide PT lumber and plywood at all locations in direct contact with earth, concrete or masonry or as otherwise shown on Drawings.
- C. Accurately lay out, cut, fit and erect all framing true to lines and dimensions. Erect framing plumb and level, unless otherwise shown. Do not use shims for leveling on wood or metal bearings. Adequately anchor all framing as shown or specified.
- D. Brace all structures adequately during erection period, as well as final in-place condition. Cut framing square on bearings, closely fitted, accurately set to required lines, level, plumb and secured rigidly in place at bearings and connections.
- E. Temporary shoring and bracing is the sole responsibility of the Contractor.
- F. Notch all rafters and roof blocking as indicated on Drawings to provide a continuous ventilation path at all insulated roofs. At roofs with rigid insulation placed to the outside of the roof sheathing, roof venting will not be required.

3.2 PERFORMANCE

- A. Protection During Construction:
1. Protect adjacent surfaces, equipment, and facilities to remain, from damage during construction.

3.3 LAYOUT

- A. Coordinate all layout of all ceiling, wall and roof framing to provide for indicated placement of suspended ceilings, electrical and mechanical work.

3.4 CUTTING AND NOTCHING

- A. Carpenters to do all cutting of structural members for other trades.
- B. Cutting and notching of joists not allowed unless shown on drawings. 1" diameter hole may be drilled in the center 1/3 of the member depth. All other holes to be approved.
- C. Studs may be notched in the lower 1/5 of the height of stud for electric and plumbing pipes but no part of notch is to be deeper than 25% of width of stud. Holes of diameters up to 1/3 width of stud may be drilled in studs but not in center 1/3 of their height.

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3.5 INSTALLATION

- A. Beams, joists and rafters set "crown" up.
- B. Treated lumber, cut after treatment, and the ends of all posts in concealed locations and in contact with concrete, masonry or earth, to receive two (2) coats of a concentrated solution of treating preservatives used, saturating all cut surfaces and bolt holes.
- C. Lumber of nominal size, unless indicated "NET", shown on Drawings or as specified.
- D. Where a size is not shown on Drawings, or additional support is deemed necessary, request size from Architect.
- E. Stud Wall Framing (Standard):
 - 1. Bottom plate: Pressure treated 2x or 3x as shown on Drawings. Anchor to concrete with 5/8" x 12" anchor bolts at 48" o.c. and 6" from end of piece unless otherwise noted on structural drawings. For non-bearing partitions on slab, power driven ramset 7/32" x 3" drive pins at 24" on center. Anchor to wood with 16d nail at 12" o.c., unless otherwise noted on structural drawings. See Structural Drawings for more stringent shear wall anchorage.
 - 2. Spacing:
 - a. Exterior and interior bearing and/or shear walls: 16" on center unless shown otherwise. 2 studs minimum (unless noted otherwise on the Drawings) at the end of each wall and at each side of all openings.
 - b. Interior, non-bearing partitions: 24" on center except, walls receiving ceramic tile finishes to be 16" on center. 2 studs minimum (unless noted otherwise on the Drawings) at the end of each wall and at each side of all openings.
 - 3. Top plates shall be double except walls under beams may be single. Lap at all intersections and splices. Provide steel straps where plates are cut for ducts or pipes.
 - 4. Headers shall be 6x8 at exterior walls and 4x8 at interior walls, unless noted otherwise on the Drawings.
 - 5. Provide (2) studs minimum under beam and header ends unless otherwise shown.
 - 6. Provide fire blocking of 2 inch nominal thick wood:
 - a. In exterior and interior walls or partitions at ceiling, roof and floor levels but not over 10 feet on center maximum.
 - b. In all stud walls and partitions, including furred spaces with maximum distance not over 10 feet.
 - c. Between stair stringers at top and bottom and between studs along and in line with run of stair adjoining stud wall and partitions.
 - d. At levels of furred ceilings and floors.
 - 7. Provide nailing blocks and strips as required by all trades. All backing for fixtures, equipment, specialties and Owner supplied items is to be provided under this Division. If applicable, see Food Service (FS) and/or Kitchen (K) drawings for special blocking.
 - 8. Miscellaneous blocking required for use of electrical and mechanical trades shall be by those trades unless otherwise stipulated or arranged for.
 - 9. Set all exterior wall plates and party wall plates on sill sealer gasket.
- F. Curbs or Cants: Furnish wood curbs required for mechanical equipment and wood cants at all junctures of vertical and horizontal roof surfaces and as shown

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or noted on Architectural Drawings.

G. Sheathing:

1. All plywood panels shall be placed over two or more spans with face grain perpendicular to supports, all joints staggered.
2. No surface or edge shall be exposed to the weather. Piecing will not be permitted. Minimum width 2'-0".
3. Where called for on Drawings as "Blocked" provide nominal 2" solid blocking at all panel edges.
4. Set all floor sheathing in a continuous bead of construction adhesive placed at centerline of joist.

H. Fastening:

1. Nailing: Provide all builders hardware required; all nails for framing of American made, common type and penny weight specified or required. Use galvanized or aluminum nails for exterior nailing. Minimum nailing requirements for standard connections unless specifically shown or otherwise noted.

<u>Framing Item</u>	<u>No. or o/c of Fasteners</u>	<u>Size of Fasteners</u>
Dimensional Lumber	See IBC 2304.9.1.	
Gypsum Sheathing	As required by fire assembly.	
Plywood Sheathing	See Structural Drawings	
2. Framing Connectors:		
a. Provide framing connectors where required or indicated; secure with fastenings recommended by manufacturer to develop full total load reactions.		
3. Bolted connections:		
a. At wood bolted connections where bolts bear on wood, use malleable iron washers under bolt head and nut, and where wood bears on concrete or steel cut steel washers unless otherwise noted on Structural Drawings. All washer dimensions per Western Wood Use Book recommendations.		
b. Bolt holes shall not exceed 1/16" larger than bolt diameter.		
c. All nuts, bolts and washer exposed on exterior to be galvanized. Retighten all exposed bolts at completion of job.		
d. Install lag screws where required. Bore for threads as follows: 1/8" less for 1/4" to 1/2" diameter, 3/16" less for 5/8" diameter, 1/4" less for over 5/8" diameter. Counterbore for shank at nominal diameter. Seat by turning, soap threads before setting and install with wrench only.		
e. All bolts and/or fasteners used in contact with pressure treated lumber shall be hot dipped galvanized or stainless steel as specified above. DO NOT MIX GALVANIZED AND STAINLESS STEEL.		
4. Miscellaneous Connectors:		
a. Install all miscellaneous metal items called for to be furnished under Division 5 related to carpentry. See Shop Drawings for locations and installation details.		

3.6 AIR SEALING MEASURES

- A. Install air-sealing measures as required to create an air barrier system. The

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following items are general guidance to achieving an air barrier system.

1. Prior to framing bottom wall plates, install sill sealer gasket at all exterior wall and party/common wall locations.
2. Following framing, the following areas shall be air sealed:
 - a. Air-seal with spray foam all wall penetrations of exterior sheathing. This may include electrical boxes, pipes, ducts, etc.
 - b. Air-seal with spray foam around all exterior wall and party/common wall top plates and rim joists.
 - c. All double stud walls shall be blocked and air-sealed at each floor level.
 - d. Air-seal with spray foam at all party/common wall to roof sheathing joint.
3. See Drawings for additional air-sealing measures.

END OF SECTION

**SECTION 06 20 00
FINISH CARPENTRY**

PART 1 GENERAL

1.1 DESCRIPTION

- A. Work in this Section includes installation of wood doors, paneling, window and door trim; manufacture and installation of wood shelves, and miscellaneous finish items, if not specified elsewhere.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

- | | |
|----------------------|------------------|
| A. Project Meetings | Section 01 31 19 |
| B. Submittals | Section 01 33 00 |
| C. Quality Assurance | Section 01 43 00 |

1.3 STANDARDS

- A. Soft Woods: Standard Grading and Dressing Rules of the Western Wood Products Association, and/or the West Coast Lumber Inspection Bureau, and/or California Redwood Association (CRA) and the Redwood Inspection Services (RIS).
- B. Hardwoods: Latest rules of the National Hardwood Lumber Association.
- C. Softwood Plywood: Latest edition of U.S. Product Standard PS-1 with each sheet bearing the appropriate grade-trademark of the American Plywood Association.
- D. Hardwood Plywood: Latest standard of Hardwood Plywood Manufacturers Association. All plywood to be selected for uniformity of color, grain and pattern.
- E. Specified qualities of workmanship on mill items furnished to be as specified in the Architectural Woodwork Institute (AWI), Architectural Woodwork Standards and Guide Specifications and/or as specified herein. All materials shall conform to grading and dressing rules listed.
- F. Western Red Cedar: Western Red Cedar Lumber Association (WRCLA).
- G. Flame Spread: Interior wall and ceiling finishes shall meet the following flame spread classifications per IBC Table 803.9:
- B - Occupancy / Non-Sprinklered:** Class C (76-200) for rooms or areas; Class B (26-75) for exit access corridors and other exit ways (lobbies) and; Class A (0-25) for vertical exits and exit passageways.
- H. Comply with the standards specified herein and listed in Section 01 42 19.

1.4 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.

1.5 PRE-INSTALLATION CONFERENCE & MOCKUP

- A. Conduct a pre-installation conference as required by Section 01 31 19.
- B. Construct a mockup as required by Section 01 43 00.

PART 2 PRODUCTS

2.1 MATERIALS (Interior)

- A. All materials, unless otherwise specifically approved in advance by the Architect, shall meet or exceed the following:

Item:	Description:
1. Opaque Finished Lumber:	AWI Grade C, KD, Hemlock, Poplar or

**SECTION 06 20 00
FINISH CARPENTRY**

- | | |
|--|--|
| <ul style="list-style-type: none"> 2. Transparent Finish Lumber: 3. Wood Wall Paneling 4. Underlayment: <ul style="list-style-type: none"> a. Carpet b. Resilient Flooring 5. Adhesives | <p>other sound grain hardwood, finger jointed allowed, S4S, pre-primed. Shaped per Drawings. Finished per Section 09 90 00.</p> <p>AWI Grade C, KD, match existing species, S4S. Shaped per Drawings. Finished per Section 09 90 00.</p> <p>See Drawings for details.</p> <p>Formaldehyde free particle board.</p> <p>APA rated, AC plywood w/ exterior glue.</p> <p>Low VOC per Section 01 61 16.</p> |
|--|--|

2.2 MATERIALS (Exterior)

- A. All materials, unless otherwise specifically approved in advance by the Architect, shall meet or exceed the following:
- | | |
|--|---|
| <ul style="list-style-type: none"> 1. Wood Trim: 2. Fasteners: 3. Insect Screen: 4. Insect Foam: | <p>Description:</p> <p>1x, 5/4 and 2x, Western Red Cedar, WRCLA grading and texture to match existing, kiln dried, mixed grain. Transparent finish per Section 09 90 00.</p> <p>Type 316 stainless steel.</p> <p>Painted aluminum screen barring access to birds and insects.</p> <p>Polyether outdoor foam barring access to birds and insects. Black.</p> |
|--|---|

2.3 MOISTURE CONTENT

- A. Lumber
- All finish lumber to be kiln dried as closely as practicable to the following schedule:
- | | | |
|----------------------|-----------------------|-------------------------|
| | <u>1 inch or less</u> | <u>1-1/2 - 2 inches</u> |
| 90% shall not exceed | 12% M.C. | 15% M.C. |
| 10% shall not exceed | 15% M.C. | 18% M.C. |
| Average | 12-1/2% M.C. | 15-1/2% M.C. |
- Resinous woods to be steam-treated to extract all pitch.

PART 3 EXECUTION

3.1 INSTALLATION OF WOOD

- A. All joints to be neatly made, set all wood finish straight, plumb level in true alignment, tightly fitted and rigidly fastened in one place. Finished work must be guaranteed to stand one year after completion without warping, opening of joints or other defects.
- B. Plow out back of all flat trim. Splice no running trim under 12 feet in length and make joints only where solid blocking or backing occurs. Fit all joints flush on face by dressing off back. No face planing, excessive sanding or cross grain sanding will be permitted. Make all trim and fascia joints with 45 degree scarf. Miter all corners unless shown otherwise on Drawings.
- C. Nailing of trims, paneling, caps etc.: Blind nail or fasten whenever possible. If

**SECTION 06 20 00
FINISH CARPENTRY**

- face nailing is required, use only finish nails. Countersink and putty.
- D. Leave work clean, free from warp, twist and disfigurement. Sand smooth all interior finish material with minimum 120 grit abrasive and leave in perfect condition for painter.
 - E. Install all building specialties, hardware and equipment as specified in their respective Divisions except where installation is required of supplier or other Subcontractor.
 - F. Sand exposed interior wood surfaces for final finish per Section 09 90 00, Painting.
 - G. All finish nail heads will be counter sunk. Interior nail heads will be filled and sanded.

3.2 INSTALLATION OF DOORS & HARDWARE

- A. See Division 8.

END OF SECTION

**SECTION 06 41 00
CUSTOM CABINETWORK**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes the fabrication, finishing, and installation of Architectural cabinets and counter tops.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Special Requirements Section 01 61 16
- C. Metal Fabrications Section 05 50 00
- D. Finish Carpentry Section 06 20 00

1.3 STANDARDS

- A. Architectural Woodwork Institute (AWI) quality standards and guide specifications.

1.4 SUBMITTALS

- A. Product Data: Submit following information:
 - 1. Shop Drawings showing each of the items to be provided under this Section, completely detailing joinery and other construction, including anchorage.

1.5 QUALITY ASSURANCE

- A. Environmental Requirements:
 - 1. Maintain ambient air temperature between 65 and 80 degrees F. and relative humidity between 30 and 60 percent for 48 hours prior to and during fabricating, finishing, and installing casework.
- B. Fabricator Qualifications:
 - 1. Casework fabricator shall have 5 consecutive years of experience in fabrication of commercial and retail casework.
- C. The cabinetwork manufacturer is responsible for details and dimensions controlled by job conditions and shall show on Shop Drawings all required field measurements beyond their control. The General Contractor and the cabinetwork manufacturer shall cooperate to establish and maintain these field dimensions.

PART 2 PRODUCTS

2.1 GENERAL

- A. Workmanship shall comply with AWI Quality Standards and Specifications for Casework.
- B. All finish and adhesive materials shall be low VOC type in compliance with Section 01 61 16 – Special Requirements – Sustainable Building Practices.

2.2 CABINET MATERIALS (Plastic Laminate Finished, European)

- A. General:
 - 1. Workmanship shall comply with AWI Quality Standards and Specifications for Casework-"**Custom Grade**," factory finished cabinets.
 - 2. Cabinet Style: "European (Frameless)" Full flush overlay and as detailed.
 - 3. Door Style: Slab
 - 4. Finish:

**SECTION 06 41 00
CUSTOM CABINETWORK**

- a. Exposed surfaces: High pressure laminate.
 - b. Semi-Exposed: Low pressure laminate.
- B. Panel and Edge Materials:
- 1. Concealed lumber: Comply with Section 3 of AWI Quality Standards.
 - 2. Plastic Laminate Finished panels:
 - a. Standard Particleboard: Mat-formed, formaldehyde free, wood particleboard, ANSI A208.1, Type 1-M-2, 45 pound density, 8 percent or less moisture content. HPL panel edges.
 - b. Prefinished Hardboard (cabinet backs & drawer bottoms): ANSI/AHA A135.4, Class 1 tempered, formaldehyde free, melamine finish.
 - 3. Drawers: 3/4" particle board drawer box, melamine finished. Edges are 0.020 inch thick PVC, machine applied with hot-melt adhesive.
 - 4. Shelves: 3/4", formaldehyde free, composition board with melamine laminate. Edges are 0.020 inch thick PVC, machine applied with hot-melt adhesive. Adjustable in all cabinets. Full depth in base cabinets.
 - 5. Door and drawer faces: 3/4" Mat-formed, formaldehyde free, wood particleboard, ANSI A208.1, Type 1-M-2, 45 pound density, 8 percent or less moisture content. Edges are matching HPL finish.
 - 6. Sink Counter top and moisture sensitive panels: APA, Exterior grade plywood or phenoliresin particleboard, ANSI A208.1, Type 2-M-2, 45 pound, medium density, 8% moisture or less.
- C. High Pressure Plastic Laminates (HPL)
- 1. Vertical Surfaces: Decorative laminate nominal (1/32") thickness vertical surface type, NEMA LD-3.
 - 2. Horizontal Surfaces: Decorative laminate nominal 1/16" thickness. General purpose type, NEMA LD-3. (countertops, shelves and splashes)
 - 3. Curved Surfaces: Post forming grade NEMA PF-42.
 - 4. Backing Sheets: Multi-purpose backer, nominal (1/32") thickness.
 - 5. Surface Finish: To be "Textured (6)" non-directional textured surface with a moderate reflective quality unless otherwise noted.
 - 6. Manufacturer/Color: See Drawings.
- D. Low Pressure Plastic Laminates (Melamine)
- 1. Industry Standard: ALA 1985
 - 2. Acceptable Material: Polyester or melamine laminate
 - 3. Surface Finish: Smooth
 - 4. Color: White
- E. Hardware
- 1. Drawer glides: Full extension, ball bearing nylon rollers, self-closing.
 - a. 6" deep or less: 75 lb. rating.
 - b. Greater than 6" deep: 110 lb. rating.
 - c. At lateral files: 175 lb. rating.
 - 2. Door hinges: Concealed, European self-closing, 110 degree opening, Grass America Inc.; Blum.
 - 3. Silencers: 3/8" diam. urethane button pad (2 each door).
 - 4. Pulls: Wire pulls. ADA compliant, 1/2"x1-7/8"x4",

**SECTION 06 41 00
CUSTOM CABINETWORK**

- EPCO MC427
- 5. Shelf Standards & Supports: Knape & Vogt 330 shelf pins.
 - 6. Locks: Corbin Camlock, 15700 series or approved equal. Provide locks at locations shown on Drawings.
 - 7. Grommets: Doug Mockett, BG Flip-Top Series, 1-1/2" dia., matte black.
 - 8. Finish: Satin Stainless Steel, U.N.O.
 - 9. All other hardware not specified shall be the Cabinetwork manufacturer's option as to type and manufacturer, subject to Owner's review.
- F. Countertop Support Brackets:
- 1. A&M Hardware, Inc., concealed bracket with support arm, 9", 12", 18", 24", or 30", black. Provide at 4'-0" o.c. maximum.
- G. Adhesives: Type I Waterproof; Low VOC per Section 01 61 16.

2.3 COUNTERTOPS & BACKSPLASHES

- A. High Pressure Laminate: (Kitchens)
- 1. Vertical Surfaces: Decorative laminate nominal (1/32") thickness vertical surface type, NEMA LD-3.
 - 2. Horizontal Surfaces: Decorative laminate nominal 1/16" thickness. General purpose type, NEMA LD-3. (countertops, shelves and splashes)
 - 3. Curved Surfaces: Post forming grade NEMA PF-42.
 - 4. Backing Sheets: Multi-purpose backer, nominal (1/32") thickness.
 - 5. Surface Finish: To be "Textured (6)" non-directional textured surface with a moderate reflective quality unless otherwise noted.
- B. Wood:
- 1. See Drawings for details.

PART 3 EXECUTION

3.1 FABRICATION

- A. Fabricate the work of this Section in strict accordance with the original design, the reviewed Shop Drawings, and the referenced AWI grade standards.
- B. When provisions of the AWI grade specified are in conflict with or are modified by the Drawings and further specifications, the modifications govern.
- C. Accurately fit and install all finish hardware. After fitting, remove all hardware until paint or varnish work is complete, then reinstall. Leave all hardware clean securely fastened and in working order. Cabinet doors to be mill fitted and hung.
- D. Assemble cabinetwork at the shop insofar as practical. Where it is necessary to cut and fit on the job, make ample allowance for cutting.
- E. Moisture content: Casework in storage and in place to have moisture content of between six and eleven percent, inclusive.
- F. Hardware:
 - 1. See Drawings for cabinet lock locations.
 - 2. Provide wire grommets at all desktop/workstation locations. Coordinate

**SECTION 06 41 00
CUSTOM CABINETWORK**

quantity and location with Architect.

3.2 FINISHING

- A. Plastic laminate finished cabinets:
 - 1. Install laminates in strict conformance with laminate manufacturers printed instructions.
 - 2. Adhesives: Use only adhesives and methods as recommended by laminate manufacturer. Adhesive to be waterproof type.
 - 3. All joints to be neat, tight and all exposed edges to be routed & filed smooth.
- B. Substitutions of finish type shall be submitted in writing to the Architect for approval prior to fabrication and finishing of cabinetwork under this Section.

3.3 INSTALLATION

- A. Inspection
 - 1. Examine the areas and conditions under which work of this Section will be installed. Correct conditions detrimental to timely & proper completion of the work. Do not proceed until unsatisfactory conditions have been corrected.
 - 2. Verify dimension of all cabinetwork locations before fabrication.
- B. Installation
 - 1. Install all components in strict accordance with the original design and the approved Shop Drawings, anchoring all items firmly into position for long life under hard use.
 - 2. Fabricate counter tops for scribe fit to walls.
 - 3. Fabricate all "Inset Door" type cabinetry with extended stiles for scribe fit to walls.
 - 4. Install plumb, level and true. Shim and anchor securely.
 - 5. Doors and drawers to operate smoothly and freely, without binding or rattling. Proper reveal gaps to be maintained.
 - 6. Install with concealed fasteners wherever possible. Where exposed, use countersunk Phillips head screws to match adjacent hardware. Cap with matching screw caps.

3.4 CLEANING AND ADJUSTMENT

- A. Upon completion of the installation, visually inspect each installed item, thoroughly clean all surfaces by using the cleaning material recommended by the manufacturer and carefully adjust all operating components for optimum operation.

END OF SECTION

DIVISION 7**THERMAL AND MOISTURE PROTECTION**

07 14 00	Interior Membrane Waterproofing
07 21 00	Insulation
07 25 00	Weather Resistive Barriers
07 46 23	Wood Siding
07 51 01	Built-Up Bituminous Roofing Modifications
07 60 00	Flashing and Sheet Metal
07 72 13	Attic Access Ladders
07 84 13	Through Penetration Firestopping
07 90 00	Sealants

SECTION 07 14 00
INTERIOR MEMBRANE WATERPROOFING

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Installation of a seamless, elastomeric, waterproofing membrane and crack isolation at floor and wall areas shown on the Drawings receiving tile and/or resilient tile (at wet areas).

1.2 RELATED SECTIONS

- A. Submittals Section 01 33 00
- B. Concrete Finishing Section 03 35 00
- C. Fiber Reinforced Cement Board Section 09 28 00
- D. Tile Section 09 30 00

1.3 QUALITY ASSURANCE

- A. Apply 10 lineal feet field samples of waterproofing system.
- B. Acceptable samples may be incorporated in the Work.

1.4 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.
- B. Submit product data for waterproofing materials, system components, installation instructions and manufacturer's printed recommendations for use of this product in this application.

PART 2 PRODUCTS

2.1 MATERIAL

- A. Interior Floors: (over gypsum underlayment or concrete substrates)
 - 1. Laticrete, Hydro Ban, 0.020-0.030 inch thick liquid rubber.
 - 2. Ardex, 8+9 Waterproofing and Crack Isolation Compound.
- B. Interior Walls: (over gypsum board and cement backer board substrates)
 - 1. Laticrete, Hydro Ban, 0.020-0.030 inch thick liquid rubber.
 - 2. Ardex, 8+9 Waterproofing and Crack Isolation Compound.
- C. Accessories:
 - 1. Primer/Sealer: As required by waterproofing membrane manufacturer for proper substrate preparation.

PART 3 EXECUTION

3.1 PREPARATION

- A. Clean substrate surfaces and fill all voids with an approved filler material.
- B. Apply primer/sealer to substrate as required by waterproofing membrane manufacturer.

3.2 APPLICATION

- A. Interior:
 - 1. Apply waterproofing system per manufacturer's procedures.
 - 2. Apply at all floor/wall joints on all walls with quarry or ceramic tile base. Extend a minimum 8" up wall and onto floor.

SECTION 07 14 00
INTERIOR MEMBRANE WATERPROOFING

3. At all floors receiving tile and all restrooms, provide waterproofing system over entire floor.
4. All piping and conduit penetrations through waterproofed floors to be sleeved, sealed and waterproofed.

END OF SECTION

**SECTION 07 21 00
BUILDING INSULATION**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes insulation, related products, and accessories used for the resistance of heat and sound transfer.
- B. Work in this Section also includes the furnishing and installation of specified products in a manner that will provide a continuous barrier as required for a completed thermal or acoustical resistant assembly.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Rough Framing Section 06 10 00
- C. Sealants Section 07 90 00

1.3 STANDARDS

- A. Unfaced glass fiber thermal batt insulation shall comply with ASTM C-665, Type I, non-combustible per ASTM E-136 and have a maximum flame spread rating of 25 and smoke development rating of 50 per ASTM E-84.
- B. Sound Attenuation glass fiber batt insulation shall comply with ASTM C-665, Type I, non-combustible per ASTM E-136 and have a maximum flame spread rating of 25 and smoke development rating of 50 per ASTM E-84.
- C. Unfaced Mineral wool Fire Safing Blankets shall comply with ASTM C-665, Type I, non-combustible per ASTM E-136 and NFPA Standard 220, and have a maximum flame spread rating of 15 and smoke development rating of 0 per ASTM E-84.

1.4 QUALITY ASSURANCE

- A. Standards: Comply with standards specified herein and as listed in Section 01 42 19.
- B. All insulation products shall contain a permanent certification label that certifies it to comply with applicable codes and requirements.

1.5 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.
- B. Submit product data for all products specified herein.

1.6 FLAME SPREAD

- A. Flame spread ratings of insulation and facings shall not exceed 25 and smoke development shall not exceed 50 when tested in accordance with ASTM E-84 for all insulating materials within floor-ceiling assemblies, walls, crawl spaces or attics.
 - 1. Except: When such materials are installed in concealed spaces of wood frame construction, the flame spread and smoke development limitations do not apply to facings, provided that the facing is installed in direct contact with the exposed surface of the ceiling, floor or wall finish.

PART 2 PRODUCTS

**SECTION 07 21 00
BUILDING INSULATION**

2.1 MATERIALS

- A. Roof Insulation: Existing to remain.
- B. Exterior Wall Insulation: Paper-faced fiberglass batt. FS 25. R-value per Drawings. Formaldehyde free.
- C. Floor Insulation: Un-faced fiberglass batt. FS 25. R-value per Drawings. Formaldehyde free.
- D. Acoustic Insulation: Sound attenuation glass fiber batts, 3" thickness. Formaldehyde free.
- E. Foam Insulation:
 - 1. Gaps 1" and less: Single component, polyurethane-based foam insulation. GREAT STUFF Gaps & Cracks or approved equal.
 - 2. Gaps 1" and greater: Two-component, polyurethane-based foam insulation, closed-cell, low density, minimum R-6.0 per inch. FOMO Handi-Foam E84 Class 1(A) or approved equal.
- F. Foam Sealant: Single-component, polyurethane-based foam sealant, closed-cell, minimum R-4.7 per inch. FOMO Handi-Foam Window and Door West Low Pressure Polyurethane Foam Sealant or approved equal.
- G. Batt insulation fasteners: Staples, zinc or coated wire, or other devices of type approved by the insulation manufacturer.
- H. Sill Sealer: Polyethylene foam gasket.

2.2 OTHER MATERIALS

- A. Provide all other materials, not specifically described but required for a complete and proper installation of the work of this Section.

PART 3 EXECUTION

3.1 INSTALLATION - GENERAL

- A. Except as otherwise specifically directed by the Architect, install all building insulation in accordance with the current edition of "Fiberglass Building Insulation Application Instructions," publication 3- BL-4992 of the Owens/Corning Fiberglass Corporation.
- B. Insulate all cracks around doors, windows and sills with sprayed foam insulation.
- C. Install sill sealer insulation under all exterior wall and party/common wall bottom plates on top of concrete foundation.

3.2 INSTALLATION - BATTS

- A. Fit insulation in all framing spaces, including areas between joists and outside headers with widths and lengths as required to fully bridge space between framing members. All butt joints to be taped.
- B. If attached to wood studs, place staples no further than 8" apart. For batts installed between roof joists, provide mesh or wire supports as required to prevent insulation from sagging.
- C. Tape all seams between faced batts.

**SECTION 07 21 00
BUILDING INSULATION**

- D. Place insulation and vapor barrier to outside of pipes to prevent freezing and fit neatly around and behind electrical boxes.
- E. Install insulation with vapor retarder toward the heated side of the wall.
- F. Acoustical Batt Insulation: Provide sound attenuation blanket at wall and ceiling locations shown on Drawings and listed herein in such a manner as to provide complete acoustic isolation:
 - 1. All floor/ceiling assemblies.
 - 2. All shaft walls.
 - 3. All restroom walls.
 - 4. All corridor walls.
 - 5. All elevator shaft walls.
 - 6. At other locations shown on the Drawings.

3.3 AIR SEALING MEASURES

- A. Install air-sealing measures as required to create an air barrier system. The following items are general guidance to achieving an air barrier system.
 - 1. Prior to framing, install sill sealer gasket at all exterior wall and party/common wall locations.
 - 2. Following framing per Section 06 10 00, the following areas shall be air sealed:
 - a. Air-seal with spray foam all wall penetrations of exterior sheathing. This may include electrical boxes, pipes, ducts, etc.
 - b. Air-seal with spray foam around all exterior wall and party/common wall top plates and rim joists.
 - c. All double stud walls shall be blocked and air-sealed at each floor level.
 - d. Air-seal with spray foam at all party/common wall to roof sheathing joint.
 - 3. See Drawings for additional air-sealing measures.

3.4 CLEARANCES

- A. Insulation shall not be installed within 3 inches of a recessed light fixture, ballast or other heat-generating electrical device, and shall not be so installed above the device as to entrap heat and prevent the free circulation of air unless the fixture is otherwise approved for the purpose. **Verify with Electrical Lighting Fixture Schedule that all effected fixtures are IC/DC rated for direct contact of insulation.**
- B. Insulation shall not be installed within 3 inches of any metal chimney gas vent or hood. A permanent sleeve of fine wire mesh screen, sheet metal, or other non-combustible material, shall be installed to maintain the required clearances.
- C. Insulation shall not be installed in a manner that would obstruct opening required for attic ventilation. Install insulation baffles where necessary to maintain attic ventilation.

END OF SECTION

**SECTION 07 25 00
WEATHER RESISTIVE BARRIERS**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes all vapor barriers and retardants for use in wall assemblies requiring an independent exterior vapor barrier and under all interior slab-on-grade (SOG) construction.

1.2 RELATED SECTIONS

- A. Submittals Section 01 33 00
B. Flashing and Sheet Metal Section 07 60 00

1.3 QUALITY ASSURANCE

- A. Standards: Comply with standards specified herein and as listed in Section 01 42 19.

1.4 SUBMITTALS

- A. General: Comply with provision of Section 01 33 00.
B. Product Data: Submit the following information:
1. Complete materials list and samples of all items proposed to be furnished and installed under this Section.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Weather Resistive Barrier (WRB) – Walls
1. Water-resistant, vapor permeable, spunbonded polyethylene, air barrier sheet membrane, with code approved supporting test data for equal or better performance.
 - a. Primary WRB Tyvek, CommercialWrap.
 - b. Seam Tape Tyvek Tape
 - c. Spray Adhesive Per manufacturer
 - d. Sealant Adhesive Commercial Sealant
 - e. Fastener staple caps Per manufacturer
 2. Weather resistive barrier shall have a flame spread index of 25 or less and a smoke-development index of 450 or less as determined in accordance with ASTM E84 or UL 723.
 3. Manufacturer:
 - a. DuPont
- B. Flexible SAM Flashing (Ice and Water Shield)
1. Manufacturer:
 - a. Typical at window and door opngs: Protecto Wrap, PS45, 45 mil, cross laminated, high density polyethylene film, self-adhesive membrane, with aluminum foil facer.
 - b. Typical Thru Wall Flashing: Protecto Wrap, PW 100/40, 40 mil, cross laminated, high density polyethylene film, self-adhesive membrane.

SECTION 07 25 00
WEATHER RESISTIVE BARRIERS

- c. Ice and Water Shield: Protecto Wrap, Jiffy Seal Ice & Water Guard HT Butyl, 30 mil, tri-layer, woven polyolefin fabric, butyl adhesive, self-adhesive membrane.
 - d. High Temp (under metal flashing): Protecto Wrap, Protecto BT20XL Butyl, 20 mil, cross laminated, high density polyethylene film, self-adhesive membrane.
- C. Wall Penetration Flashing
- 1. Pre-manufactured flashing panel for plumbing, electrical and HVAC penetrations with weatherproof seals.
 - a. Quickflash
 - b. Or approved equal.

PART 3 EXECUTION

3.1 INSTALLATION

- A. WRB - Walls
- 1. In general, install WRB underlayment over ALL exterior sheathing materials on walls to provide a vapor breathable, air barrier, waterproof skin from top to bottom of building.
 - 2. Install WRB starting at bottom of wall, overlapping into rough openings, and per Drawings.
 - 3. Layers:
 - a. Frame Walls: (1) layer (lapping 6 inches horizontally and 12 inches vertically)
 - b. Corner wrap: Continuous –OR- Double layer, lapping corner a minimum of 24" each side.
 - c. Corner reinforcing: (1) layer 12" wide SAM at all inside and outside corners. (6" each wall face measured from the corner). See 3.1, C below.
 - d. Roofs (field): (1) layer primary WRB
 - e. Roof Transitions: (1) layer secondary WRB – lap per manufacturer's recommendation. Extend a minimum 36" each side of valley, hip ridge, edge and sidewalls.
 - 4. Opening Protection:
 - a. Install per manufacturer's instructions and as detailed on Drawings in all door and window rough openings. Install in coordination with window manufacturer's window installation instructions ensuring proper weather lapping.
 - 5. Tape all lapped joints per manufacturer's instructions to create a continuous air barrier.
- B. Flexible SAM Flashing (Ice and Water Shield)
- 1. Install per manufacturer's instructions in all door, window and

SECTION 07 25 00
WEATHER RESISTIVE BARRIERS

- miscellaneous rough openings.
- 2. Also install in locations shown on drawings.

3.2 AIR SEALING MEASURES

- A. Install air-sealing measures as required to create an air barrier system. The following items are general guidance to achieving an air barrier system.
 - 1. Following installation of WRB as specified herein, the following areas shall be air sealed:
 - a. WRB to foundation wall shall be sealed as indicated on the Drawings.
 - b. Tape all lapped joints of WRB when not a self-adhesive or liquid applied product.
 - c. Tape or cap all tears, cuts, and nail and/or staple holes in WRB.
 - d. Install all wall penetration flashing as specified herein. Tape all joints to WRB.
 - e. Apply SAM or liquid applied flashing from all window frames/flanges to WRB.
 - 2. See Drawings for additional air-sealing measures.

END OF SECTION

**SECTION 07 46 23
WOOD SIDING**

PART 1 GENERAL

- 1.1 DESCRIPTION
- A. Work Included: Provide all wood exterior siding at locations shown on Drawings.
- 1.2 RELATED WORK SPECIFIED ELSEWHERE
- | | |
|-------------------------------|------------------|
| A. Submittals | Section 01 33 00 |
| B. Finish Carpentry | Section 06 20 00 |
| C. Weather Resistive Barriers | Section 07 25 00 |
| D. Flashing and Sheet Metal | Section 07 60 00 |
| E. Sealants | Section 07 90 00 |
| F. Painting | Section 09 90 00 |
- 1.3 QUALITY ASSURANCE
- A. Standards: Comply with standards specified in this Section and as listed in Section 01 42 19.
- B. Western Red Cedar Lumber Association (WRCLA)
- C. American Plywood Association (APA); publications PS1, 303 siding and Engineered Wood Construction Guide.
- 1.4 SUBMITTALS
- A. General: Comply with provisions of Section 01 33 00.
- B. Submit (3) three 12-inch lengths of siding in specified species and profile.
- 1.5 DELIVERY, STORAGE AND HANDLING
- A. Provide wrapping or coating to protect surfaces.

PART 2 PRODUCTS

- 2.1 MATERIALS
- A. Horizontal Bevel Siding:
- | | |
|---------------------|--|
| 1. Type: | Western Red Cedar, WRCLA grade and texture to match existing, kiln dried, mixed grain. Finished per Section 09 90 00. |
| 2. Fasteners: | |
| a. Concealed Nails: | 7d minimum, 2 1/4", stainless steel, splittless blunt point, ring shank siding nails. Verify minimum 1 1/4" penetration of substrate. |
| b. Face Nails: | 7d minimum, 2 1/4", Type 316 stainless steel, finish nail. Verify minimum 1 1/4" penetration of substrate. (Used only at last board installation where concealed nailing cannot be used) |
- B. Weather resistive barrier: See Section 07 25 00.
- C. Sealants: See Section 07 90 00.
- D. Flashing: See Section 07 60 00
- E. Edge sealing / Pre-staining: Primer/Sealer compatible with section 09 90 00.
- F. Trim Lumber: See Section 06 20 00.

SECTION 07 46 23
WOOD SIDING

PART 3 EXECUTION

3.1 PRE-STAINING & EDGE SEALING

- A. Apply one coat of primer/sealer to all surfaces of wood siding prior to installation. Coordinate primer/sealer coat with the requirements of Section 09 90 00.

3.2 PREPARATION

- A. Install weather resistive barrier on all walls per Section 07 25 00.
- B. Install rain screen spacer wall furring per Drawings.
- C. Install insect screen at all locations necessary to restrict the entry of insects to the furring cavity.
- D. Install all flashing and sheet metal per Section 07 60 00.

3.3 INSTALLATION (Horizontal Tongue and Groove)

- A. Install siding per WRCLA publication "How to Install Western Red Cedar Siding".
- B. Boards 6" and less in width shall be blind nailed. Boards over 6" in width shall be face nailed.
- C. Outside corners to be **mitered**.
- D. All cut ends shall be primed or pre-sealed prior to installation.

3.4 FINISHING

- A. Finish all installed siding per Section 09 90 00.

END OF SECTION

SECTION 07 51 01
BUILT-UP BITUMINOUS ROOFING MODIFICATIONS

PART 1 GENERAL

1.1 DESCRIPTION

- A. Work in this Section includes modifications to the existing built-up bituminous roofing system for all rooftop mounted equipment and other modifications required by this project.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
B. Flashing and Sheet Metal Section 07 60 00

1.3 QUALITY ASSURANCE

- A. Standards: Comply with standards specified herein and as listed in Section 01 42 19.

1.4 SUBMITTAL

- A. General: Comply with provision of Section 01 33 00.
B. Product Data: Submit the following information:
1. Complete materials list and samples of all items proposed to be furnished and installed under this Section.
2. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements.
3. Manufacturer's recommended installation procedures. The manufacturer's recommended installation procedures, when reviewed by the Architect, will become the basis for inspecting and accepting and rejecting actual installation procedures used on the Work.

1.5 GUARANTEE

- A. Manufacturer's warranty: Original warranty issuer's written confirmation that work/modifications completed under this project will maintain the original warranty and cover subsequent work under this project.
B. Installers warranty: Provide, as part of the roofing bid, a guarantee of the roof modifications for a period of two (2) years from the date of acceptance of the roof. Guarantee to cover any defects in the materials or workmanship and to provide for repair and/or replacement (labor and materials) of any leaks, cracks or otherwise defective areas within the limits of the modification work under this project.

PART 2 PRODUCTS

2.1 GENERAL

- A. All materials and work shall conform to the original roofing specifications and installation details.
B. Roof Accessories:
1. Perimeter Cap and Drip flashings: See Section 07 60 00.
2. Cant Strips: Molded Perlite per ASTM C 728. FesCant Plus.
3. Pipe penetration boots.
4. Other: As required for roof installation.

SECTION 07 51 01
BUILT-UP BITUMINOUS ROOFING MODIFICATIONS

PART 3 EXECUTION

3.1 PREPARATION FOR INSTALLATION

- A. Project Conditions:
 - 1. Roofing materials shall not be applied unless proper asphalt application temperatures (approximately 400 degrees F.) Can be maintained. Nor shall materials be applied when water in any form (i.e. rain, dew, ice, frost, snow, etc.) is present on the deck.
 - 2. The roof deck shall be structurally sound to support the live and dead load requirement of roofing system and sufficiently rigid to support construction traffic.
 - 3. Fill joints between roof decking greater than ½" wide.
 - 4. Cleaning: Thoroughly clean roof deck.
- B. Coordination: Properly coordinate with all other trades as required to ensure adequate provision for anchorage of the work of this Section and for proper interface with the work of all other trades.
- C. Notify General Contractor and Architect of any conditions limiting the satisfactory performance of the roofing installation.

3.2 INSTALLATION

- A. Cant Strips
 - 1. Verify installation of cant strips at all junctures of vertical and horizontal surfaces.
- B. Inter Ply Installation
 - 1. Install membrane materials in accordance with manufacturer's current published application instructions.
 - 2. At parapets and roof penetrations, interplys up wall a minimum 10".
 - 3. Set roofing plies in solid nominal uniform rate of hot bitumen in accordance with system and slope requirements.
 - 4. Place plies with exposure as determined by number of plies, and depicted by manufacturer's published details and drawings.
- C. Surfacing
 - 1. Install bitumen and mineral cap sheet per manufacturer's specifications.
 - 2. Install ¾" thickness of loose ballast material over cap sheet where indicated on Drawings.
- D. Base Flashing
 - 1. After built-up roof has been installed, install SBS elastomeric base flashing per manufacturer's printed instructions.
 - 2. Flashing to extend a minimum of 6-inches vertically above top of cant strip and beyond bottom of cant strip onto cap sheet. Nail top at 6 inches on center and cover with flashing.
 - 3. Secure the SBS elastomeric flashing material with asphalt of a sufficient temperature to melt the bitumen and to ensure full adherence of the material to the cap sheet.

3.3 FIELD QUALITY CONTROL

- A. Guarantee Inspection
 - 1. The installation of the roof is to be supervised and/or reviewed by the manufacturer's representative to satisfy the terms of the Guarantee.

SECTION 07 51 01
BUILT-UP BITUMINOUS ROOFING MODIFICATIONS

END OF SECTION

**SECTION 07 60 00
FLASHING AND SHEET METAL**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes furnishing and installing:
 - 1. Flashings: Metal, plastic, or laminated sheets used in walls, or as flashing at perimeter of roofing, curbs, cants, equipment, supports, and at other roof penetrations.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Weather Resistive Barriers Section 07 25 00
- C. Sealants Section 07 90 00

1.3 STANDARDS

- A. Galvanized Steel Sheet Metal: ASTM A-653, latest revision.
- B. Lead Sheet: ASTM B-749, latest revision.
- C. Solder: ASTM E-32, latest revision.
- D. SMACNA Architectural Sheet Metal Manual.

1.4 QUALITY ASSURANCE

- A. Standards: Comply with standards specified herein and as listed in Section 01 42 19.
- B. Qualifications of manufacturers: All products used in the work of this Section shall be produced by one manufacturer, regularly engaged in the reputable manufacture of similar items.

1.5 SUBMITTALS

- A. Submit shop drawings describing all flashing and sheet metal conditions per the requirements of Section 01 33 00.

1.6 WARRANTY

- A. A two (2) year written warranty shall be furnished for material and workmanship of all parts of building to be made watertight with sheet metal work under normal usage.
- B. Repair any leaks that may occur at sheet metal work without cost to the Owner.
- C. Warranty shall commence on the date of Substantial Completion.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Sheet Metal Materials:
 - 1. Prefinished Steel Flashing: Roll-formed sheet steel per ASTM A525; 24 gage, u.n.o. on Drawings; with 1.25 oz./sq.ft. G90 galvanized coating. Factory pre-finished with Kynar 500 or Hylar 5000, factory baked silicon-polyester enamel.
- B. Flexible Flashing: See Section 07 25 00.
- C. Related Materials:
 - 1. Penetrations: Pipe and conduit penetrations through

SECTION 07 60 00
FLASHING AND SHEET METAL

- roofing to be sealed with an elastomeric preformed or malleable 3lb. lead sheet flashing collar compatible with roofing material.
2. Screws and Bolts: Stainless steel.
 3. Mastic: Cold-application, flashing cement, compatible w/roofing system.
 4. Bituminous Paint: ASTM NA-TAZ .007, Pure Asphalt Company, Chicago, Illinois, or equal, for use where dissimilar metals are in contact or the flashing is within 6" of the ground. Acid and alkali resistant.
 5. Solder: ASTM B 32, Grade Sn60.
 6. Other materials: Provide all other materials, not specifically described, but required for a complete and proper installation of this work, shall be new, first quality, of their respective kinds.

PART 3 EXECUTION

3.1 FABRICATION / INSTALLATION

- A. General
1. Form all sheet metal accurately and to the dimensions and shapes required, finishing all molded and broken surfaces with true, sharp, and straight lines and angles and, where intercepting other members, coping to an accurate fit, soldering securely.
 2. Form sections square, and accurate to profile, in maximum possible lengths, free from distortion and other defects detrimental to appearance of performance.
 3. Hem exposed edges of flashings minimum 1/2 inch on underside.
 4. Apply bituminous paint on concealed surfaces of flashings.
 5. Where indicated on Drawings, factory pre-form, solder and finish flashing and sheet metal fabrications.
- B. Installation
1. Install flashings in accordance with manufacture's instructions, and SMACNA Architectural Sheet Metal Manual requirements.
 2. Provide all required backing and support necessary for a complete and watertight installation.
 3. Weather lap joints minimum 4 inches and seal with sealant.
 4. Flash and seal work projecting through or mounted on roofing with sealant. Provide weathertight installation.
 5. Place eave edge and gable edge flashing tight with fascia boards, weather lap joints 4 inches and seal with plastic cement.
- C. Expansion
1. Form, fabricate and install all sheet metal so as to adequately provide for expansion and contraction of the finished work.
- D. Weatherproofing
1. Finish watertight and weathertight where so required.
 2. Make all lock seam work flat and true to line, sweating full of solder.

SECTION 07 60 00
FLASHING AND SHEET METAL

3. Make all lock seams and lap seams, when soldered, at least 1/2" wide.
 4. Where lap seams are not soldered, lap according to pitch, but in no case less than 3".
 5. Make all flat and lap seams in direction of flow.
- E. Joints
1. Join parts with rivets or sheet metal screws where necessary for strength or stiffness.
 2. Provide suitable watertight expansion joints for all runs of more than 40' except where closer spacing is indicated on the Drawings or required for proper installation.
- F. Nailing
1. Whenever possible, secure metal by means of clips or cleats without nailing through the metal. When fastening, place fastener 1" from top edge of flashing.
 2. Space all nails, rivets, and screws not more than 8" apart and, where exposed to the weather, use lead washers.
- G. Embedment
1. Embed all metal in connection with roofs in a solid bed of sealant, using materials and methods described in Section 07 90 00.

END OF SECTION

**SECTION 07 72 13
ATTIC ACCESS LADDERS**

PART 1 GENERAL

- 1.1 DESCRIPTION
 - A. Work in this Section includes furnishing and installation of prefabricated roof hatches and access ladders.
- 1.2 RELATED WORK SPECIFIED ELSEWHERE
 - A. Submittals Section 01 33 00
- 1.3 QUALITY ASSURANCE
 - A. Standards: Comply with standards specified herein and as listed in Section 01 42 19.
- 1.4 SUBMITTAL
 - A. Comply with provisions of Section 01 33 00.
 - B. Product data:
 - 1. Manufacturer's specifications, fabrication drawings and other data required to demonstrate compliance with specified requirements.
 - 2. Manufacturer's comprehensive installation instructions.
- 1.5 STANDARDS
 - A. Applicable standards of Occupational Safety & Health Administration (OSHA).
 - 1. Products and installation under this section shall conform to current OSHA standards.

PART 2 PRODUCTS

- 2.1 MATERIALS
 - A. Pull-Down Attic Access Ladder:
 - 1. Manufacturer: Werner
 - 2. Model: AH2510
 - 3. Compliance: OSHA compliant.

PART 3 EXECUTION

- 3.1 INSTALLATION
 - A. Provide all in-wall blocking as required for installation.
 - B. Install in strict conformance with manufacturer's printed instructions and all code regulations.

END OF SECTION

**SECTION 07 84 13
THROUGH PENETRATION FIRESTOPPING**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this section describes the requirements various firestopping systems used to seal miscellaneous penetrations through rated construction assemblies to the passage of heat, smoke and fire.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Sealants Section 07 90 00

1.3 QUALITY ASSURANCE

- A. Comply with standards specified herein and as listed in Section 01 42 19.

1.4 STANDARDS

- A. Firestopping system shall be an integrated system from one manufacturer and carry an ICC/ICBO or UL approval for the rating required and the condition for which it is intended.
- B. Underwriters Laboratories fire resistance directory.

1.5 SUBMITTALS

- A. Comply with provisions of Section 01 33 00.
- B. Product data:
 - 1. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements and UL ratings.
 - 2. Manufacturer's comprehensive installation instructions and details.
 - 3. Material safety data sheets.
 - 4. ICC/ICBO Evaluation Reports.

PART 2 PRODUCTS

2.1 GENERAL

- A. This Specification is written based on the use of "HILTI" products unless otherwise noted. Alternate products will be considered when submitted in accordance with Section 01 25 00.
- B. Each class of firestopping shall be the product of a single manufacturer.

2.2 COMPONENTS

- A. Unfaced Mineral Wool Fire Safing Insulation.
 - 1. Industry Standard: ASTM C665, Type I.
 - 2. Minimum Density: 4.0 pounds per cubic foot.
 - 3. Fire Rating: ASTM E84, Class I, FS 15, Smoke Dev. 0.
 - 4. Manufacturer/Model: USG Thermafiber Safing Insulation.
- B. Intumescent Firestopping Caulks, Mortars, Sheets, Wrap strips, and collars:
 - 1. Intumescent Materials: Capable of expanding between 5 to 10 times original sized when exposed to high temperatures with expansion beginning at 250 degrees F.
 - 2. Building Code Approvals: ICC/ICBO Evaluation reports and listing in UL Fire Resistance Directory for intended application and rating.
 - 3. Fire Ratings: As required for F & T through penetration rating required for

**SECTION 07 84 13
THROUGH PENETRATION FIRESTOPPING**

- assembly rating shown on Drawings.
4. General Purpose Firestop Caulking:
 - a. Use: Miscellaneous small metallic and non-metallic penetrations through masonry, concrete, drywall & wood wall and floors.
 - b. Type: One component water based intumescent acrylic dispersion.
 - c. Shore A hardness +/- 35.
 - d. Joint movement range: +/- 5%.
 - e. Expansion rate: 3-5 x original volume.
 - f. Manufacturer/Model: Hilti FS-One High Performance Sealant.
 5. Elastomeric Firestop Sealant: (Silicone)
 - a. Use: Wall and floor construction expansion joints to 3".
 - b. Type: One component silicone based.
 - c. Joint movement range: +/- 25%.
 - d. Manufacturer/Model: Hilti CP 601S Sealant.
 6. Flexible Firestop Sealant: (Acrylic)
 - a. Use: Wall and floor construction expansion joints to 3".
 - b. Type: One component acrylic based.
 - c. Joint movement range: +/- 10%.
 - d. Manufacturer/Model: Hilti CP 606 Sealant.
 7. Trowelable Firestop Compound:
 - a. Use: Medium to large openings with non-combustible pipe or cable.
 - b. Type: Cement based mortar.
 - c. Compressive strength: 360 psi.
 - d. Manufacturer/Model: Hilti FS 635.
 8. Intumescent Flexible Blocks:
 - a. Use: Medium to large wall or floor openings with combustible or non-combustible pipe or cable penetration.
 - b. Type: Two component polyurethane foam blocks.
 - c. Expansion rate: 3-5 x original volume.
 - d. Manufacturer/Model: Hilti FS 657.
 9. Firestop Collars with Intumescent Inserts:
 - a. Use: Combustible pipe wall and floor penetrations up to 10" diameter.
 - b. Type: Galvanized steel housing with intumescent inserts.
 - c. Manufacturer/Model: Hilti CP 643 & CP 642.
- C. Foil Faced Mineral Wool Fire Safing Insulation.
1. Industry Standard: ASTM C665, Type I, III (Class A, Category 1).
 2. Minimum Density: 4.0 pounds per cubic foot.
 3. Fire Rating: ASTM E84, Class I, FS 25, Smoke Dev. 0.
 4. Manufacturer/Model: Owens Corning Thermafiber FireSpan 40, Mineral Wool Insulation.

2.3 RELATED PRODUCTS

- | | |
|-----------------------|---|
| A. Primer: | As recommended by manufacturer for each product. Nonstaining. |
| B. Joint Cleaner: | As recommended by sealant manufacturer. |
| C. Backing Materials: | As recommended by sealant |

**SECTION 07 84 13
THROUGH PENETRATION FIRESTOPPING**

- D. Bond preventative Material: manufacturer for each product.
Nonabsorbent and nonstaining.
As recommended by sealant manufacturer for each product.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install in strict accordance with manufacturer's printed instructions, applicable UL assembly, and ICC/ICBO report to achieve at least the minimum through-penetration rating required by prevailing code for rated assembly penetrated.
- B. Joints greater than 3/8" in depth to receive backer rod.
- C. Cleaning: Clean joint surfaces, using joint cleaner as necessary to be free of dust, dirt, oil, grease, rust lacquers, latence, release agents, moisture, or other matter which might adversely affect adhesion of sealant.
- D. Priming: Apply primer, following manufacturer's instructions when required for joint condition.
- E. Apply sealants in joints that are completely dry and free of moisture using pressure gun with nozzle cut to fit joint width. Make sure sealant is deposited in uniform, continuous beads without gaps or air pockets.
- F. Provide complete sealing of all joints, both interior and exterior, where preventing the penetration of fire is required.
- G. Install putty pad or similar device at all electrical boxes located within fire rated building assemblies. Install per manufacturer's instructions.

3.2 CLEANING

- A. Remove excess materials adjacent to joints to eliminate evidence of spillage or damage to adjacent surfaces.
- B. Leave finished work in neat, clean condition with no evidence of spillovers onto adjacent surface.

END OF SECTION

SECTION 07 90 00
SEALANTS

PART 2 PRODUCTS

2.1 GENERAL

- A. Sealants shall be of the highest available grade for each product type meeting the minimum standards listed below. **Sealant installer shall verify suitability of each type for intended application and bonding substrate.** Notify architect of unsuitable conditions prior to application.
- B. Color of sealant to match adjacent finish. Each color and each class of sealant shall be the product of a single manufacturer.
- C. When available, sealants shall be low VOC per the requirements of Section 01 61 16.

2.2 JOINT SEALANTS - Interior or exterior (unless noted otherwise)

- A. Elastomeric Sealants:
 - 1. "Type ES-A" (for pedestrian and light -traffic bearing horizontal surfaces):
 - a. Type: Type S, one component or type M, two component.
 - b. Standard: ASTM C920, Class 25, Grade P, self-leveling.
 - c. Composition: Polyurethane.
 - d. Shore A hardness: 15 to 45.
 - e. Joint movement range: +/- 25%
 - 2. "Type ES-B" (for precast and masonry panel vertical joints)
 - a. Type: Type S, one component or type M, two component.
 - b. Standard: ASTM C920, Class 25, Grade NS, non-sag.
 - c. Composition: Polyurethane.
 - d. Shore A hardness: 15 to 50.
 - e. Joint movement range: +/- 25%
 - 3. "Type ES-C" (General purpose vertical joints)
 - a. Type: Type S, one component.
 - b. Standard: ASTM C920, Class 25, Grade NS, non-sag.
 - c. Composition: Polyurethane.
 - d. Shore A hardness: 15 to 50.
 - e. Joint movement range: +/- 25%
 - 4. "Type ES-D" (to join and seal glass, plastic, metal alloys, aluminum)
 - a. Type: Type S, one component.
 - b. Standard: ASTM C920, Class 25, Grade NS, non-sag.
 - c. Composition: Low modulus neutral cure silicone.
 - d. Shore A hardness: 15 to 20.
 - e. Joint movement range: +100 to -50%
 - 5. "Type ES-E" (for sealing sanitary locations)
 - a. Type: Type S, one component.
 - b. Standard: ASTM C920, Class 25, Grade NS, non-sag.
 - c. Composition: Mildew resistant silicone
 - d. Shore A hardness: 20 to 30.
 - e. Joint movement range: +/- 25%
 - 6. "Type ES-F" (for fiber cement siding joints)
 - a. Type: Type S, one component.
 - b. Standard: ASTM C920, Class 25, Grade NS, non-sag.
 - c. Composition: Silyl-terminated polyether.
 - d. Shore A hardness: 15 to 20.

**SECTION 07 90 00
SEALANTS**

- e. Joint movement range: +/- 50%
- 7. "Type ES-G" (for air sealing at doors and windows)
 - a. Type: Type S, one component.
 - b. Standard: ASTM C920, Class 25, Grade NS, non-sag.
 - c. Composition: Silyl-terminated polyether.
 - d. Shore A hardness: 15 to 20.
 - e. Joint movement range: +/- 25%
- 8. "Type ES-H" (for flashing lap joints)
 - a. See Section 07 60 00.
- B. Elastomeric adhesive/sealers:
 - 1. "Type EA-A" (General purpose adhesive - wood, metal, FRP, plastic)
 - a. Type: Type S, one component or type M, two component.
 - b. Standard: ASTM C920, Class 25, Grade NS, non-sag.
 - c. Composition: Polyurethane.
 - d. Shore A hardness: 15 to 50.
 - e. Joint movement range: +/- 25%
- C. Caulks:
 - 1. "Type C-1" (Thresholds and neoprene gaskets)
 - a. Type: one component.
 - b. Standard: AAMA 808.3.
 - c. Composition: Butyl Rubber.
 - d. Joint movement range: +/- 5%
 - 2. "Type C-2" (General purpose interior vertical joints)
 - a. Type: one component.
 - b. Standard: ASTM C736
 - c. Composition: Acrylic latex.
 - d. Joint movement range: +/-7.5%.
 - e. Recovery: 75% per ASTM C736
 - 3. "Type C-3" (Acoustical caulking - interior)
 - a. Type: one component
 - b. Standard: ASTM C919 & C834
 - c. Composition: Non-hardening polyisobutylene rubber.
 - 4. "Type C-4" (Fire stop caulking - general purpose small penetrations)
 - a. Type: one component
 - b. Standard: UL rated for intended application (verify with manuf.)
 - c. Composition: Water based intumescent acrylic dispersion.
 - d. Shore A hardness: +/-35.
 - e. Joint movement range: +/- 5%.
 - f. Intumescent activation: +/- 250 deg. F.
 - g. Expansion rate: 3-5x original volume.
 - h. Manufacturer/Model: Hilti FS-One High Performance Sealant

2.3 RELATED PRODUCTS

- A. Primer: As recommended by manufacturer for each product. Non-staining.
- B. Joint Cleaner: As recommended by sealant manufacturer.
- C. Backing Materials: As recommended by sealant manufacturer for each product. Non-absorbent and non-staining.
- D. Bond preventative Material: As recommended by sealant manufacturer

SECTION 07 90 00
SEALANTS

for each product.

PART 3 EXECUTION

3.1 PREPARATION

- A. Remove all existing sealants from all existing joints in preparation for new sealants.

3.2 INSTALLATION

- A. Install in strict accordance with manufacturer's printed instructions.
- B. Maximum joint width shall be 3/8" unless otherwise noted on the Drawings. Joints greater than 5/8" in width shall be approved by the Architect prior to construction.
- C. Joints greater than 3/8" in depth to receive backer rod, unless otherwise directed by sealant manufacturer joint width to depth ratio.
- D. Cleaning: Clean joint surfaces, using joint cleaner as necessary to be free of dust, dirt, oil, grease, rust lacquers, laitance, release agents, moisture, or other matter which might adversely affect adhesion of sealant.
- E. Priming: Apply primer, following manufacturer's instructions when required for joint condition.
- F. Apply sealants in joints that are completely dry and free of moisture using pressure gun with nozzle cut to fit joint width. Make sure sealant is deposited in uniform, continuous beads without gaps or air pockets.
- G. Tool joints to required configuration within 10 minutes of sealant application. If masking materials are used, remove immediately after tooling.
- H. Provide complete sealing of all joints, both interior and exterior, where preventing the penetration of moisture, air, fire or sound is required, including, but not limited to:
 - 1. Exterior pavement joints
 - 2. Exterior building wall joints
 - 3. Flashing and coping joints
 - 4. Misc. construction joints
 - 5. Interior floor, wall and ceiling joints
 - 6. Utility penetrations
 - 7. Sound walls
 - 8. Fire walls and shafts
 - 9. Wall flashing joints
 - 10. Equipment and isolation joints
 - 11. Food service cabinets and permanent equipment to walls.

3.3 AIR SEALING MEASURES

- A. Install air-sealing measures as required to create an air barrier system. The following items are general guidance to achieving an air barrier system.
 - 1. Following installation of wall board per Section 09 29 00, the following areas shall be air sealed:
 - a. Air-seal with caulk around all wall penetrations of gypsum wallboard. This may include switches, receptacles, pipes, ducts, wall heaters, doorbells, medicine cabinets, fire extinguisher cabinets, etc.

SECTION 07 90 00
SEALANTS

- b. Air-seal with caulk around all ceiling penetrations of gypsum wallboard. This may include light fixtures, fans, smoke alarms, fire sprinklers, ducts, pipes, etc.
- 2. See Drawings for additional air-sealing measures.

3.4 **CLEANING**

- A. Remove excess materials adjacent to joints to eliminate evidence of spillage or damage to adjacent surfaces.
- B. Leave finished work in neat, clean condition with no evidence of spillovers onto adjacent surface.

END OF SECTION

DIVISION 8**DOORS AND WINDOWS**

08 14 00	Wood Doors & Frames
08 34 00	Access Doors
08 40 00	Aluminum Entrances and Storefronts
08 51 13	Aluminum Windows
08 56 19	Interior Transoms Windows
08 62 23	Tubular Skylights
08 71 00	Finish Hardware
08 80 00	Glass & Glazing

SECTION 08 14 00
WOOD DOORS & FRAMES

PART 1 GENERAL

1.1 DESCRIPTION

- A. Work in this Section includes doors and frames of wood and wood product construction with facing materials of wood veneers, wood products and metal and plastic laminate. All doors shall bear the appropriate labels and certifications from their respective testing agencies, for the assembly in which it is installed.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- | | | |
|----|----------------------|------------------|
| A. | Submittals | Section 01 33 00 |
| B. | Special Requirements | Section 01 61 16 |
| C. | Finish Hardware | Section 08 71 00 |
| D. | Glass & Glazing | Section 08 80 00 |
| E. | Painting | Section 09 90 00 |

1.3 QUALITY ASSURANCE

- A. Comply with the standard specified herein and listed in Section 01 42 19.
- B. Doors shall comply with applicable provisions of the Architectural Woodwork Standards (AWI) quality standards for Wood Doors or the Window and Door Manufacturers Association.
- C. Fire-rated doors shall comply with NFPA-80 requirements according to building code standards. Fire-rated doors shall be manufactured to U.L. standards and carry either U.L. or ITS/Warnock-Hersey label.
- D. Doors shall be fabricated to the standards of the Door Hardware Institute.

1.4 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.
- B. Product data:
1. Complete materials list of all items proposed to be furnished and installed under this Section.
 2. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements.
 3. Shop Drawings and sufficient dimensional data to enable coordination of installation of concealed items of support.
 4. Architectural Woodwork Standards (AWI) quality standards recommended installation procedures.
 5. Test Results to assure conformance with applicable standards.

1.5 ALLOWABLE TOLERANCES

- A. A maximum allowable warp or twist of doors shall be 1/4" using the WDMA testing method. Doors not meeting this requirement are subject to rejection.
- B. The allowable gap at jambs, head and meeting stiles shall be 3/32". Edges of both stiles shall be beveled 1/8" in 2".
- C. Size tolerances:
1. Thickness: +/-1/16 inch
 2. Length: +/-1/16 inch
 3. Widths: +/-1/16 inch
 4. Prefit widths: +/-1/32 inch
- D. Squareness Tolerance: diagonal measurement difference shall not exceed 1/8 inch.

SECTION 08 14 00
WOOD DOORS AND FRAMES

- E. Factory Hardware Preparation Tolerances:
 - 1. Hinges: +/-1/32 inch
 - 2. Lock cut outs: 0 - 1/32 inch
- F. Stile, rail and core telegraphing not acceptable.
- G. The sill undercut shall be 1/2" or as indicated on Drawings. 3/8" maximum clearance undercut for U.L. label doors.

1.6 WARRANTY

- A. Furnish a manufacturer's written warranty stating that all doors will be of good materials and workmanship and that doors will be warranted against excessive warpage as follows:
 - 1. Solid Core & Stile & Rail:
 - a. Interior installation - lifetime
 - b. Exterior installation - two (2) years
- B. Manufacturer's written warranty shall include rehanging and refinishing of doors.

1.7 COORDINATION

- A. Coordinate door preparation work with finish hardware and hollow metal frame supplier for items to be installed in doors so proper allowances can be made.

PART 2 PRODUCTS

2.1 GENERAL

- A. Wood doors shall be of the sizes, types and designs as shown on the Drawings.

2.2 DOORS

- A. Flush interior doors, solid core (Transparent finished):
 - 1. Grade: AWI Custom
 - 2. Thickness: 1-3/4"; 5 or 7-ply
 - 3. Glue: Type I, waterproof
 - 4. Core:
 - a. Non fire-rated: Particle board, no added urea-formaldehyde, bonded.
 - b. Fire-rated: Mineral fiber, bonded.
 - 5. Face skin: AWI, Grade C hardwood wood veneer. Match existing species.
 - 6. Edge Strips: 1-1/8" min. T&B, 1-3/8" Vert. Birch
 - 7. Glazing: Factory glaze per Section 08 80 00.
 - 8. Fire Rating: Per Drawings.
 - 9. Finish: Finish per Section 09 90 00. See Section 01 61 16 for VOC limits.
- B. Stile and Rail Doors, solid core (Opaque finished):
 - 1. Grade: AWI Custom
 - 2. Thickness: 1-3/4"; 5 or 7-ply
 - 3. Glue: Type I, waterproof
 - 4. Core:
 - a. Non fire-rated: Particle board, no added urea-formaldehyde, bonded.
 - b. Fire-rated: Mineral fiber, bonded.

SECTION 08 14 00
WOOD DOORS AND FRAMES

- | | | |
|----|--------------|---|
| 5. | Face Skin: | Paint grade Poplar or other sound, closed grain hardwood. |
| 6. | Edge Strips: | 1-1/8" min. T&B, 1-3/8" Vert. Birch |
| 7. | Glazing: | Factory glaze per Section 08 80 00. |
| 8. | Fire Rating: | Per Drawings. |
| 9. | Finish: | Finish per Section 09 90 00. See Section 01 61 16 for VOC limits. |

2.3 FRAME ASSEMBLIES

- | | | |
|----|----------------------------------|---|
| A. | Interior (transparent finished): | |
| 1. | Specie: | Match existing species. |
| 2. | Grade: | AWI, Grade C hardwood. |
| 3. | Profile: | As indicated on Drawings |
| 4. | Fire Rating: | Per Drawings. |
| 5. | Finish: | Finish per Section 09 90 00. See Section 01 61 16 for VOC limits. |
| B. | Exterior Wood (Opaque finished): | |
| 1. | Specie: | Paint grade Poplar or other sound, closed grain hardwood. |
| 2. | Profile: | As indicated on Drawings |
| 3. | Grade: | AWI Custom |
| 4. | Fire Rating: | Per Drawings. |
| 5. | Finish: | Paint per Section 09 90 00. See Section 01 61 16 for VOC limits. |

2.4 FIRE RATING

- | | |
|----|---|
| A. | Prepare fire rated doors and frames to meet requirements of NFPA 252 and NFPA 80, with Underwriters Laboratories, Inc., Warnock-Hersey International, and ICC evaluation report for fire rating indicated on Door Schedule. |
| B. | All fire rated doors and frames to bear permanently affixed label stating fire rating, meeting provisions of ICC/OSSC Section 715.3.5 and include "S" rating suffix signifying compliance as a smoke and draft requirements of UL 1784. |

PART 3 EXECUTION

3.1 FABRICATION

- | | |
|----|---|
| A. | Fabricate in strict accordance with the manufacturer's product data and as reviewed by the Architect. |
| B. | Manufacturer shall machine doors for specified hardware, with the exception of through-bolts, pilot holes for screws, and other similar drilling operations, in accordance with current recommendation and standards of the WDMA and the Door Hardware Institute. |
| C. | The utility or structural strength of the door must not be impaired in the fitting of the door, the application of hardware, or cutting and altering the doors for lights, louvers or other special details. |

3.2 PRODUCT DELIVERY, STORAGE AND HANDLING

- | | |
|----|--|
| A. | Deliver, store, protect and handle doors under provisions of WDMA and manufacturer's instructions. |
|----|--|

SECTION 08 14 00
WOOD DOORS AND FRAMES

- B. Do not store wood products in areas subject to direct sunlight.
- C. HVAC systems shall be operating prior to the delivery and storage of doors. Maintain relative humidity of not less than 25% nor greater than 55%.
- D. Store all doors and frames in horizontal flat position prior to installation.

3.3 INSTALLATION

- A. Initial Inspection of Doors: Prior to start of installation of each door, carefully inspect the door and verify:
 - 1. That the door furnished is the proper door for the opening, as described on the Door Schedule in the Drawings.
 - 2. That the door is in sound condition, unblemished, without warp, twist, bow or other attributes causing it to be rejected upon installation.
- B. Handling: Carry wood doors, do not drag them. Use extreme care in handling.
- C. Fitting: Trim all wood doors as necessary to provide a uniform clearance of between 1/8" and 3/16" at jambs and head, and a uniform clearance at the threshold or floor to properly clear the floor covering described on the Finish Schedule in the Drawings.
- D. Installing: For each door, verify the hardware type as described on the Door Schedule in the Drawings and verify that hardware actually supplied is the hardware specified. Using only the specified hinges or butts, and the proper equipment for the purpose, install the door into the opening with the following hinge or butt locations throughout the Work:
 - 1. Top hinge or butt: The center of the hinge or butt not more than 11" below the top of the door.
 - 2. Bottom hinge or butt: The center of the hinge or butt not more than 13" above the finish floor.
 - 3. Intermediate hinge: Equidistant between the top and bottom hinge, butt, or pivot.

3.4 FINISH PREPARATION

- A. Finish Preparation of Wood Doors: With fine sandpaper, working only in the direction of the grain of the wood, remove all rough edges resulting from door trimming and leave the installed door in condition to receive its final finish.

3.5 ADJUSTING AND CLEANING

- A. Adjust door hardware for smooth operation and compliance with Americans with Disabilities Act accessibility provisions.
- B. Clean all doors, frames and hardware.

END OF SECTION

SECTION 08 34 00
ACCESS DOORS

PART 1 GENERAL

1.1 DESCRIPTION

- A. At locations shown on Drawings or as required by access needs, provide wall or ceiling access doors.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
B. Painting Section 09 90 00

1.3 QUALITY ASSURANCE

- A. Comply with standards specified herein and as listed in Section 01 42 19.

1.4 SUBMITTAL

- A. General: Comply with provisions of Section 01 33 00.
B. Product data:
1. Complete materials list of all items proposed to be furnished and installed under this Section.
2. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements.
3. Shop Drawings and sufficient dimensional data to enable coordination of installation of concealed items of support.
4. Manufacturer's recommended installation procedures.
5. UL listing certification where required to be fire rated.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Manufacturer: Acudor Products, Inc., or approved equal.
B. Model:
1. Standard flush frame: UF-5000 / DW-5040 (drywall) / PS - 5030 (plaster)
2. Recessed frameless: AT-5020 / DW-5015 (drywall) / AP-5010 (Plaster)
3. Fire rated: FB-5060 / FB-5060-DW (Drywall)
C. Size: As required for application.
22" x 30" min. for full body access.
D. Door: Flush steel panel - minimum 16 gauge.
E. Frame: One piece outer steel flange welded to mounting frame.
F. Hinge: Continuous, concealed.
G. Lock: Cylinder key lock - master keyed.
H. Finish: Five (5) stage iron phosphate preparation with prime coat of white baked enamel.

PART 3 EXECUTION

**SECTION 08 34 00
ACCESS DOORS**

3.1 APPLICATION

- A. Provide access door type as appropriate for condition of installation and final appearance based on following general criteria:
1. General service access in non-public areas: Standard flush.
 2. Public areas: Recessed frameless.
 3. Fire rated assemblies: Fire rated.

3.2 INSTALLATION

- A. Install neat and square and in strict conformance with manufacturer's printed instructions.
- B. In all recessed frameless doors provide infill material to match adjacent surfaces.
- C. Provide two keys per door and five master keys.

END OF SECTION

SECTION 08 40 00
ALUMINUM ENTRANCES AND STOREFRONTS

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes the requirements for the aluminum storefront, entry and window system as indicated on the Drawings.
- B. Work in this Section includes bidder designed and engineered components.
 - 1. Bidder designed and engineered components include: all components.
 - 2. Manufacturer shall provide all engineering required; for final sizing to meet specifications, and code requirements of permit jurisdiction, and that system components are appropriate for intended application.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Bidder Designed Systems Section 01 33 50
- C. Joint Sealers Section 07 90 00
- D. Finish Hardware Section 08 71 00
- E. Glass and Glazing Section 08 80 00

1.3 QUALITY ASSURANCE

- A. Comply with standards specified herein and as listed in Section 01 42 19.
- B. AAMA Storefront and entrance guide specifications manual.

1.4 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.
- B. Product data: Submit the following information:
 - 1. Complete materials list of all items proposed to be furnished and installed under this Section.
 - 2. Sufficient data required to demonstrate compliance with all specified requirements.
 - 3. Shop Drawings of the entire installation.
 - 4. (3) 6" lengths of storefront section with specified finish and color.

1.5 PERFORMANCE REQUIREMENTS

- A. Minimum Design Wind Loads - ASCE 7, current edition.
 - 1. Building Risk Category: **II** (OSSC T1604.5)
 - 2. Ultimate design wind speed: **120 mph**.
 - 3. Wind Exposure Category: **B**.
 - 4. Wind Importance Factor: 1.0.
- B. Thermal performance: (per NFRC)
 - 1. Maximum U-Value: .45 or lower (.80 for entrance doors)
 - 2. Maximum SHGC: .40 or lower
- C. Weather performance:
 - 1. Air infiltration: Curtain wall, storefront glazing, swinging entrance doors and revolving doors shall be tested for air leakage at 1.57 pounds per square foot (psf) in accordance with ASTM E283.
 - a. Curtain wall, storefront glazing: Air leakage shall not exceed 0.06 cubic feet per minute per square

SECTION 08 40 00
ALUMINUM ENTRANCES AND STOREFRONTS

- b. Swinging entrance doors, revolving doors:
 - foot (cfm/ft²) of fenestration area.
 - Air leakage shall not exceed 1.00 cubic feet per minute per square foot (cfm/ft²) of door area.
- 2. Water infiltration:
 - No uncontrolled leakage when tested in accordance with ASTM E331 at test pressure of 8 psf.
- D. Structural performance:
 - 1. Exterior windows and hinged doors: Tested and labeled as conforming to AAMA/WDMA/CSA101/I.S.2/A440 or ASTM E330.
 - 2. Exterior sliding doors: Tested and labeled as conforming to AAMA/WDMA/CSA101/I.S.2/A440.

1.6 WARRANTY

- A. Manufacturer: Project specific, minimum five (5) year written warranty from material defects, including related glazing and caulking. Repair and replace defective materials within the warranty period at no expense to the Owner.
- B. Installer: Two (2) year water-tightness warranty. Repair and replace defective work within the warranty period at no expense to the Owner.
- C. Warranty shall be dated from date of contract's Substantial Completion.

PART 2 PRODUCTS

2.1 SYSTEM DESCRIPTION

- A. General
 - 1. All entrances and storefront for this work shall be the product of one manufacturer.
 - 2. Entrance and storefront design for this Work is based on products of Kawneer, and the numbers shown are Kawneer numbers. Products shall be those upon which design is based, or an equal submitted as a substitution in accordance with Section 01 25 00.
- B. Materials: provide aluminum extruded from 6063-T5 alloy.
 - 1. All materials, including secondary fasteners and accessories shall be aluminum or other non-corrosive material as recommended by manufacturer.
 - 2. Metals of different types shall be isolated using appropriate insulation materials in order to eliminate any electrolytic corrosive action.
- C. Standard Exterior Storefront and Windows:
 - 1. Framing System: Kawneer **Trifab VersaGlaze 451T**, center set, outside glazed, thermally broken, **2" x 4-1/2"**.
 - 2. Swing Doors: Kawneer 350, Medium Stile.
 - a. Vertical Stiles: 3-1/2"
 - b. Top Rail: 3-1/2"
 - c. Bottom Rail: 10"
 - 3. Flashing:
 - a. Flashing shall match storefront aluminum finish.
 - 4. Accessories: Manufacturer's standard as required for complete

SECTION 08 40 00
ALUMINUM ENTRANCES AND STOREFRONTS

- installation.
- 5. Hardware: See Section 08 71 00.
- D. Glazing: See Section 08 80 00.
 - E. Hardware:
 - 1. Provide hardware as indicated in Section 08 71 00. If no hardware is indicated in Section 08 71 00, provide the manufacturer's standard hardware fabricated from stainless steel material and of sufficient strength to perform its intended function and meeting CMBSO 1-79, CAWM 300/301. For application of hardware, use fasteners that match the finish of the hardware being fastened.
 - 2. Provide waterproof seals at all operating hardware assemblies penetrating frame.
 - F. Configurations:
 - 1. See Drawings for window types and configurations.
 - 2. Provide egress windows as indicated on the Drawings and as required by code.
- 2.2 ALUMINUM FINISH
- A. Typical: AAMA 611 Class I anodized; **Match existing color.**
- 2.3 OTHER MATERIALS
- A. All other materials, not specifically described but required for a complete and proper installation of storefront system shall be new, first quality of their respective kinds, and subject to review of the Architect.
- 2.4 PERFORMANCE
- A. Expansion and contraction of the extruded aluminum components shall be provided for throughout the system so as to eliminate any distortion, buckling, opening of the joints or other detrimental effects caused by an ambient temperature range of 125 degrees.
 - B. All window wall units shall be capable of safely supporting a uniformly distributed load according to data in published windload charts and the I.B.C.
 - C. Door corners shall be able to withstand a minimum of 2,000 pounds tension without noticeable deformation. Glass stops for doors shall be snap-on type, with non-stretch vinyl glazing beads. No screws shall be permitted.
 - D. Door jambs shall withstand 1600 # pressure in vertical distance of 3" and horizontal distance of 1" from strike so as to prevent violation.

PART 3 EXECUTION

- 3.1 FABRICATION
- A. General: Shop prefabricate all doors and frames into complete units, verifying all measurements at the job site prior to fabrication.
 - B. Workmanship:
 - 1. Fabricate in strict accordance with the approved Shop Drawings and the manufacturer's published recommendations.
 - 2. Accurately miter and fit all members to hairline joints.
 - 3. Weld or mechanically fasten along entire line of contact on the unexposed side.

SECTION 08 40 00
ALUMINUM ENTRANCES AND STOREFRONTS

- 4. No discoloration on the face after fabrication will be acceptable.
- C. Factory finish all components using manufacturer's standard factory application specifications for product specified.

3.2 **INSTALLATION**

- A. General: Install all members with adequate provision for settling, expanding, and contracting to occur without breaking glass.
- B. Anchoring: Firmly anchor all members, using all anchoring devices required to ensure positive attachment of the members for long life under hard use.
- C. Protection:
 - 1. Wherever aluminum is in contact with steel, concrete or other material potentially creative of electrolytic action, provide all required permanent isolation of the aluminum by back painting with first quality bituminous paint or by such other isolation as is recommended by the manufacturer.
 - 2. Protect all finished surfaces as necessary to prevent damage during progress of the work.

3.3 **AIR SEALING MEASURES**

- A. Install air-sealing measures as required to create an air barrier system. The following items are general guidance to achieving an air barrier system.
 - 1. Following installation of exterior storefront frame systems, apply an air-sealing bead of sealant around storefront frame inside and outside.
 - 2. See Drawings for additional air-sealing measures.

3.4 **CLEANING UP**

- A. General: Immediately prior to acceptance of the Work, remove all protective materials from the storefront system and clean all exposed members.
- B. Abrasives: Do not use abrasives or harmful cleaning agents.

END OF SECTION

SECTION 08 51 13
ALUMINUM WINDOWS

PART 1 GENERAL

1.1 DESCRIPTION

- A. The work described in this Section includes engineering and fabrication of thermally broken, tubular extruded aluminum windows for proper installation at locations shown on Drawings.
- B. Provide all aluminum windows and accessories, as shown on Drawings, specified herein, or needed for a complete and proper installation.
- C. Provide factory glazing of all new windows unless otherwise coordinated with General Contractor.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Weather Resistive Barriers Section 07 25 00
- C. Flashing and Sheet Metal Section 07 60 00
- D. Joint Sealers Section 07 90 00

1.3 QUALITY ASSURANCE

- A. Standards: Comply with standards specified in this Section and as listed in Section 01 42 19.
- B. Comply with General Requirements of AAMA/WDMA 101/IS2/A440-05(American Architectural Manufacturer's Association). Except to extent more stringent requirements are indicated.
- C. Windows to meet performance standards for:
 - 1. ASTM E 283 Test method for infiltration rate of air leakage through exterior windows, curtain walls, and doors under specified pressure differences across the specimen.
 - 2. ASTM E 330 Test method for structural performance of exterior windows, and doors by uniform static air pressure difference.
 - 3. ASTM E 331 Test method for water penetration of exterior windows, curtain walls, and doors by cyclic static air pressure difference.
- D. National Fenestration Rating Council (NFRC) U-value determination per 100-97 with amendment Jan. 1, 1999.
- E. Manufacturer's Published Data

1.4 PERFORMANCE REQUIREMENTS

- A. Minimum Design Wind Loads - ASCE 7-05.
 - 1. Building Category **II**. (OSSC)
 - 2. Wind Speed: **120 mph**.
 - 3. Wind Exposure Category: **B**.
 - 4. Wind Importance Factor: 1.0.
- B. Structural: Windows must meet the minimum Gateway Performance Requirements as established by AAMA/WDMA/CSA 101/I.S.2/A440-08 for the performance class listed.
 - 1. Minimum Performance Class / Performance Grade:
 - a. Bottom Awning **C-30**
- C. Thermal performance: (per NFRC)
 - 1. Maximum U-Value: .46 or lower
 - 2. Maximum SHGC: .40 or lower

SECTION 08 51 13
ALUMINUM WINDOWS

- 1.5 SUBMITTALS
 - A. General: Comply with provisions of Section 01 33 00.
 - B. Submit Manufacturer's Product Data and Shop Drawings showing all window types indicated on Drawings or required after field review.
 - C. (2) Extrusion samples in specified finish.
- 1.6 DELIVERY, STORAGE AND HANDLING
 - A. Provide strippable wrapping or coating to protect surfaces.
- 1.7 WARRANTY
 - A. Manufacturers 10 year "Commercial" warranty.

PART 2 PRODUCTS

- 2.1 MATERIALS
 - A. Aluminum:
 - 1. Windows shall be extruded, 0.060" thick, 6063-T5 tempered aluminum sections thermally broken between interior and exterior w/ integral polyurethane insulator.
 - 2. Frame section design shall be self flashing with a continuous nail flange for exterior installation over a framed rough opening.
 - B. Finish:
 - 1. Anodized, Class II factory-applied finish, minimum 0.4 mils thick.
 - 2. Color: **Match Existing**.
 - C. Glass and Glazing Materials:
 - 1. Provide the manufacturer's clear, sealed insulation glazing material that complies with ASTM E774 Class A, and required energy code thermal performance standard, and is at least 1" in overall thickness. Under no circumstances will a double glazing system incorporating a removable storm sash be allowed.
 - 2. Sash shall be factory glazed from the exterior by use of applied aluminum glazing beads w/ vinyl seal. The size of the bead shall accommodate the glass thickness.
 - 3. Spacer Bar: PPG Intercept warm-edge stainless steel spacer.
 - 4. Provide tempered safety glass on lites as designated on the Drawings or required by prevailing code.
 - D. Weatherstripping:
 - 1. All operating sash members shall be weatherstripped with manufacturer's standard method. Weatherstripping shall be replaceable without the use of special tools or skills.
 - E. Hardware:
 - 1. Provide the manufacturer's standard hardware fabricated from stainless steel material and of sufficient strength to perform its intended function and meeting CMBSO 1-79, CAWM 300/301. For application of hardware, use fasteners that match the finish of the hardware being fastened.
 - 2. Provide waterproof seals at all operating hardware assemblies penetrating frame.

SECTION 08 51 13
ALUMINUM WINDOWS

- 3. Provide opening limiting device as required by code.
 - F. Insect Screens:
 - 1. Provide removable insect screen panel black for each operable sash, with replaceable mesh and vinyl retainer spline.
 - G. Configurations:
 - 1. See Drawings for window types and configurations.
 - 2. Provide egress windows as indicated on the Drawings and as required by code.
- 2.2 ACCESSORIES
- A. Provide all weatherstripping, glazing and mounting accessories as needed to provide a complete installation in intended application.
 - B. All metal fasteners, hardware, etc. shall be stainless steel or approved equal.
- 2.3 ACCEPTED MANUFACTURERS
- A. Milgard Windows, Thermally Improved Aluminum

PART 3 EXECUTION

3.1 FABRICATION

- A. General
 - 1. Windows shall be constructed in a neat workmanlike manner. All corners of the frame and sash shall be precision mitered with rigid, mechanically fastened or welded joints.
 - 2. Fabricate window units to comply with indicated standards. Units shall be reglazable without dismantling sash framing.
- B. Pre-glazed Fabrication:
 - 1. Pre-glaze units at the factory for applications indicated.
- C. Factory Mullled:
 - 1. Provide factory engineered and fabricated mullions between multiple lights as required for configurations shown on Drawings.

3.2 INSTALLATION

- A. Comply with manufacturer's specifications and recommendations for installation of window units, hardware, operators, accessories, and other window components.
- B. Windows shall be factory sized to fit in each framed opening so that they are 2" smaller than the framed (rough) opening to allow 1/4" clearance on all sides (tolerance + - 1/16").
- C. Opening panels must be closed and locked during installation. All windows must be installed level, plumb, and square with 1/4" clearance on all sides with weep holes at bottom.
- D. Headers must not be nailed. Nail through fin into framing along sides and base. At the head, nails may be placed above fin per manufacturer's written instructions and bent down over fin to allow for header deflection. Full support is required along entire length of sill.
- E. Adjust operating sash and hardware to provide tight fit at contact points and weatherstripping. Lubricate hardware and moving parts.

**SECTION 08 51 13
ALUMINUM WINDOWS**

3.3 CLEANING

- A. Remove protective material from pre-finished surfaces.
- B. Wash down surfaces with solution of mild detergent in warm water, applied with soft, clean wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean.
- C. Do not use petroleum distillates.

END OF SECTION

SECTION 08 56 19
INTERIOR TRANSACTION WINDOWS

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section describes the requirements for interior sliding transaction window systems.
- B. Work in this Section includes bidder designed and engineered components.
 - 1. Bidder designed and engineered components include: all components.
 - 2. Manufacturer shall provide all engineering required; for final sizing to meet specifications, and code requirements of permit jurisdiction, and that system components are appropriate for intended application.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Bidder Designed and Engineered Systems Section 01 33 50
- C. Custom Cabinetwork Section 06 41 00
- D. Glazing Section 08 80 00

1.3 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.
- B. Product data: Submit the following information:
 - 1. Complete materials list of all items proposed to be furnished and installed under this Section.
 - 2. Sufficient data required to demonstrate compliance with all specified requirements.
 - 3. Shop Drawings of the entire installation.

PART 2 PRODUCTS

2.1 GENERAL

- A. General
 - 1. All sliding transaction window systems shall be the product of one manufacturer.
- B. Manufacturer
 - 1. Sliding transaction window systems design for this Work is based on products of C.R. Laurence Co., Inc., and the numbers shown are C.R. Laurence numbers. Products shall be those upon which design is based, or an equal submitted as a substitution in accordance with Section 01 25 00.

2.2 MATERIALS

- A. Sliding Transaction Window System:
 - 1. Manufacturer: C.R. Laurence Co., Inc.
 - 2. Model: CRL Deluxe Track Assembly #2301.
 - a. Configuration: Provide top and bottom track, recessed into finishes as detailed on the Drawings. No jambs required. Provide fixed sidelites with bi-parting operating leafs. See Drawings for locations, dimensions, configuration and operation.
 - 3. Track Material: 6063-T5 extruded aluminum with anodized

SECTION 08 56 19
INTERIOR TRANSACTION WINDOWS

- 4. Glass: finish.
1/4" thick laminated safety glazing GL-3 with flat polished edges. See Section 08 80 00.
- 5. Finish: **Satin Anodized.**
- 6. Locks: Provide CRL keyed_pin lock at bottom H-bar for all operable leafs. Keyed to match when multiple leafs within the same space.

2.3 OTHER MATERIALS

- A. All other materials, not specifically described but required for a complete and proper installation of transaction windows shall be new, first quality of their respective kinds, and subject to review of the Architect.

PART 3 EXECUTION

3.1 FABRICATION

- A. Workmanship:
 - 1. Fabricate in strict accordance with the approved Shop Drawings and the manufacturer's published recommendations.
 - 2. Accurately fit all members to hairline joints.
 - 3. Mechanically fasten along entire line of contact to substrate.

3.2 INSTALLATION

- A. Install all sliding transaction window systems per manufacturer's printed instructions.
- B. Coordinate with all other trades as required for proper installation.

3.3 PROTECTION

- A. After installation, General Contractor shall protect exposed surfaces from damage by grinding and polishing compounds, plaster, lime, acid, cement, or other contaminants.

3.4 CLEANING UP

- A. General: Immediately prior to acceptance of the Work, remove all protective materials from the storefront system and clean all exposed members.
- B. Abrasives: Do not use abrasives or harmful cleaning agents.
- C. Adjusting and Cleaning:
 - 1. Replace damaged and defective entrance systems.
 - 2. Clean all exposed surfaces prior to Substantial Completion.
 - 3. Remove excess sealants from glazing, doors, frames, and substrate surfaces.
 - 4. Wash and wipe dry glazing prior to requesting Substantial Completion.

END OF SECTION

**SECTION 08 62 23
TUBULAR SKYLIGHTS**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes furnishing and installation and all required product engineering as required to provide skylight systems shown on Drawings.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Rough Carpentry Section 06 10 00
- C. Flashing and Sheet Metal Section 07 60 00

1.3 QUALITY ASSURANCE

- A. Standards: Comply with standards specified herein and as listed in Section 01 42 19.
- B. Skylight system must have ICC/ICBO approval listing as meeting applicable code provisions of the IBC/OSSC Building Code.

1.4 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.
- B. Product data: Submit the following information:
 - 1. Complete materials list of all items proposed to be furnished and installed under this Section.
 - 2. Sufficient data required to demonstrate compliance with all specified requirements.
 - 3. Shop Drawings of the entire installation.

1.5 WARRANTY

- A. Manufacturer: Project specific, five (10) year written warranty from material defects, including related glazing and caulking. Repair and replace defective materials within the warranty period at no expense to the Owner.
- B. Installer: Two (2) year water-tightness warranty. Repair and replace defective work within the warranty period at no expense to the Owner.
- C. Warranty shall be dated from date of contract's Substantial Completion.

1.6 PERFORMANCE CRITERIA

- A. Design skylight systems per IBC/OSSC Building Code.
- B. Minimum Design Wind Loads – ASCE 7, current edition.
 - 1. Building Risk Category: **II** (OSSC T1604.5)
 - 2. Ultimate design wind speed: **120 mph**.
 - 3. Wind Exposure Category: **B**.
 - 4. Wind Importance Factor: 1.0.
- C. Thermal performance: (per NFRC)
 - 1. Maximum U-Value: .60 or lower
 - 2. Maximum SHGC: .40 or lower
- D. Weather performance:
 - 1. Air infiltration: Skylights shall be tested for air leakage in accordance with AAMA/WDMA/CSA101/I.S.2/A440 or NFRC 400.

**SECTION 08 62 23
TUBULAR SKYLIGHTS**

- a. Skylights: Air leakage shall not exceed 0.3 cubic feet per minute per square foot (cfm/ft²) of fenestration area.
- 2. Water infiltration: No uncontrolled leakage when tested in accordance with ASTM E331 at test pressure of 8 psf.
- E. Structural performance:
 - 1. Skylights: Tested and labeled as conforming to AAMA/WDMA/CSA101/I.S.2/A440.

PART 2 PRODUCTS

2.1 MATERIAL

- A. Tubular Skylights:
 - 1. Manufacturer: Solatube
 - 2. Model: 160 DS Brighten Up
 - 3. Flashing Type: 6" flat/no pitch metal, self mounted.
 - 4. Diffuser: 10" round with frosted diffuser.
 - 5. Miscellaneous: Per manufacturer's recommendation.
- B. Accessories: Provide all flashing and accessories not specifically listed as required for a complete water tight system.
- C. Approved Manufacturers:
 - 1. Other approved equal.

PART 3 EXECUTION

3.1 PREPARATION FOR INSTALLATION

- A. Coordinate with all other trades as required to ensure adequate provisions for anchorage of the work of this Section and for proper interface with the work of all other trades.
- B. Provide shop drawings and details as required for curb sizing and placement.
- C. Examine the areas and conditions under which work of this Section will be installed. Correct conditions detrimental to the proper and timely completion of the work.

3.2 INSTALLATION

- A. Install in strict conformance with manufacturer's instructions and approved submittal.
- B. Fasten with corrosion resistant fasteners.

3.3 TESTING

- A. Flood test skylights after installation and repair any leaks.

END OF SECTION

**SECTION 08 71 00
FINISH HARDWARE**

use and long life, and shall harmonize with the hardware as to material and finish. These fastenings shall be furnished where necessary with expansion shield, sex bolts, toggle bolts, security screws, or other approved anchors according to the material to which it is applied as recommended by the manufacturer.

- F. Furnish all items of hardware not definitely specified or listed but required for completion and proper installation of the work; provide type and quality suitable for service required and comparable to the kind specified for similar use.

1.5 SUBMITTALS

- A. For all submittals comply with provisions of Section 01 33 00.
- B. Product data:
 - 1. Complete hardware schedule of all items proposed to be furnished and installed under this Section. List hardware for each opening separately in number order, listing quantity, material, finish and manufacturer.
 - 2. Manufacturer's catalog information and other data required to demonstrate compliance with specification.
 - 3. Sufficient dimensional data to enable coordination of installation of concealed hardware items.
 - 4. Manufacturer's recommended installation procedures.
 - 5. Detailed description of each electrified door hardware function, including location, sequence of operation and interface with other Building Control systems. Submit electrical point to point schematic detail and riser diagram for each system.

1.6 WARRANTY

- A. All hardware shall be factory warranted, free from defects in workmanship and material for a period of one year after acceptance of the building except:
 - 1. Hydraulic door closers shall carry a factory ten year warranty. Electrified and automatic door operators shall carry a factory two year warranty.
 - 2. Exit devices shall carry a factory three year warranty.
 - 3. Locksets shall carry a factory seven year warranty.
 - 4. Electro mag locks shall carry a factory five year warranty.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Hardware types and sizes shall be as listed on drawings or as specified herein.
- B. Closers: All closers sized to an in conformance with factory recommendations. Door closers shall in no case restrict swing of doors, but shall allow door to open as far as conditions permit. List and verify degree of opening for all closers.
- C. Locksets and Latchsets: Strikes to have extended lip where required to protect trim from being marred by latch bolt. All lock and latch sets to be furnished with box type strikes. Furnish reinforcing units for all metal doors.
- D. Stops and Holders: Check Drawings for suitability and method of anchorage. Provide door stops or overhead stops wherever a door or an item of hardware on a door might contact a wall or other type of the building construction, or other types as specified.
- E. Door Silencers: All doors shall receive silencers, except labeled fire doors and exterior doors, three (3) per single door and four (4) per double door.

**SECTION 08 71 00
FINISH HARDWARE**

- F. Gasket: Fire rated doors are to receive appropriate rated gasketing as required, or specified herein.
- G. Butts Hinges: 1-1/2 pair, 4-1/2 x 4-1/2 inch per door leaf, unless otherwise noted.
- H. All finish hardware shall be commercial Grade 1.
- I. Any substitution in hardware from that specified must be submitted in advance, per Section 01 25 00.

2.2 FINISH

- A. General finish of all exposed hardware: **630 Satin Stainless Steel**

2.3 ACCEPTABLE MANUFACTURERS

- A. Butts: Ives, Stanley, Hager, Bommer, McKinney
- B. Locks, Latches, Cylinders: Schlage, Best
- C. Push Plates, Pull Plates: Ives, Trimco
- D. Kick Plates, Flush Bolts: Ives, Trimco
- E. Closers: LCN, Stanley
- F. Stops, Kick Plates, Silencers: Ives, Trimco
- G. Overhead Stops: Glynn Johnson, ABH
- H. Thresholds, Door Bottoms: National Guard, Pemko, Reese
- I. Seals & Weatherstrip: National Guard, Pemko, Reese
- J. Panic Devices: Von Duprin, phi Precision

2.4 KEYS AND KEYING

- A. Provide Schlage facility standard keyway as confirmed by Owner. Provide 1-bitted permanent cylinder cores. Keying and installation of permanent cylinder cores by Owner. Provide 3 keys per cylinder core and one control key.
- B. Provide factory keyed temporary construction cores pre-installed for the construction period. Provide ten construction keys. Return construction cores to hardware supplier after installation of permanent cylinder cores. Supplier may charge for unreturned construction cores and construction keys.

PART 3 EXECUTION

3.1 PREPARATION FOR INSTALLATION

- A. Coordination: Properly coordinate with all other trades as required to ensure adequate provision for anchorage of the work of this Section and for proper interface with the work of all other trades.
- B. Inspection: Examine the areas and conditions under which work of this Section will be installed. Correct conditions detrimental to the proper and timely completion of the Work. Do not proceed until unsatisfactory conditions have been corrected.
- C. Deliver to the job site all finished hardware for storage in a dry and secure environment, except that which is to be delivered to other Subcontractors as directed. A complete finish hardware schedule in DHI format and installation instructions shall accompany the delivery. Deliver hardware items complete with necessary parts for fitting, installing, and as required for proper perfect operation. Door numbers to be marked on hardware items.

**SECTION 08 71 00
FINISH HARDWARE**

3.2 INSTALLATION

- A. Locations: Using only the specified finish hardware, and the proper equipment for the purpose, install finish hardware in the following locations throughout the Work:
1. Combination push-and-pulls: Centered 40-1/4" above the finish floor.
 2. Door pulls on plates: Centered 40-1/4" above the finish floor.
 3. Door pulls - sectional: Centered 40-1/4" above the finish floor.
 4. Door-closing devices: Install and adjust in strict accordance with the templates and printed instructions supplied by the manufacturer of the devices. Insofar as practicable, doors opening to or from halls or corridors shall have the closer mounted on the room side of the door.
 5. Extension level flush bolts: In the edge of the door, bolt center to fronts 12" from top edge of the door and 12" from the bottom.
 6. Kick plates: On single acting doors: with kick plate on push side. On double-acting doors: with kick plate on both sides
 7. Mortise deadlock: Center 60" above finish floor
 8. Lever handle locks: Center 40-1/4" above the finish latch strikes: floor
 9. Panic exit push pad: Install per directions furnished by manufacturer.
 10. Push bars, single: Centered 42" above the finish floor
 11. Push plates: Centered 48" above the finish floor
 12. Other hardware items, not described above: Install as directed by manufacturer.

3.3 CLEAN AND ADJUST

- A. Remove all protective materials and wipe all surfaces clean. Adjust all operative hardware for proper and smooth action. Align all gasket weather stripping for proper fit and use. Make final adjustments to door closers maintaining ADA requirements.

3.4 HARDWARE SETS

- A. See Drawings.

END OF SECTION

**SECTION 08 80 00
GLASS AND GLAZING**

Standard 16 CFR 12-1 and ANSI Z97.1.

- G. Glazing accessories: American Architectural Manufacturer's Association (AAMA).
- H. All vision glass to be produced by one manufacturer and to have the identical exterior appearance.

1.6 REGULATORY REQUIREMENTS

- A. Comply with State Building Code Section 2406.
- B. Fire-Rated Door and Window assemblies: Provide glazing materials complying with NFPA 80 that are listed and labeled, for ratings indicated, and tested in accordance with NFPA 252 (doors) and NFPA 257 (windows).

1.7 FIELD MEASUREMENTS

- A. Field verify dimensions prior to fabrication. Notify architect of any significant variation from Contract Documents.

1.8 WARRANTY

- A. Installer: Provide a written warranty against failure of glazing products due to defective materials or installation, including water leakage or air infiltration in excess of specified standard, for a period of 2 years after date of Substantial Completion.
- B. Manufacturer: Provide the following manufacturer warranties:
 - 1. Insulating Glass: 10 year labor and materials to warrant units against failure of hermetic seal.
 - 2. Coated Glass: 10 year labor and materials to replace unit deterioration including peeling, cracking and other indications of deterioration in metallic coatings.
 - 3. Laminated Glass: 5 year labor and materials to replace unit deterioration including defects in edge separation, de-lamination or obstruction of vision through glass, and blemishes exceeding those allowed in referenced standard.

PART 2 PRODUCTS

2.1 GLASS

- A. Products: Subject to compliance with the following requirements, provide products indicated in Glass Schedule at the end of Part 3.
- B. Acceptable Manufacturer's of primary glass products:
 - 1. Guardian Industries
 - 2. PPG Industries, Inc.
 - 3. Cardinal
- C. Coordinate all glazing materials meet the requirements of manufacturer's of supporting components.
- D. Glass types:
 - 1. Float Glass: ASTM C-1036, Type I, (transparent glass, flat), Quality q3 (glazing select), class as indicated in the Glass Schedule.
 - 2. Tempered: ASTM C1048, Type I, (transparent glass, flat) Quality q3 (glazing select), class, kind and condition as indicated in the Glass Schedule.

**SECTION 08 80 00
GLASS AND GLAZING**

3. Coated Float Glass: ASTM 1376, coated glass complying with requirements indicated in the Glass Schedule and the following:
 - a. Provide Kind HS (heat strengthened) coated float glass where needed to resist thermal stresses produced by differential shading of lites.
 - b. Provide Kind FT (fully tempered) coated float glass where safety glass is indicated or required by Building Code.
 - c. Pyrolytic Coated (Low E) Float Glass: Glass with solar reflective metallic oxide coating applied by pyrolytic deposition process.
 4. Wired Glass: ASTM C 1036, Type II (patterned and wired glass, flat), Class 1 (clear), Quality q8 (glazing), Form 1 (wired, polished both sides), Mesh m2 (square), 6.4 mm thick.
 5. Laminated Glass: ASTM C 1172, interlayer of clear polyvinyl butyral sheet, as type as indicated in Glass Schedule.
 6. Insulating Glass: ASTM E 774, Class A units, complying with requirements in the Glass Schedule and the following:
 - a. Seal: Dual Seal, isobutyl primary with polysulfide secondary.
 - b. Provide Kind HS (heat strengthened) coated float glass where needed to resist thermal stresses produced by differential shading of lites.
 - c. Provide Kind FT (fully tempered) coated float glass where safety glass is indicated or required by Building Code.
 7. Mirror Glass: ASTM C1036, Type 1 transparent flat, Class I clear, quality q2 mirror, 1/4" thick, silver coated and hermetically sealed with uniform .0002" coating of electrolytic copper.
 8. Fire Rated Glazing: Technical Glass Products (TGP) Firelite Plus, fire rated glazing. Each lite shall bear permanent, non-removable label of UL certifying it for use in tested and rated fire protective assemblies.
 - a. Fire Protective Glazing Products for Door Assemblies: Products identical to those tested per ASTM E2074-00 and UL 10B, labeled and listed by UL.
- E. All sealant products applied under this Section shall comply with VOC limits as required in Section 01 61 16.

2.3 GLAZING COMPOUNDS AND SEALANTS

- A. Use glazing compounds and preformed glazing sealants approved for the application by the glass manufacturer and, except as otherwise specified, conforming to the Glazing Materials portion of the GANA/FGMA Glazing Manual.
1. Sealants: ASTM C 920, Type S, Class 25, Grade NS.

2.4 GLAZING ACCESSORIES

- A. Provide all glazing accessories required to supplement those accessories which accompany the items to be glazed, and as needed to provide a complete installation, including glazing points, clips, shims, angles, beads, settling blocks, and spacer strips.
1. Glazing Tape: ASTM C 1241 and AAMA 800.
 2. Cylindrical Glazing Sealant Backer: ASTM C 1330, type O.
 3. Setting blocks: ASTM C864, EPDM or neoprene rubber unless otherwise required for compatibility with sealer and glazing compounds.
 4. Mirror Molding: ASTM A167, type 304 stainless steel, 22 gage. No. 4

**SECTION 08 80 00
GLASS AND GLAZING**

finish.

PART 3 EXECUTION

3.1 FABRICATION

- A. Fabricate in strict conformance with referenced standard to sizes required for glazed opening.
 - 1. Provide edge and face clearances, edge and surface conditions, and bite complying with referenced standards and requirements of glass and support component manufacturer.
 - 2. Grind smooth and polish exposed glass edges.

3.2 INSPECTION

- A. Examine the areas and conditions under which work of this Section will be installed. Correct conditions detrimental to the proper and timely completion of the Work. Do not proceed until unsatisfactory conditions have been corrected.

3.3 INSTALLATION

- A. General
 - 1. Selection of Glass: Where plate glass is indicated, float glass may be used.
 - 2. Distortion: Cut and install glass with the visible lines or waves running with the horizontal direction.
 - 3. Fix moveable items securely, or in a closed and locked position, until glazing compound has thoroughly set.
 - 4. Perform glazing when ambient temperature is above 40° F.
 - 5. Perform glazing on dry surfaces only.
- B. Glass setting
 - 1. Items to be glazed shall be shop-glazed or field-glazed with glass of the quality and thickness specified.
 - 2. Prepare surrounds and glass, unless otherwise directed, in conformance with the details and general conditions governing glazing in the Flat Glass Marketing Association (FGMA) Glazing Manual.
 - 3. Use beads or stops furnished with the items to be glazed to secure the glass in place.
 - 4. All glass to be set with the FGMA recommended clearance and isolation from frame or sash using appropriate setting blocks, spacers, tapes, beads, sealants or compounds.
 - 5. Glass shall be set "flat" with no visible twist, torque, bending or other detrimental induced stress.
 - 6. Provide final sealing of all glazed openings against the penetration of air or water.
 - 7. All wire glass to be set with wire grid running horizontal and vertical.
- C. Mirrors
 - 1. Unless shown otherwise on the Drawings, provide necessary backing and/or concealed fasteners for surface mounting at locations shown on Drawings.
 - 2. Provide s/s edge trim on all mirrors unless shown otherwise on Drawings.

3.4 CLEANING

**SECTION 08 80 00
GLASS AND GLAZING**

- A. In addition to the requirements of Section 01 74 00 of these Specifications, and prior to acceptance of the work, thoroughly clean all glass and remove all labels, paint spots, putty and other defacements.

3.5 GLASS SCHEDULE

- A. Glass Type GL-1: (EXTERIOR INSULATED VISION)
1. Specific glass is specified in individual Sections for the component in which it is used. Refer to Sections referenced in part 1.2 above.
- B. Glass Type GL-2 (EXTERIOR INSULATED VISION – Clear)
1. Unit Thickness: 1"
 2. Interspace/Content: ½" / inert gas - as required to meet thermal performance requirements.
 3. Indoor Lite: Class 1 (clear) float glass.
 4. Outdoor Lite: Coated condition C (other coated glass), class 2 (clear) float glass. Coated on 2nd surface as required to meet performance requirements.
 5. Low-Emissivity Coating: Pyrolytic on second surface.
 6. Performance Standards:
 - a. **Winter U-value:** **0.45 maximum**
 - b. **SHGC:** **0.40 maximum**
 7. Tempered: Heat Strengthened (HS), typical. Fully Tempered (FT) where required by code. All tempered glazing locations shall be as required by code.
- C. Glass Type GL-3: (INTERIOR SINGLE VISION – Clear - Interior Doors & Relites)
1. Thickness: 1/4" minimum single sheet.
 2. Type: Class 1, clear float glass
 3. Tempered: Tempered or laminated safety glazing where required by code or condition.
- D. Glass Type GL-4: (MIRRORS)
1. Thickness: 1/4" minimum.
 2. Type: Clear per specified standard.

END OF SECTION

DIVISION 9**FINISHES**

09 28 00	Fiber Reinforced Cement Board
09 29 00	Gypsum Board
09 30 00	Tile
09 51 00	Acoustic Ceilings
09 65 00	Resilient Flooring
09 68 00	Carpeting
09 72 16	Vinyl Wall Covering
09 90 00	Painting

SECTION 09 28 00
FIBERGLASS REINFORCED TILE BACKER BOARD

PART 1 GENERAL

1.1 SUMMARY OF WORK

- A. Work in this Section includes providing fiberglass reinforced tile backer board panels where indicated on drawings.

1.2 RELATED SECTIONS

- | | |
|--------------------|------------------|
| A. Rough Carpentry | Section 06 10 00 |
| B. Gypsum Board | Section 09 29 00 |
| C. Tile | Section 09 30 00 |

1.3 STANDARDS

- A. Comply with standards specified herein and as listed in Section 01 42 19.
B. ICC/ICBO listed for required rating of assembly.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Backer Board:
1. USG -Durock Cement Board; 5/8" thick
 2. GP – DensShield Tile Backer; 5/8" thick
 3. CertainTeed GlasRoc – Diamondback Tile Backer; 5/8" thick
 4. Other approved equal.
- B. Joint Reinforcement tape:
1. Manufacturer's fiberglass joint reinforcement tape.
- C. Fasteners:
1. Corrosion resistant, bugle head "S" point screws or other as recommended by the backer board manufacturer.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Interior:
1. Install on studs with a maximum spacing of 16" o/c.
 2. Block all edges.
 3. Fasten through pre-drilled holes at a maximum spacing of 6" o/c all supports.
 4. Fill joints with mortar and embed reinforcing mesh.

END OF SECTION

**SECTION 09 29 00
GYPSUM BOARD**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes the furnishing, installation, joint taping and finishing of gypsum wallboard panels on wood, metal, and solid substrates.
- B. Work in this section also includes furnishing and installation of direct hung suspended metal furring systems, all wallboard accessories and finishing materials.
- C. Work in this Section includes bidder designed and engineered components.
 - 1. Bidder designed and engineered components include: all components.
 - 2. Manufacturer shall provide all engineering required; for final sizing to meet specifications, and code requirements of permit jurisdiction, and that system components are appropriate for intended application.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Bidder Designed and Engineered Systems Section 01 33 50
- C. Rough Carpentry Section 06 10 00
- D. Painting Section 09 90 00

1.3 STANDARDS

- A. Gypsum Board: ASTM C 1396
- B. Fasteners: ASTM C 1002, latest revision.
- C. Installation: ASTM C 840, latest revision
- D. Conform to code requirements to achieve fire rating of walls, ceilings, ceiling-floor and ceiling-roof assemblies and column and beam protection which require joint taping of gypsum board assemblies, even when finishing is not required for decorative purposes.
- E. Suspension System - by hierarchy:
 - 1. 2014 OSSC
 - 2. ASTM C635, ASTM C636, ASTM E 580/E 580M
 - 3. ASCE 7-05, Section 13.5.6
 - 4. CISCA - Guidelines for seismic restraint for direct hung suspended ceiling assemblies - Seismic ones 3 & 4. May 2004.
 - 5. NWCB Field technical bulletin 401- 12/17.
- F. Suspended Ceiling Load Criteria:
 - 1. Vertical: 4 psf.
 - 2. Lateral: Per Structural Drawings.
 - 3. OSSC T1604.5 Occupancy Category: II
 - 4. Duty Classification: Heavy, per ASTM C-635.
 - 5. Cross Runner Deflection: L/360 max.

1.4 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.

1.5 QUALITY ASSURANCE

- A. Standards: Comply with standards specified herein and as listed in Section 01 42 19.
- B. Moisture Content of Substrate: Do no taping or finishing of gypsum board surfaces until the moisture content of substrate is 15% or less.

**SECTION 09 29 00
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- C. Temperature: Do no taping or finishing of gypsum wallboard surfaces until the interior temperature has been maintained at a minimum of 55 degrees F for a period of at least 24 hours.
- D. Temporary Heat: Temporary heat for interior work shall be provided as specified under Section 01 56 00. The heat and method shall be sufficient to allow all coats of taping and finishing compound to dry to a maximum of 15% moisture within 72 hours.
- E. Ventilation: Coordinate the work so that adequate continuous ventilation is provided, in conjunction with temporary heat to insure proper drying.
- F. Lighting: Do not proceed with the work in any room unless lighting level of 15 candlepower per square foot is available.

1.6 PROTECTION

- A. Protect adjacent surfaces that do not receive board finish.
- B. Protect all wallboard from weather exposure.

1.7 PRE-INSTALLATION CONFERENCE & MOCKUP

- A. Contractor shall provide a 36" x 36" area of all wall and ceiling textures on site or as approved by Owner in advance via sample boards, for the Owner's approval of drywall textures throughout the project. Contractor shall schedule this approval so as to not delay the project and ensure approval prior to actual finish application.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Gypsum Board:
 - 1. General Wallboard: 5/8" thick, per ASTM C-1396, tapered-edge, in 48" minimum widths and in such lengths as will result in the minimum of joints.
 - 2. Fire Resistant: 5/8" thick, Type "X", per ASTM C-1396, tapered-edge, in 48" minimum widths and in such lengths as will result in the minimum of joints.
 - 3. Moisture Resistant: 1/2" thick, per ASTM C-1396, Grade MR, asphalt treated core and water repellent paper face.
- B. Joint Tape: Furnished perforated, cross-laminated, reinforced paper, per ASTM C-475.
- C. Taping Compound: Furnish specifically formulated and manufactured for use in embedding of tape at board joints compatible with the tape and substrate; do not mix vinyl-base and casein-base formulations for any one coat.
- D. Finishing Topping Compound:
 - 1. Furnish specifically formulated and manufactured for use as a finishing compound; do not mix vinyl base and casein-base formulations for any one coat.
 - 2. At textured surfaces; United States Gypsum Company, Texture XII Drywall Surfer.
- E. All Purpose Compound: Furnish specifically designed to serve as both a taping and a finishing compound compatible with the tape and substrate.
- F. Compound Form: Furnish compounds for taping and finishing in either powder or premixed forms, of compatible chemical composition with previous and

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GYPSUM BOARD**

- successive coats of compound applied joints, fasteners, and trim.
- G. Metal Trim
1. Trims: Furnish trims for corners, expansion joints, exposed edges, edges abutting dissimilar materials and where detailed or noted on the Drawings, specifically designed for such installations, and of type to meet the requirements of the work in this Section and any code requirements for fire ratings to be achieved by the installation or system.
 2. Trim Features: Provide hot-dip galvanized 0.0217" nominal thickness (26 gauge).
 3. Fry Trim: Extruded aluminum as manufactured by Fry Reglet Co.
 4. Casing Beads: Channel shaped with concealed wing not less than 7/8" wide, and an exposed wing.
 5. Corner Beads: Provide angle shaped with wings not less than 3/4" wide. Concealed wing shall be perforated for nailing and exposed wing shall be folded flat. Exposed wing may be factory finished in a white color.
 6. Edge beads for use at perimeter of ceilings shall be angle-shaped with wings not less than 3/4" wide. Concealed wing shall be perforated for nailing and exposed wing shall be folded flat. Exposed wing may be factory finished in white color.
- H. Acoustical Furring: U.S.G. RC-1 channel or equal.
- I. Fasteners: Self-drilling, self-taping steel screw fasteners, type and length as recommended by the manufacturer for the application involved.
- J. Direct Hung Ceiling System - non-proprietary:
1. Main Carrying channels: 1 1/2" Cold formed steel "C" channel.
 2. Cross furring channels: 7/8"x2 5/8" x No. 25ga. Carbon sheet steel hat channels.
 3. Suspension Wire: #12 SWG galvanized wire.
#8 SWG galvanized wire @ FR assembly.
 4. Tie Wire: #18 SWG galvanized wire (double strand).
 5. Anchors: Proprietary with an ICC/ICBO capacity rating of 200 lbs.:
 - a. Steel deck: CMI DC-1 or DC-2, 1/4" metal deck screw eyes.
 - b. Concrete: Embeds or 1/4" x 3/4" metal hit anchors.
 - c. Wood: CMI DT-3Z, wood screw with eyes.
- K. Direct Hung Ceiling System - proprietary:
1. Pre-engineered, integrated system complying with requirements of Part 1.3 (E) and (F) herein.
 - a. Provide ICC/UL test data showing compliance.

PART 3 EXECUTION

3.1 SUSPENSION - GRID INSTALLATION GENERAL REQUIREMENTS

- A. Install ceiling system per referenced standards and Drawings.
- B. Main runners shall be installed 48 inches on center, and be directly suspended by suspension wire spaced 48 inches on center along the main runners. Hanger wires shall be wrapped tightly at least 3 full turns.
- C. Main runners shall be interconnected by cross channels at 24" centers for 24" x 48" modules. (12" o.c. for FR assemblies) Proper length cross channels shall

**SECTION 09 29 00
GYPSUM BOARD**

also be installed adjacent to all recessed light fixtures or supply and return diffusers on each side not supported by a main runner.

- D. Wall angle moldings shall be installed wherever suspension components meet vertical surfaces. Provide seismic "slip" edge angles were required by referenced standards.
- E. Attachment devices to be of an approved type capable of carrying 200 lbs.
- F. Hangers to be plumb or counter splayed and not press against pipe or duct insulation. Provide a trapeze where obstructions do not allow normal suspension wire placement.
- G. Deflection shall be limited to 1/360 or .133" (1/8") in a 4' span. If any fixture or equipment supported by the ceiling grid causes a deflection in excess of the 1/8", the fixture shall be independently supported or the grid shall be supplementary supported within 6" of each corner with an independent suspension wire capable of carrying the fixture full weight.
 - 1. Fixtures or other equipment weighting more than 20# but less than 56# shall have two #12 ga. wires from the housing to the structure above. These wires may be slack.
 - 2. Fixtures or other equipment weighing in excess of 56# shall be independently supported with minimum #12 ga. wire at each corner to the structure above.
 - 3. Pendant hung fixtures shall be independently supported with a minimum of one #9 ga. wire.
- H. Carrying channels and main runners are to be level within 1/8" in 12 feet; leveling is to be performed with hangers taut; kinks or bends are not to be used as a way of leveling.

3.2 SUSPENSION - GRID INSTALLATION LATERAL BRACING REQUIREMENTS: (FOR GRIDS WHEN NOT SUPPORTING PARTITIONS)

- A. All suspension channels shall be independently supported at the perimeter within 8" of the wall or ceiling discontinuity; the wall angle or closure strip shall not be allowed for this purpose.
- B. Within 4' of the walls at 12' o.c. in each direction, 4-#12 ga. wires shall be connected within 2" of an intersection of a main runner with a cross runner and splayed 90° from each other at an angle not exceeding 45° from the plane of the ceiling.
 - 1. A steel channel or tube strut fastened to the main runner shall be extended to and fastened to the structural members supporting the roof or floor above. The strut shall be adequate to resist the vertical component induced by the wires.
 - 2. Lateral force bracing members shall be spaced a minimum of 6 inches from all horizontal piping or duct work that is not provided with bracing restraints for horizontal forces. Bracing wires shall be attached to the grid and to the structure in such a manner that they can support a design load of not less than 200 pounds or the actual design load, whichever is greater, with a safety factor of 2.
- C. Members perpendicular to the wall shall be tied together (stabilized) to prevent their spreading. This shall be done immediately adjacent and parallel to the wall. The wall or closure angle shall not be used for this purpose, although to facilitate installation, runners may be attached to the closure angle at two adjacent walls with clearances between the wall and the runner being maintained at the other

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two walls.

- D. All light fixtures shall be positively attached to the suspension system. The attachment device shall have a capacity of 100% of the fixture weight.

3.3 GYPSUM BOARD INSTALLATION

A. General Use Schedule: See Drawings for specific locations.

1. Non-wet walls and ceilings: General Wallboard.
2. Wet walls and ceilings (all walls with plumbing fixtures within four feet or otherwise susceptible to repeated moisture, restroom/bathroom walls and ceilings, commercial/institutional kitchen walls, shower/dressing rooms, mechanical and electrical rooms): Moisture Resistant Wallboard.
3. Walls receiving Ceramic or stone tiles: Moisture Resistant Wallboard.

B. Gypsum Board-General:

1. Install in conformance with ASTM C840. At all locations listed as fire rated assemblies, install gypsum board in strict conformance with assembly listing using proper board layout, fasteners, and finishing specified by the listing.
2. Install the gypsum board with the separate boards in moderate contact with each other but not forced into place.
3. At internal and external corners, conceal the edges of the board by overlapping covered edges of the abutting boards.
4. Stagger the boards so that corners of any four boards will not meet at a common point except in vertical corners.
5. Place boards perpendicular to framing wherever practical.
6. Install gypsum boards on ceiling first, then on walls.

C. Ceilings:

1. Install the gypsum board to ceilings with the long dimension of the board at right angles to the supporting members, except that board may be installed with the long dimension parallel to supporting members that are spaced 16" on center, or less, when attachment members are provided at end joints.
2. At fire rated ceiling assemblies, provide a continuous fire rated assembly. At recessed fixtures and equipment, fire rated assembly shall maintain continuity by jogging up and over all fixtures and equipment.
3. Install control joints in continuous ceilings at 50 feet on center maximum.
4. See 3.2 for air sealing measures.

D. Walls:

1. Install the gypsum board at right angles to the furring or framing members. Make end joints, where required, over furring or framing members.
2. Stagger end joints in successive corners. Place end joints on opposite sides of partitions on different studs.
3. Drive fasteners in field of panel first, working toward ends and edges.
4. At fire rated exterior walls and interior bearing walls, install gypsum board full height from floor to floor or ceiling structure above, including in floor/ceiling and attic spaces.
5. Install control joints in continuous walls at 30 feet on center maximum.
6. See 3.2 for air sealing measures.

E. Attaching:

1. Drive the specified screws with clutch-controlled power screwdrivers, spacing the screws a minimum of 12" on centers at ceilings and 12" on

SECTION 09 29 00 GYPSUM BOARD

centers at walls unless noted otherwise.

2. Provide attachment in strict conformance with listing at all fire rated assemblies.

3.4 AIR SEALING MEASURES

- A. Install air-sealing measures as required to create an air barrier system. The following items are general guidance to achieving an air barrier system.
 1. Prior to installation of wall board at all exterior walls and party/common walls, apply a bead of sealant to top and bottom plates.
 2. After installation of wall board at all exterior walls and party/common walls, air-seal around all penetrations per Section 07 90 00.
 3. After installation of ceiling board, air-seal around all penetrations per Section 07 90 00.

3.5 FINISHING

- A. Unfinished Walls and Ceilings, PDCA Level 1:
 1. Tape embed joints and interior angles in joint compound, panel surfaces free of excess joint compound.
 2. Tool marks and joint compound ridges are acceptable.
- B. Ceramic Tile Finished Walls, PDCA Level 2:
 1. Tape embed joints and interior angles in joint compound with one separate coat of joint compound applied over joints, angles, fastener heads, and accessories.
 2. Panel surfaces free of excess joint compound.
 3. Tool marks and joint compound ridges are acceptable.
- C. Wall Covering and Paneling Finished Walls, PDCA Level 3:
 1. Tape embed joints and interior angles in joint compound with two separate coats of joint compound applied over joints, angles, fastener heads, and accessories.
 2. Finish joint compound smooth and free of tool marks and joint compound ridges.
- D. Painted Walls in Closet, Janitor, Storage, Mechanical, and Electrical Rooms and walls receiving finish texture, PDCA Level 4:
 1. Tape embed joints and interior angles in joint compound with 3 separate coats of joint compound applied over joints angles, fastener heads, and accessories.
 2. Finish joint compound smooth and free of tool marks and joint compound ridges.
- E. Painted Walls and Ceiling in All Other Rooms, PDCA Level 4:
 1. Tape embed joints and interior angles in joint compound with 3 separate coats of joint compound applied over joints angles, fastener heads, and accessories.
 2. Finish joint compound smooth and free of tool marks and joint compound ridges.
- F. Select Walls and Walls with wall coverings, PDCA Level 5:
 1. Tape embed joints and interior angles in joint compound with 3 separate coats of joint compound applied over joints angles, fastener heads, and accessories.
 2. Apply a thin skim coat of joint compound, or Latex Flat Sealer to the entire surface.
 3. Finish joint compound smooth and free of tool marks and joint compound

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GYP SUM BOARD

ridges.

3.6 TEXTURING:

- A. In preparation for texturing, apply (1) coat of PVA primer to all gypsum board walls and ceiling surfaces.
- B. Provide texturing at the following surfaces:
 - 1. Match existing texture at all locations. Coordinate locations with Architect.
- C. Apply texture materials in conformance with manufacturer's instructions.

3.7 CLEANING UP

- A. In addition to the requirements of Division 1 of these Specifications, use all necessary care during execution of this portion of the work to prevent scattering of gypsum board scraps and dust and to prevent tracking of joint and finishing compound onto floor surfaces. At completion of each segment of installation in a room or space, promptly pick up and remove from the working area all scraps, debris, and surplus material of this Section.

END OF SECTION

SECTION 09 30 00
TILE

PART 1 GENERAL

- 1.1 DESCRIPTION
- A. Work in this Section includes furnishing and installation of vertically and horizontally set tile.
- 1.2 RELATED WORK SPECIFIED ELSEWHERE
- | | |
|---------------------------------------|------------------|
| A. Submittals | Section 01 33 00 |
| B. Interior Membrane Waterproofing | Section 07 14 00 |
| C. Sealants | Section 07 90 00 |
| D. Fiberglass Reinforced Cement Board | Section 09 28 00 |
| E. Gypsum Wallboard | Section 09 29 00 |
- 1.3 STANDARDS
- A. Handbook for Ceramic Tile Installation published by the Tile Council of America.
- B. ANSI Standard Specifications for Ceramic Tile.
- 1.5 SUBMITTALS
- A. General: Comply with provisions of Section 01 33 00.
- B. Submit product data for each type of tile type.
- C. Submit product samples of each product type.
- 1.6 QUALITY ASSURANCE
- A. Standards: Comply with standards specified herein and as listed in Section 01 42 19.

PART 2 PRODUCTS

- 2.1 MANUFACTURERS, MODELS, COLOR
- A. See Drawings - Finish Materials Schedule
- B. Manufacturer's and/or Suppliers to verify all materials specified meet the following standard specifications.
- 2.2 TILE:
- A. Ceramic Tile:
1. Standard grade, glazed ceramic tiles meeting ANSI A 137.1.
 2. Standard grade, unglazed ceramic tiles meeting ANSI A 137.1.
 3. Standard grade, unglazed porcelain tiles meeting ANSI A137.1.
 4. See Interiors Drawings.
- B. Quarry Tile:
1. Standard grade, unglazed, dense extruded, 1/2" thick, quarry tile meeting ANSI A 137.1.
- C. Trims:
1. Full range of inside/outside corner, bullnose top and edge, and transition radius trims. No field fabricated transition or edge pieces allowed. See Drawings for required trim profiles.
- 2.3 EDGING AND TRANSITIONS:
- A. Metal edge trims and/or reducer strips shall be SchluterSystems as appropriate for material and condition. All edging and transitions to be ADA compliant.
1. Tile to Concrete: Schluter; RENO-U
 2. Tile to Resilient: Schluter; RENO-U

SECTION 09 30 00
TILE

- 3. Tile to Carpet (lower thickness) Schluter; RENO-TK
 - 4. Tile to Carpet (same thickness) Schluter; SCHIENE
 - 5. Tile wall perimeter edging: Schluter; SCHIENE
 - B. Material/Finish: Aluminum / Clear anodized.
 - C. Thickness of finish flooring materials and edging/transition model to be coordinated by the Contractor.
- 2.4 WATERPROOFING & CRACK ISOLATION
- A. See Section 07 14 00.
- 2.5 MORTARS
- A. Thin Set Dry Set Portland Cement Mortar: per ANSI A118.1.
 - 1. Ardex X4, Laticrete 253, Custom VersaBond, or approved equal.
 - B. Latex Portland Cement Mortar: per ANSI A118.4 and A118.11.
 - 1. Ardex X5, Laticrete 4 XLT, Custom VersaBond Flex, or approved equal.
 - C. Polymer-Modified Fiber Reinforced Thin Set Mortar: per ANSI A118.4.
 - 1. Ardex X 77, Laticrete 254/255, Custom Mega Flex Prolite Complete Contact, or approved equal.
- 2.6 GROUTS
- A. Polymer Modified Grout: per ANSI A118.7.
 - 1. Color: To be selected from manufacturer's standard color range.
 - 2. Ardex FL, Laticrete 1500 Permacolor, Custom Prism, or approved equal.
 - B. Epoxy Grout: per ANSI A118.3.
 - 1. Color: To be selected from manufacturer's standard color range.
 - 2. Ardex WA, Laticrete Spectralock, Custom CEG-Lite, or approved equal.
- 2.7 SEALERS & RELEASING AGENTS
- A. StoneTech Professional Grout Release
 - B. StoneTech Professional Grout Sealer for Ceramic Tile
- 2.8 RELATED ACCESSORIES
- A. Spacers and clips - as recommended by tile manufacturer.
 - B. Metal edge trims and/or reducer strips per part 2.3 above.

PART 3 EXECUTION

- 3.1 PREPARATION FOR INSTALLATION
- A. Coordination: Properly coordinate with all other trades as required to ensure adequate provision for anchorage of the work of this Section and for proper interface with the work of all other trades.
 - B. Inspection: Examine the areas and conditions under which work of this Section will be installed. Correct conditions detrimental to the proper and timely completion of the Work. Do not proceed until unsatisfactory conditions have been corrected.
 - C. Condition of Surfaces:
 - 1. Surfaces shall be clean, free of cracks, films, oils and curing compounds.
 - 2. Maximum variation of surfaces to receive tile shall be:
 - a. Floors: 1/4" in 10 feet from required plane.
 - b. Walls: 1/4" in 8 feet from required plane.
 - D. Coordinate and level Floor with mortar or compatible leveling compound as required to provide flush transitions between abutting materials of varying

SECTION 09 30 00
TILE

- thickness.
- E. Establish and coordinate the location of expansion and/or control joints.
- 3.2 SUBSTRATE
- A. Verify conformance of substrate per the following general schedule. See also Drawings.
1. Floor tile: Concrete structural slab or fiberglass reinforced cement board per Section 09 28 00.
 2. Wall tile: Fiberglass reinforced cement board per Section 09 28 00 and/or moisture resistant gypsum wallboard.
- 3.3 EXPANSION JOINTS
- A. Provide expansion joints at:
1. Interior (dry areas): 24' to 36' in each direction.
 2. Interior (wet areas): 12' to 16' in each direction.
 3. Where tile abuts restraining surfaces such as perimeter walls, dissimilar floors, curbs, columns or pipes.
 4. Directly over control/expansion joints in structural substrate.
 5. As shown on Drawings.
- 3.4 INSTALLATION
- A. Tile - General
1. Install tiles in full pieces, center and balance in areas unless specifically dimensioned otherwise on Drawings.
 2. Grout Joints: See Drawings.
 3. For partial tiles, cut, do not split.
 4. Mix all mortar and grouts in strict conformance with manufacturer's printed instructions.
- B. Setting and Grouting: Install in accordance with the following listed specifications:
1. Walls:
 - a. Over MRGWB: TCA Assembly W243.
 - b. Over cement backer board: TCA Assembly W244.
 2. Floors:
 - a. Over concrete slab: TCA Assembly F113.
 - b. Over cement backer board: TCA Assembly F144.
- C. Compatibility of all grout with tile product shall be the responsibility of the contractor. Grout selection shall be as follows:
1. Polymer modified grout shall be used at all general, non-wet locations, restroom/bathroom walls, and all locations other than those listed below.
 2. Epoxy grout shall be used at all kitchen floors, kitchen walls, restroom/bathroom floors, and locations as indicated on the Drawings.
- D. Cleaning: Clean all grout and setting materials from face of tile while materials are still workable.
- E. Provide Releaser prior to grouting.
- 3.5 PROTECTION
- A. Cover tile with visqueen and plywood to protect while performing adjacent construction work or related activities.
- B. Protect adjacent surfaces when installing and cleaning tile.
- 3.6 SEALER
- A. Provide grout sealer at all tile.

**SECTION 09 30 00
TILE**

END OF SECTION

SECTION 09 51 00
ACOUSTICAL CEILINGS

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work Included: Provide acoustical ceiling system complete and in place, including all associated hardware, as shown on Drawings, specified herein, and needed for a complete and proper installation. Provide required seismic bracing wires, struts and accessories per IBC.
- B. Work in this Section includes bidder designed and engineered components.
 - 1. Bidder designed and engineered components include: all components.
 - 2. Manufacturer shall provide all engineering required; for final sizing to meet specifications, and code requirements of permit jurisdiction, and that system components are appropriate for intended application.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Bidder Designed and Engineered Systems Section 01 33 50
- C. Gypsum Board Section 09 29 00
- D. Fire Sprinklers Division 21
- E. Mechanical Division 23
- F. Electrical Division 26

1.3 STANDARDS

- A. Acoustical Ceiling Tile
 - 1. Federal Specification SS-S-118B, Class A, latest revision, U.L. 25 or less.
 - 2. Fire Hazard Rating: ASTM E 84-79c, (0-25)
- B. Suspension System - by hierarchy:
 - 1. 2014 OSSC
 - 2. ASTM C635, ASTM C636, ASTM E 580/E 580M
 - 3. ASCE 7-05, Section 13.5.6
 - 4. CISCA - Guidelines for seismic restraint for direct hung suspended ceiling assemblies - Seismic ones 3 & 4. May 2004.
 - 5. NWCB Field technical bulletin 401- 12/17.
- C. Suspended Ceiling Load Criteria:
 - 1. Vertical: 4 psf.
 - 2. Lateral: Per Structural Drawings.
 - 3. IBC T1604.5 Occupancy Category: II
 - 4. Duty Classification: Heavy, per ASTM C-635.
 - 5. Cross Runner Deflection: L/360 max.

1.4 SUBMITTALS

- A. General: Comply with provisions of Section 01 30 00.
- B. Product data: Submit the following:
 - 1. Complete materials list and samples of all items proposed to be furnished and installed under this Section.
 - 2. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements.
 - 3. Manufacturer's recommended installation procedures.
 - 4. Manufacturer's warranty.

PART 2 PRODUCTS

SECTION 09 51 00
ACOUSTICAL CEILINGS

2.1 MATERIALS:

- A. System A: Typical
 - 1. Suspension System:
 - a. Suspension System: Shall be a 15/16" exposed tee system.
 - b. Material: Double-web electrogalvanized steel.
 - c. Face Dimension: 15/16" x 24" x 24", 48" and 72" exposed tee face.
 - d. Profile: Exposed tee surface and edge angles.
 - e. Color: White, Baked polyester paint.
 - f. Duty rating: Heavy duty system.
 - g. Manufacturer: USG, Armstrong or other approved equal.
 - 2. Acoustical Ceiling Tile:
 - a. 24"x24", 24"x48" and 24"x72" acoustical panels.
 - b. Manufacturer / Model: See Drawings
 - c. Layout/Configurations: See Drawings
- B. Direct Hung Ceiling System - non-proprietary:
 - 1. Main Carrying channels: 1 1/2" Cold formed steel "C" channel.
 - 2. Cross furring channels: 7/8"x2 5/8" x No. 25ga. Carbon sheet steel hat channels.
 - 3. Suspension Wire: #12 SWG galvanized wire.
#8 SWG galvanized wire @ FR assembly.
 - 4. Tie Wire: #18 SWG galvanized wire (double strand).
 - 5. Anchors: Proprietary with an ICC/ICBO capacity rating of 200 lbs.:
 - a. Steel deck: CMI DC1 or DC2, 1/4" metal deck screw eyes.
 - b. Concrete: Embeds or 1/4" x 3/4" metal hit anchors.
 - c. Wood: 1/4" wood screw eyes.
- C. Direct Hung Ceiling System - proprietary:
 - 1. Pre-engineered, integrated system complying with requirements of Part 1.3 (A) and (B) herein.
 - a. Provide ICC/UL test data showing compliance.

PART 3 EXECUTION

3.1 SUSPENSION - GRID INSTALLATION GENERAL REQUIREMENTS

- A. Install ceiling system per referenced standards.
- B. Main runners shall be installed 48 inches on center, and be directly suspended by not less than 12 gage galvanized steel wire spaced 48 inches on center along the main runners. Hanger wires shall be wrapped tightly at least 3 full turns.
- C. Main runners shall be interconnected by cross tees at 24" centers for 24" x 48" modules. Proper length cross tees shall also be installed adjacent to all recessed light fixtures or supply and return diffusers on each side not supported by a main runner.
- D. Wall angle moldings shall be installed wherever suspension components meet vertical surfaces. Wall angle moldings shall have a horizontal leg of 1" with manufacturer's proprietary perimeter (seismic) clip. Perimeter (seismic) clips shall allow for minimum of 3/4" of movement.
- E. Provide extra hanger wires at each corner of light fixtures and at all points where

SECTION 09 51 00
ACOUSTICAL CEILINGS

- tees are interrupted by light fixtures.
- F. Attachment devices to be of an approved type capable of carrying 5 times the ceiling load (50#).
 - G. Hangers to be plumb or counter splayed and not press against pipe or duct insulation.
 - H. Deflection shall be limited to 1/360 or .133" (1/8") in a 4' span. If the fixture causes a deflection in excess of the 1/8", the fixture shall be independently supported or the grid shall be supplementally supported within 6" of each corner with a #12 wire.
 - I. A fixture installation shall not cause the runners to rotate more than 2° from the vertical (this is the equivalent of a 1/32" out of horizontal for a standard 1" tee).
 - J. Carrying channels and main runners are to be level within 1/8" in 12 feet; leveling is to be performed with hangers taut; kinks or bends are not to be used as a way of leveling.
- 3.2 SUSPENSION - GRID INSTALLATION LATERAL BRACING REQUIREMENTS: (FOR STANDARD TEE BAR GRIDS WHEN NOT SUPPORTING PARTITIONS)
- A. Hangers to be a minimum of #12 gage, galvanized, soft annealed mild steel wire @ 4' o.c. each way. Hangers to be attached to suspension members and to the support above with a minimum of three turns. Hangers shall not attach to or bend around other material or equipment and shall not be more than 1 in 6 out of plumb without being counter splayed.
 - B. All connection devices shall be of an approved type capable of supporting 100#'s and be secured to the building structure.
 - C. A trapeze or equivalent shall be used where obstructions preclude direct attachment to the structure. Trapeze suspension shall be a minimum of back to back 1-1/4" cold rolled channels where spans exceed 48".
 - D. All runners shall be independently supported at the perimeter within 8" of the wall or ceiling discontinuity; the wall angle or closure strip shall not be allowed for this purpose.
 - E. Within 4' of the walls at 12' o.c. in each direction, 4-#12 ga. wires shall be connected within 2" of an intersection of a main runner with a cross runner and splayed 90° from each other at an angle not exceeding 45° from the plane of the ceiling.
 - 1. A strut fastened to the main runner shall be extended to and fastened to the structural members supporting the roof or floor above. The strut shall be adequate to resist the vertical component induced by the wires.
 - 2. Lateral force bracing members shall be spaced a minimum of 6 inches from all horizontal piping or duct work that is not provided with bracing restraints for horizontal forces. Bracing wires shall be attached to the grid and to the structure in such a manner that they can support a design load of not less than 200 pounds or the actual design load, whichever is greater, with a safety factor of 2.
 - F. Members perpendicular to the wall shall be tied together (stabilized) to prevent their spreading. This shall be done immediately adjacent and parallel to the wall. The wall or closure angle shall not be used for this purpose, although to facilitate installation, runners may be attached to the closure angle at two adjacent walls with clearances between the wall and the runner being maintained at the other two walls.
 - G. All light fixtures shall be positively attached to the suspension system. The attachment device shall have a capacity of 100% of the fixture weight in any

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direction.

- H. Only intermediate-duty and heavy-duty suspension systems shall be used to support light fixtures.
- I. With intermediate-duty suspension systems, the grid members shall have supplemental support within 3" of each corner of the fixture with a #12 ga. hanger. Where heavy-duty suspension systems are used, supplemental support is not required.
- J. In addition to the above, fixtures or other equipment weighting more than 20# but less than 56# shall have two #12 ga. wires from the housing to the structure above or to other hanger wires. These wires may be slack. Fixtures or other equipment weighing in excess of 56# shall be independently supported with #12 ga. wire at each corner to the structure above. Pendant hung fixtures shall be independently supported with a minimum of one #9 ga. wire.

3.3 LAY-IN PANEL INSTALLATION

- A. Center and balance areas of tile, if possible.
- B. An excessive number of cuts shall not be made. Usually, no cuts smaller than half size should be made. Make all cuts on the outer edges of the field.
- C. Install the tile without jagged or flaked edges. No visible cut edges allowed.
- D. Fit tile closely where edges will be covered by trim, escutcheons or other similar devices.
- E. Install whole tiles wherever possible. The splitting of tile is expressly prohibited except where no alternative is possible.
- F. Make cutouts for all penetrations of lights, mechanical and fire sprinkler systems.
- G. At tegular type panels, field cuts shall be cut to a matching tegular profile. Field paint tegular profile to match factory edges.

3.4 EXTRA STOCK

- A. Furnish an additional 5% of each tile color, size, style and pattern for Owner's use.

3.5 ADJUSTMENT AND CLEANING

- A. Leave all tile clean and free of dust or discoloration. Replace damaged or discolored units at no additional cost to the Owner.

END OF SECTION

**SECTION 09 65 00
RESILIENT FLOORING**

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Work in this Section includes furnishing and installation of all resilient flooring and base as indicated on the Drawings, specified herein, or otherwise needed for a complete and proper installation of the work of this Section.
- B. Work in this Section includes the final top-coating and finishing of materials installed under this Section.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Special Requirements Section 01 61 16
- C. Finish Carpentry Section 06 20 00
- D. Carpeting Section 09 68 00

1.3 STANDARDS

- A. ASTM REFERENCES, FEDERAL REFERENCES
 - 1. Solid Vinyl Floor Tile: ASTM F 1700
 - 2. Solid Vinyl Sheet Flooring: ASTM F 1303
 - 3. Base: F.S. SS-W-40a, Type I Rubber.
- B. Flame Spread, Smoke Developed
 - 1. F.S. less than 75 per ASTM E-84.
 - 2. Smoke density less than 450.
 - 3. N.B.S. Floor Radiant Panel - Critical Radiant Flux - 7.5.
 - 4. U.L. tunnel test 992.

1.4 QUALITY ASSURANCE

- A. Qualifications of manufacturers: Products used in the work of this Section shall be produced by manufacturers regularly engaged in manufacture of similar items and with a history of successful production acceptable to the Architect.
- B. Qualifications of installers: Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- C. **Moisture, Humidity and pH testing:** For flooring to be installed on concrete slab, provide the following:
 - 1. Prior to installation, the flooring installer, under authorization of the flooring manufacturer will perform slab testing to determine moisture retention and pH in the concrete.
 - 2. Moisture emission is not to exceed **5 lbs.** of water per 1000 sq.ft. per 24 hours per ASTM F1869, using Calcium Chloride test method OR, a lesser moisture content as required by the manufacturer or installer of the flooring to be installed.
 - 3. Internal relative humidity of the concrete slab shall not exceed 75% when measured per ASTM F2170.
 - 4. Slab shall not exceed a pH value of 10.
 - 5. Installation of the flooring will signify acceptance by the installer and manufacturer that the substrate is sufficiently dry to allow proper performance of the flooring in place.
- D. **Slab Flatness:**

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RESILIENT FLOORING**

1. Check slab flatness and verify that it meets the requirements of Section 03 35 00.
2. Low spots must be filled and high spots ground to required flatness.
3. Clean all contaminants from slab that would be detrimental to proper installation.

1.5 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00
- B. Product data: Submit the following:
 1. Complete materials list and samples of all items proposed to be furnished and installed under this Section.
 2. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements.
 3. Manufacturer's recommended installation procedures.
 4. Manufacturer's warranty.
- C. Submit product samples of each product type.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Resilient Vinyl Plank Flooring:
 1. Laminated Vinyl Plank.
 2. Minimum overall thickness: 5.0 mm (0.020 in.).
 3. Minimum wear layer thickness: 20 mil (13/64").
 4. Finish: N/A
 5. Edges: Interlocking "click profile.
 6. Manufacturer / Style / Color:
 - a. See Drawings
 7. Size: See Drawings
- A. Resilient Vinyl Sheet Flooring:
 1. Minimum overall thickness: 0.080" (2.0 mm).
 2. Minimum wear layer thickness: 0.080" (2.0 mm).
 3. Manufacturer/style/color:
 - a. See Drawings
 4. Adhesives:
 - a. Per manufacturer's recommendations.
 - b. All adhesives shall meet VOC requirements of Section 01 61 16.
 5. Heat Welding Rods:
 - a. Mannington color-matched welding rod.
 6. Gameline Floor Paint:
 - a. Product as recommended by flooring manufacturer for PVC flooring. See Drawings for colors and layout.
- C. Rubber Base shall be 4" or 6" top set cove or straight base, as shown on Drawings, in maximum lengths.
 1. Rubber; refer to References section of this specification for grade and type.
 2. Manufacturer / Style / Color:
 - a. Armstrong, Roppe, Flexco, or Burke Mercer. Color to be selected from Manufacturer's standard color range.

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- 3. Base Adhesive and Finishes:
 - a. Adhesives shall be a waterproof and stabilized type as recommended by the manufacturer of the approved resilient material. Asphalt emulsions and other non-waterproofed types will not be accepted.
 - b. Adhesives and finishes shall meet VOC requirements of Section 01 61 16.
 - D. Concrete slab primer shall be a non-staining type as recommended by the manufacturer of the resilient material to be applied over it.
 - E. Concrete slab vapor reduction coating: Koster VAP I 2000
 - F. Resilient sheet cove base top edge finished with continuous metal binding, or wood strip if detailed. Miter corners and finish smooth.
- 2.2 EDGING AND TRANSITIONS:
- A. Metal edge trims and/or reducer strips shall be SchluterSystems as appropriate for material and condition. All edging and transitions to be ADA compliant.
 - 1. Resilient to Concrete: Schluter; RENO-U
 - 2. Resilient Carpet: See Section 09 68 00, if applicable.
 - 3. Resilient to Tile: See Section 09 30 00, if applicable.
 - 4. Resilient to Resilient: None
- 2.3 OTHER MATERIALS
- A. All other materials not specifically described but required for a complete and proper installation of the work of this Section, shall be as recommended by the manufacturer of the resilient materials used, and as approved by the Architect.

PART 3 EXECUTION

3.1 INSPECTION

- A. General: Examine the areas and conditions under which resilient flooring and/or base is to be placed. Correct conditions detrimental to the proper and timely completion of the Work. Do not proceed until unsatisfactory conditions are corrected.
- B. Surface shall be smooth, level, at the required finish elevation, without more than 1/8" in 10'-0" variation from level or slopes shown.

3.3 PREPARATION (Wood Substrates)

- A. Install and prepare wood underlayment substrate per Section 06 20 00.
- B. Vacuum clean surfaces to be covered immediately before the application of flooring. Make subfloor free from dust, dirt, grease, and all foreign materials.
- C. If required by flooring manufacturer, apply substrate primer.

3.4 EDGING AND TRANSITIONS

- A. Provide edging and transition strips at all carpet edges where a change in finish flooring material or thickness occurs.
- B. Install per manufacturer's recommendations.

3.5 INSTALLATION

- A. General: Install all materials provided under this Section in strict conformance

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RESILIENT FLOORING**

with manufacturer's printed installation specifications and details. Where manufacturer's instructions conflict with other requirements herein, notify architect for resolution prior to application.

- B. Install material only after all finishing operations, including painting, have been completed and permanent heating system is operating. Moisture content of concrete slabs, building air temperature and relative humidity must be within limits recommended by flooring manufacturer.
- C. Resilient Tile Flooring
 1. Center tile or tile joints in room or as specifically shown on Drawings.
 2. Adjust tile location to eliminate cut tiles less than 6" wide at perimeter.
 3. Lay tile in pattern as indicated on the Drawings.
 4. Install flooring using the exact system recommended by the resilient flooring manufacturer.
 5. Install sheets tight to floor with butt joints less than 1/100" in width.
- D. Resilient Sheet Flooring:
 1. Cut material in lengths and sizes required, minimizing number of seams.
 2. Match pattern between adjacent abutting edges and double cutting if recommended by manufacturer. Do not reverse sheets.
 3. Lay sheets flat and allow to acclimate prior to adhesive work.
 4. Install flooring using the exact system recommended by the resilient flooring manufacturer.
 5. Install sheets tight to floor with butt joints less than 1/100" in width.
 6. At butt joints between two different thicknesses of material, install paper shim per manufacturer's instructions to bring finished surfaces flush with each other to provide a smooth transition.
 6. Heat weld seal seams using products and equipment recommended by manufacturer.
 7. At locations scheduled as "Self Cove", provide 6" high self-coves using 7/8" radius wall base fillet strip to form the cove. Terminate the exposed top edge of the cove with a metal binding set in adhesive. Outside and inside corners shall be formed without using metal trim pieces. Adhere cove and cap strike by manufacturer's recommended method.
 8. Use necessary floor trim pieces to provide a finish edge and protect edge.
- E. Resilient Base:
 1. Install base to walls, columns, cabinets and permanent fixtures.
 2. Install base in maximum lengths available. Notch as required to neatly fit around trims at door jambs.
 3. Install continuous around outside corners using a v-notch tool on the back side. Apply heat to help form the base around the corner.
 4. Install continuous around inside corners using a straight blade tool on the back side. Apply heat to help form the base around the corner.
 5. Install base per manufacturer's installation instructions. Ensure a positive fit against the wall and floor surfaces.
 6. Where base is installed at a wet location, set base in a bed of sealant to prevent moisture passage beneath.

3.6 CLEANING, FINISHING AND PROTECTION

- A. Cleaning:
 1. Remove excess adhesive or other surface blemishes from flooring and/or

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base, using neutral type cleaners recommended by the flooring or base manufacturer.

- B. Finishing:
 - 1. Provide topcoat finishes per manufacturer's specifications.
- C. Protection:
 - 1. Protect installed flooring from damage until acceptance by the Owner.

3.7 ADJUSTMENTS

- A. Contractor shall inspect and make necessary adjustments within one month of the time that heat is supplied continuously in finished areas.
- B. All material that has not been seated in a level plane with surrounding adjacent material shall have heat supplied locally and be quickly rolled to the surrounding level of floor material.
- C. All materials showing broken corners, minor brakes, or fracture lines across surface shall be removed, and new materials substituted.
- D. All materials showing evidence of debris, not removed prior to installation, shall be removed and new material substituted after cleaning of the sub-surface.

END OF SECTION

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- per color AATCC transference scale.
- F. Static Resistance: Provide carpet construction to provide minimum of 3.0 KV resistance for 20 percent relative humidity at 70 degrees F, AATCC 134.
 - G. Tuft Bind: Carpet shall have an average face yarn tuft bind of 20 pounds for the life of the carpet, as tested per ASTM D 1335-67 method. Tuft bind shall not be rendered insufficient by normal cleaning or accidental spillage of water causing a flooded carpet condition.
 - H. Delamination: Primary and secondary backings shall be able to stand up to an average of 8.3 pounds per square inch resistance to separation, as certified by independent testing.
 - I. Stain Resistance: Carpet shall be of a permanent stain resistant fiber and not only by surface treatments. Carpet shall pass testing of AATCC 175, and be certified to comply with that standard.
 - J. Edge Ravel: When installed with or without edge sealer, carpet shall have no evidence of edge ravel.
 - K. Nylon Fiber Construction: Continuous filament nylon shall be high bulk or textured carpet type yarn with average filament size of 12 denier or coarser. Staple nylon shall be carpet type fiber with an average fiber size of 12 denier or coarser, and of specified fiber length. For level loop carpet, the staple length shall be a minimum of 6 inches.
 - 1. Solution dyed.

1.5 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00
- B. Product data: Submit the following:
 - 1. Complete materials list and samples of all items proposed to be furnished and installed under this Section.
 - 2. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements.
 - 3. Manufacturer's recommended installation procedures.
 - 4. Manufacturer's warranty.
- C. Submit product samples of each product type.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Modular Tile Carpet:
 - 1. See Drawings.
- B. Walk-Off Carpet Tile:
 - 1. See Drawings.

2.2 EDGING AND TRANSITIONS:

- A. Metal edge trims and/or reducer strips shall be SchluterSystems as appropriate for material and condition. All edging and transitions to be ADA compliant.
 - 1. Carpet to Concrete: Schluter; RENO-U
 - 2. Carpet to Resilient: Schluter; RENO-U
 - 3. Carpet to Tile: See Section 09 30 00, if applicable.
 - 4. Carpet to Carpet (same thickness) None
 - 5. Carpet to Carpet (lower thickness) Schluter; RENO-TK
- B. Material/Finish: Aluminum / Clear anodized.

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- C. Thickness of finish flooring materials and edging/transition model to be coordinated by the Contractor.

2.3 ACCESSORIES

- A. Adhesives:
 - 1. Adhesive for direct glue-down: waterproof type as recommended by carpet manufacturer.
 - 2. Seam adhesive shall be carpet seaming adhesive, or an equal recommended for the purpose by the manufacturer of the approved carpet.
 - 3. Adhesive shall meet VOC requirements of Section 01 61 16.
- B. Primers:
 - 1. Provide substrate primers as required for proper installation of carpet. Installer shall verify primer compatibility between carpet requirements and substrate.
- C. Concrete slab vapor reduction coating: Koster VAP I 2000
- D. Provide other accessories and materials required to complete installation.

PART 3 EXECUTION

3.1 INSPECTION

- A. Examine the areas and conditions under which work of this Section will be installed. Do not proceed until any unsatisfactory conditions have been corrected.

3.2 PREPARATION (Wood Substrates)

- A. Install and prepare wood underlayment substrate per Section 06 20 00.
- B. Vacuum clean surfaces to be covered immediately before the application of flooring. Make subfloor free from dust, dirt, grease, and all foreign materials.
- C. If required by flooring manufacturer, apply substrate primer.

3.3 EDGING AND TRANSITIONS

- A. Provide edging and transition strips at all carpet edges where a change in finish flooring material or thickness occurs.
- B. Install per manufacturer's recommendations.

3.4 INSTALLATION (Tile)

- A. The Contractor shall install carpeting where indicated. Installation shall be direct glue-down.
- B. Carpet shall be installed in accordance with the recommendations of the manufacturer and shall be laid in a pattern **as indicated on the Drawings**, square with the lines of the room. The final installation shall provide a carpeted surface that is smooth, lays completely flat, without wrinkles, ripples, or surface irregularities. All finished seams shall not be noticeable under normal visual observation.

3.5 CLEAN-UP

- A. Thoroughly clean all carpet surfaces prior to final acceptance of the carpeted areas by Owner, and inspectors.
- B. Installed carpet shall be free of spots, dirt or soil, and shall be without tears, frays

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CARPETING

or pulls.

- C. Any damage to paint, walls, woodwork, doors, etc., during installation shall be the responsibility of the carpet contractor to repair.
- D. No installation will be accepted until inspected by representatives of the Owner and carpet installer.
- E. All carpeted areas shall be adequately ventilated after installation to assure the elimination of odors from carpet or associated installation materials.

3.6 PROTECTION

- A. Provide a heavy non-staining paper or plastic walkway as required over carpeting in direction of foot traffic, maintaining intact until carpeted space is accepted by Owner.

END OF SECTION

SECTION 09 72 16
VINYL WALL COVERING

PART 1 GENERAL

- 1.1 DESCRIPTION
 - A. Work in this Section includes furnishing and installation of adhesive applied vinyl wall coverings.

- 1.2 RELATED WORK SPECIFIED ELSEWHERE
 - A. Submittals Section 01 33 00
 - B. Gypsum Wallboard Section 09 29 00
 - C. Painting Section 09 90 00

- 1.3 SUBMITTALS
 - A. General: Comply with provisions of Section 01 33 00.
 - B. Submit product data for each type of wall covering.
 - C. Submit product samples of each wall covering type.

- 1.4 QUALITY ASSURANCE
 - A. Standards: Comply with standards specified herein and as listed in Section 01 42 19.

PART 2 PRODUCTS

- 2.1 MATERIALS
 - A. Vinyl Wall Coverings
 - 1. Manufacturer: See Drawings
 - 2. Product ID: See Drawings
 - 3. Description: Vinyl wall covering.
 - 4. Product No.: See Drawings
 - 5. Material: 100% vinyl
 - 6. Backing: Paper

- 2.2 RELATED ACCESSORIES
 - A. Primers/sealers: Opaque acrylic wall covering primer as recommended by the textile manufacturer.
 - B. Adhesive: Heavy-duty, clear, pre-mixed wall covering adhesive.

PART 3 EXECUTION

- 3.1 PREPARATION FOR INSTALLATION
 - A. Coordination: Properly coordinate with all other trades as required to ensure adequate provision for anchorage of the work of this Section and for proper interface with the work of all other trades.
 - B. Inspection: Examine the areas and conditions under which work of this Section will be installed. Correct conditions detrimental to the proper and timely completion of the Work. Do not proceed until unsatisfactory conditions have been corrected.

- 3.2 SUBSTRATE
 - A. Gypsum wallboard substrates shall be prepared per Section 09 29 00.
 - B. Gypsum wallboard substrates shall be sealed per Section 09 90 00.

SECTION 09 72 16
VINYL WALL COVERING

3.3 INSTALLATION

- A. Apply primer per manufacturer's printed instructions to all wall surfaces scheduled to receive wall coverings.
- B. Layout and cut wall coverings as required. An excessive number of cuts shall not be made. Usually, no cuts smaller than half the width of the material should be made.
- C. Make cutouts for all penetrations of all switches, receptacles, lights, etc. as required.
- D. Cuts shall be made on a table using a straight edge and a sharp razor blade. Change blades often to ensure crisp cut edges.
- E. Apply adhesive in an even coat to the wall (never to the wall covering) and allow to tack up.
- F. Care should be taken not to get adhesive on the face of the material. If necessary, remove adhesive from the surface by brushing with a stiff brush after the adhesive is dry.
- G. Apply wall covering strips in consecutive order, starting from one end of the wall surface. Strips shall be installed plumb beginning at the top and working downward. Do not stretch the wall covering.
- H. Using a wall covering brush or smooth trowel, press panels gently to remove bubbles or wrinkles. Smoothing shall be done from the top of the panel and working downward.
- I. When applying an abutting panel, begin by butting the adjoining edge as tightly as possible to the preceding edge, being careful not to overlap or leave gaps along the seam. Do not overwork the seams.
- J. At outside corners, wrap wall covering a minimum of 6 inches around the corner.
- K. Trim top and bottom of each panel with a straight edge and sharp razor blade.

3.4 PROTECTION

- A. Protect adjacent surfaces when installing wall coverings.
- B. Protect wall coverings while performing adjacent construction work or related activities.

END OF SECTION

**SECTION 09 90 00
PAINTING**

PART 1 GENERAL

1.1 DESCRIPTION

- A. The work described in this section describes the requirements for applying paint, stain, or other emulsions on designated surfaces.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Priming and finishing of certain surfaces are specified to be factory performed or installer performed under pertinent other Sections.
- B. Submittals Section 01 33 00
- C. Special Requirements Section 01 61 16
- D. Metal Fabrications Section 05 50 00
- E. Finish Carpentry Section 06 20 00
- F. Sealants Section 07 90 00
- G. Doors and Windows Division 8

1.3 WORK NOT INCLUDED

- A. Do not include painting which is specified under other Sections to be completed by those trades.
- B. Unless otherwise indicated, painting is not required on surfaces in concealed areas and inaccessible areas such as furred spaces, pipe spaces, and duct shafts.
- C. Pre-finished metal surfaces of forged steel, anodized aluminum, stainless steel, chromium plate, brass, copper, bronze, and similar finished materials will not require painting under this Section except as may be specified herein.
- D. Do not paint any moving parts of operating units; mechanical or electrical parts such as valve operations, linkages, sinkages, sensing devices, and motor shafts, unless otherwise indicated.
- E. Do not paint over any required labels or equipment identification, performance rating, name, or nomenclature plates.

1.4 DEFINITIONS

- A. The term "paint", as used herein, means all coating systems materials including primers, emulsions, epoxy, enamels, stains, sealers, fillers, and other applied materials whether used as prime, intermediate or finish coats.

1.5 QUALITY ASSURANCE

- A. Architectural Specification Manual as published by Painting Contractors of America (PDCA).
- B. Qualifications of manufacturers: Products used in the work of this Section shall be produced by manufacturers regularly engaged in manufacture of similar items and with a history of successful production acceptable to the Architect.
- C. Qualifications of Workmen:
 - 1. Provide at least one person who shall be present at all times during the execution of the work of this Section, who shall be thoroughly familiar with the specified requirements of the materials and the methods needed for their execution, and who shall direct all work performed under this Section.
 - 2. Provide adequate numbers of workmen skilled in the necessary crafts and properly informed of the methods and materials to be used.

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PAINTING**

3. In acceptance or rejection of the work of this Section, the Architect will make no allowance for lack of skill on the part of the workmen.
 - D. Transparent Finished Interior Woodwork: Shall be finished to the standards of American Woodwork Institute (AWI) Section 5, Finishing, Premium grade, regardless of where actually finished.
 - E. Paint Coordination
 1. Provide finish coats which are compatible with the prime coats used.
 2. Review other Sections of these Specifications as required, verifying the prime coats to be used and assuring compatibility of the total coating system for the various substrata.
 3. Provide additional primers, sealers or fillers, depending on substrate to be finished, as required for proper application of finish coat specified, whether listed herein or not.
 4. Upon request, furnish information on the characteristics of the specific finish materials to ensure that compatible prime coats are used.
 5. Provide barrier coats over non-compatible primers, or remove the primer and re-prime as required.
 6. Notify the Architect in writing of anticipated problems in using the specified coating systems over prime coating supplied under other Sections.
- 1.6 LOW VOC COMPLIANCE
- A. When available, all products used under this Section shall meet the following limitations for emission of Volatile Organic Compounds (VOC).
 1. See Section 01 61 16 – Special Requirements – Sustainable Building Practices.
- 1.7 PRODUCT HANDLING
- A. Delivery of Materials: Deliver paint materials to the job site in sealed, original labeled containers, each bearing manufacturer's name, type of paint, brand name, color designation and instructions for mixing and/or reducing.
 - B. Storage of Materials: Provide proper storage to prevent damage to, and deterioration of, paint materials.
- 1.8 PROTECTION
- A. Adequately protect other surfaces from paint and damage caused by this Work. Make good any damage caused by failure to provide suitable protection, but not any damage caused by other trades.
 - B. Removal of Flammable Rubbish: Place cotton waste, cloths and material which may constitute a fire hazard in closed metal containers and daily remove from site.
 - C. Coordinate the work with other trades that they remove all miscellaneous hardware prior to starting work under this Section.
- 1.9 SUBMITTALS
- A. General: Comply with provisions of Section 01 33 00.
 - B. Products List: Before ordering, submit detailed list of materials proposed for use on work.
 - C. Drawdowns:
 1. Submit drawdowns prepared with type of paint and application specified,

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PAINTING

- samples not less than 8-1/2" x 12" in size.
- D. Finish material samples:
 - 1. Provide actual finished material samples of transparent finished wood.
 - E. Furnish additional samples as required until colors, finishes and textures are approved. Retain approved samples to be used as the quality standard for final finishes.

PART 2 PRODUCTS

2.1 GENERAL

- A. All painting products applied under this Section shall comply with VOC limits as required in Section 01 61 16.

2.2 PAINT MATERIALS

- A. Design is based on use of paint products by manufacturers listed below and other materials of those manufacturers are named in the Painting Schedule.
- B. General: Provide the best quality grade of the various types of coatings as regularly manufactured by paint materials manufacturers. Materials not displaying the manufacturer's identification as a standard best-grade product will not be acceptable.
- C. Durability: Provide paints of durable and washable quality. Do not use paint materials which will not withstand normal washing as required to remove pencil marks, ink ordinary soil, and similar material without showing discoloration, loss of gloss, staining, or other damage.
- D. Colors and Glosses: See the Finish Materials Schedule on the Drawings. The architect has selected the colors to be used in the various types of paint specified and will be the sole judge of acceptability of the various glosses obtained from the materials proposed to be used in the Work.
- E. Undercoats and Thinners: Provide undercoat paint produced by the same manufacturer as the finish coat. Use only the thinners recommended by the paint manufacturer, and use only to the recommended limits. Insofar as practicable, use undercoat, finish coat, and thinner material as parts of a unified system.
- F. Standards
 - 1. Provide paint materials which meet or exceed the standards listed for each application in the Painting Schedule in Part 2 of this Section.
 - 2. Furnish coatings ready-mixed unless otherwise specified, except field mix coatings which are in paste or powder form, or to be field catalyzed, in accordance with the directions of its manufacturer.

2.3 MANUFACTURERS

- A. Paints (General): Benjamin Moore, Sherwin-Williams, Miller, Rodda, Coronado, Pittsburgh, Corotech, Tnemec, or approved substitution.
- B. Stains and Sealers (General): Sherwin-Williams, Olympic, Cabots, Penofin, Messmer's, Sansin, Lenmar, SharkSkin, Wood-Kote, Timber Pro, or approved substitution.
- C. Gypsum board primer (over tape joints and patches) and over patches on other walls: pigmented shellac or pigmented PVA.

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PAINTING**

2.4 PAINT TYPES SCHEDULE

- A. Exterior Coatings
 - 1. Stained Siding and Trim:
 - 1st Coat: Exterior waterborne acrylic alkyd, UV blocking, transparent penetrating stain sealer.
 - 2nd Coat: Exterior waterborne acrylic alkyd, UV blocking, transparent penetrating stain sealer.
 - 2. Painted Metal - Galvanized:
 - 1st Coat: Acrylic Metal Primer
 - 2nd Coat: Exterior Alkyd DTM Enamel - Satin (MPI Gloss Level 4)
 - 3rd Coat: Exterior Alkyd DTM Enamel - Satin (MPI Gloss Level 4)
- B. Interior Coatings:
 - 1. General wall paint:
 - 1st Coat: Pigmented Shellac or PVA sealer
 - 2nd Coat: Acrylic Latex - Satin (MPI Gloss Level 4)
 - 3rd Coat: Acrylic Latex - Satin (MPI Gloss Level 4)
 - 2. General ceiling paint:
 - 1st Coat: Pigmented Shellac or PVA sealer
 - 2nd Coat: Acrylic Latex - Flat (MPI Gloss Level 1)
 - 3rd Coat: Acrylic Latex - Flat (MPI Gloss Level 1)
 - 3. Epoxy Enamel wall and ceiling paint: (Restroom, Kitchen & Wet locations)
 - 1st Coat: Pigmented Shellac or PVA sealer
 - 2nd Coat: Epoxy Enamel - Semi Gloss (MPI Gloss Level 5)
 - 3rd Coat: Epoxy Enamel - Semi Gloss (MPI Gloss Level 5)
 - 4. Opaque finished wood:
 - 1st Coat: Waterborne Interior Alkyd Primer
 - 2nd Coat: Waterborne Interior Alkyd – Satin (MPI Gloss Level 4)
 - 3rd Coat: Waterborne Interior Alkyd – Satin (MPI Gloss Level 4)
 - 5. Painted metal:
 - 1st Coat: Acrylic Metal Primer
 - 2nd Coat: Interior Acrylic DTM Enamel - Satin (MPI Gloss Level 4)
 - 3rd Coat: Interior Acrylic DTM Enamel - Satin (MPI Gloss Level 4)
 - 6. Transparent Finish Wood:
 - Oil-based stain (when indicated)
 - AWI System 11, Catalyzed Polyurethane, Satin (MPI Gloss Level 4).
 - 7. Stainless Steel and Aluminum: No coating.
- C. Coverage:
 - 1. The intent of the above coating schedule is to provide a thorough, uniform, durable coating of the specified paint. It is the responsibility of the applicator to install each product at rates appropriate to the substrate and in conformance with the manufacturer's recommendations to provide good coverage. The above schedule shall be considered the minimum application required.

PART 3 EXECUTION

3.1 ENVIRONMENTAL CONDITIONS

- A. Do no exterior work if surface moisture from any source is present or expected

**SECTION 09 90 00
PAINTING**

- before applied paints can cure.
- B. Do no work if temperature extremes are in excess of those recommended by manufacturers. in no case below minimum temperature of 45° F.
 - C. Do no work on surfaces receiving less than 15 candlepower per square foot lighting levels.
 - D. Provide adequate ventilation to materials receiving coatings per manufacturer's requirement for proper drying.
- 3.2 SURFACE CONDITIONS
- A. Before starting work in this Section, inspect all surfaces to receive coatings and verify their condition is suitable to receive work under this Section.
 - B. Report any unsatisfactory conditions to the Architect. Commencement of work will signify acceptance of existing conditions.
- 3.3 PROTECTION
- A. Prior to beginning work, mask or otherwise protect adjacent finished surfaces.
 - B. Maintain pedestrian access and required egress paths during all phases of work.
- 3.4 PREPARATION OF NEW SURFACES
- A. Prepare surfaces to receive scheduled work under this Section as hereinafter set forth, and as supplemented by the Painting Specification Manual, latest edition.
 - B. Interior Wood:
 - 1. AWI Section 5.
 - 2. Surfaces are to have been cleaned of dirt and contamination by other trades. Wipe off dust and minor grit prior to prime and subsequent coats.
 - 3. Fill all nail holes and fine cracks with filler prior to sanding.
 - C. Gypsum Board (Walls and Ceilings)
 - 1. Surfaces are to be crack-free, properly finished, textured where required and left clean by other trades.
 - 2. Remove any minor subsequent contamination, dust and dirt.
 - 3. If surface defects appear after prime coating, have defects repaired by the drywall trade; after defects are corrected, proceed with finish painting again using primer over repaired areas.
 - D. Steel and Iron
 - 1. At areas not shop primed or at shop primed surfaces field welded:
 - a. Grind smooth all welds. Remove all rust and scale by power tool clean to bare metal [SSPC-SP 11], or abrasive blasting to SSPC-SP5 commercial grade of cleanliness.
 - 2. Galvanized or Zinc Coated metal surfaces: Remove surface contamination, wash metal with phosphoric acid or approved solution, or apply one coat of etching type primer.
 - E. Mechanical and Electrical Work:
 - 1. Prepare metal surfaces as specified above for "Steel" and "Galvanized Surfaces" and as applicable to type of material scheduled to be painted.
 - 2. Prepare pre-finished surfaces of electrical panel boards as specified above for "Steel".
 - E. Concrete:
 - 1. Prepare concrete surfaces per manufacturer's printed instructions and in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines.

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2. Provide slab moisture testing prior to application. Moisture vapor transmission should not exceed three (3) lbs. per 1,000 sq ft in a 24 hour period.

3.5 PREPARATION OF PRE-PAINTED SURFACES

- A. Metal:
 1. Remove all loose, peeling, flaking or scaling paint by scraping, chipping and sanding.
 2. Feather back all rough paint edges and weathered wood to sound surfaces by sanding.
 3. In extreme cases, remove old paint completely and treat as new.
 4. Spot-prime bare areas as though they were new.
 5. Remove the gloss from old painted surfaces, sand with proper grade sandpaper, use a wire brush, or use a liquid deglossing compound.

3.6 APPLICATION

- A. Apply paint or finish by methods generally accepted by the trade to achieve approved finishes, in strict accordance with manufacturer's printed instructions.
- B. In multiple coat work, provide each coat of paint of slightly different color than preceding coat.
- C. Sand lightly between coats to achieve required finish.
- D. Do not apply finishes on surfaces that are not sufficiently dry.
- E. Make sure each coat of finish is dry and hard before a following coat is applied unless the manufacturer's directions state otherwise.
- F. Tint filler to match stain where clear finishes are specified; work filler well into grain and, before it has set, working perpendicularly to the grain, wipe the excess from the surface.
- G. To achieve the minimum dry thickness the following formula will be accepted:
 1. If coating "Volume Solids" (as specified by product manufacturer) is 100% then one gallon will cover 1,600 square feet at one mil dry film thickness (DFT), or 800 square feet at two mils DFT, or 400 square feet at four mils DFT. Reduced volume solids will reduce coverage proportionately to achieve same dry film thickness.
 2. On average, minimum of two to four mils thickness per coat is required.

3.7 COLOR SCHEDULE:

- A. See Drawings. When colors are not listed on the drawings, submit manufacturer's color selection chart to Architect for color selection.
- B. Actual paint color selection subject to change. Final selection to be determined during submittal process per part 1.9 above.

3.8 EXTRA STOCK

- A. Submit, in original unopened containers, one gallon of each top coat for touch up purposes. Label for positive identification. Store where directed.

3.9 CLEAN-UP/TOUCH-UP

- A. Touch up any blemishes on painted surface. Sand surface and refinish per specifications if necessary.
- B. Clean adjacent surfaces (or replace finish materials if necessary) of all paint materials or blemishes that resulted during execution of Work in this Section.

**SECTION 09 90 00
PAINTING**

END OF SECTION

DIVISION 10**SPECIALTIES**

10 14 00	Identifying Plaques and Signage
10 21 13.13	Metal Toilet Partitions
10 26 00	Wall Protection
10 28 00	Toilet Accessories
10 44 00	Fire Extinguishers and Cabinets

SECTION 10 14 00
IDENTIFYING PLAQUES & SIGNAGE

PART 1 GENERAL

1.1 DESCRIPTION

- A. Work in this Section includes furnishing and installing all non-lighted plaques for locations listed herein and on the Drawings.
- B. Work in this Section includes furnishing and installing all vinyl applied letters and signage for locations listed herein and shown on the Drawings.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00

1.3 SUBMITTAL

- A. General: Comply with provisions of Section 01 33 00.
- B. Product data: Submit the following
 1. Complete materials list and samples of all items proposed to be furnished and installed under this Section.
 2. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements.
 3. Manufacturer's recommended installation procedures.
 4. Shop layout drawings of all graphics.
 5. Submit manufacturer's color selection charts.

1.4 REQUIREMENTS

- A. All identifying plaques will conform to all Americans with Disabilities Accessibility Guidelines **Braille**
- B. All identifying plaques will contain text in **English**.

PART 2 PRODUCTS

2.1 SIGNAGE - Interior

- A. Plaques:
 1. Background Material: 1/8" thick Charcoal Grey Rowmark.
 2. Attachment: 3M VHB tape on back.
 3. Text: 1/32" thick raised Satin White Rowmark ADA compliant applique text with corresponding clear bead braille per ANSI A117.1.
 4. Graphics:
 - a. Font: Helvetica Regular
 - b. Size: 5/8" tall minimum.
 5. Provide the following:
 - a. Qty. (4); "EXIT" 6"x8" w/ ADA symbol
 - b. Qty. (1); "MEN" 6"x8" w/ ADA symbol
 - c. Qty. (1); "WOMEN" 6"x8" w/ ADA symbol
 6. Verify all plaque text with Owner. Verify installation locations with Owner.
- B. Vinyl Applied Letters and Symbols:
 1. Material: Face adhesive vinyl, black.
 2. Text & Graphics: See Drawings
 3. Locations:
 - b. Qty. (1): "ELECTRICAL ROOM"; 2"
 - e. See Drawings for additional locations, specific dimensions and

SECTION 10 14 00
IDENTIFYING PLAQUES & SIGNAGE

layout.

2.2 SIGNAGE - Exterior

A. Vinyl Applied Letters and Symbols:

1. Material: Face adhesive vinyl, white.
2. Text & Graphics: See Drawings
3. Locations:
 - a. Entrance doors: International HC symbol. 6"x6"
 - b. Entrance door: Street address; 5". Minimum 0.5" stroke.
 - c. See Drawings for additional locations, specific dimensions and layout.

PART 3 EXECUTION

3.1 FABRICATION

- A. Fabricate in strict accordance with the Manufacturer's product data approved by the Architect.

3.2 PREPARATION FOR INSTALLATION

- A. Inspection: Examine the areas and conditions under which work of this Section will be installed. Correct conditions detrimental to the proper and timely completion of the Work. Do not proceed until unsatisfactory conditions have been corrected.

3.3 INSTALLATION

- A. Install lettering level and plumb.
- B. Plaques:
1. Mount with center of the plaque at 5'-0" off floor, within 3" of the door on the latch or strike side.

END OF SECTION

**SECTION 10 21 13.13
METAL TOILET PARTITIONS**

PART 1 GENERAL

1.1 DESCRIPTION

- A. Work included: Provide metal toilet partitions and urinal screens, complete, in place, as shown on the Drawings specified herein, and needed for a complete installation.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00
- B. Toilet Accessories Section 10 28 00

1.3 STANDARDS

- A. American National Standards Institute (ANSI) specifications for accessible facilities for handicapped people, ANSI A117.1 - 1980
- B. Comply with standards specified herein and as listed in Section 01 42 19.

1.4 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.
- B. Product data: Submit the following:
 - 1. Complete materials list and samples of all items proposed to be furnished and installed under this Section.
 - 2. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements.
 - 3. Shop Drawings and sufficient dimensional data to enable coordination of installation of concealed items of support.
 - 4. Manufacturer's recommended installation procedures.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Partitions to be powder-coated, floor-mounted, overhead-braced type.
- B. Panel construction: One-inch thick total, 22 gage, galvanized steel, bonded to sound deadening, double faced honeycomb core. Roll-formed interlocking edges, brazed and ground smooth at corners, reinforced for hardware accessories. Configuration as shown on Drawings.
 - 1. Wall panels: 55" high mounted at +14" above floor.
 - 2. Door panels: 55" high mounted at +14" above floor.
 - 3. Pilasters: Floor to overhead brace style.
 - 4. Overhead brace: Clear anodized extruded aluminum with anti-grip headrail.
- C. Finish: Phosphate treated power wash preparation with epoxy/polyester electrostatically applied powder coat with baked sure.
 - 1. Color: **To be selected from manufacturer's standard color range.**
- D. Doors:
 - 1. 24" door width for standard stalls.
 - 2. 34" clear, outswing door for handicap stalls, with self-closing hinge, set to return to closed position when unlatched.
 - 3. Provide positive latch, ADA compliant at HC stall.
 - 4. Provide pull, latch, bumper stop/coat hook at each door.
- E. Hardware: Provide 304 stainless steel finished hinges, latches, supports and pilaster base trim of manufacturer's standard design. Moving parts shall be nylon

SECTION 10 21 13.13
METAL TOILET PARTITIONS

- frictionless.
- F. Manufacturer: Accurate Partitions Corporation or approved equal.

PART 3 EXECUTION

3.1 FABRICATION

- A. Fabricate in strict accordance with the manufacturer's product data as reviewed by the Architect.
- B. Cut holes for partition mounted toilet accessories.

3.2 PREPARATION FOR INSTALLATION

- A. Coordination: Properly coordinate with all other trades as required to ensure adequate provision for anchorage of the work of this Section and for proper interface with the work of all other trades.

3.3 INSTALLATION

- A. Install the work of this Section straight and plumb rigidly anchoring to blocking and position for long life under hard use. Perform all drilling and cutting for installation of anchors only at locations which will be concealed in the finished work. Provide a uniform vertical edge clearance for doors of approximately 3/16", resting open at approximately 30 degrees when the latch is not engaged.

END OF SECTION

**SECTION 10 26 00
WALL PROTECTION**

PART 1 GENERAL

1.1 SUMMARY OF WORK

- A. Work in this Section includes providing and installing wall protective panels, corner guards, crash guards and handrails where indicated on drawings.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00

1.3 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.
- B. Product data: Submit the following:
1. Complete materials list and samples of all items proposed to be furnished and installed under this Section.
 2. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements.
 3. Manufacturer's recommended installation procedures.
 4. Color samples of manufacturer's standard color range.
- C. Product Submittals:
1. Submit 6 by 6 inch minimum sized product samples of panels.
 2. Submit 6 inch minimum length inside corner and edge trim samples.

PART 2 PRODUCTS

2.1 MATERIALS

- A. FRP Wall Protective Panels:
1. Thickness: 3/32" Nominal
 2. Panel Width: 4 feet.
 3. Panel Length: As required for full height floor to ceiling panels.
 4. Material: Fiberglass reinforced polyester resin panels
 5. Texture: Smooth.
 6. Color: See Drawings.
 7. Fire Rating: Class C.
 8. Trim/Accessories: Extruded aluminum, clear anodized. Top cap, vertical divider bar, inside corner, perimeter j-trim, and others as required for a complete installation.
 9. Adhesives: Low VOC compliant with Section 01 61 16.
 10. Acceptable Panels: Marlite / NUDO Products

PART 3 EXECUTION

3.1 FABRICATION

- A. Fabricate in strict accordance with the Manufacturer's product data approved by the Architect.

3.2 PREPARATION FOR INSTALLATION

- A. Inspection: Examine the areas and conditions under which work of this Section will be installed. Correct conditions detrimental to the proper and timely

SECTION 10 26 00
WALL PROTECTION

completion of the Work. Do not proceed until unsatisfactory conditions have been corrected.

- B. Modify substrate as required to obtain flat surface to within 1/8 inch in 10 feet.
- C. Remove dirt, dust and other contaminating material.

3.3 INSTALLATION

- A. Installation of Wall Panels:
 - 1. Cut panels to required size with carbide tipped saws.
 - 2. See Drawings for installation methods. Install wall paneling and trim accessories using adhesive methods. See manufacturer's printed installation instructions.
- B. Adjusting and Cleaning:
 - 1. Replace damaged and defective panels and moldings.
 - 2. Clean panels and moldings prior to finishing.
 - 3. Remove excess materials from the site.

END OF SECTION

**SECTION 10 28 00
TOILET ACCESSORIES**

PART 1 GENERAL

- 1.1 DESCRIPTION
 - A. This Section includes providing prefabricated accessories for use in conjunction with toilets, vanities and service areas. Provide blocking to support all owner provided accessories.
- 1.2 RELATED WORK SPECIFIED ELSEWHERE
 - A. Submittals Section 01 33 00
 - B. Glass and Glazing Section 08 80 00
- 1.3 QUALITY ASSURANCE
 - A. Comply with the standards specified herein and listed in Section 01 42 19.
- 1.4 SUBMITTALS
 - A. General: Comply with provisions of Section 01 33 00.
 - B. Product data:
 - 1. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements.

PART 2 PRODUCTS

- 2.1 GENERAL
 - A. Anchors and Fasteners: Provide anchors and fasteners capable of developing a retaining force commensurate with the strength of the accessory to be mounted, and well suited for use with the supporting construction. Where exposed fasteners are permitted, provide oval head fasteners with finish matching the accessory.
 - B. Finish: All accessory items shall be 304 stainless steel with satin finish.
 - C. All accessories in restrooms shall meet IBC Chapter 11 requirements for Handicap access.
 - D. Alternate products and manufacturers will be considered for use when submitted in accordance with the provisions of Section 01 25 00.
- 2.2 MANUFACTURERS
 - A. Approved Manufacturers:
 - 1. Bobrick
 - 2. Bradley
 - 3. Or approved equal
- 2.3 ACCESSORY ITEMS
 - A. See Drawings

PART 3 EXECUTION

- 3.1 INSTALLATION
 - A. Install accessory units in strict accordance with manufacturer's instructions.
 - B. Install units requiring handicap access at recommended mounting heights per

SECTION 10 28 00
TOILET ACCESSORIES

state handicap accessibility requirements. Other items per manufacturer's recommendations.

- C. All accessories shall be installed with sufficient strength, together with anchorage, to sustain a dead weight of 250 pounds for five minutes at any point.
- D. Grab bars shall be installed with sufficient strength, together with anchorage, to sustain a dead weight of 250 pounds for five minutes at any point.

3.2 ADJUSTMENT AND CLEANING

- A. Carefully adjust accessories and leave in perfect working order.
- B. Clean finished surfaces and leave free from any imperfections.

END OF SECTION

SECTION 10 44 00
FIRE EXTINGUISHERS AND CABINETS

PART 1 GENERAL

- 1.1 DESCRIPTION
 - A. This Section includes furnishing and installing portable fire extinguishers, cabinets, wall brackets and Fire Department Knox Boxes.
- 1.2 RELATED WORK SPECIFIED ELSEWHERE
 - A. Submittals Section 01 33 00
- 1.3 STANDARDS
 - A. Requirements of local jurisdictions are in force and shall govern.
 - B. Comply with standards specified herein and as listed in Section 01 42 19.
- 1.4 SUBMITTALS
 - A. General: Comply with provisions of Section 01 33 00.
 - B. Product data: Submit the following:
 - 1. Complete materials list of all items proposed to be furnished and installed under this Section.
 - 2. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements.
 - 3. Manufacturer's recommended installation procedures.
 - 4. Color samples of manufacturer's standard color range.

PART 2 PRODUCTS

- 2.1 FIRE EXTINGUISHERS
 - A. Multi-Purpose Dry Chemical (Qty. per Drawings): 10 pound capacity, U.L. Rating 4A-80BC with service tag attached. Cosmic 10E by J.L. Industries.
- 2.2 CABINETS & MOUNTING BRACKETS
 - A. Cabinets (Qty. per Drawings): J.L. Industries, Ambassador series, steel #1017.
 - 1. Cabinet type: Semi-Recessed, 3" rolled edge.
 - 2. Exterior finish: powder coated steel, white.
 - 3. Interior tub: powder coated steel, white.
 - 4. Door style: Vertical Duo door w/ tempered glass glazing and Saf-t-lok.
 - 5. Pull handle: Standard pull handle, clear anodized aluminum.
 - 6. Lettering: Die-cut red vinyl, vertical, "FIRE EXTINGUISHER"
 - B. Wall Bracket: (Qty. per Drawings)
 - 1. Provide fire extinguisher with corresponding wall bracket.
- 2.3 FD KEY BOX
 - A. Knox-Box – 3275 w/ hinged door. When located at concrete or masonry, provide recessed mounting kit RMK. (Verify location with Fire Department.)

PART 3 EXECUTION

- 3.1 PERFORMANCE
 - A. Installation of Fire Extinguisher Brackets:

SECTION 10 44 00
FIRE EXTINGUISHERS AND CABINETS

1. Install fire extinguisher brackets on walls at 40 inches above the floor.
 2. Install fire extinguisher cabinets at locations shown with top of cabinet no more than 60 inches above the floor and with handle no more than 54 inches above the floor.
 2. Screw anchor brackets to adjacent substrate as recommended by bracket manufacturer.
- B. Location of Fire Extinguishers:
1. Install fire extinguishers and cabinets at locations indicated on Drawings. Verify locations with Owner and Fire Marshall.
- C. Adjusting and Cleaning:
1. Replace damaged and defective fire extinguisher cabinets, fire extinguisher brackets, and fire extinguishers.
 2. Clean door glazing and fire extinguisher cabinet interior and exterior surfaces prior to Substantial Completion.

END OF SECTION

DIVISION 12

FURNISHINGS

12 21 00

Window Coverings

**SECTION 12 21 00
WINDOW COVERINGS**

PART 1 GENERAL

1.1 DESCRIPTION

- A. This Section includes furnishing and installation of mini blinds and/or roller blinds at following locations:
 - 1. See Drawings

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals Section 01 33 00

1.3 SUBMITTALS

- A. General: Comply with provisions of Section 01 33 00.
- B. Product data: Submit the following information:
 - 1. Complete materials list of all items proposed to be furnished and installed under this Section.
 - 2. Sufficient data required to demonstrate compliance with all specified requirements.
 - 3. Shop Drawings of the entire installation.
 - 4. Color selection charts.

1.4 STANDARDS

- A. Requirements of local jurisdictions are in force and shall govern.
- B. Comply with standards specified herein and as listed in Section 01 42 19.

PART 2 PRODUCTS

2.1 MATERIALS

- A. BL-1 Horizontal slat blinds
 - 1. Design is based on Riviera by Levolor.
 - 2. Configuration:
 - a. 1" wide painted aluminum slats.
 - b. Slat support by polyester yarn.
 - c. Upward action by polyester cord at right side of blind w/ cord lock. (Verify side)
 - d. 180 degree horizontal angle tilt by clear plastic wand at left side of blind. (Verify side)
 - e. Head and bottom rail of steel finished to match slats.
 - f. Valance comprised of double slat in metal clip.
 - g. Support clips as required for installation condition.
 - 3. Color: To be selected by Architect from manufacturer's standard solid colors.

2.2 SIZE & CONFIGURATION

- A. Provide individual shades at all window lights. (Do not gang multiple lights)

PART 3 EXECUTION

SECTION 12 21 00
WINDOW COVERINGS

3.1 PREPARATION FOR INSTALLATION

- A. Coordination: Properly coordinate with all other trades as required to ensure adequate provision for anchorage of the work of this Section and for proper interface with the work of all other trades. Confirm with Owner exact locations prior to installation to ensure coordination with fixtures.
- B. Install level and plumb and in good working condition per manufacturer's instructions.

END OF SECTION

DIVISION 22

PLUMBING

22 00 00

Plumbing Systems – Bidder Designed

SECTION 22 00 00
PLUMBING SYSTEMS - Bidder Designed

PART 1 GENERAL

1.1 DESCRIPTION

- A. This Section includes all materials and labor necessary as required to provide new and/or alterations and extensions to an existing system to create a complete, functioning system as outlined by the Drawings and herein and, per all prevailing codes.
- B. Work in this Section includes bidder designed and engineered systems.
 - 1. Bidder shall provide all engineering required; for final sizing to meet specifications, and code requirements of permit jurisdiction.
 - 2. On all Bidder Designed work, the Contractor shall provide complete design and documentation as required for submission to and approval of Architect and/or Engineer of Record, Governing Building Departments or Other Authorities having jurisdiction, and Owner.
- C. Work includes all final testing and adjustment.
- D. Systems Included:
 - 1. Domestic Plumbing:
 - a. Alterations and extensions as required to the existing domestic water, sanitary and storm sewer delivery system as required for a complete, functioning system and based on fixture layout shown on Drawings.
 - 2. Natural Gas:
 - a. Complete new natural gas delivery system as required for a complete, functioning system and based on fixture layout shown on Drawings.

1.2 RELATED SECTIONS

- A. Submittals Section 01 33 00
- B. Bidder Designed Systems Section 01 33 50

1.3 STANDARDS

- A. Requirements of local jurisdictions are in force and shall govern.
- B. Comply with standards specified herein and as listed in Section 01 42 19.

1.4 ARCHITECTURAL SCHEMATICS

- A. Drawings are diagrammatic for intent, complimentary to the Architectural drawings not intended to show all features of work. Install material not dimensioned on drawings in a manner to provide a symmetrical appearance. Do not scale drawings for exact equipment locations. Review drawings and adjust work to conform to conditions shown thereon. Field verification of dimensions, locations and levels as directed.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Plumbing System:
 - 1. Provide all materials, equipment and fixtures for alterations and extensions to an existing domestic water, sanitary sewer and delivery system as required to create a complete, functioning system based on fixture layout shown on Drawings.

SECTION 22 00 00
PLUMBING SYSTEMS - Bidder Designed

- a. Existing domestic water meter and domestic water service from street to the building to remain and be reused. The balance of the system shall all be new.
 - b. Existing sanitary sewerage discharge from building to the street to remain and be reused. The balance of the system shall be new.
 - c. All water piping to be PEX and copper hybrid.
 - d. Waste piping to be ABS, PVC DWV, or cast iron.
 - e. Insulate all hot water lines.
 - f. See Drawings for fixture layouts and types. All fixtures to be ADA compliant as required by code.
 - i. Lavatories: Porcelain china, drop-in, white.
 - ii. Faucets: Motion sensing, stainless steel.
 - iii. Toilets: Floor-mount, flush-valve.
 - iv. Shower: Pre-fabricated fiberglass, roll-in, with accessible fixtures, bench and grab bars.
 - v. Drinking fountain: Dual-height, electric water cooler.
 - vi. Kitchen sink: Double bowl, stainless steel with single lever faucet and disposal.
 - g. Coordinate water supply and waste needs with all other trades and provide as required.
- B. Natural Gas System:
- 1. Provide all materials, equipment and fixtures for a natural gas delivery system as required for a complete, functioning system and based on fixture layout shown on Drawings.
 - a. Coordinate natural gas supply needs with all other trades and provide as required.

PART 3 EXECUTION

3.1 PREPARATION FOR INSTALLATION

- A. Coordination: Properly coordinate with all other trades as required to ensure adequate provision for anchorage of the work of this Section and for proper interface with the work of all other trades.

3.2 INSTALLATION AND TESTING

- A. Install in accordance with prevailing code and in strict conformance with manufacturer's printed instructions.
- B. Provide final hook up of all plumbing equipment and equipment supplied by natural gas equipment.
- C. Final test systems installed under this contract, make final adjustment and provide Owner with all closeout material per Section 01 77 00.

END OF SECTION

DIVISION 23

HEATING, VENTILATION AND AIR-CONDITIONING (HVAC)

23 00 00

HVAC Systems – Bidder Designed

SECTION 23 00 00
HEATING, VENTILATION & AIR-CONDITIONING SYSTEMS-Bidder Designed

PART 1 GENERAL

1.1 DESCRIPTION

- A. This Section includes all materials and labor necessary as required to provide complete new, functioning systems as outlined by the Drawings and herein and, per all prevailing codes.
- B. Work in this Section includes bidder designed and engineered systems.
 - 1. Bidder shall provide all engineering required; for final sizing to meet specifications, and code requirements of permit jurisdiction.
 - 2. On all Bidder Designed work, the Contractor shall provide complete design and documentation as required for submission to and approval of Architect and/or Engineer of Record, Governing Building Departments or Other Authorities having jurisdiction, and Owner.
- C. Work includes all final testing and adjustment.
- D. Systems Included:
 - 1. Heating and Cooling:
 - a. Complete new heating and air cooling system with packaged, gas-fired rooftop units based on fixture layout shown on Drawings.
 - 2. Exhaust:
 - a. Complete new bathroom exhaust systems based on fixture layout shown on Drawings.

1.2 RELATED SECTIONS

- A. Submittals Section 01 33 00
- B. Bidder Designed Systems Section 01 33 50

1.3 STANDARDS

- A. Requirements of local jurisdictions are in force and shall govern.
- B. Comply with standards specified herein and as listed in Section 01 42 19.

1.4 ARCHITECTURAL SCHEMATICS

- A. Drawings are diagrammatic for intent, complimentary to the Architectural drawings not intended to show all features of work. Install material not dimensioned on drawings in a manner to provide a symmetrical appearance. Do not scale drawings for exact equipment locations. Review drawings and adjust work to conform to conditions shown thereon. Field verification of dimensions, locations and levels is directed.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Heating and Cooling Systems:
 - 1. Provide all materials, equipment and fixtures for a heating and cold air delivery system as required for a complete, functioning system and based on equipment layout shown on Drawings.
 - a. Replace all existing rooftop units. Utilize existing roof curbs to the greatest extent possible, minimizing roofing modifications.
 - b. Provide minimum of four (4) zones. See Drawings for schematic zoning information.
 - c. All new ductwork to be galvanized steel. All duct work shall be

SECTION 23 00 00
HEATING, VENTILATION & AIR-CONDITIONING SYSTEMS-Bidder Designed

- concealed above the ceiling line, within walls, or below the floor.
 - d. Insulate all supply duct work.
 - e. Diffusers shall be adjustable for volume control and direction. Diffusers shall be painted steel, color: white.
 - f. Return air grilles shall be painted steel, color: white.
 - g. Coordinate heating and cooling needs with all other trades and provide as required.
 - 2. Minimum design temperatures per ASHRAE design standards.
 - a. Heating: 70F DB Inside Design
10F DB Outside Design
 - b. Cooling: 75F DB, 63F WB Inside Design
95F DB, 67F WB Outside Design
 - 3. Provide equipment and wiring as needed for thermostats. Thermostats shall be digital, 7-day programmable with automatic switching from heating to cooling.
 - 4. Minimum efficiency factors:
 - a. Heating 80% AFUE
- B. Exhaust Systems:
 - 1. Provide all materials, equipment and fixtures for exhaust systems as required for a complete, functioning system and based on equipment layout shown on Drawings.
 - a. Exhaust fans shall be Energy STAR compliant and low noise.
 - b. Exhaust fan grilles white.
 - c. Coordinate exhaust needs with all other trades and provide as required.

PART 3 EXECUTION

3.1 PREPARATION FOR INSTALLATION

- A. Coordination: Properly coordinate with all other trades as required to ensure adequate provision for anchorage of the work of this Section and for proper interface with the work of all other trades.

3.2 INSTALLATION AND TESTING

- A. Install in accordance with prevailing code and in strict conformance with manufacturer's printed instructions.
- B. Provide final hook up of all HVAC equipment.
- C. Final test systems installed under this contract, make final adjustment and provide Owner with all closeout material per Section 01 77 00.

END OF SECTION

DIVISION 26

ELECTRICAL

26 00 00

Electrical Systems – Bidder Designed

SECTION 26 00 00
ELECTRICAL SYSTEMS - Bidder Design

PART 1 GENERAL

1.1 DESCRIPTION

- A. This Section includes all materials and labor necessary as required to provide alterations and extensions to an existing system to create a complete, functioning system as outlined by the Drawings and herein and, per all prevailing codes.
- B. Work in this Section includes bidder designed and engineered systems.
 - 1. Bidder shall provide all engineering required; for final sizing to meet specifications, and code requirements of permit jurisdiction.
 - 2. On all Bidder Designed work, the Contractor shall provide complete design and documentation as required for submission to and approval of Architect and/or Engineer of Record, Governing Building Departments or Other Authorities having jurisdiction, and Owner.
- C. Work includes all final testing and adjustment.
- D. Systems included:
 - 1. Electrical Service: Alterations and extensions as required to an existing system to create a complete service and distribution system of 120/240v electrical power, outlets and switching, complete lighting system based on architect's layout and including final lamping, exhaust fans, and final hookup of all electrical equipment based on fixture layout shown on Drawings.

1.2 RELATED SECTIONS

- A. Submittals Section 01 33 00
- B. Bidder Designed Systems Section 01 33 50

1.3 STANDARDS

- A. Requirements of local jurisdictions are in force and shall govern.
- B. Comply with standards specified herein and as listed in Section 01 42 19.

1.4 ARCHITECTURAL SCHEMATICS

- A. Drawings are diagrammatic for intent, complimentary to the Architectural drawings not intended to show all features of work. Install material not dimensioned on drawings in a manner to provide a symmetrical appearance. Do not scale drawings for exact equipment locations. Review drawings and adjust work to conform to conditions shown thereon. Field verification of dimensions, locations and levels is directed.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Electrical System:
 - 1. Provide all materials, equipment and fixtures for alterations and extensions to an existing electrical system as required to create a complete, functioning system based on fixture layout shown on Drawings.
 - a. Existing electrical meter and service to the building to remain.
 - b. Provide all new panels, subpanels and other electrical equipment as required.
 - c. Electrical system shall include provisions for Owner to plug in a

SECTION 26 00 00
ELECTRICAL SYSTEMS - Bidder Design

- portable generator in an emergency event. The Owner desires for the entire building to be powered during the emergency event.
- d. New panelboards shall allow provisions for a minimum of five (5) 120 volt circuits for future use.
 - e. Power basis of design: Provide power based on minimum code requirements. Where a desk/work station is shown on the Drawings, provide minimum two (2) duplex outlets each.
 - f. See architectural Drawings for schematic fixture layouts and types.
 - i. All fixtures to be dimmable LED.
 - ii. Lighting controls to be motion-activated where appropriate. Switching and circuiting to be designed for ease-of-use, and as approved by the Owner as meeting intended office function.
 - g. Provide the following for basis of design:
 - i. Provide two (2) duplex outlets minimum for each work station, based on furniture layout.
 - ii. Provide one (1) duplex outlet minimum for each room or space identified by number on the floor plan (except toilet rooms).
 - iii. Provide one (1) duplex outlet for each television indicated.
 - h. Coordinate electrical power needs with all other trades and provide as required.

PART 3 EXECUTION

3.1 PREPARATION FOR INSTALLATION

- A. Coordination: Properly coordinate with all other trades as required to ensure adequate provision for anchorage of the work of this Section and for proper interface with the work of all other trades.

3.2 INSTALLATION AND TESTING

- A. Install in accordance with prevailing code and in strict conformance with manufacturer's printed instructions.
- B. Provide final hook up of all electrical equipment.
- C. Final test system installed under this contract, make final adjustment and provide Owner with all closeout material per Section 01 77 00.

END OF SECTION

DIVISION 27

COMMUNICATIONS

27 00 00

Communications Systems - Bidder Designed

SECTION 27 00 00
COMMUNICATIONS SYSTEMS - Bidder Design

PART 1 GENERAL

1.1 DESCRIPTION

- A. This Section includes furnishing and installation of new system components as outlined by the Architectural Drawings and herein.
- B. Work in this Section includes bidder designed and engineered (if required) systems. Basis of design shall be the basis of the bid/contract for the Work. Coordinate all system details and requirements with the Owner. For work provided by the Owner, general contractor shall coordinate scheduling of work with the Owner.
 - 1. Bidder shall provide all engineering required; for final sizing to meet specifications, and code requirements of permit jurisdiction.
 - 2. On all Bidder Designed work, the Contractor shall provide complete design and documentation as required for submission to and approval of Architect and/or Engineer of Record, Governing Building Departments or Other Authorities having jurisdiction, and Owner.
- C. Systems included:
 - 1. Data and Communication:
 - a. System equipment, wiring and installation by Owner.
 - b. Provide complete rough-in, outlet box and raceways with pull string from device up to accessible space.

1.2 RELATED SECTIONS

- A. Submittals Section 01 33 00
- B. Bidder Designed Systems Section 01 33 50

1.3 STANDARDS

- A. Requirements of local jurisdictions are in force and shall govern.
- B. Comply with standards specified herein and as listed in Section 01 42 19.

1.4 ARCHITECTURAL SCHEMATICS

- A. Drawings are diagrammatic for intent, complimentary to the Architectural drawings not intended to show all features of work. Install material not dimensioned on drawings in a manner to provide a symmetrical appearance. Do not scale drawings for exact equipment locations. Review drawings and adjust work to conform to conditions shown thereon. Field verification of dimensions, locations and levels is directed.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Data and Communications Systems:
 - 1. System equipment, wiring and installation by Owner.
 - 2. Provide all boxes, raceways, pull strings and other related materials as required to provide pathways for an Owner provided and installed data and communications system. See Drawings for list of Owner provide work and materials.
 - a. See architectural Drawings for schematic fixture layouts and types.

SECTION 27 00 00
COMMUNICATIONS SYSTEMS - Bidder Design

- b. Provide the following for basis of design:
 - i. Provide one (1) location minimum for each private office and/or work station, based on furniture layout.
 - ii. Provide one (1) location minimum for each room or space identified by number on the floor plan (except toilet rooms).
 - iii. Provide one (1) location for each television indicated.
 - iv. Provide one (1) location for each mechanical equipment location requiring data/communications (ie. DDC controls, etc.)
- b. Raceways are not required where Contractor can coordinate installation of all data and communication wiring prior to wall and ceiling cover.

PART 3 EXECUTION

3.1 PREPARATION FOR INSTALLATION

- A. Coordination: Properly coordinate with all other trades as required to ensure adequate provision for anchorage of the work of this Section and for proper interface with the work of all other trades.

3.2 INSTALLATION AND TESTING

- A. Install in accordance with prevailing code and in strict conformance with manufacturer's printed instructions.

END OF SECTION

DIVISION 28

ELECTRONIC SAFETY AND SECURITY

28 00 00

Electronic Safety and Security Systems - Bidder Designed

SECTION 28 00 00
ELECTRONIC SAFETY & SECURITY SYSTEMS - Bidder Design

PART 1 GENERAL

1.1 DESCRIPTION

- A. This Section includes furnishing and installation of new system components as required to provide a complete, functioning system as outlined by the Architectural Drawings and herein.
- B. Work in this Section includes bidder designed and engineered (if required) systems. Basis of design shall be the basis of the bid/contract for the Work. Coordinate all system details and requirements with the Owner. For work provided by the Owner, general contractor shall coordinate scheduling of work with the Owner.
 - 1. Bidder shall provide all engineering required; for final sizing to meet specifications, and code requirements of permit jurisdiction.
 - 2. On all Bidder Designed work, the Contractor shall provide complete design and documentation as required for submission to and approval of Architect and/or Engineer of Record, Governing Building Departments or Other Authorities having jurisdiction, and Owner.
- C. Work includes all final testing and adjustment.
- D. Systems included:
 - 1. Local fire detection alarm system: Provide complete
 - a. Complete new local fire detection alarm system as required for a complete, functioning system and based on fixture layout shown on Drawings.
 - 2. Security and Access Control Systems:
 - a. System equipment, wiring and installation by Owner.
 - b. Provide complete rough-in, outlet box and raceways with pull string from device up to accessible space.

1.2 RELATED SECTIONS

- A. Submittals Section 01 33 00
- B. Bidder Designed Systems Section 01 33 50

1.3 STANDARDS

- A. Requirements of local jurisdictions are in force and shall govern.
- B. Comply with standards specified herein and as listed in Section 01 42 19.

1.4 ARCHITECTURAL SCHEMATICS

- A. Drawings are diagrammatic for intent, complimentary to the Architectural drawings not intended to show all features of work. Install material not dimensioned on drawings in a manner to provide a symmetrical appearance. Do not scale drawings for exact equipment locations. Review drawings and adjust work to conform to conditions shown thereon. Field verification of dimensions, locations and levels is directed.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Local Fire Detection System:
 - 1. Provide all materials, equipment and fixtures as required for fire detection

SECTION 28 00 00
ELECTRONIC SAFETY & SECURITY SYSTEMS - Bidder Design

system as required for a complete, functioning system as required by code.

- B. Security and Access Control Systems:
 - 1. System equipment, wiring and installation by Owner.
 - 2. Provide all boxes, raceways, pull strings and other related materials as required to provide pathways for an Owner provided and installed security and access control systems. See Drawings for list of Owner provide work and materials.
 - a. Basis of Design: All exterior doors and operable windows shall be provided with pathway for security systems. Select doors shall have pathways installed and shall be electrified for access control systems. See Drawings for locations. Entry doors may require special preparation for owner-provided security system; door hardware may require modification – coordinate with owner.
 - b. Raceways are not required where Contractor can coordinate installation of all data and communication wiring prior to wall and ceiling cover.

PART 3 EXECUTION

3.1 PREPARATION FOR INSTALLATION

- A. Coordination: Properly coordinate with all other trades as required to ensure adequate provision for anchorage of the work of this Section and for proper interface with the work of all other trades.

3.2 INSTALLATION AND TESTING

- A. Install in accordance with prevailing code and in strict conformance with manufacturer's printed instructions.
- B. Final test system installed under this contract, make final adjustment and provide owner with all closeout material per Section 01 77 00.

END OF SECTION