## SPECIFICATIONS AND CONTRACT DOCUMENTS FOR

# WILSONVILLE POLICE DEPARTMENT INTERIM RENOVATIONS

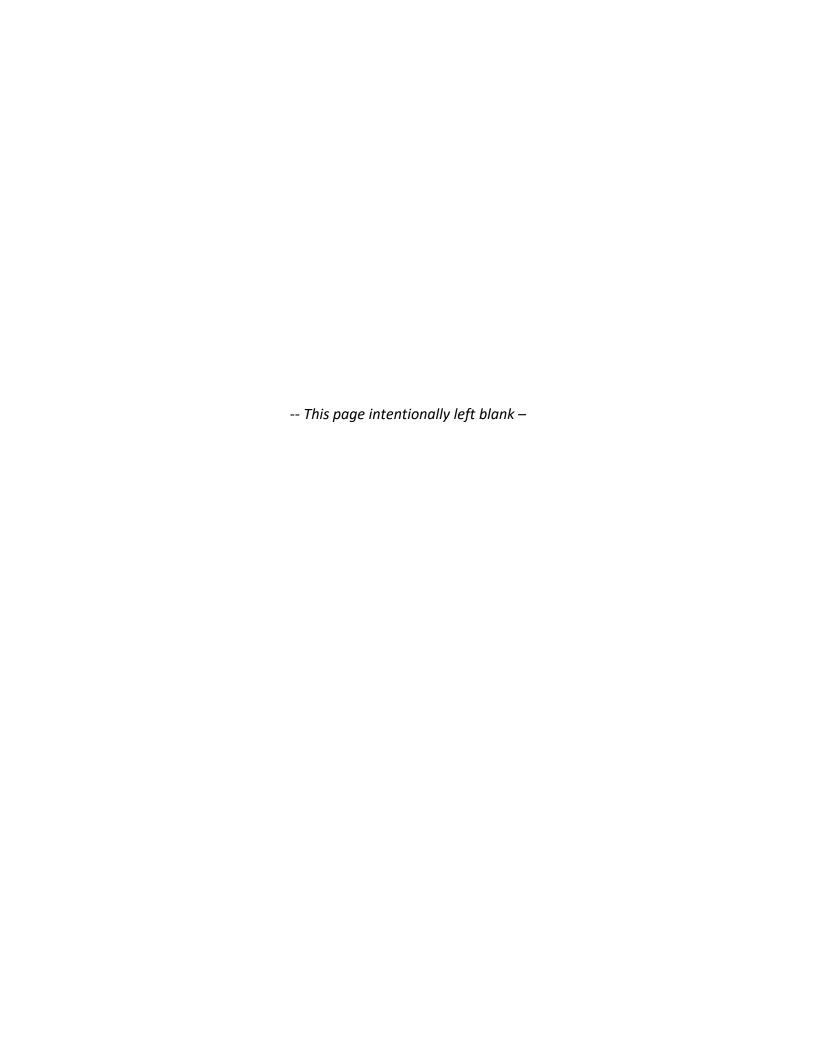
**CITY OF WILSONVILLE PROJECT CIP #8160** 

BID SUBMITTAL DUE BY: 2:00 PM, Wednesday, March 6, 2024



## **PREPARED BY:**

Office of the Public Works Director 29799 SW Town Center Loop East Wilsonville, OR 97070 (503) 682-4960



## SPECIFICATIONS AND CONTRACT DOCUMENTS FOR:

## WILSONVILLE POLICE DEPARTMENT INTERIM RENOVATIONS

**CITY OF WILSONVILLE PROJECT CIP# 0997** 

BID SUBMITTAL DUE BY: 2:00 PM, Wednesday, March 6, 2024



#### PREPARED BY:

Office of the Public Works Director 29799 SW Town Center Loop East Wilsonville, OR 97070 (503) 682-4960

Bidders do not need to be pre-qualified to bid this Project; however, Bidders must be qualified by the City of Wilsonville, in compliance with Oregon Revised Statutes Chapter 279C.375(3), in order to be awarded this Project.

In determining the responsiveness and responsibility of any bid submitted, establishing requisite qualification with the City shall not be considered an informality.

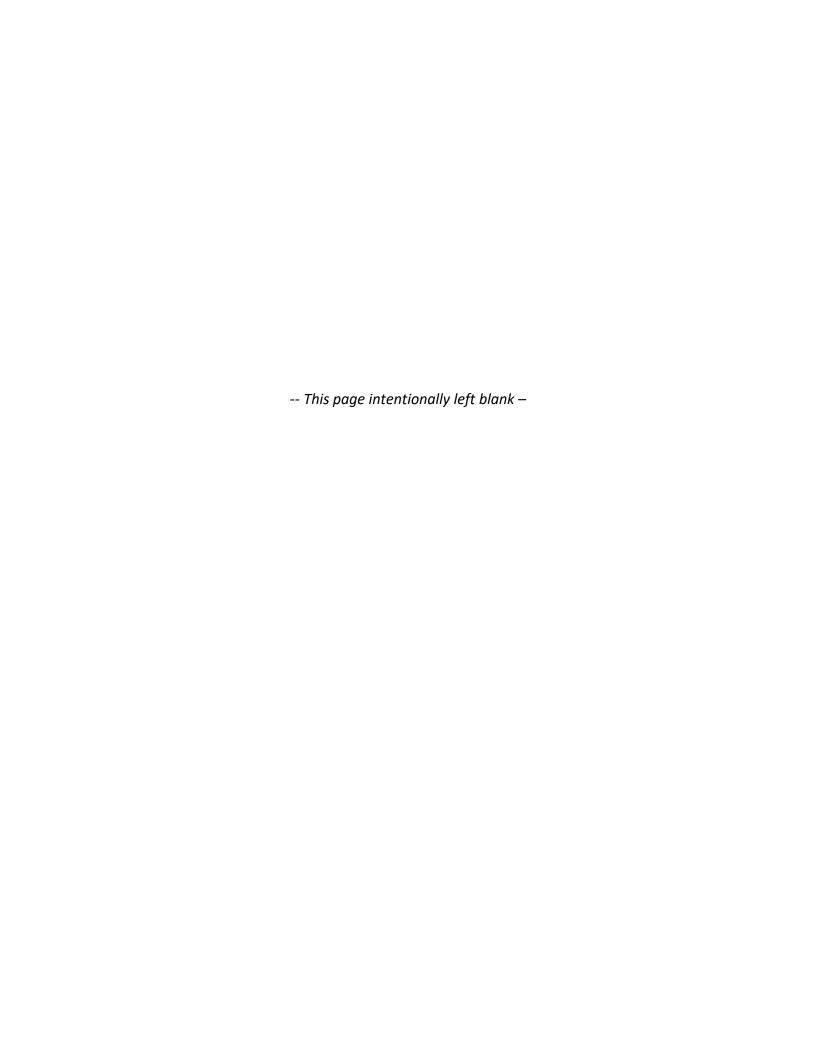
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## **INVITATION TO BID**

Sealed bids for furnishing all materials, labor, and equipment for the construction of the Wilsonville Police Department Interim Renovations for the City of Wilsonville ("Project") will be accepted at the City of Wilsonville, City Hall, 29799 SW Town Center Loop East, Wilsonville, Oregon 97070, by mail or hand delivery, until March 6, 2024 at 2:00 p.m., Local Time. At 2:00 p.m. all bids will be publicly opened and read. First—tier subcontractor disclosure submittals from Bidders will be received until March 6 2024 at 4:00 p.m., Local Time. Bidders that fail to submit disclosure forms within the allowable time period will be considered non-responsive and the submitted bid will be rejected. Martin Montalvo, Operations Manager, is the person designated to receive bids.

**Bidders must be qualified** by the City of Wilsonville ("City") in compliance with ORS 279C.375(3). In determining the responsiveness and responsibility of any bid submitted, establishing requisite qualification with the City shall not be considered an informality.

The choice of bid and/or the rejection of bids will be announced by 5:00 p.m. on March 8, 2024. A contract will be awarded within thirty (30) days after the selection of a qualified Bidder.

**SCOPE OF WORK:** ("Work") for the Project consists of furnishing all materials, labor, equipment, and supervision for the following:

The Project is limited to an interior tenant improvement. The scope includes general improvements to the existing interior finishes, flooring and ceiling. Changes include the closure of one existing stair case and the creation of a new stair case at an alternatic location.

...and performance of such additional and incidental work as called for by the Specifications and Contract Documents.

The estimated Project cost range is \$110,000 to 160,000...

Specifications and Contract Documents are available on March 6, 2024, after 8:00 a.m., at the City of Wilsonville, 29799 SW Town Center Loop East, Wilsonville, Oregon 97070. Copies of the Project Specifications and Contract Documents may be purchased for \$35.00 each from the City of Wilsonville. Bidders may also download them at <a href="https://www.questcdn.com">www.questcdn.com</a> and input **8966491**. Requests for documents to be mailed via overnight express shall be accompanied by a separate check in the amount of \$35.00. The City shall not be held responsible for the receipt of documents sent via mail.

All bids must be submitted on the forms furnished in the Project Specifications and Contract Documents and each must be accompanied by a Bid Security in the amount of ten percent (10%) of the total bid. The successful Bidder will be required to furnish Performance and Payment Bonds from a City approved surety for faithful performance of the contract in the full amount of the contract price.

This is a Contract for a Public Works Project ("Contract"), subject to ORS 279C.800 to 279C.870. Therefore, not less than the applicable state prevailing wage must be paid on this Project. (See

https://www.oregon.gov/boli/workers/Prevailing%20Wage%20Rate%20Books/January%205,%202024 %20Prevailing%20Wage%20Rate%20Book.pdf Prevailing-Wage-Rate-Amendment.pdf) In addition, all Bidders shall be compliant with all tax laws. No bid will be received or considered unless the bid contains a statement by the Bidder, as part of the bid, that the provisions of ORS 279C.838 or 279C.840 will be met.

In accordance with ORS 279C.515, if the Contractor fails, neglects, or refuses to make prompt payment of any claim for labor or services furnished to the Contractor or a subcontractor by any person in connection with the Contract, as the claim becomes due, the City may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due, or to become due, to the Contractor by reason of the Contract. If the Contractor or a first-tier subcontractor fails, neglects, or refuses to make payment to a person furnishing labor or materials in connection with the Contract within thirty (30) days after receipt of payment from the contracting agency or Contractor, the Contractor or first-tier subcontractor shall owe the person the amount due, plus interest charges. The payment of a claim in the manner authorized in this section does not relieve the Contractor or the Contractor's surety from any obligation with respect to any unpaid claims.

In accordance with ORS 279C.830(2), the Contractor and every subcontractor must have a public works bond filed with the Construction Contractors Board before starting Work on the Project, unless exempt under ORS 279C.836(4), (7), (8) or (9). Additionally, the Contractor shall include in every subcontract a provision requiring the subcontractor to have a public works bond filed with the Construction Contractors Board before starting Work on the Project, unless exempt under ORS 279C.836(4), (7), (8) or (9).

In accordance with ORS 279C.520, employees shall be paid at least time and a half pay for daily, weekly, weekend, and holiday overtime. An employer must give notice, in writing, to employees who work on a public contract, either at the time of hire or before commencement of Work on the Contract or by posting a notice in a location frequented by employees, of the number of hours per day and days per week that the employees may be required to work.

In accordance with ORS 279C.530, the Contractor shall promptly make payment for medical services that the Contractor has agreed to pay for, and all moneys and sums that the Contractor collected or deducted from the wages of employees under any law, contract, or agreement for the purpose of providing or paying for the services.

Each bid must identify whether the Bidder is a resident bidder, as defined in ORS 279A.120.

The performance of this Contract does not require a contractor or subcontractor to be licensed to do asbestos abatement work under ORS 468A.720.

No bid for this Contract will be received or considered by the City unless the Bidder is licensed with the Construction Contractors Board, as required by ORS 701.035 to 701.055, or the State Landscape Contractors Board, as specified in OAR 137-049-0230. In addition, the Contractor and every subcontractor must obtain a City of Wilsonville Business License or a Metro Business License prior to performing work within the City limits.

The City reserves the right to reject any bid that is not in compliance with all prescribed public contracting procedures and requirements, including the requirement to demonstrate the Bidder's responsibility under ORS 279C.375(3)(b). The City may reject any bid for good cause. The City may also reject all bids upon a finding of the agency that it is in the public interest to do so.

When applicable, all bidding shall comply with President's Executive Order No. 11246. All Bidders shall comply with the applicable provisions of the Equal Employment Opportunity Act of 1972 and the Civil Rights Act of 1964.

The Contractor shall use recyclable products to the maximum extent economically feasible in the performance of the Contract.

Bidders are required, prior to submission of bids, to examine the site and Specifications of the contemplated Work. Perceived errors and omissions in the Plans or Specifications shall be called to the attention of the City's Project Manager so that an Addendum may be issued. Failure to do so on the part of the Bidder does not relieve Bidder of responsibility for a correct and completely finished job.

A <u>non - mandatory</u> pre-bid meeting for prospective Bidders will be held at Wilsonville City Hall, (30000 SW Town Center Loop East, Wilsonville, OR 97070) beginning at 10:00 AM local time on February 19, 2024.

The following is the anticipated timeline for receiving and evaluating bids and awarding a contract to the most qualified Bidder. This schedule is subject to change if additional time is needed.

Advertise Invitation to Bid February 7, 2024

Non-Mandatory Pre-Bid Meeting
Bid Question Submission Deadline
Addenda Issuance Deadline
February 19, 2024, 10:00 a.m.
February 26, 2024, 5:00 p.m.
February 29, 2024, 5:00 p.m.

Bid Opening March 6, 2024, 2:00 p.m. (Wilsonville City Hall)

Evaluation of Bids Complete March 8, 2024 Notice of Intent to Award March 8, 2024

Award Protest Deadline March 15, 2024 at 5:00 p.m.
City Council Award Hearing April 1, 2024 7:00 p.m.

Notice of Award April 2, 2024

For additional information, contact the City Project Manager:

Martin Montalvo, Operations Manager City of Wilsonville 29799 SW Town Center Loop E. Wilsonville OR 97070

Telephone: (503) 570-1560

Fax: (503) 682-7025

Email: montalvo@ci.wilsonville.or.us

By Order of Delora Kerber, Public Works Director, City of Wilsonville, 29799 SW Town Center Loop East, Wilsonville, Oregon 97070. Dated this February 7, 2024.

-End of Section-

## **INSTRUCTIONS TO BIDDERS**

#### 1. DEFINED TERMS

Unless otherwise defined herein, capitalized terms used in these Instructions to Bidders are defined in the General Conditions or Supplementary Conditions contained in the Contract Documents. The term "Successful Bidder" means the lowest priced, qualified, responsible Bidder to whom the City of Wilsonville ("Owner") (on the basis of Owner's evaluation as hereinafter provided) makes an award. The term "Bid Documents" means the Solicitation Documents as defined under OAR 137-049-0200, and includes all documents that are issued prior to the Bid Closing time.

#### 2. GENERAL

A general description of the Work to be performed is contained in the Invitation to Bid. The Scope of Work is specified on the accompanying applicable parts of these Contract Documents. The selected Contractor shall furnish all materials, unless otherwise specified.

#### 3. CONTRACT DOCUMENTS

The Contract Documents under which it is proposed to execute the Work consist of all material bound herewith and any Addenda hereafter. These Contract Documents are intended to be mutually cooperative and to provide all details reasonably required for the execution of the Work. Any party contemplating the submission of a Proposal and being in doubt as to the meaning or intent of the Contract Documents, should request that the City's Project Manager provide, in writing, an interpretation thereof. Any interpretation or change in the Contract Documents will be made only in writing, and a copy of such interpretation or change will be mailed or delivered to each party receiving a set of Documents. The City will not be responsible for any other explanation or interpretation of said Documents.

## 4. PRE-BID MEETING

A non-**mandatory** pre-bid meeting for prospective Bidders will be held at the time and place designated in the Invitation to Bid. Statements made by the City's Project Manager at the walkthrough are not binding upon the City unless confirmed by this document or written addendum thereto. Failure to attend the pre-bid meeting will not disqualify a contractor from bidding on the Project.

## 5. TYPE OF PROPOSAL

All bids must be submitted on the forms provided in the Contract Documents. The Proposal for the Work contemplated is to be submitted on a lump sum basis and/or unit price basis, as shown on the Bid Schedule.

#### 6. PREPARATION OF BID PROPOSAL

All blank spaces in the Bid Proposal form must be filled in, in blue or black ink, in both words and figures where required. No changes shall be made to the Bid Proposal form. If the Bidder's figures are not legible and the Bidder fails to provide bid amounts, in writing, the bid will be

considered non-responsive and shall not be considered for contract award. Written amounts shall govern in cases of discrepancy between the amounts stated in writing and the amounts stated in figures.

Erasures or interlineations in the Bid Proposal must be explained or noted over the signature of the Bidder. Any Bid Proposal shall be deemed unresponsive if it contains omissions, erasures not properly noted, alterations, or additions of any kind, or items uncalled for, or if any of the items are obviously unbalanced, in the opinion of the City Project Manager, or which in any manner shall fail to conform to the conditions of the published Invitation to Bid.

In the event that the product of a unit price and an estimated quantity do not equal the extended amount quoted on the Bid Schedule, the unit price shall govern, and the correct product of the unit price and the estimated quantity shall be deemed to be the amount bid. If the sum of two or more items in a Bid Schedule do not equal the total amounts quoted, the individual item amounts shall govern, and the correct total shall be deemed to be the amount bid.

The Bidder shall sign the Bid Proposal in the blank space provided. Bid Proposals made by corporations, limited liability companies, or partnerships shall contain names and addresses of the principal officers, managers, or partners. If the Bid Proposal is made by a corporation, it must be acknowledged by one of the principal officers thereof; if made by a partnership, by one of the partners; if made by an LLC, by a managing member.

## 7. SUBMISSION OF BIDS

Bids shall be submitted at the time and place indicated in the Invitation to Bid and shall be placed in an opaque sealed envelope, marked with the Project title, name and address of the Bidder, and accompanied by the Bid Security and other required documents (see Bidder's Checklist). Any bid not so submitted may be considered non-conforming. The Bidder must identify whether the Bidder is a "resident bidder," as defined in ORS 279A.120 (1).

The Bidder shall assume full and complete responsibility for timely delivery of the bid to the location designated for receipt of bids, as follows:

City of Wilsonville
Attn: Martin Montalvo, Operations Manager
29799 SW Town Center Loop East
Wilsonville OR 97070

## 8. FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

Within two (2) hours of the date and time of the deadline when bids are due, the Bidders shall submit to the City a disclosure of any first-tier subcontractors whose contract value is equal to or greater than: a) five percent (5%) of the total Project bid, but at least Fifteen Thousand Dollars (\$15,000); or b) Three Hundred Fifty Thousand Dollars (\$350,000), regardless of the percentage of the total Project bid. The disclosure form shall include: a) the name and address of each subcontractor; b) the registration number assigned to the subcontractor by the

Construction Contractors Board, if the subcontractor is required to have a certificate of registration by the Board; c) the amount of the contract of each subcontractor; and (d) the category of work the subcontractor will be performing.

## 9. NON-DISCRIMINATION CERTIFICATION

A bidder or proposer who competes for or is awarded a public contract may not discriminate against a subcontractor in awarding a subcontract because the subcontractor is a minority, woman, or emerging small business enterprise certified under ORS 200.055, or a business enterprise that is owned or controlled by or that employs a disabled veteran, as defined by ORS 408.225.

- This type of discrimination within three years of the current solicitation can lead to debarment or disqualification of the Bidder.
- Violation after the Contract is awarded may be regarded as a breach of contract.

Each Bidder shall certify in the documents accompanying the Bidder's offer to enter a public contract that the Bidder has not discriminated and will not discriminate against any minority, woman, or emerging small business enterprise, or a business enterprise that is owned or controlled by or that employs a disabled veteran, in obtaining a required subcontract.

#### 10. WITHDRAWAL OF BID PROPOSAL

Bids may be modified by an appropriate document duly executed and delivered to the place where bids are to be submitted at any time prior to the Bid Closing. Any Bid Modification must be submitted in a sealed opaque envelope, marked with the Project title, name and address of the Bidder, and labeled "Bid Modification — Wilsonville Police Department Interim Renovations." The Bid Modification must include a statement that the modification amends and supersedes the prior bid. A Bid Modification may be made any time before Bid Closing. If submitted by mail, the Bidder is responsible to ensure the City receives the Bid Modification prior to Bid Closing. Oral communications or e-mails are not acceptable.

A bid may be withdrawn by written notice submitted on the Bidder's letterhead, signed by an authorized representative, and delivered to the location specified for bids in the Invitation to Bid before the time scheduled for Bid Opening. Any Bid Withdrawal must be submitted in a sealed opaque envelope, marked with the Project title, name and address of the Bidder, and labeled "Bid Withdrawal – Wilsonville Police Department Interim Renovations." No Bid Proposal may be withdrawn after the time scheduled for the opening of Bid Proposals. If submitted by mail, the Bidder is responsible to ensure the City receives the Bid Withdrawal prior to the time scheduled for Bid Opening. Oral communications or e mails are not acceptable, except that a Bidder or authorized representative of the Bidder may withdraw a bid in person, prior to the time scheduled for Bid Opening, upon presentation of appropriate identification and satisfactory evidence of authority.

#### 11. INTERPRETATIONS AND ADDENDA

- (a) All questions about the meaning or intent of the Bidding Documents shall be submitted to the City's Project Manager, in writing. Questions received less than five (5) days prior to the date for Bid Opening will not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications are not binding unless confirmed by written Addendum, including discussions at prebid conferences.
- (b) Addenda may be issued to clarify, correct, or change the Bidding Documents, as deemed advisable by the City's Project Manager, in consultation with the Public Works Director. Addenda will be issued a minimum of seventy-two (72) hours prior to Bid Closing unless the Addendum also extends the Bid Closing.
- (c) An Addendum is considered to be issued at the time copies of the Addendum are available to prospective Bidders at City Hall and the office of the Public Works Director. The Addendum will be mailed or delivered electronically via email to all parties recorded by the City's Project Manager as having received the Bidding Documents, and will be made available for pickup at City Hall and the office of the Public Works Director by any interested party. Electronic transmittal or mailing of the Addendum shall be considered notice, as required by OAR 137 049 250.
- (d) Each prospective Bidder shall be responsible for verifying the number of Addenda issued seventy-two (72) hours prior to Bid Closing. Failure by the prospective Bidders to verify the number of Addenda issued, or failure of an Addendum to be delivered in a timely manner to prospective Bidders, shall not be grounds for a Bid protest.

## 12. BID SECURITY

Bid Proposals must be accompanied by a Bid Security in the form of a cashier's check drawn on a bank in good standing, or a Bid Bond issued by a surety company authorized to issue such bonds in the State of Oregon, in an amount of not less than ten percent (10%) of the total amount of the Bid Proposal submitted. The cashier's check or Bid Bond shall be given as a guarantee that, if awarded the Contract, the successful Bidder will execute the Contract (sample attached) and furnish a properly executed Performance and Payment Bond in the amount of one hundred percent (100%) of the Contract price within the time specified.

The City reserves the right to retain the Bid Security of the three (3) lowest Bidders until the successful Bidder has signed and delivered the Contract. Upon failure of the successful Bidder to sign and deliver the required Contract insurance verification and Performance and Payment Bond within the specified time, the next lowest bid may be accepted at the City's discretion, whereupon the above instructions and requirements will apply to said second Bidder.

If requested in writing, the Bid Security, except the three (3) lowest, will be returned promptly after the canvass of bids; the Bid Security of the three (3) lowest Bidders will be returned within three (3) calendar days after the Contract has been executed or other disposition is made, in accordance with the provisions of the Contract Documents.

#### 13. CONDITIONS OF WORK

Each Bidder must inform itself of the conditions relating to the regular execution of the Work. Bidders are expected to inspect the Project site and be thoroughly familiar with all the Contract Documents. Failure to do so will not relieve the successful Bidder of the obligation to enter into the Contract and complete the Work in strict accordance with the Contract Documents.

Each Bidder must inform itself on all laws and statutes, both federal and state, relative to the execution of the Work, the employment of labor, protection of public health, the protection of private property, rights-of-way, access to the Work, fire protection regulations, and similar requirements.

#### 14. FINANCING

The Project will be financed by the City. The City will make monthly payments for Work performed, as more particularly described in the Contract Documents (see Section II – Contract).

## 15. AWARD OF CONTRACT

Within forty-five (45) calendar days after the opening of Bid Proposals, the City will either accept one of the Bid Proposals, reject all bids, or accept only a portion of the lowest bid based on budget.

The City reserves the right to reject any and all bids, to waive any and all informalities, to negotiate contract terms with the successful Bidder, and to disregard all nonconforming, nonresponsive, or conditional bids. Discrepancies between words and figures will be resolved in favor of words. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between unit prices and total price will be resolved in favor of the unit price.

If a Contract is to be awarded, it will be awarded to the lowest Bidder whose evaluation by the City indicates to the City that the award will be in the best interest of the Project, as outlined in Section 16, below. As a part of that evaluation, the City reserves the right to add alternate items or to delete certain bid items from the award without rebidding.

After evaluation of the bids, the City will issue a Notice of Intent to Award Contract to all Bidders via email, and will post this information on the City's website. Protests or appeals of the City's intent to award shall be made in accordance with Section 21, below.

The City will give the successful Bidder a Notice of Award, subject to final approval by City Council, which shall occur within forty-five (45) calendar days of the Notice of Intent to Award.

## 16. BASIS OF AWARD

The award will be made by the City to a qualified Bidder on the basis of price, but with the following factors taken into account. The City reserves the right to reject the bid of any Bidder who does not pass any such evaluation to the City's satisfaction.

- (a) In evaluating bids, the City shall consider the qualifications and experience of the Bidders, in addition to whether or not the bids comply with the prescribed requirements, alternatives, and unit prices, if requested in the Bid Forms. In addition, determination of Bidder responsibility for public projects will be in accordance with OAR 137-049-0390(2). It is the City's intent to accept alternatives (if any are accepted) in the order in which they are listed (if any are listed) in the Bid Forms, but the City may accept them in any order or combination.
- (b) The City may consider the qualifications and experience of subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the Work for which the identity of subcontractors and other persons and organizations must be submitted, as provided in the General or Supplementary Conditions. Operating costs, maintenance considerations, performance data, and guarantee of materials and equipment may also be considered by the City.

## 17. EXECUTION OF CONTRACT

After approval of the Contract by Wilsonville City Council, Owner will give a Notice of Award to the successful Bidder, accompanied by at least four (4) unsigned counterparts of the Contract and all other Contract Documents. Within ten (10) calendar days thereafter, Contractor shall sign and deliver at least four (4) counterparts of the Contract to the Owner, with all other Contract Documents attached. Within twenty (20) days thereafter, Owner will deliver all fully signed counterparts to Contractor.

#### 18. FAILURE TO EXECUTE CONTRACT

Should the successful Bidder fail or refuse to execute the Contract, then the Bid Security deposited by said Bidder shall be retained as liquidated damages by the City. It is agreed that actual damages are difficult to ascertain, but the City and Bidder agree that the Bid Security sum is a fair estimate of the amount of damages the City will sustain in case the Bidder fails to enter into the Contract.

## 19. TIME OF COMPLETION

The time of completion of the Work to be performed under this Contract is stated in the Contract. Delays and extensions of time may be allowed at the City's sole discretion.

#### 20. NOTICE TO PROCEED

It is the intent of the City to issue a "Notice to Proceed" on or about April 2, 2024.

## 21. PROTESTS AND APPEALS

Adversely affected or aggrieved Bidders may submit to the City's Community Development Director written protest of the City's intent to award within seven (7) business days following receipt of the Notice of Intent to Award Contract. The protest must specify the grounds upon which the protest is based. The City will not consider any late protests.

A Bidder is adversely affected or aggrieved only if the Bidder is eligible for award of the Contract as the responsible Bidder submitting the lowest responsive bid and is next in line for award, i.e., the protesting Bidder must claim that all lower Bidders are ineligible for Award:

- (a) Because their bids were nonresponsive; or
- (b) Because the City committed a substantial violation of a provision in the Solicitation Documents or of an applicable procurement statute or administrative rule, and the protesting Bidder was unfairly evaluated and would have, but for such substantial violation, been the responsible Bidder offering the lowest bid.

The City shall not consider a protest submitted later than seven (7) business days after the City issues its Notice of Intent to Award Contract, or such different period as may be provided in the Contract Documents. A Bidder may not protest the City's decision not to increase the size of the competitive range above the size of the competitive ranges set forth in the Contract Documents.

-End of Section-

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## **BIDDER'S CHECKLIST**

Bidder's attention is called to the following. Any required forms must be executed in full as required and included with the bid. This checklist is intended to assist the Bidder but may not be all inclusive. Bidder is instructed to review all Contract Documents thoroughly to ensure Bidder addresses all requirements in Bidder's Bid Proposal. Submittal of all forms with the bid is a matter of responsiveness.

## The following documents must be submitted with the Bid Proposal:

#### **BID PROPOSAL SHEETS**

Each Bidder shall complete all sheets in the Bid Proposal. Failure to fully complete the Bid Proposal will result in Bidder disqualification.

#### **BID SCHEDULE**

Prices must be written in the spaces provided and must be expressed in figures.

#### **BID BOND FORM**

This form is to be executed by the Bidder and their surety company. The amount of cash, certified check, or Bid Bond shall not be less than ten percent (10%) of the total amount of the bid.

## **NON-COLLUSION AFFIDAVIT**

Each Bidder shall complete this form, to be submitted with the Bid Proposal (see the instructions and form included with the Contract Documents).

#### CERTIFICATION REGARDING CONTRACTOR'S STATUS – SUSPENSION/DEBARMENT

Each Bidder shall complete this form, to be submitted with the Bid Proposal (see form included with the Contract Documents).

The following form is to be executed within two (2) working hours of when bids are due:

#### FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

This form is to be executed by the Bidder and actually received by the City within two (2) working hours of the date and time of the deadline when bids are due to the City.

NOTE: This form must be filled out by subcontractors as well as by the prime contractor whenever the amount of the subcontract is over \$25,000. Forms from subcontractors do not have to be included with the bid, but they must be submitted to the prime contractor and be made available for inspection immediately following the bid opening (if requested).

The following documents are to be executed and/or submitted within ten (10) calendar days of when the Contract is awarded:

#### **CONTRACT**

The Contract shall be executed by the successful Bidder.

## PERFORMANCE AND PAYMENT BOND

To be executed by the successful Bidder and their surety company prior to the execution of the Contract by the Owner.

## **PUBLIC WORKS WAGE CERTIFICATION FORM**

To be completed in accordance with state law and submitted monthly and with the first and last request for payment.

## **CERTIFICATE OF INSURANCE**

To be executed by the successful Bidder and their insurance company prior to the execution of the Contract by the Owner.

#### CONTRACTOR'S DRUG-TESTING POLICY

Submit copy of Drug Testing Policy per "Contractor's Responsibilities" Section of the Contract.

#### **CONTRACTOR'S LICENSES**

Contractor's license for the Construction Contractor's Board and a City of Wilsonville or Metro business license.

## **CONTRACTOR'S CONSTRUCTION SCHEDULE**

Clearly show the material submittal timeline, start of construction, major items of work, utility relocation, and completion of construction in accordance with the Specifications. Pages in 8-1/2" x 11" or 11" x 17" format are acceptable, provided they are readable to City representatives.

-End of Section-

## **BID PROPOSAL**

City Council City of Wilsonville 29799 SW Town Center Loop East Wilsonville, OR 97070

This Bid Proposal is submitted as an offer by the undersigned to enter into a contract ("Contract") with the City of Wilsonville, hereinafter referred to as the "Owner," to furnish all labor, material, equipment, and services required for the construction of the **Wilsonville Police Department Interim Renovations**, as more particularly described in the Contract Documents. This offer is conditioned on the following declarations as to the acts, intentions, and understandings of the undersigned and the agreement of the Owner to the term and prices herein submitted.

- The undersigned, hereinafter called the "Bidder," declares that the only persons or parties
  interested in this Bid Proposal are those named herein, that the Bid Proposal is in all respects fair
  and without fraud, and that it is made without any connection or collusion with any person
  making another Bid Proposal on this Contract.
- 2. The Bidder further declares that Bidder has carefully examined the Specifications for the construction of the proposed improvements; that Bidder has personally inspected the contemplated construction area or areas; that Bidder is satisfied as to the quantities of materials, items of equipment, and conditions of Work involved, including the fact that the description of Work and materials as included herein is brief and is intended only to indicate the general nature of such items and to identify the said quantities with the detailed requirements of the Specifications; and that this Bid Proposal is made according to the provisions and under the terms of the Specifications which are hereto attached and are hereby made a part of this Bid Proposal.
- 3. The Bidder agrees that if this Bid Proposal is accepted, Bidder will, within ten (10) calendar days after the notification of acceptance, execute the Contract with the Owner in the form of Contract specified, and will, at the time of execution of the Contract, deliver to the Owner the Performance and Payment Bonds required herein, and will, to the extent of this Bid Proposal, furnish all the materials necessary to complete the Work by 5:00 p.m. on April 22, 2022, according to methods as specified in the Specifications and required by the City's Project Manager.
- 4. All of the Specifications and Plans, which are contained in the Contract Documents, have been examined by the Bidder and their terms and conditions are hereby accepted.
- 5. The Bidder understands that the Specifications and Plans may be supplemented by additional drawings and specifications in explanation and elaboration of those listed herein. It is agreed that such supplemental drawings will have the same force and effect as if completed and attached hereto, and that, when received, they will be considered a part of the Contract Documents.
- 6. The Bidder understands that all Work shall be performed under the Bid Schedule attached hereto and that, for said prices, all services, material, labor, equipment, and all Work necessary to

BID PROPOSAL I-15 February 7, 2024

complete the Project, in accordance with the Plans and Specifications, shall be furnished for the said prices named. After contract award, if there will be an increase in the Scope of Work or a decrease in the Scope of Work covered by the Bid Schedule, it shall be made only as a result of negotiation between the Bidder and the Owner, and documented by a written Change Order. Furthermore, it is understood that any estimate with respect to time, materials, equipment, or service which may appear on the Plans or in the Specifications is for the sole purpose of assisting the Bidder in checking its own independent calculations and at no time shall the Bidder attempt to hold the Owner, the City's Project Manager, or any other person, firm, or corporation responsible for any errors or omissions that may appear in any estimate.

7. The cash, certified check, or Bid Bond accompanying this Bid Proposal shall be payable to the City of Wilsonville in an amount equal to ten percent (10%) of the total bid. The Bid Bond will be forfeited if Bidder's Bid Proposal is accepted by the City and the Bidder shall fail or refuse to execute the Contract and furnish a Performance and Payment Bond, as required by the Contract Documents, within the time limit named therein after notification that said Bid Proposal is accepted, all in accordance with the provisions of this Bid Proposal and the Contract Documents.

## 8. QUALIFICATIONS FOR INSURANCE AND BONDING COMPANIES

**Minimum Financial Security Requirements.** The Bidder understands all bonding and insurance companies providing insurance or bonds required by the Contract must meet certain minimum financial security requirements. These requirements conform to the rating published by A.M. Best & Co. and a current Bests Key Rating Guide-Property-Casualty. All companies providing bonds or insurance under this Contract must:

- Have a current A.M. Best Rating of not less than A;
- o Have a current A.M. Best Financial Size Category of not less than Class IX;
- Be authorized to conduct and transact insurance and surety contracts in the State of Oregon; and
- o Be a U.S. Treasury Circular 570 listed company, if providing payment or performance bonds.

**Failure to Meet Minimum Financial Security Requirements.** If the issuing company does not meet these minimal requirements, or for any other reason is unsatisfactory to the Owner, written notification will be made by the Owner to the Contractor, who must promptly obtain and submit a new policy or bond issued by an insurer/surety acceptable to the Owner.

- 9. The Bidder declares that all items on the Bid Schedule have been completed in full by the showing of lump sum price or unit prices and item total for each and every item thereof, and for the showing of other information indicated by the Bid Schedule form.
- 10. The Bidder agrees that Bidder will substantially complete the Work within the specified time frames after "Notice to Proceed" has been issued by the Owner.
- 11. The Bidder agrees that Final Completion and Acceptance shall occur when all Contract Work is completed and approved, in writing, by the Owner. The final punch list, provided at the time of

substantial completion, must be completed and approved, in writing, by the City's Project Manager.

- 12. The Bidder further proposes to accept as payment in full for the Work proposed herein the amount computed under the Bid Schedule and as further provided by the provisions of the Contract Documents.
- 13. As required by OAR 137-049-440(3), the undersigned Bidder certifies that Bidder has not discriminated and will not discriminate against any disadvantaged business enterprise, minority owned business, women-owned business, emerging small business, or business that a service-disabled veteran owns in obtaining any required subcontracts.
- 14. The name of the Bidder who is submitting this bid is:

U.S. Treasury Circular 507 List

(Payment or Performance Bond only):

	Bidder Co. Name: Contact Name: Address: Phone No.:			
	Fax No.: Email:			
	This is the address to which a shall be sent.	ll communic	ations concerned v	with this bid and with the Contract
15.	The Bidder proposes that if the provide the Performance Bor		awarded the Contr	act for this bid, the Surety who will
	Surety Co. Name: Agent Name: Address: Phone No.: Fax No.: Email:			
	Bond No.: A.M. Best Rating:			
	A.M. Best Finance Size C	ategory:		
	Conduct Business in Ore	gon:	Yes	No

Yes

No

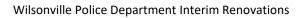
16.	The name of the Insurance Co	mpany is:			
	Insurance Co. Name:				
	Contact Name:	-			
	Address:				_
	Phone No.:				
	Fax No.:				
	Email:				_
	A.M. Best Rating:				
	A.M. Best Finance Size Ca	ategory:			
	Conduct Business in Ore	gon:	Yes	No	
17.	The name(s) of the principal of	officer(s) of	the entity are as fo	lows:	
					_
					_
18.			• •	e following subcontractors. The	<u> </u>
	subcontractors, by name and	specialty o	of work, are as follow	/S:	
	Full Legal Name		Specia	alty	
					<u> </u>
					_
19.	The Bidder agrees to be boun	d by and w	ill comply with the ہ	provisions of ORS 279C.838, 279	 C.840,
	or 40 USC 3141 to 3148. Sign	ing of the I	Bid Proposal constitu	ites compliance, and a separate	!
	statement is not necessary.				
20.				monstrate that an employee dr	_
	testing program is in place. T demonstrate that such a prog		=	copy of the drug testing policy t	0
21.	Declaration of Residency				
	I a "re	esident bid	der"* as defined by	ORS 279A.120.	
	("am" or "am not")				
	I a lice	ensed cont	tractor pursuant to (	ORS 701 026	

("am"	or	"am	not")
-------	----	-----	-------

\*"Resident Bidder" means a Bidder that has paid unemployment taxes or income taxes in Oregon during the twelve (12) calendar months immediately preceding submission of the bid, has a business address in the state, and has stated in the bid whether the Bidder is a "Resident Bidder" pursuant to ORS 279A.120(1)(b).

22.	<ol> <li>The Bidder understands that Oregon law re Construction Contractors Board or licensed submit a bid to do work as a contractor. B number is:</li></ol>	d by the State Landso idder's Construction Bidder's State La	cape Contractor Contractors Bo	rs Board in order to eard registration
23.	<ol> <li>Bidder hereby certifies that Bidder will me performance of the Contract, if awarded.</li> </ol>	et the requirements	of ORS 279C.83	38 and 279C.840 in
	The undersigned hereby represents that he behalf of Bidder and to bind Bidder hereby		zed to sign this	Bid Proposal on
	In witness hereto, the undersigned has set	his/her hand this	day of	, 2018.
	Name:			
	Address:			
	Signature of Bidder			
	Title			
24.	<ol> <li>The Bidder acknowledges the following Ad Documents. Initial and date as acknowledge</li> </ol>		•	Contract
	No	Date:		

-End of Section-



CIP# 8160

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## **BID SCHEDULE**

## **Schedule of Values**

Note:

		BASE BID	ALTERNATE #1
Div.	Group	Value (\$)	Value (\$)
02	Demolition		
05	Metals		
06-07	Interior Construction		
80	Openings		
09	Finishes		
10	Specialties		
12	Furnishings		
26	Electrical		
	Jobsite Management		
	Site Requirements General Conditions Fee		
	Insurance		
	Bonds		
	Other		
PROJECT TOTAL			

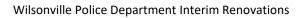
Base Bid Total Amount Bid (Figures)

Base Total Bid Written in Words:

Dollars AND Cents

Company Name

Bidder's Signature



CIP# 8160

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## **BID BOND FORM**

## **BID BOND**

Herewith find a Bid Bond deposit in the \$ which ar		
	Bidder Signature	
	-	
	BID BOND No	
KNOW ALL MEN BY THESE PRESENTS:		
That we,		, as Principal, and
		, as Surety, are held and firmly bound
	for the payment of wh	er, in the penal sum of nich the Principal and the Surety bind and assigns, jointly and severally, by these
the Principal therefore, and the Principal accordance with the terms of said properformance thereof, with Surety or Stailure to do so, pay and forfeit to Own then this obligation shall be null and votage.	n Renovations Project act and expension of the second of t	cording to the terms of the bid made by nter into a contract with Owner, in and shall give bond for the faithful
SIGNED, SEALED AND DATED THIS	DAY OF	, 20

	Principal	
Principal Repre	sentative Name and Title	
	Principal Signature	
	Surety	
	Address:	
	Phone No.:	
	Fax No.:	
	Email:	
Suret	y Attorney-in-Fact Name	
	Surety Signature	
Received return of deposit in the sum	of\$	
this day of		
Signed		
ATTACH DID DOND TO THIS DAGE		

ATTACH BID BOND TO THIS PAGE.

-End of Section-

## NON-COLLUSION AFFIDAVIT

## **Wilsonville Police Department Interim Renovations**

## City of Wilsonville Project #8160

l,		, state that I am the	
	(Name)		
of		and that I am	
	(Name of Firm)		
authorize	d to make this affidavi	on behalf of my firm and its owners, directors, and officers. I am	the
person re	sponsible in my firm fo	the price(s) and the amount of this bid.	

#### I state that:

- (1) The price(s) and amount of this bid have been arrived at independently and without consultation, communication, or agreement with any other prime contractor, bidder, or potential bidder, except as disclosed in the attached appendix.
- (2) Neither the price(s) nor the amount of this bid, and neither the approximate price(s) nor approximate amount of this bid, have been disclosed to any other firm or person who is a bidder or potential bidder, and they will not be disclosed before bid opening.
- (3) No attempt has been made or will be made to induce any firm or person to refrain from bidding on this Project, or to submit a bid higher than this bid, or to submit any intentionally high or non-competitive bid or other form of complementary bid.
- (4) The bid of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other non-competitive bid.
- (5) The above-named firm, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four (4) years been convicted of or found liable for any act prohibited by state or federal law in any jurisdiction involving conspiracy or collusion with respect to bidding on any public contract, except as described on the attached appendix.

I state that the above-named firm understands and acknowledges that the above representations are material and important, and will be relied on by the City of Wilsonville in awarding the Contract(s) for which this bid is submitted. I understand, and my firm understands, that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the City of Wilsonville of the true facts relating to this submission of bids for this Contract.

I make these statements under penalty of per	rjury.	
Print Name		
Title		
STATE OF OREGON ) ) ss		
County of)		
Sworn to and subscribed before me this	day of	, 2018.
	Notary Public for	Oregon

## INSTRUCTIONS FOR NON-COLLUSION AFFIDAVIT

- This Non-Collusion Affidavit ("Affidavit") is material to any contract awarded pursuant to this bid.
  According to the Oregon Public Contracts and Purchasing Laws, a public contracting agency may
  reject any or all bids on a finding of the agency that it is in the public interest to do so. ORS 279C.395.
  This agency finds that it is in the public interest to require the completion of this Affidavit by potential
  contractors.
- 2. This Affidavit must be executed by the member, officer, or employee of the Bidder who makes the final decision on prices and the amount quoted in the bid.
- 3. Bid rigging and other efforts to restrain competition, and the making of false sworn statements in connection with the submission of bids, are unlawful and may be subject to criminal prosecution. The person who signs the Affidavit should examine it carefully before signing and assure himself/herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Bidder with responsibilities for the preparation, approval, or submission of the bid.
- 4. In the case of a bid submitted by a joint venture, each party to the venture must be identified in the Bid Documents, and an Affidavit must be submitted separately on behalf of each party.
- 5. The term "complementary bid," as used in the Affidavit, has the meaning commonly associated with that term in the bidding process, and includes the knowing submission of bids higher than the bid of another firm, any intentionally high or non-competitive bid, and any other form of bid submitted for the purpose of giving a false appearance of competition.
- 6. Failure to file an Affidavit in compliance with these instructions will result in disqualification of the bid.
- 7. A completed, signed, and notarized Affidavit must be submitted with the bid before the bid opening.

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# CERTIFICATION REGARDING CONTRACTOR'S STATUS SUSPENSION/DEBARMENT

**Wilsonville Police Department Interim Renovations** 

City of Wilsonville Project #0997

This Contract may be a covered transaction for purposes of 2 CFR Part 180. As such, the Contractor must comply with and facilitate compliance with U.S. Department of Transportation regulations, "Nonprocurement Suspension and Debarment" (2 CFR Part 1200), which adopts and supplements the U.S. Office of Management and Budget (U.S. OMB) "Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)" (2 CFR Part 180). The Contractor is required to verify that its principals, affiliates, and any subcontractors are eligible to participate in this federally funded Contract and are not presently declared by any federal department or agency to be debarred, suspended, proposed for debarment, voluntarily excluded, disqualified, or declared ineligible from participation in any federally assisted award.

Contractor is required to comply with Subpart C of 2 CFR Part 180, as supplemented by 2 CFR Part 1200, and must include the requirement to comply with Subpart C of 2 CFR Part 180 in any lower tier covered transaction it enters into. By signing and submitting its bid or proposal, Contractor has certified as follows:

The certification in this clause is a material representation of fact relied upon by the City of Wilsonville. If it is later determined that the Bidder knowingly rendered an erroneous certification, in addition to remedies available to the City of Wilsonville, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The Bidder agrees to comply with the requirements of 2 CFR Part 180, Subpart C, as supplemented by 2 CFR Part 1200, while this offer is valid and throughout the period of any contract that may arise from this offer. Contractor further agrees to include a provision requiring such compliance in its lower tier covered transactions.

Bidder or Contractor Signature	Date
Bidder or Contractor Signature	Date

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## FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

(OAR 137-049-0360)

Bids which are submitted by Bid Closing, but for which a required disclosure submittal has not been made by the specified Disclosure Deadline, are not responsive and shall not be considered for contract award.

#### **AGENCY SUPPLIED INFORMATION:**

PROJECT NAME: Wilsonville Police Department Interim Renovations

BID #: 0997 BID CLOSING: Date: March 6, 2024 Time: 2:00 PM

REQUIRED First-Tier Subcontractor Disclosure Deadline: Date: March 6, 2024 Time: 4:00 PM

Deliver Form to (Agency): City of Wilsonville, Public Works Department

Designated Recipient (Person): Martin Montalvo Phone #: 503-570-1560

Agency's Address: By Mail/Hand: City of Wilsonville, 29799 SW Town Center Loop East

Wilsonville, OR 97070

The Engineer's Estimate for this total project costs are \$110,000 to \$160,000

#### **INSTRUCTIONS:**

The City will insert "N/A" in Engineer's Estimate above if the Contract value is not anticipated to exceed One Hundred Thousand Dollars (\$100,000). Otherwise this form must be submitted either with the bid or within two (2) working hours after the advertised Bid Closing date and time; but no later than the DISCLOSURE DEADLINE stated above.

Bidders are required to disclose information about certain first-tier subcontractors (see ORS 279C.370). Specifically, when the contract amount of a first-tier subcontractor furnishing labor or labor and materials would be greater than or equal to: (i) five percent (5%) of the project bid but at least \$15,000; or (ii) \$350,000 regardless of the percentage, the Bidder must disclose the following information about that subcontractor, either in its bid submission or within two hours after Bid Closing:

- (a) The subcontractor's name;
- (b) The category of Work that the subcontractor would be performing; and
- (c) The dollar value of the subcontract. 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 accompanying form.

THE CITY MUST REJECT A BID IF THE BIDDER FAILS TO SUBMIT THE DISCLOSURE FORM WITH THIS INFORMATION BY THE STATED DEADLINE (see OAR 137-0490-0360).

This document shall NOT be submitted by facsimile. It is the responsibility of Bidders to submit this disclosure form and any additional sheets, with the bid number and Project name clearly marked, at the location indicated by the specified disclosure deadline. See "Instructions to Bidders."

A subcontractor may file a complaint under ORS 279C.590 based on the disclosure requirement of ORS 279C.370(1).

List below the Name, Category of Work, and Dollar Value for each first-tier subcontractor that would be furnishing labor, or labor and material, for which disclosure is required. Enter the word "NONE" if there are no first-tier subcontractors subject to disclosure. ATTACH ADDITIONAL SHEETS IF NECESSARY.

#### **BIDDER DISCLOSURE:**

	SUBCONTRACTOR			CATEGORY OF	
	NAME	ADDRESS	CCB#	WORK	DOLLAR VALUE
1.					
2.					
3.					
4.					
5.					
6.					

The above listed first-tier subcontractor(s) are providing labor, or labor and materials, with a Dollar Value equal to or greater than:

a) Five percent (5%) of the total Contract Price, but at least Fifteen Thousand Dollars (\$15,000). [If the Dollar Value is less than \$15,000 do not list the subcontractor above.]

OR:

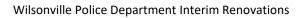
b) Three Hundred Fifty Thousand Dollars (\$350,000), regardless of the percentage of the total Contract Price.

Form Submitted By (Blader Name):	
Contact Name:	Phone #:

Wilsonville Police Department Interim Reno	vations
--	---------

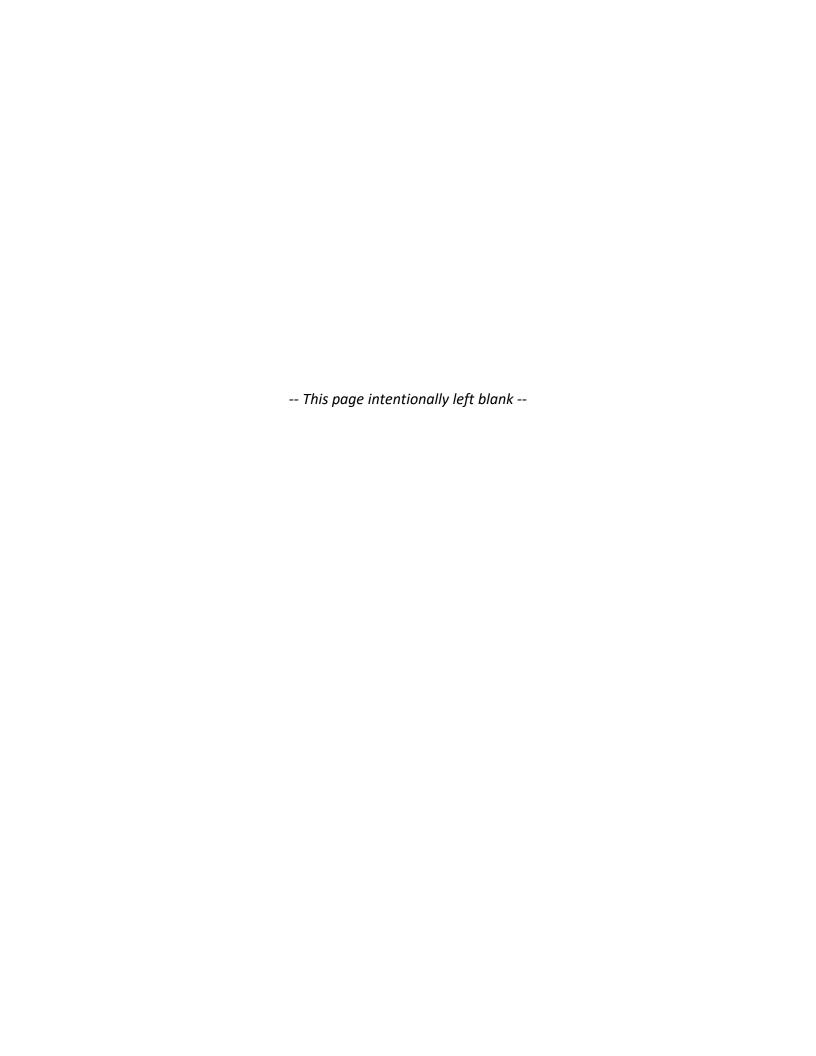
# Section II - Contract

--- The project contract will be issued as an addendum prior to bid opening---



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Se	ction III – Projec	t Manual (Spe	cial Provision	s)



# WILSONVILLE POLICE DEPARTMENT

# **INTERIM RENOVATIONS**

30000 TOWN CENTER LOOP E WILSONVILLE, OR 97070

# PROJECT SPECIFIC SPECIAL PROVISIONS

Issued for Permit/Bid 2/6/2024



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Section 01 31 00 Project Management and Coordination

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Section 01 78 39 Project Record Documents

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Section 08 11 13 Hollow Metal Doors and Frames

Section 08 71 00 Door Hardware

Section 09 21 16 Gypsum Board Assemblies

Section 09 51 00 Acoustical Ceilings

Section 09 65 00 Resilient Flooring

Section 09 68 00 Carpeting

Section 09 91 00 Painting

#### PART 1 – GENERAL

#### 1.1 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. Coordination Drawings.
  - 2. Administrative and supervisory personnel.
  - 3. Project meetings.
  - 4. Requests for Information (RFIs).
- B. Related Sections include the following:
  - 1. Division 1 Section "Closeout Procedures" for coordinating closeout of the Contract.

#### 1.2 DEFINITIONS

A. RFI: Request from Contractor seeking information or clarification of the Contract Documents.

#### 1.3 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components to ensure maximum accessibility for required maintenance, service and repair.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  - 1. Preparation of Contractor's Construction Schedule.
  - 2. Preparation of the Schedule of Values.
  - 3. Installation and removal of temporary facilities and controls.

- 4. Delivery and processing of submittals.
- 5. Progress meetings.
- 6. Preinstallation conferences.
- 7. Project closeout activities.
- 8. Startup and adjustment of systems.
- 9. Project closeout activities.
- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
  - 1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to other Sections for disposition of salvaged materials that are designated as Owner's property.

#### 1.4 SUBMITTALS

- A. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.
  - 1. Content: Project-specific information, drawn accurately to scale. Do not base Coordination Drawings on reproductions of the Contract Documents or standard printed data. Include the following information, as applicable:
    - a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
    - b. Indicate required installation sequences.
    - c. Indicate dimensions shown on the Contract Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
  - 2. Sheet Size: At least 8-1/2 by 11 inches but no larger than 30 by 40 inches.
  - 3. Document Submittal: Submit documents in electronic PDF format.
  - 4. Refer to individual Sections for Coordination Drawing requirements for Work in those Sections.
- B. Key Personnel Names: Within 5 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers,

including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.

1. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

#### 1.5 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

A. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.

#### 1.6 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
  - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
  - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  - 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within 3 days of the meeting.
- B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
  - 1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Tentative construction schedule.
    - b. Phasing.
    - c. Critical work sequencing and long-lead items.
    - d. Designation of key personnel and their duties.
    - e. Procedures for processing field decisions and Change Orders.
    - f. Procedures for RFIs.

- g. Procedures for testing and inspecting.
- h. Procedures for processing Applications for Payment.
- i. Distribution of the Contract Documents.
- j. Submittal procedures.
- k. EA requirements.
- 1. Preparation of Record Documents.
- m. Use of the premises.
- n. Work restrictions.
- o. Responsibility for temporary facilities and controls.
- p. Construction waste management and recycling.
- q. Parking availability.
- r. Site access restrictions.
- s. Office, work, and storage areas.
- t. Equipment deliveries and priorities.
- u. First aid.
- v. Security.
- w. Progress cleaning.
- x. Working hours.
- 3. Minutes: Record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction or as otherwise required by the Specifications.
  - 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
  - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
    - a. The Contract Documents.

- b. Options.
- c. Related RFIs.
- d. Related Change Orders.
- e. Purchases.
- f. Deliveries.
- g. Submittals.
- h. Review of mockups.
- i. Possible conflicts.
- j. Compatibility problems.
- k. Time schedules.
- 1. Weather limitations.
- m. Manufacturer's written recommendations.
- n. Warranty requirements.
- o. Compatibility of materials.
- p. Acceptability of substrates.
- q. Temporary facilities and controls.
- r. Space and access limitations.
- s. Regulations of authorities having jurisdiction.
- t. Testing and inspecting requirements.
- u. Installation procedures.
- v. Coordination with other work.
- w. Required performance results.
- x. Protection of adjacent work.
- y. Protection of construction and personnel.
- 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.

- 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
- D. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date. Failure on part of Contractor to resolve issues which may delay project will not be considered as grounds for approval of Change Orders requesting additional Contract Time or compensation.
- E. Progress Meetings: Conduct progress meetings at weekly intervals. Coordinate dates of meetings with preparation of payment requests.
  - 1. Attendees: Owner, Architect and Contractor shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Contractor's Construction Schedule: Review progress since the last meeting.

      Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
      - (1) Review schedule for next period.
      - (2) Review updated Contractor's 3-weekly schedule.
    - b. Review present and future needs of each entity present, including the following:
      - (1) Interface requirements.
      - (2) Sequence of operations.
      - (3) Status of submittals.
      - (4) Long lead items and deliveries.
      - (5) Off-site fabrication.
      - (6) Access.
      - (7) Site utilization.
      - (8) Temporary facilities and controls.
      - (9) Work hours.

- (10) Hazards and risks.
- (11) Progress cleaning.
- (12) Quality and work standards.
- (13) Status of correction of deficient items.
- (14) Field observations.
- (15) RFIs.
- (16) Status of proposal requests.
- (17) Pending changes.
- (18) Status of Change Orders.
- (19) Pending claims and disputes.
- (20) Documentation of information for payment requests.
- 3. Minutes: Record the meeting minutes.
- 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
- 5. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- F. Contractor Coordination Meetings (Subcontractors): Conduct Project coordination meetings at weekly intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and pre-installation conferences.
  - 1. Attendees: Contractor, each subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Review present and future needs of each **sub**contractor present, including the following:
      - (1) Interface requirements.
      - (2) Sequence of operations.

- (3) Status of submittals.
- (4) Deliveries.
- (5) Off-site fabrication.
- (6) Access.
- (7) Site utilization.
- (8) Temporary facilities and controls.
- (9) Work hours.
- (10) Hazards and risks.
- (11) Progress cleaning.
- (12) Quality and work standards.
- (13) Change Orders.
- (14) EA Requirements.
- 3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

## 1.7 REQUESTS FOR INFORMATION (RFI)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
  - 1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
  - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
  - 3. The RFI process is not intended to answer questions regarding information that can be found in the Contract Documents. RFIs received from the Contractor, that can be answered by information contained in the Contract Documents without further interpretation by the Architect, will be returned without response.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
  - 1. Project name.
  - 2. Date.

- 3. Name of Contractor.
- 4. Name of Architect.
- 5. RFI number, numbered sequentially.
- 6. Specification Section number and title and related paragraphs, as appropriate.
- 7. Drawing number and detail references, as appropriate.
- 8. Field dimensions and conditions, as appropriate.
- 9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
- 10. Contractor's signature.
- 11. Attachments:
  - a. Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
  - b. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
- C. Hard-Copy RFIs: Contractor's standard form subject to Architect's approval. Identify each page of attachments with the RFI number and sequential page number.
- D. Software-Generated RFIs: Software-generated form with substantially the same content as indicated above. Attachments shall be electronic files in Adobe Acrobat PDF format.
- E. Architect's Action: Architect will review each RFI, determine action required, and return it. Allow 7 working days for Architect's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.
  - 1. The following RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for coordination information already indicated in the Contract Documents.
    - d. Requests for adjustments in the Contract Time or the Contract Sum.
    - e. Incomplete RFIs or RFIs with numerous errors.

- 2. Architect's action may include a request for additional information, in which case Architect's time for response will start again.
- 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 1 Section "Contract Modification Procedures."
- 4. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within **10** days of receipt of the RFI response.
- F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within **seven** days if Contractor disagrees with response.
- G. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following:
  - 1. Project name.
  - 2. Name and address of Contractor.
  - 3. Name and address of Architect.
  - 4. RFI number including RFIs that were dropped and not submitted.
  - 5. RFI description.
  - 6. Date the RFI was submitted.
  - 7. Date Architect's response was received.
  - 8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
  - 9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

END OF SECTION

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Sections include the following:
  - 1. Division 1 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes and for submitting Coordination Drawings.
  - 2. Division 1 Section "Product Requirements" for submitting product information.
  - 3. Division 1 Section "Closeout Procedures" for submitting warranties.
  - 4. Division 1 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.
  - 5. Divisions 2 through 33 Sections for specific requirements for submittals in those Sections.

#### 1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information that requires Architect's responsive action.
- B. Informational Submittals: Written information that does not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

#### 1.3 SUBMITTAL PROCEDURES

- A. Electronic Submittals: All submittal documentation and procedures detailed in this specification section that lend themselves to transfer by digital electronic media shall be submitted in an electronic format as approved by the Architect.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - Coordinate transmittal of different types of submittals for related parts of the Work so
    processing will not be delayed because of need to review submittals concurrently for
    coordination.
    - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of

the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

- 1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
- 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
- 3. Resubmittal Review: Allow 10 business days for review of each resubmittal.
- 4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 15 business days for initial review of each submittal.
- D. Identification: Place a permanent label or title block on each submittal for identification.
  - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
  - 2. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
  - 3. Include the following information on label for processing and recording action taken:
    - a. Project name.
    - b. Date.
    - c. Name and address of Architect.
    - d. Name and address of Contractor.
    - e. Name and address of subcontractor.
    - f. Name and address of supplier.
    - g. Name of manufacturer.
    - h. Submittal number or other unique identifier, including revision identifier.
      - Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 06 10 00.01).
         Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 06 10 00.01.A).
    - i. Number and title of appropriate Specification Section.
    - j. Drawing number and detail references, as appropriate.

- k. Location(s) where product is to be installed, as appropriate.
- 1. Other necessary identification.
- E. Deviations: Highlight, encircle, or otherwise specifically identify deviations from the Contract Documents on submittals. Contract Document deviations on submittals do not constitute a request for a change to Contract Documents and Contract Documents cannot be revised by the submittal process.
- F. Additional Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
- G. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will return submittals, without review, received from sources other than Contractor.
  - 1. Transmittal Form: Provide locations on form for the following information:
    - a. Project name.
    - b. Date.
    - c. Destination (To:).
    - d. Source (From:).
    - e. Names of subcontractor, manufacturer, and supplier.
    - f. Category and type of submittal.
    - g. Submittal purpose and description.
    - h. Specification Section number and title.
    - i. Drawing number and detail references, as appropriate.
    - j. Transmittal number, numbered consecutively.
    - k. Submittal and transmittal distribution record.
    - 1. Remarks.
    - m. Signature of transmitter.
  - 2. Record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same label information as related submittal.

- H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
  - 1. Note date and content of previous submittal.
  - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
  - 3. Resubmit submittals until they are marked "No Exception Taken," or "Make Corrections Noted."
- I. Distribution: Forward copy of final submittal to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- J. Use for Construction: Use only final submittals with mark indicating "Reviewed for Conformance With Design Concepts, No Exception Taken," or Reviewed for Conformance With Design Concepts, Make Corrections Noted."

#### PART 2 - PRODUCTS

#### 2.1 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
  - 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
  - 2. Mark each copy of each submittal to show which products and options are applicable.
  - 3. Include the following information, as applicable:
    - a. Manufacturer's written recommendations.
    - b. Manufacturer's product specifications.
    - c. Manufacturer's installation instructions.
    - d. Standard color charts.
    - e. Manufacturer's catalog cuts.
    - f. Wiring diagrams showing factory-installed wiring.
    - g. Printed performance curves.
    - h. Operational range diagrams.

- i. Mill reports.
- j. Standard product operation and maintenance manuals.
- k. Compliance with specified referenced standards.
- 1. Testing by recognized testing agency.
- m. Application of testing agency labels and seals.
- n. Notation of coordination requirements.
- 4. Submit Product Data before or concurrent with Samples.
- 5. Review comments of the Architect will be shown on one set of product data when it is returned to the Contractor. The Contractor may make and distribute such copies as required for his purposes.
- 6. Method of Submittal: Electronic submittals in PDF format only.
- C. Shop Drawings: Prepare Project-specific information. They shall be drawn accurately to scale and scale of each drawings shall be large enough to clearly identify all parts and components for complete review. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
  - 1. Preparation: Fully illustrate requirements of the Contract Documents. Include the following information, as applicable:
    - a. Dimensions.
    - b. Identification of products.
    - c. Fabrication and installation drawings.
    - d. Roughing-in and setting diagrams.
    - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
    - f. Shopwork manufacturing instructions.
    - g. Templates and patterns.
    - h. Schedules.
    - i. Design calculations.
    - j. Compliance with specified standards.
    - k. Notation of coordination requirements.

- 1. Notation of dimensions established by field measurement.
- m. Relationship to adjoining construction clearly indicated.
- n. Seal and signature of professional engineer if specified.
- o. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
- 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit PDF format Shop Drawings of sheets at least 8-1/2 by 11 inches but no larger than 30 by 40 inches.
- 3. Review comments of the Architect will be shown on one set of PDF format prints when they are returned to the Contractor. The Contractor may make and distribute such copies as required for his purposes.
- 4. Method of Submittal: Electronic submittals in PDF format only.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
  - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
  - 2. Identification: Attach label on unexposed side of Samples that includes the following:
    - a. Generic description of Sample.
    - b. Product name and name of manufacturer.
    - c. Sample source.
    - d. Number and title of appropriate Specification Section.
  - 3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
    - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of Substantial Completion.
    - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
  - 4. Samples for Initial Selection:

- a. Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
- b. Number of Samples: Submit two full sets of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return one set with options selected.
- 5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
  - a. Number of Samples: Submit three sets of Samples. Architect will retain one Sample set; remainder will be returned.
    - (1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
    - (2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least two sets of paired units that show approximate limits of variations.
- E. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
  - 1. Name, address, and telephone number of entities performing subcontract or supplying products.
  - 2. Number and title of related Specification Section(s) covered by subcontract.
  - 3. Drawing number and detail references, as appropriate, covered by subcontract.
  - 4. Method of Submittal: Electronic submittals in PDF format only.

#### F. EA Submittals:

- 1. Method of Submittal: Electronic submittals in PDF format only.
- G. Material Safety Data Sheets (MSDS) for EA Certification: Submit information necessary to show compliance with EA certification requirements, which will be the limit of the Architect's review.

#### 2.2 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
  - 1. Method of Submittal: Electronic submittals in PDF format only.
  - Certificates and Certifications: Provide a notarized statement that includes signature of
    entity responsible for preparing certification. Certificates and certifications shall be
    signed by an officer or other individual authorized to sign documents on behalf of that
    entity.
- B. Coordination Drawings: Comply with requirements specified in Division 1 Section "Project Management and Coordination."
- C. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- D. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- E. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- F. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- G. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- H. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- I. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- J. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- K. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
  - 1. Name of evaluation organization.

- 2. Date of evaluation.
- 3. Time period when report is in effect.
- 4. Product and manufacturers' names.
- 5. Description of product.
- 6. Test procedures and results.
- 7. Limitations of use.
- L. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- M. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- N. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- O. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Division 1 Section "Operation and Maintenance Data."
- P. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.
- Q. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:
  - 1. Preparation of substrates.
  - 2. Required substrate tolerances.
  - 3. Sequence of installation or erection.
  - 4. Required installation tolerances.
  - 5. Required adjustments.

- 6. Recommendations for cleaning and protection.
- R. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:
  - 1. Name, address, and telephone number of factory-authorized service representative making report.
  - 2. Statement on condition of substrates and their acceptability for installation of product.
  - 3. Statement that products at Project site comply with requirements.
  - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  - 6. Statement whether conditions, products, and installation will affect warranty.
  - 7. Other required items indicated in individual Specification Sections.
- S. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- T. Material Safety Data Sheets (MSDS): Submit information directly to Owner; do not submit to Architect, except as required in "Submittals" Article. Architect will not review submittals that include MSDS and will return the entire submittal for resubmittal. Hard Copies are to be provided, electronic copies may be provided at owner's discretion.

#### 2.3 DELEGATED DESIGN

- A. Performance and Design Criteria:
  - 1. Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
  - 2. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Submittal:
  - 1. Method of Submittal: Electronic submittals in PDF format only.
  - 2. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

C. Comply with requirements of Division 1 Section "Design Build Requirements."

#### **PART 3 - EXECUTION**

#### 3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Approval Stamp: Stamp submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

#### 3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
  - 1. No Exception Taken;
  - 2. Make Corrections Noted; or
  - 3. Nonconforming Resubmit.
- C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION

## DESIGN BUILD REQUIREMENTS

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Procedures for portions of Work under this Contract that are Design-Build.
- B. Contractor's responsibility is to coordinate and assume or assign to subcontractors complete responsibility for design, preparation of Contract Documents, calculations, submittals, permits, code appeals, fabrication, transportation and installation.
  - 1. Contractor to submit and coordinate Design-Build documents to Governing Jurisdiction for separate permit.
  - 2. Contractor responsible to complete Design Build Summary Sheet.
  - 3. Design-Build components of Work are defined as complete, operational systems, provided and installed for their intended use.
- C. Design Professional is Project Architect or Engineer of Record.
  - 1. Review of Design-Build Submittals by Architect or Engineer of Record shall be for design intent only and shall not lessen nor shift responsibility from Contractor or assigned subcontractor, to Owner nor Design Professional.
  - 2. 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 work of other trades on Project or to provide Design-Build portion or component in a timely manner to meet Project Schedule.
- D. Contractor shall be responsible for and pay cost of all required design, submittals, permits and fees and coordination for Work of this Section.

#### E. Related Sections:

- 1. Division 1 Section "Project Management and Coordination."
- 2. Division 1 Section "Submittal Procedures."
- 3. Division 1 Section "Closeout Procedures."

#### 1.2 DESIGN-BUILD COMPONENTS OF WORK

- A. Design-Build Components include, but not limited to:
  - 1. Section 06 10 00 ROUGH CARPENTRY, wood trusses.
  - 2. Section 09 21 16- GYPSUM BOARD ASSEMBLIES
  - 3. Section 09 51 00- ACOUSTICAL CEILINGS

#### **DESIGN BUILD REQUIREMENTS**

#### 1.3 DESCRIPTIONS

A. Refer to systems descriptions in Part 1, General and Part 2, Products in each technical specification Section listed for references to Design Build Work.

#### 1.4 QUALITY ASSURANCE

- A. Refer to Quality Assurance described in Part 1 General in individual Sections with Design Build Work.
- B. Quality assurance described in Specification Sections shall be minimum acceptable standards for this project. Should quality assurance not be defined within specific Specifications, printed industry standards for "normal" quality practices shall govern.

#### 1.5 SUBMITTALS

- A. Refer to Submittals in Part 1 General, in individual Sections with Design-Build Work.
- 1.6 Design-Build Submittals shall contain:
  - A. Complete criteria.
  - B. Design assumptions.
  - C. Details.
  - D. Calculations.
  - E. Stamped by Design-Build Engineer licensed in State of Oregon.
  - F. Instructions for fabrication, assembly, installation and interface with other trades.

# 1.7 SPECIFIC REQUIREMENTS AND DEFINITIONS

- A. Submit list of proposed Design-Build Subcontractor(s) and/or Engineer(s) not more than fifteen days after signing Notice to Proceed.
- B. Submit Design-Build Summary Sheet to governing authorities if required.
- C. Design-Build Elements indicated in Contract Documents are for design intent only.
- D. Intent is that Design-Build Entity is responsible to design, provide, coordinate and install Design-Build Component.
  - 1. Required Submittals to governing jurisdictions, permits, Code appeals, etc. are Contractor's responsibility.
- E. Design-Build Elements that attach to structural frame or are supplemental to structural frame shall be designed for anticipated loads outlined in the Contract Documents and required by the International Building Code as modified by the Oregon Structural Specialty Code.

# DESIGN BUILD REQUIREMENTS

- F. Coordinate Design-Build Elements with appropriate subcontractors.
- G. Clearly identify load reactions at interface between Design-Build Elements and structural frame for review by Structural Engineer of Record.

END OF SECTION

#### PRODUCT REQUIREMENTS

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
- B. Related Sections include the following:
  - 1. Division 1 Section "Closeout Procedures" for submitting warranties for Contract closeout.
  - 2. Divisions 2 through 33 Sections for specific requirements for warranties on products and installations specified to be warranted.

#### 1.2 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
  - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
  - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
  - 3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

#### 1.3 SUBMITTALS

A. Product List: Submit a list, in tabular form, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.

#### PRODUCT REQUIREMENTS

- 1. Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.
- 2. Form: Tabulate information for each product under the following column headings:
  - a. Specification Section number and title.
  - b. Generic name used in the Contract Documents.
  - c. Proprietary name, model number, and similar designations.
  - d. Manufacturer's name and address.
  - e. Supplier's name and address.
  - f. Installer's name and address.
  - g. Projected delivery date or time span of delivery period.
  - h. Identification of items that require early submittal approval for scheduled delivery date.
- 3. Initial Submittal: Within 30 days after date of commencement of the Work, submit 3 copies of initial product list. Include a written explanation for omissions of data and for variations from Contract requirements.
- 4. Completed List: Within 60 days after date of commencement of the Work, submit 3 copies of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
- 5. Architect's Action: Architect will respond in writing to Contractor within 15 days of receipt of completed product list. Architect's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Architect's response, or lack of response, does not constitute a waiver of requirement to comply with the Contract Documents.
- B. Substitution Requests: Submit one copy of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Substitution Request Form: Use facsimile of CSI Northwest Region Substitution Request Form provided at end of Section.
  - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified material or product cannot be provided.

- b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
- c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
- d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
- e. Samples, where applicable or requested.
- f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
- g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
- h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
- i. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
- j. Cost information, including a proposal of change, if any, in the Contract Sum.
- k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
- Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- 3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within 7 days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
  - a. Form of Acceptance: Change Order.
  - b. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.

- C. Comparable Product Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
    - a. Form of Approval: As specified in Division 1 Section "Submittal Procedures."
    - b. Use product specified if Architect cannot make a decision on use of a comparable product request within time allocated.
- D. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 1 Section "Submittal Procedures." Show compliance with requirements.

### 1.4 QUALITY ASSURANCE

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

## 1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
  - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
  - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
  - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
  - 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

## C. Storage:

- 1. Store products to allow for inspection and measurement of quantity or counting of units.
- 2. Store materials in a manner that will not endanger Project structure.

- 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
- 4. Store cementitious products and materials on elevated platforms.
- 5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
- 6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 7. Protect stored products from damage and liquids from freezing.

#### 1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
  - 1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
  - 2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
  - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
  - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
  - 3. Refer to Divisions 2 through 33 Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Division 1 Section "Closeout Procedures."

## PART 2 - PRODUCTS

#### 2.1 PRODUCT SELECTION PROCEDURES

- A. Comply with specified industry standards. If no standards are specified, comply with the product's industry standards as a minimum requirement. Provide materials in size, type, and quality indicated and specified, unless variations are accepted by Architect in writing.
- B. Specifying a manufacturer and manufactured product shall not constitute a waiver of any requirements of the Contract Documents, and products furnished by the listed manufacturer shall conform to such requirements.
- C. No materials or products containing asbestos are to be used in the construction of this Project. If any material or product specified in this Project Manual is known to contain asbestos, it shall be brought to the attention of the Architect before ordering or fabricating the material or product.

## D. General Product Requirements:

- 1. Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.
- 2. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
- 3. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
- 4. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- 5. Where products are accompanied by the term "as selected," Architect will make selection.
- 6. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
- 7. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
- 8. Or Equal: Where products are specified by name and accompanied by the term "or equal" or "or approved equal" or "or approved," comply with provisions in Part 2 "Comparable Products" Article to obtain approval for use of an unnamed product.

## E. Product Selection Procedures:

- 1. Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.
- 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
- 3. Available Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.

Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.

- 4. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one of the manufacturers listed that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
- 5. Specifying a manufacturer and manufactured product shall not constitute a waiver of any requirements of the Contract Documents, and products furnished by the listed manufacturer shall conform to such requirements.
- 6. Product Options: Where Specifications indicate that sizes, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
- 7. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
- 8. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
  - a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
- 9. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.
  - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.
  - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

- A. All wood products shall originate in "certified well-managed" forests as determined by standards endorsed by the Forest Stewardship Council (FSC).
- B. The following programs are accredited by the Forest Stewardship Council:
  - 1. Green Cross Certification Program; administered by Scientific Certification Systems (SCS).
  - 2. SmartWood Certification Program; administered by Rainforest Alliance.
  - 3. Société Générale de Surveillance (SGS) Forestry Qualifor Programme; administered by Oxford Centre for Innovation.
  - 4. The Responsible Forestry Program; administered under Soil Association's Woodmark Scheme.
  - 5. SKAL Forestry Certification Programme; administered by SKAL.
- C. Provide evidence of compliance with standards endorsed by the Forest Stewardship Council and as follows:
  - 1. Indicate certified status of forest of origin.
  - 2. Indicate chain of custody from forest of origin through manufacturing and fabrication.
  - 3. Submit prior to fabrication.
  - 4. Composite wood or agrifiber products shall contain no added urea-formaldehyde resins.

## 2.3 PRODUCT SUBSTITUTION PROCEDURES

- A. Submit substitution requests on the CSI Substitution Request form bound in this Project Manual. If the Substitution Request form is reproduced, the terms and conditions of the Substitution Request bound in this Project Manual shall apply to the request.
- B. Each substitution request shall include a complete description of the proposed substitute, the name of the material, service, or equipment for which it is to be substituted, drawings, cuts, performance and test data, samples illustrating color, texture and pattern, and any other data or information required to make a valid comparison. Product catalogs containing multiple products shall be marked to indicate which products and product options are being submitted for substitution. Substitution requests submitted with unmarked catalogs will not be reviewed.
- C. To have the results of a substitution request mailed to the author, include two copies of the substitution request form and a stamped, self-addressed envelope.
- D. Consideration of Substitution Requests Prior to Bid Date: Submit Substitution Requests 10 days prior to bid date. If, in the Architect's opinion, the proposed product is acceptable in lieu of the one or more specified, the Architect will include it in a written addendum which will be issued to bidders. Acceptance of a Substitution Request does not relieve the requestor from meeting the requirements, procedures, and warranties as set forth in this specification. Only those

manufacturers, materials, services, and equipment approved in these Specifications or by Addendum will be acceptable for use on this construction project.

- E. Consideration of Substitution Requests After Contract Award:
  - 1. Requests for substitution of specified products after the construction Contract is signed, will be considered only in accordance with paragraphs 2.3.A. and 2.3.B., above. If, in the Architect's opinion, the proposed product is acceptable in lieu of the one or more specified, the Architect will issue a Supplemental Instruction, when Contract Sum or Contract Time is not affected, or a Construction Change Directive or Change Order, when Contract Sum or Contract Time is affected.
  - 2. Substitution requests occasioned by the Contractor's failure to order specified material in a timely manner shall not be considered and delays in construction caused by such an event shall not be waived.
  - 3. One or more of the following five conditions must also be documented:
    - a. The substitution must be required for compliance with final interpretation of code requirements or insurance regulations.
    - b. The substitution must be due to the unavailability of the specified products, through no fault of the Contractor.
    - c. The substitution may be requested when subsequent information discloses the inability of the specified products to perform properly or to fit in the designated space.
    - d. The substitution may be due to the manufacturer's or fabricator's refusal to certify or guarantee performance of the specified product as required.
    - e. The substitution may be requested when it is clearly seen, in the judgment of the Architect that a substitution, would be substantially to the Owner's best interests in terms of cost or time.

## 2.4 COMPARABLE PRODUCTS

- A. Conditions: Architect shall consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with the requirements:
  - 1. Evidence the proposed product does not require extensive revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
  - 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  - 3. Evidence that proposed product provides specified warranty.

- 4. List of similar installations for completed projects with project names and addresses; and names and addresses of architects and owners, if requested.
- 5. Samples, if requested.

END OF SECTION

TO:				
PROJECT:				
SPECIFIED ITEM:				
Section No.	Page	Paragraph	Description	
PROPOSED SUBS	STITUTION: _			
			specifications, drawings, photographs st including identifying applicable port	
		des description of oper installation.	changes to Contract Documents	that proposed
Undersigned certi	fies that the f	ollowing items, un	nless modified by attachments, are	correct:
3. Propose specified 4. Maintena substitut  Undersigned furthequivalent or supe	ction costs caud substitution do substitution do warranty requance and servicion.  Ther certifies derior to specifies that, if this	that function, ap	effect on other trades, construction able locally or are readily obtainable pearance, and quality of propose uced, terms and conditions for sul	n schedule, or e for proposed ed substitution are
Submitted by	,			
Name (Print)			General Contractor (if after award	of Contract)
Signature			For use by A/E:	
Firm Name			Approved	Approved as Noted
Address			Not Approved	Received Too Late
City, State, Zip			By	
Date			Date	
Telephone	Fax		 Remarks	

## **Attachments**

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Provide all labor and materials necessary to execute cutting and patching of defective Work.
- B. Match each patch material with kind, grade, size and quality identical to patched material.

#### 1.2 DEFINITIONS

## A. Cutting:

- 1. Removal of in-place construction necessary to permit installation or performance of other Work.
- 2. Removal of defective Work.

## B. Patching:

- 1. Fitting and repair work required to restore surfaces to original conditions after installation of other Work. Include patch and repair that is implied or consequential to other trades to achieve the intended results.
- 2. Replacing defective Work with Work that conforms to Contract Documents.

## 1.3 SUBMITTALS

- A. Cutting and Patching Proposal: Submit a proposal describing procedures at least 10 days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:
  - 1. Extent: Describe cutting and patching of defective Work. Show how they will be performed, and indicate why they cannot be avoided.
  - 2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.
  - 3. Products: List products to be used and firms or entities that will perform the Work.
  - 4. Dates: Indicate when cutting and patching will be performed.
  - 5. Utility Services and Mechanical/Electrical Systems: List services/systems that cutting and patching procedures will disturb or affect. List services/systems that will be relocated and those that will be temporarily out of service. Indicate how long services/systems will be disrupted.
  - 6. Structural Elements: Where cutting and patching involve adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.

7. Architect's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

## 1.4 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- B. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operating elements include but are not limited to the following:
  - 1. Primary operational systems and equipment.
  - 2. Air or smoke barriers.
  - 3. Fire-suppression systems.
  - 4. Mechanical systems piping and ducts.
  - 5. Control systems.
  - 6. Communication systems.
  - 7. Conveying systems.
  - 8. Electrical wiring systems.
- C. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Miscellaneous elements include but are not limited to the following:
  - 1. Water, moisture, or vapor barriers.
  - 2. Membranes and flashings.
  - 3. Exterior curtain-wall construction.
  - 4. Equipment supports.
  - 5. Piping, ductwork, vessels, and equipment.
  - 6. Noise- and vibration-control elements and systems.
- D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic

- qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- E. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

#### 1.5 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

## PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials:
  - 1. Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
  - 2. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.

### PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
  - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
  - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

## 3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

## 3.3 PERFORMANCE

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
  - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
  - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
  - 3. Concrete or Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
  - 4. Excavating and Backfilling: Comply with requirements in applicable Division 31 Sections where required by cutting and patching operations.
  - 5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
  - 6. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.
  - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
  - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
    - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
    - b. Restore damaged pipe covering to its original condition.

- 3. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
- 4. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.
- D. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:
  - 1. Recycling nonhazardous construction waste.
  - 2. Disposing of nonhazardous construction waste.

## 1.2 REFERENCES

A. Earth Advantage Institute (EA).

## 1.3 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction operations. Construction waste includes packaging.
- B. Disposal: Removal off-site of construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- C. Recycle: Recovery of construction waste for subsequent processing in preparation for reuse.

## 1.4 PERFORMANCE REQUIREMENTS

- A. Develop waste management plan that results in end-of-Project rates for recycling of 75 percent by weight of total waste generated by the Work in accordance with EA Measure MA-08.
- B. Recycle Requirements: Owner's goal is to recycle as much nonhazardous demolition and construction waste as possible including the following materials:
  - 1. Construction Waste:
    - a. Site-clearing waste.
    - b. CMU.
    - c. Lumber.
    - d. Wood sheet materials.
    - e. Wood trim.
    - f. Metals.
    - g. Roofing.
    - h. Insulation.

- i. Carpet.
- j. Gypsum board.
- k. Piping.
- 1. Electrical conduit.
- m. Packaging: Regardless of recycle goal indicated above, recycle 100 percent of the following uncontaminated packaging materials:
  - (1) Paper.
  - (2) Cardboard.
  - (3) Boxes.
  - (4) Plastic sheet and film.
  - (5) Polystyrene packaging.
  - (6) Wood crates.
  - (7) Plastic pails.

## 1.5 SUBMITTALS

- A. Submit the following in accordance with Division 1 Section "Submittal Procedures."
- B. Waste Management Plan: Submit three copies of plan within 30 days of date established for commencement of the Work.
- C. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit three copies of report. Include separate reports for demolition and construction waste. Include the following information:
  - 1. Material category.
  - 2. Generation point of waste.
  - 3. Total quantity of waste in tons.
  - 4. Quantity of waste recycled, both estimated and actual in tons.
  - 5. Total quantity of waste recovered plus recycled in tons.
  - 6. Total quantity of waste recovered recycled as a percentage of total waste.

- D. Waste Reduction Calculations: Before request for Substantial Completion, submit three copies of calculated end-of-Project rates for, recycling, and disposal as a percentage of total waste generated by the Work.
- E. Records of Donations: Indicate receipt and acceptance of recycled waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- F. Records of Sales: Indicate receipt and acceptance of Recycled waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- G. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- H. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- I. Sustainable Design Submittal: Sustainable design letter template, signed by Contractor, tabulating total waste material, quantities diverted and means by which it is diverted, and statement that requirements for the measure have been met.
- J. Qualification Data: For Waste Management Coordinator.

#### 1.6 OUALITY ASSURANCE

- A. Waste Management Coordinator Qualifications: EA Accredited Professional, or otherwise qualified individual.
- B. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Waste Management Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to waste management including, but not limited to, the following:
  - 1. Review and discuss waste management plan including responsibilities of Waste Management Coordinator.
  - 2. Review requirements for documenting quantities of each type of waste and its disposition.
  - 3. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
  - 4. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
  - 5. Review waste management requirements for each trade.

## 1.7 WASTE MANAGEMENT PLAN

- A. General: Develop plan consisting of waste identification, waste reduction work plan, and cost/revenue analysis. Include separate sections in plan for demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of site-clearing and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
  - 1. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
  - 2. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
  - 3. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location on Project site where materials separation will be located.
- D. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there was no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Include the following:
  - 1. Total quantity of waste.
  - 2. Estimated cost of disposal (cost per unit). Include hauling and tipping fees and cost of collection containers for each type of waste.
  - 3. Total cost of disposal (with no waste management).
  - 4. Revenue from recycled materials.
  - 5. Savings in hauling and tipping fees by donating materials.
  - 6. Savings in hauling and tipping fees that are avoided.
  - 7. Handling and transportation costs. Include cost of collection containers for each type of waste.
  - 8. Net additional cost or net savings from waste management plan.
- E. Forms: Prepare waste management plan on forms included at end of Part 3.

#### PART 3 - EXECUTION

#### 3.1 PLAN IMPLEMENTATION

- A. General: Implement waste management plan as approved by Architect. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
- B. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan. Coordinator shall be present at Project site full time for duration of Project.
- C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
  - 1. Distribute waste management plan to everyone concerned within three days of submittal return.
  - 2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.
- D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - 1. Designate and label specific areas on Project site necessary for separating materials that are to be recycled, donated, and sold.

## 3.2 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to Contractor.
- C. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical.
  - 1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
    - a. Inspect containers and bins for contamination and remove contaminated materials if found.
  - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
  - 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.

- 4. Store components off the ground and protect from the weather.
- 5. Remove recyclable waste off Owner's property and transport to recycling receiver or processor.

## 3.3 RECYCLING DEMOLITION WASTE

- A. Asphaltic Concrete Paving: Break up and transport paving to asphalt-recycling facility.
- B. Concrete: Remove reinforcement and other metals from concrete and sort with other metals.
  - 1. Pulverize concrete to maximum 4-inch size.

#### 3.4 RECYCLING CONSTRUCTION WASTE

## A. Packaging:

- 1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
- 2. Polystyrene Packaging: Separate and bag materials.
- 3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
- 4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- B. Site-Clearing Wastes: Chip brush, branches, and trees at landfill facility.

## C. Wood Materials:

- 1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
- 2. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
- D. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location.
  - 1. Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

## 3.5 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
  - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.

- 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Transport waste materials off Owner's property and legally dispose of them.

END OF SECTION

#### PART 1 GENERAL

#### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Inspection procedures.
  - 2. Warranties.
  - 3. Spare parts and extra stock.
  - 4. Final cleaning.
- B. Electronic Submittals: All submittal documentation and procedures detailed in this specification section that lend themselves to transfer by digital electronic media shall be submitted in an electornic format as approved by the Architect.

## C. Related Sections:

- 1. Division 1 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
- 2. Division 1 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.

## 1.2 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
  - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
  - 2. Advise Owner of pending insurance changeover requirements.
  - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
  - 6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.

- 7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
- 8. Complete startup testing of systems.
- 9. Submit test/adjust/balance records.
- 10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
- 11. Advise Owner of changeover in heat and other utilities.
- 12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- 13. Complete final cleaning requirements, including touchup painting.
- 14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
  - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
  - 2. Results of completed inspection will form the basis of requirements for Final Completion.

## 1.3 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
  - Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  - 2. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  - 3. Submit pest-control final inspection report and warranty.
  - 4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.

- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
- C. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

## 1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
  - 1. Organize list of spaces in sequential order.
  - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
  - 3. Include the following information at the top of each page:
    - a. Project name.
    - b. Date.
    - c. Name of Architect.
    - d. Name of Contractor.
    - e. Page number.

## 1.5 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual. If hard copies are requested by owner:
  - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2 x 11-inch paper.
  - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
  - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.

- C. Provide additional copies of each warranty to include in operation and maintenance manuals.
- D. Provide an electronic log of warranties. At a minimum the log shall include vendor/mfg. information, contact information, warranty start date, warranty expiration date, and product/equipment location within building.

## PART 2 PRODUCTS

#### 2.1 MATERIALS

- A. Spare Parts and Extra Stock: All Spare Parts or Extra Stock required for the Project shall be transmitted to the Owner at the location indicated in the Contract Documents or as directed by the Owner's representative.
- B. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

## PART 3 EXECUTION

#### 3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
    - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
    - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
    - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
    - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing

- natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
- f. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
- g. Sweep concrete floors broom clean in unoccupied spaces.
- h. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean carpet in accordance with carpet manufacturer's instructions if visible soil or stains remain.
- Clean transparent materials, including mirrors and glass in doors and windows.
   Remove glazing compounds and other noticeable, vision-obscuring materials.
   Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
- j. Remove labels that are not permanent.
- k. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
  - (1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
- 1. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- m. Replace parts subject to unusual operating conditions.
- n. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- o. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
- p. Clean ducts, blowers, and coils if units were operated without filters during construction.
- q. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
- r. Leave Project clean and ready for occupancy.
- C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests. Prepare a report.

D. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
  - 1. Operation and maintenance documentation directory.
  - 2. Operation manuals for systems, subsystems, and equipment.
  - 3. Maintenance manuals for the care and maintenance of products, materials, and finishes, and systems and equipment.
- B. Electronic Submittals: All submittal documentation and procedures detailed in this specification section that lend themselves to transfer by digital electronic media shall be submitted in an electornic format as approved by the Architect.

## 1.2 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

#### 1.3 SUBMITTALS

- A. Initial Submittal: Submit one draft copy of each manual at least 15 days before requesting inspection for Substantial Completion. Include a complete operation and maintenance directory. Architect will return one copy of draft and mark whether general scope and content of manual are acceptable.
- B. Final Submittal: Submit one copy of each manual in final form at least 15 days before final inspection. Architect will return copy with comments within 15 days after final inspection.
  - 1. Correct or modify each manual to comply with Architect's comments. Submit corrected digital manuals within 15 days of receipt of Architect's comments.

## 1.4 COORDINATION

A. Where operation and maintenance documentation includes information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by representatives and prepare manuals.

## PART 2 - PRODUCTS

#### 2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

A. Organization: Include a section in the directory for each of the following:

- 1. List of documents.
- 2. List of systems.
- 3. List of equipment.
- 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each operation and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

## 2.2 MANUALS, GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
  - 1. Title page.
  - 2. Table of contents.
  - 3. Manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
  - 1. Subject matter included in manual.
  - 2. Name and address of Project.
  - 3. Name and address of Owner.
  - 4. Date of submittal.
  - 5. Name, address, and telephone number of Contractor.
  - 6. Name and address of Architect.
  - 7. Cross-reference to related systems in other operation and maintenance manuals.

- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
  - 1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
  - 1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
    - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
    - b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
  - 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
  - 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
  - 4. Supplementary Text: Prepared on 8-1/2-by-11-inch white bond paper.
  - 5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
    - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
    - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

#### 2.3 OPERATION MANUALS

A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:

- 1. System, subsystem, and equipment descriptions.
- 2. Performance and design criteria if Contractor is delegated design responsibility.
- 3. Operating standards.
- 4. Operating procedures.
- 5. Operating logs.
- 6. Wiring diagrams.
- 7. Control diagrams.
- 8. Piped system diagrams.
- 9. Precautions against improper use.
- 10. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:
  - 1. Product name and model number.
  - 2. Manufacturer's name.
  - 3. Equipment identification with serial number of each component.
  - 4. Equipment function.
  - 5. Operating characteristics.
  - 6. Limiting conditions.
  - 7. Engineering data and tests.
  - 8. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include the following, as applicable:
  - 1. Startup procedures.
  - 2. Equipment or system break-in procedures.
  - 3. Routine and normal operating instructions.
  - 4. Regulation and control procedures.
  - 5. Instructions on stopping.
  - 6. Normal shutdown instructions.

- 7. Seasonal and weekend operating instructions.
- 8. Required sequences for electric or electronic systems.
- 9. Special operating instructions and procedures.
- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

#### 2.4 PRODUCT MAINTENANCE MANUAL

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
  - 1. Product name and model number.
  - 2. Manufacturer's name.
  - 3. Color, pattern, and texture.
  - 4. Material and chemical composition.
  - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
  - 1. Inspection procedures.
  - 2. Types of cleaning agents to be used and methods of cleaning.
  - 3. List of cleaning agents and methods of cleaning detrimental to product.
  - 4. Schedule for routine cleaning and maintenance.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

1. Include procedures to follow and required notifications for warranty claims.

## 2.5 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
  - 1. Standard printed maintenance instructions and bulletins.
  - 2. Drawings, diagrams, and instructions required for maintenance.
  - 3. Identification and nomenclature of parts and components.
  - 4. List of items recommended to be stocked as spare parts.
- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
  - 1. Test and inspection instructions.
  - 2. Troubleshooting guide.
  - 3. Precautions against improper maintenance.
  - 4. Aligning, adjusting, and checking instructions.
  - 5. Demonstration and training videotape, if available.
- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
  - 1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
  - 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

# OPERATION AND MAINTENANCE DATA

- G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
  - 1. Include procedures to follow and required notifications for warranty claims.

## **PART 3 - EXECUTION**

## 3.1 MANUAL PREPARATION

- A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to operation and maintenance manuals.
- B. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- C. Equipment Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
- D. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
  - 1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- E. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.
  - 1. Do not use original Project Record Documents as part of operation and maintenance manuals.
  - 2. Comply with requirements of newly prepared Record Drawings in Division 1 Section "Project Record Documents."
- F. Comply with Division 1 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

## **END OF SECTION**

# PART 1 - GENERAL

### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
  - 1. Record Drawings.
  - 2. Record Specifications.
  - 3. Record Product Data.
- B. Electronic Submittals: All submittal documentation and procedures detailed in this specification section that lend themselves to transfer by digital electronic media shall be submitted in an electornic format as approved by the Architect.

## 1.2 SUBMITTALS

- A. Record Drawings: Comply with the following:
  - 1. Number of Copies: Submit copies of Record Drawings as follows:
    - a. Initial Submittal: Submit digitally, one set of marked-up Record Prints. Architect will initial and date each print and mark whether general scope of changes, additional information recorded, and quality of identification are acceptable. Architect will return digital documents for organizing into sets, printing, binding, and final submittal.
    - b. Final Submittal: Submit one set of marked-up Record Prints, and one digital copy in PDF format.
- B. Record Specifications: Submit one hard copy of Project's Specifications, including addenda and contract modifications, and one digital copy in PDF format.
- C. Record Product Data: Submit one copy of each Product Data submittal.
  - 1. Final Submittal: Submit one set of marked-up Record Product Data, and one digital copy in PDF format.
  - 2. Where Record Product Data is required as part of operation and maintenance manuals, submit marked-up Product Data as an insert in manual instead of submittal as Record Product Data.

## PART 2 - PRODUCTS

## 2.1 RECORD DRAWINGS

- A. Record Drawings: Maintain one digital set of record drawings in PDF format of the Contract Drawings and Shop Drawings.
  - 1. Preparation: Mark digital record drawings to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is installer, subcontractor, or similar entity, to prepare the marked-up digital record drawings.
    - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
    - b. Accurately record information in an understandable identification technique approved by the Architect.
    - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
  - 2. Content: Types of items requiring marking include, but are not limited to, the following:
    - a. Dimensional changes to Drawings.
    - b. Revisions to details shown on Drawings.
    - c. Depths of foundations below ground level floor.
    - d. Locations and depths of underground utilities.
    - e. Revisions to routing of piping and conduits.
    - f. Revisions to electrical circuitry.
    - g. Actual equipment locations.
    - h. Duct size and routing.
    - i. Locations of concealed internal utilities.
    - j. Changes made by Change Order or Construction Change Directive.
    - k. Changes made by Request for Interpretation (RFI) or Architect's Supplementary Instructions (ASI).
    - 1. Details not on the original Contract Drawings.
    - m. Field records for variable and concealed conditions.
    - n. Record information on the Work that is shown only schematically.

- 3. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
- 4. Mark important additional information that was either shown schematically or omitted from original Drawings.
- 5. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Record Digital Documents: Immediately before inspection for Certificate of Substantial Completion, Review marked-up Record Documents with Architect. When authorized, prepare a full set of corrected digital documents in PDF format of the Contract Drawings and Shop Drawings.
  - 1. Incorporate changes and additional information previously marked on Record Documents. Delete, redraw, and add details and notations where applicable.
  - 2. Refer instances of uncertainty to Architect for resolution.
  - 3. Print the Contract Drawings and Shop drawings for use as Record Drawings. Architect will make the Contract Drawings available to Contractor's print shop.
- C. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing Record Drawings where Architect determines that neither the original Contract Drawings nor Shop Drawings are suitable to show actual installation.
  - 1. New Drawings may be required when a Change Order is issued as a result of accepting an alternate, substitution, or other modification.
  - 2. Consult Architect for proper scale and scope of detailing and notations required to record the actual physical installation and its relation to other construction. Integrate newly prepared Record Drawings into Record Drawing sets; comply with procedures for formatting, organizing, copying, binding, and submitting.
- D. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
  - 1. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
  - 2. Identification: As follows:
    - a. Project name.
    - b. Date.
    - c. Designation "PROJECT RECORD DRAWINGS."

- d. Name of Architect.
- e. Name of Contractor.

# 2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark digital PDF Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Mark copy with the proprietary name and model number of products, materials, color selection and equipment furnished, including substitutions and product options selected.
  - 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
  - 4. For each principal product, indicate whether Record Product Data has been submitted in operation and maintenance manuals instead of submitted as Record Product Data.
  - 5. Note related Change Orders, ASI's, RFI's, Record Product Data, and Record Drawings where applicable.

# 2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
  - 3. Note related Change Orders, Record Specifications, and Record Drawings where applicable.

# 2.4 MISCELLANEOUS RECORD SUBMITTALS

A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

# PART 3 - EXECUTION

## 3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.
- C. Review of Record Documents and Samples: Review Record Documents at Job Site monthly.

END OF SECTION

# PART 1 GENERAL

### 1.1 SUMMARY

- A. Furnish all labor, materials, equipment, and services necessary for the installation of all rough carpentry.
- B. The General Structural Notes shall be used in conjunction with these specifications. The General Structural Notes shall supersede items in this specification when discrepancies exist.
- C. Related Section: Division 1 Section "Sustainable Design Requirements" for compliance with Earth Advantage Institute sustainable design requirements.

## 1.2 REFERENCES

- A. American Institute of Timber Construction (AITC).
- B. American Lumber Standards Committee (ALSC).
- C. American National Standards Institute (ANSI).
- D. American Society for Testing and Materials (ASTM).
- E. American Wood Preservers' Association (AWPA).
- F. APA The Engineered Wood Association.
- G. International Code Council (ICC).
- H. Voluntary Product Standard (PS).
- I. West Coast Lumber Inspection Bureau (WCLIB).
- J. American Forest and Paper Association (AF&PA).
- K. Western Wood Products Association (WWPA).
- L. Earth Advantage Institute (EA).

# 1.3 SUBMITTALS

- A. Submit the following in accordance with Division 1 Section "Submittal Procedures."
- B. Certificate of Conformance with Attachments 1 and 2 indicating compliance with AITC or APA requirements.

# 1.4 QUALITY ASSURANCE

A. Materials shall be grade stamped equal to or better than the grades hereinafter called for according to the following associations governing their various species of lumber products:

- 1. American Institute of Timber Construction (AITC).
- 2. APA The Engineered Wood Association.
- 3. Unless otherwise noted, moisture content of material shall conform to WCLIB Rule No. 16, General Grading Provisions, Paragraph 3, Seasoning Provisions.
- B. Treated Lumber: Inspection of material for conformity to the requirements of this specification shall be in accordance with AWPA Standard M2, Standard for Inspection of Treated Timber Products.

## 1.5 DELIVERY, STORAGE, AND HANDLING

A. Wrap, cover, and protect lumber products in shipment and while stored on site to prevent weather exposure and damage. Maintain stocks neat and in good order, level and off ground or floors, raised on pallets or dunnage to prevent contact with water.

## PART 2 PRODUCTS

# 2.1 MANUFACTURERS

- A. Product manufacturers are listed in Paragraph 2.2, Materials.
- B. Other Manufacturers: Submit Substitution Requests prior to bid date in accordance with Division 1 Section "Product Requirements."

# 2.2 MATERIALS

- A. Framing Lumber:
  - 1. Boards: WWPA No. 2, kiln dried, Douglas-fir/larch.
  - 2. Structural Light Framing: WWPA No. 2, kiln dried, Douglas-fir/larch, unless noted otherwise.
  - 3. Beams and Stringers: WWPA No. 1, kiln dried, Douglas-fir/larch, unless noted otherwise.
- B. Decay Resistance-Treated Lumber: No. 2 S4S Douglas-fir, shall be pressure-treated with ammoniacal copper quaternary (ACQ) or copper azole (CA) in accordance with AWPA Standard U1, minimum Use Category UC2. All pressure-treated lumber shall bear the AWPA Use Category quality mark. Lumber marked "treatment to point of refusal" is not acceptable.
  - 1. ACQ Products: "Nature Wood" by Osmose, 800/241-0240; "ACQ Preserve" by Chemical Specialties, Inc., 800/421-8661. Do not use in contact with single ply roof membranes.
  - 2. CA Products: "Natural Select" by Arch Wood Protection, Inc., 866/789-4567.

- C. Subfloor and Wall Sheathing: Structural-Use panels of all-veneer, oriented strand or composite construction, Group 1, APA Rated Sheathing, Exposure 1, C-D, thickness as detailed, span rating to match support spacing, unless noted otherwise.
- D. Plywood for Equipment Boards: 3/4-inch thick APA Group 1, C-D, UL FR-S label.
- E. Anchor Bolts: ASTM F1554, Grade 36, unless otherwise noted, American made machine thread cut bolts with nut and washer. The diameter and length of bolts per the structural drawings.
- F. Framing Connectors:
  - 1. ICC approved stock framing connectors, G90 galvanized ASTM A653, (G185 galvanized ASTM A653 or Type 304 stainless steel in contact with treated lumber), rated according to recorded tests. Provide special framing anchor nails as required and other fastenings as detailed and normal for installation.
  - 2. Manufacturers: Simpson Strong Tie.

### G. Fasteners:

- 1. Power-Driven Fasteners: NES NER-272.
- 2. Lag Bolts: ASME B18.2.1.
- 3. Nails, Brads, and Staples: ASTM F 1667.
- 4. Wood Screws: ASME B18.6.1.
- 5. Type S 12 screws, bugle or pan head as required, ASTM C954.
- 6. Bolts: Steel bolts complying with ASTM A 307, Grade A, with ASTM A 563 hex nuts and, where indicated, flat washers.
- 7. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain, without failure, a load equal to 6 times the load imposed when installed in unit masonry assemblies and equal to 4 times the load imposed when installed in concrete as determined by testing per ASTM E 488 conducted by a qualified independent testing and inspecting agency.
  - a. Material: Carbon-steel components, zinc plated to comply with ASTM B 633, Class Fe/Zn 5.
  - b. Material: Stainless steel with bolts and nuts complying with ASTM F 593 and ASTM F 594, Alloy Group 1 or 2, for use with treated lumber.
- H. Fasteners for Treated Lumber: Type 304 stainless steel in contact with decay-resistant treated lumber or fire-resistant treated lumber.
- I. Construction Adhesive:

- 1. Water dispersed industrial adhesive.
- 2. Manufacturers: 3M Co. "Scotch Grip" 1357.

## PART 3 EXECUTION

## 3.1 INSTALLATION

- A. Framing Standard: Comply with AF&PA's "Details for Conventional Wood Frame Construction," unless otherwise indicated.
- B. Framing with Engineered Wood Products: Install engineered wood products to comply with manufacturer's written instructions.
- C. Metal Framing Anchors: Install metal framing anchors to comply with manufacturer's written instructions.
- D. Do not splice structural members between supports, unless otherwise indicated.
- E. Selection and placement of exposed wood products: All wood products designed to be left exposed to view in the completed building shall be selected for good appearance, free of wanes, heartwood, pitch pockets, splintering, checking, banding indentations, grade stamps, and other defacements.
- F. Cut and repair framing where required by electrical, mechanical or other mechanics throughout the job. Boring of holes for pipes and conduits not included. Where cutting is required in a structural member that is likely to weaken the construction, consult with the Architect as to the measures taken in order to perform the work without causing any deficiencies of strength or workmanship. Close all openings with incombustible material where pipes and ducts pass through framing.
- G. Accurately fit all connections as detailed, all bolt holes drilled and properly sized to the bolts. Predrill lag and wood screw holes. Washers required under head and nut of all wood connections.
- H. Sills and Plates: Use pressure-preservative-treated sills and plates in all conditions where bearing on concrete. Place sill seal foam between sill and concrete and draw down with anchor bolts as detailed. Double top plate on all partitions with end joints lapped and staggered. Reinforce top plates where cut for electrical and mechanical work with 16 gauge metal splice plates.
- I. Studs, Caps and Headers: Use straight material throughout; twisted material not permitted. Set all items as necessary for rigid frame.
- J. Joists: All joists evenly spaced.
- K. Joist Bridging: Unless specifically noted on the Drawings, intermediate joist bridging not required where joists ends are prevented from rotation by solid blocking or an approved joist

hanger. The top of each joist laterally supported by structural nailing of sheathing and sheathing nailed to blocking at ends of joists, and temporary support provided during construction.

- L. Headers: Install over all openings. Fabricate from two or more members on edge with shims as required, spike solidly together. Install king stud minimum at each rough jamb. Minimum schedule unless otherwise noted on Drawings.
  - 1. Up to 4-feet inclusive: Two 2 x 6.
  - 2. 4-feet to 6-feet inclusive: Two 2 x 8.
  - 3. 6-feet to 8-feet inclusive: Two 2 x 10.
  - 4. Over 8-feet: As detailed.
- M. Beams: Install in locations as detailed, anchoring solidly. Stay and brace members in position until all connections are complete. Handle and protect specially wrapped or prepared items to avoid damage or scarring.
- N. Firestops and Blocking:
  - 1. Install as detailed and in no case more than 120-inches apart vertically and horizontally, in exterior and interior wood stud walls throughout. Fire block at ceiling line where wall finish does not continue above ceiling.
  - 2. Fire block in concealed spaces between stair stringers, at the top and bottom of the run and between studs along and in line with the run of stairs, if the walls under the stair are unfinished.
- O. Wood Contacting Concrete: Wherever joists, beams, rafters, etc., make end or side contact against concrete walls and slabs, install two layers of separation felt so there will be no contact between wood and concrete.
- P. Treated Wood Contacting Metal: Wherever decay-resistant treated wood comes in contact with any type of metal, install one layer of separation felt so there will be no contact between wood and metal.
- Q. Gypsum Sheathing at Wood Framing: Horizontal application with end joints centered on studs and staggered. Nail through sheathing to framing with 11 gauge hot-dip galvanized nails 1-1/2-inches long with 3/8-inch head, at 4-inches o.c.
- R. Subfloor and Wall Sheathing Structural-Use Panels:
  - 1. Secure sheathing panels with nail size and pattern as detailed. Lay panels with face grain perpendicular to the supports with joints in adjacent panels staggered and butted at center line of joists.
  - 2. Apply 1/4-inch diameter continuous bead of construction adhesive to tops of joists, blocking, and plates immediately prior to placing subfloor panels.

- 3. Install subfloor panels with 1/8-inch space between sheets and clearance at boundary walls and rigid penetrations through floor.
- S. Equipment Boards: Secure equipment mounting boards 8-inches o.c. at each stud, "C" face exposed.
- T. Blocking and Backing: Verify that solid blocking or backing is provided in framing for attachment of all wall and ceiling mounted items and equipment. Coordinate specific blocking requirements of all items specified in each specification Section that mount on walls and ceilings. Use templates and fastening devices furnished with item or appropriate screws and bolts. Check Hardware Schedule for locations of wall-mounted door bumpers. Do not fasten solely to wall and ceiling finish materials.
- U. Deflection Head Construction: Required at the top of all non-bearing wall partitions that occur under open-web type framing members. Allow 3/4-inch space between top plate of wall and bottom truss chord for deflection tolerance.
- V. Fasteners in Withdrawal: Non-structural wood components held in place with fasteners that would be in withdrawal loading after the final assembly is complete shall be fastened with bugle head screws with the same frequency as scheduled for nails. Screws shall be minimum length to penetrate substrate 1-1/2-inches.

# 3.2 FIELD QUALITY CONTROL

A. Tests and Inspections: The Owner will employ the services of an independent testing laboratory for conducting inspection services on plywood nailing and as noted within the Statement of Special Inspections on the Structural Drawings.

**END OF SECTION** 

### HOLLOW METAL DOORS AND FRAMES

## PART 1 GENERAL

## 1.1 SUMMARY

- A. Furnish all labor, material, equipment and services required for the fabrication and installation of hollow metal doors, door frames, and relites. Include all required anchor bolts and devices.
- B. Related Section: Division 1 Section "Sustainable Design Requirements" for compliance with Earth Advantage Institute sustainable design requirements.

# 1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM).
- B. Hollow Metal Manufacturers Association's (HMMA) standards published by the National Association of Architectural Metal Manufacturers (NAAMM).
- C. UL 10B Fire test of Door Assemblies and UL10C Standard for Positive Pressure Fire Tests of Door Assemblies.

# 1.3 SUBMITTALS

- A. Submit the following in accordance with Division 1 Section "Submittal Procedures."
- B. Shop drawings showing anchor locations, hardware, and other pertinent installation information.

## 1.4 QUALITY ASSURANCE

A. Provide doors and frames complying with HMMA standards published by NAAMM.

Manufacturer shall be assessed and registered as meeting the requirements of Quality Systems under ISO 9001.

# 1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver to job in time for building into walls and protect from weather and construction damage. Replace dented or bent hollow metal work with new undamaged work as directed. Filled dents and straightened work are not acceptable.

### 1.6 WARRANTY

A. Provide manufacturer's 2 year warranty against rust and paint adhesion failure for all doors and frames.

## PART 2 PRODUCTS

## 2.1 MANUFACTURERS

A. Doors and frames shall be custom manufactured by the same manufacturer.

### HOLLOW METAL DOORS AND FRAMES

- B. Metal Door and Frame Manufacturers:
  - 1. Ceco Door Products, 509/455-8239.
  - 2. Amweld Building Products, 800/248-6116.
  - 3. Curries Company, 515/423-1334.
  - 4. Deansteel Manufacturing, 800/825-8271.
  - 5. Stiles Custom Metal, Inc., 209/538-3667.
  - 6. Steelcraft, 513/745-6400.
  - 7. Fleming Steel Doors and Frames, 800/263-7515.
- C. Other Manufacturers: Submit Substitution Requests prior to bid date in accordance with Division 1 Section "Product Requirements."

## 2.2 FABRICATION

- A. Doors, frames for doors, and relites formed from minimum 16 gauge (0.054-inch thick) commercial quality cold-rolled steel conforming to ASTM A366 or tension leveled steel conforming to ASTM A924, galvanized to ASTM A653, commercial steel, type B, coating designation A40, commercially known as paintable galvanneal. Steel for fabrication of all members exposed on exterior walls shall be galvanized to ASTM A653 with a minimum total coating weight of A60, 0.60 oz./s.f. (0.058 minimum thickness).
- B. Frames: Fabricate accurately with all breaks, arises, and angles or curves uniform, straight, sharply defined and true. Miter fit and full weld all corners, weld seams and grind smooth to produce an invisible joint. All fastenings concealed where possible.
- C. Flush panel doors shall be 1-3/4-inches thick, reinforced and welded full length at joints, and ground smooth. Reinforce doors 6-inches o.c. vertically. Lock reinforcing shall be provided between faces of door to prevent collapsing of door faces and side movement of latch and face plate. Void spaces in doors shall be sound deadened and filled full height with insulating material. Exterior doors and doors in high moisture areas shall have additional flush closure channel at top and bottom edge. Seal top door edge watertight with silicone sealant. Provide openings in bottom closure to permit escape of moisture. Stops for door lites shall be flush style unless detailed otherwise.
  - 1. Insulated exterior doors shall have a minimum U-Factor of 0.43.
- D. Frames for doors to be type, design and size as detailed. Provide 12 gauge (0.097-inch) minimum channel reinforcing in the head of frames over 3-feet in width and other frame locations as detailed. Provide not less than four anchors at each jamb including a 16 gauge (0.054-inch) bent plate anchor clip at the bottom. Provide for three rubber silencers in all door frames on lock side on frames not equipped with smoke gaskets or weather stripping.

### HOLLOW METAL DOORS AND FRAMES

- E. Provide suitable sinkages in doors and frames for all mortised or countersunk hardware, with steel reinforcement inserted for attaching hardware. Reinforcement of doors and frames to be as follows:
  - 1. Hinge Pockets: Reinforce hinge pockets with 3/16-inch thick x 12-inch long x full frame width steel backing welded fabrication.
  - 2. All Other Hardware Mountings: Reinforce all other hardware mountings at heads, jambs, stiles, or rails with minimum 12 gauge (0.097-inch) steel plate welded fabrication at all machine screw sinkages and 16 gauge (0.054-inch) minimum at all cylinder lock hole locations to prevent collapsing of doors and malfunctioning of hardware. Double gauge sheet metal reinforcing is not acceptable for hardware backing.

### 2.3 FINISH

A. Cold-Rolled Steel: Sand surfaces smooth eliminating all weld marks; chemically clean and "Bonderize" after fabrication. Paint with rust inhibiting ferrous metal primer and oven dry. All finished surfaces smooth, uniformly protected, and ready for finish painting on the job site. All exposed screw heads filled and ground smooth.

## 2.4 HARDWARE

- A. The door manufacturer shall be furnished with hardware templates by the finish hardware supplier. Doors and frames shall be prepared for hardware at the factory. Out-of-state door manufacturers are required to pay for all hardware shipping charges.
- B. All hardware shall be attached by machine screws, threaded into reinforced tapped holes or through-bolted. All drilling and tapping for mortised hardware shall be done at the factory. Self-tapping sheet metal screws or welding is not permitted.

# PART 3 EXECUTION

## 3.1 INSTALLATION

- A. Frames: Install metal frames in accordance with manufacturer's instructions. Anchor frame to wall and floor as recommended by manufacturer.
- B. Doors: Fit doors to frame providing clearances recommended by door manufacturer.

## 3.2 COMPLETION

A. Adjust door clearances and hardware placement to allow smooth door operation. Touch up scratched door and frame prime paint to match adjacent surfaces. Touch up damaged galvanized surfaces with zinc-rich primer.

## PART 1 GENERAL

## 1.1 SUMMARY

A. Furnish and install all door hardware as specified within this Section. Do not, however, construe the following specification as complete in every detail. Furnish all items classified as door hardware and necessary to complete construction.

# 1.2 REFERENCES

A. National Fire Protection Association (NFPA).

# 1.3 SUBMITTALS

- A. Submit the following in accordance with Division 1 Section "Submittal Procedures."
- B. Schedule of Hardware:
  - 1. Format: Comply with scheduling sequence and vertical format in DHI's (Door and Hardware Institute) "Sequence and Format for Hardware Schedule". Double space entries and number/date each page. Prepare the Schedule of Hardware as follows:
    - a. List each opening, location, door size, door hand, door and frame material, door label, manufacturer's number and finish.
  - 2. Deliver copies of this schedule to the Architect and Owner for review.
- C. Manufacturer Information: Provide manufacturer's technical product data in the form of catalog cut sheets, clearly marked for each hardware item. Include installation details, material descriptions, dimensions of individual components and profiles, and finishes.
- D. Templates: Furnish templates to metal door and frame suppliers within one week from receipt of approved hardware schedule and verification at the Preconstruction Meeting.
- E. Keying Schedule: Detailed keying instructions and diagram and index, detailing Owner's final keying instructions resulting from the Keying Conference.

## 1.4 QUALITY ASSURANCE

## A. Qualifications:

- 1. Door Hardware Supplier:
  - a. Provide services of an AHC or DAHC (Architectural Hardware Consultant) member of Door & Hardware Institute with the technical experience and availability for consultation with the Architect, Owner and Contractor.
  - b. Hardware supplier shall have and maintain a factory direct status with all manufacturers specified or approved during the course of the project.
  - c. The door hardware consultant shall:

- (1) Be an employee of supplier.
- (2) Be knowledgeable on local, state, and federal life safety fire codes, and accessibility codes and requirements to assist the Architect when necessary.
- (3) Assist in developing the keying schedule by meeting with the Owner and Architect, and make at least two job site inspections and one final inspection to ensure that all hardware has been properly installed according to the manufacturer's directions.
- (4) Notify the door closer installer for final adjustment of door closers prior to the consultant's final inspection.
- 2. Contractor: Employ an experienced worker to receive, supervise, and distribute hardware at the building site, and provide a locked room with temporary shelving for hardware.
- 3. Distributor: Provide hardware from a factory authorized distributor. Only those manufacturers specified or approved in writing prior to bidding are acceptable. All components of each hardware item shall be by the same manufacturer.
- 4. Hardware Installer: Make final adjustments to all door closers.
- B. Regulatory Requirements: All hardware shall comply with applicable local and state fire and current building codes. Hardware applied to doors with UL fire rating label shall comply with that rating. Doors installed for smoke protection shall receive hardware as recommended by the NFPA.
- C. Pre-Construction Meeting: After receipt of the Architect-reviewed hardware schedule, conduct a final "hardware function" coordination meeting with the Owner, Architect, and hardware consultant. Do not release hardware templates to door fabricators until final resolution of the hardware coordination meeting.
- D. Keying Conference: Conduct a keying coordination meeting with the Owner and Architect. Incorporate keying conference decisions into a keying schedule for review and approval, including but not limited to:
  - 1. Preliminary key system schematic diagram.
  - 2. Requirements for key control system.
  - 3. Address for delivery of keys.
  - 4. Index of each key set to unique door designations.

# 1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver all door hardware to job site unless directed otherwise. Each item shall be properly wrapped in its original factory shipping carton, labeled, and numbered for the opening for which it is intended. All items shall be shipped from the factory to the hardware supplier for final checking before sending to job site.

B. Include all necessary screws, bolts, or other fastenings of suitable size and type to securely anchor in position, and harmonize with the hardware material and finish. Furnish where necessary with sex bolts, toggle bolts, expansion shields or other approved anchors according to the material to which it is applied and recommended by the manufacturers.

## 1.6 WARRANTY

- A. All hardware shall carry a factory warranty for a minimum of one year after Substantial Completion that hardware is free from defects in workmanship and material. Hardware must be installed exactly to the manufacturer's printed instructions to prevent voiding the warranty. Provide a 3 year material and labor warranty for exit devices and 10 year material and labor warranty for closers.
- B. Provide factory order numbers to the Owner/GC for hardware warranty purposes.

# PART 2 PRODUCTS

## 2.1 MANUFACTURERS

Note that Door Hardware is to be existing, salvaged and re-used in new locations, per Drawings. If new Door Hardware is necessary, provide per information below.

- A. Product Manufacturers:
  - 1. GLY: Glynn Johnson.
  - 2. IVE: Ives.
  - 3. LCN: LCN.
  - 4. SCE: Schlage Electronics.
  - 5. SCH: Schlage.
  - 6. VON: Von Duprin.
  - 7. ZER: Zero.
- B. Other Manufacturers: Submit Substitution Requests prior to bid date in accordance with Division 1 Section "Product Requirements."

## 2.2 MATERIALS

- A. Butt Hinges: 1-1/2 pair minimum per door unless scheduled otherwise.
- B. Locks and Latches: Verify operation, hand of doors, and function for each opening as scheduled.
- C. Keying:

- 1. It shall be mandatory that keying be done by the lock manufacturer for security, Owner's convenience, and permanent keying records. In the event any keying security procedure is violated, replace all locks, cylinder units, padlocks, cylinders, etc., at no additional expense to the Owner.
- 2. Provide manufacturer's standard keyway with standard cylinders except where interchangeable core cylinders are specified. Interchangeable core cylinders to have temporary construction cores.
- 3. Furnish two keys with each lock, and five master keys. Keying and master keying schedule as established by the Owner.
- 4. All master keys and keying transcript to be sent by registered mail from the factory to the Owner. This procedure is mandatory.
- D. Closers: Verify hand of door, degree of opening, frequency of use, and head condition. Furnish cast iron body type only.
- E. Automatic Swing Door Operators:
  - 1. Automatic swinging door package consisting of swinging door operators, control panels, controls and accessories, including all connecting hardware.
  - 2. All equipment shall be UL listed and meet NFPA Standards 80 and 101.
  - 3. All equipment shall meet the requirements of ANSI A156.10.
- F. Silencers: Furnish in number and type to protect finishes wherever doors or hardware thereon will strike adjacent surfaces and materials. Furnish 3 rubber silencers for metal door frames that are not equipped with gaskets.
- G. Hardware Finishes: As specified below in the Schedule. Verify all finishes on the Schedule and at the Site.

# PART 3 EXECUTION

## 3.1 INSTALLATION

- A. Locate and place hardware on work accurately using templates when required. Install permanently using proper nails, screws or bolts, matching finish of hardware. Remove and place in original packages all hardware after setting to permit application of finishes and reinstall when finish application is complete. Deliver any adjusting tools to Owner properly tagged and identified.
- B. Properly wrap all hardware subjected to hand usage during construction for protection. Replace hardware that has damaged finish.
- C. Butt Hinges: Install top hinges 5-inches from head of frame or door top to top of hinge. Bottom hinge 10-inches from finished floor to bottom of hinge. Center intermediate hinges between top and bottom hinges.

- D. Locks and Latches: Install 38-inches to center line of knob locks and latches.
- E. Exit Devices: Mount according to manufacturer's instructions at 38-inches.
- F. Deadlock: Install 48-inches to center line of deadlock.
- G. Door Closers: The maximum force to open doors shall not exceed 8-1/2 lbs. for exterior hinged doors and 5 lbs. for interior hinged doors.

## 3.2 SCHEDULE

Note that Door Hardware is to be existing, salvaged and re-used in new locations, per Drawings. If new Door Hardware is necessary, provide per information below.

# Hardware Group No. 01

For use on Door #:

Provide each SGL door(s) with the following:

QT	Y	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	ENTRANCE LOCK	(NOTE BELOW)	626	SCH
1	EA	FSIC CORE	(NOTE BELOW)	626	SCH
1	EA	SURFACE CLOSER	SC61A REG OR PA AS REQ SLIM	689	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	630	IVE
1	EA	DOOR STOP	061	F26D	IVE
1	EA	VIEWER	U698	B26D	IVE

PROVIDE DESIGN BUILD ACCESS CONTROL EXTENSION FROM EXISTING DEPARTMENT ACCESS CONTROL SYSTEM.

INSTALL STOP ON BASE, TOP OR BOTTOM OF DOOR, ON WALL, OR OTHER FIXTURE AS APPROPRIATE. VERIFY THRESHOLD DETAIL.

**END OF SECTION** 

# PART 1 GENERAL

## 1.1 SUMMARY

A. Furnish all labor, material, equipment and services necessary for the installation and finishing of all gypsum board partitions and ceilings on wood and metal framing and furring. Include installation of acoustical insulation.

### B. Related Sections:

1. Division 1 Section "Design-build Requirements" for suspended gypsum board ceilings.

## 1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM).
  - 1. ASTM C 475/C 475M Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 2002.
  - 2. ASTM C 840 Standard Specification for Application and Finishing of Gypsum Board; 2005.
  - 3. ASTM C 1047 Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base; 2005.
  - 4. ASTM C1396/C1396M Standard Specification for Gypsum Board; 2004.
- B. GA-600 Fire Resistance Design Manual; Gypsum Association; current addition.

# 1.3 SUBMITTALS

- A. Submit the following in accordance with Division 1 Section "Submittal Procedures."
- B. Manufacturer's product data.
- C. Suspended Ceiling Design Data: Copies of Engineered Design calculations, drawings and documentation prepared by a professional engineer registered in the State of Oregon showing compliance with seismic loading requirements. Include manufacturer's literature or ICC Reports and identification of connection devices (including acoustic isolation components) and approved loading capabilities.

# 1.4 QUALITY ASSURANCE

# A. Fire Resistance Ratings:

1. Comply with fire resistance ratings as required and approved by the governing authorities and codes. Provide classification labeled materials, and accessories identical to that of assemblies tested for fire resistance per ASTM E119 by a testing and inspecting agency acceptable to authorities having jurisdiction for the type of construction scheduled.

- B. Provide completed assemblies complying with ASTM C 840.
- C. All gypsum board products shall be manufactured in the United States of America.

# 1.5 DELIVERY, STORAGE, AND HANDLING

A. Coordinate delivery with installation to minimize storage periods. Deliver in unopened containers, bundles or packages fully identified with the manufacturer's name, brand, type and grade. Protect from weather, soiling and damage.

# 1.6 PROJECT CONDITIONS

- A. Examine the conditions under which the gypsum board is to be installed. Commencement of work establishes acceptance of work conditions.
- B. Installation not permitted until a uniform temperature of 55°F to 70°F can be maintained in the building and ventilation provided to eliminate excessive moisture.

## PART 2 PRODUCTS

# 2.1 MANUFACTURERS

- A. Product manufacturers are listed in Paragraph 2.2.
- B. Other Manufacturers: Submit Substitution Requests prior to bid date in accordance with Division 1 Section "Product Requirements."

## 2.2 MATERIALS

A. Obtain all components and materials of the gypsum board system from manufacturers recommended and approved by the gypsum board manufacturer, unless otherwise indicated.

# B. Gypsum Board:

- 1. Walls and Ceilings: American Gypsum "FIREBLOC Type X," G-P Gypsum Corporation "ToughRock Fireguard," or USG "Sheetrock Brand Firecode," Type X fire retardant type, 5/8-inch thick, tapered edges, 48-inches wide and in lengths as long as practical to minimize number of joints. UL labeled and ICC approved.
- 2. High Abuse Areas, Fitness Room: American Gypsum "M-Bloc AR Type X", G-P Gypsum Corporation "DensArmor Plus Fireguard", USG "Sheetrock Brand AR Firecode X" Type X fire retardant type, abuse resistant, 5/8" thick, tapered edges, 48-inches wide and in lengths as long as practical to minimize number of joints. UL Labelled and ICC approved.

# C. Ceiling Metal Furring and Runners:

1. 22 gauge hat shaped channel, ASTM A653 G40 hot-dip galvanized steel or equivalent corrosion resistant coating, 1-3/8-inches wide, 7/8-inch deep with hemmed legs, and Z furring channel, ASTM A1003.

- 2. 16 gauge cold-rolled steel channel, black paint, 1-1/2-inches deep and 3/4-inch deep, ASTM C645.
- 3. Contractor's Option: Pre-engineered gypsum board suspension system, tested and engineered to be code compliant according to ICC ESR-1222.
  - a. Armstrong "Drywall Grid System."
  - b. USG "Drywall Suspension System."
- D. Tie and Hanger Wire: 8 gauge galvanized wire for hanging channels, 12 gauge galvanized wire for seismic bracing, and 16 gauge soft annealed wire for tying furring channel.
- E. Fasteners: Types G and S screws in required lengths and to suit requirement of application to 22 gauge metal framing, ASTM C1002. Type S-12 screws in required lengths for attachment to heavier gauge metal framing, bugle or pan head as required, ASTM C954. Type W screws or annular ringed nails for wood framing, Type GWB-54, 1-7/8-inch length. Parker or six penny (6d) cooler type nails.
- F. Joint Treatment: Provide materials from same manufacturer as gypsum board, ASTM C475/C475M.
  - 1. Joint Tape:
    - a. Gypsum Board: Paper.
    - b. Glass-Mat Gypsum Sheathing and Soffit Board: 10-by-10 glass mesh.
  - 2. Joint Compound for Gypsum Board: For each coat use formulation that is compatible with other compounds applied previously or for successive coats.
    - a. Prefilling: At open joints and damaged surface areas, use setting-type taping compound.
    - b. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use drying-type, all-purpose compound.
    - c. Use setting-type compound for installing paper-faced metal trim accessories.
    - d. Fill Coat: For second coat, use drying-type, all-purpose compound.
    - e. Finish Coat: For third coat (final coat of Level 4 finish), use drying-type, all-purpose compound.
- G. Acoustical Insulation: Friction fit, un-faced, formaldehyde-free fiberglass batt insulation containing at least 25% post-consumer or 50% post-industrial recycled glass. Comply with local code, Class I flame-spread rating of 15 to 25 as tested per ASTM E84, and with ASTM C665, Type I, R-11.
- H. Sealant:

- 1. Non-setting, non-staining, acoustically tested sealant, ASTM C919.
- 2. Products:
  - a. Sheetrock Acoustical Sealant by U.S. Gypsum.
  - b. Acoustical Sealant by Tremco. A black synthetic rubber material suitable for concealed locations only.
  - c. CP-506 by Hilti
- I. Fire-rated Acoustic Sealants:
  - 1. CP 601 S Elastomeric Firestop Sealant by HILTI.
  - 2. Dow Corning 790
  - 3. Fire Barrier 1000 N/S, 2000 by 3M.
- J. Electrical Receptacle Box Putty Pads:
  - 1. Kinetics Noise Control, "IsoBacker."
  - 2. Hilti, "Firestop Putty Pad CP 617."
  - 3. STI, "SpecSeal Putty Pad."
  - 4. 3M, "MPP+."

# K. Trim Accessories:

- 1. Hot-dip galvanized steel corner beads, edge trim, and control joints, ASTM C1047.
- 2. Trim accessories used with exterior gypsum soffit sheathing shall be plastic.
- 3. Shapes indicated below by reference to Fig. 1 designations in ASTM C1047:
  - a. Corner bead on outside corners, unless otherwise indicated.
  - b. LC-bead with both face and back flanges; face flange formed to receive joint compound, provide for edge trim unless otherwise indicated.
  - c. L-bead with face flange only; face flange formed to receive joint compound, provide where indicated.
  - d. U-bead with face and back flanges; face flange formed to remain without application of joint compound, provide where indicated.
  - e. One-piece control joint formed with V-shaped slot, with removable strip covering slot opening.

L. Accessory Backing: Refer to Division 6 Section "Rough Carpentry."

## PART 3 EXECUTION

## 3.1 INSTALLATION

- A. Installation Standards:
  - 1. Installation of steel framing members, ASTM C754.
  - 2. Installation of gypsum board assemblies, ASTM C840.
- B. Suspended Ceiling Metal Framing System:
  - 1. Secure hanger wires to overhead construction spacing at not over 4-feet o.c. in each direction to support main runners installed with web vertical, at 4-feet o.c. Provide hangers within 6-inches of runner ends and at all interruptions of ceiling or grid. Each hanger to support not over 16 sf. of ceilings weighing a maximum of 10 lbs./s.f. Install additional hangers to support any additional weight supported by the grid.
  - 2. Saddle-tie the furring channels to main runners with two strands of 16 gauge tie wire. Install additional cross reinforcing at light troffers or any other openings interrupting the installation.
  - 3. Brace main runners and furring channels for seismic loading as required by governing jurisdiction.

# C. Gypsum Board on Wood Framing:

- 1. Acoustic Insulation: Prior to commencing gypsum board installation, install acoustical insulation where detailed in accordance with insulation manufacturer's installation instructions. Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions. Press blankets firmly in place against the back of one of the layers of gypsum board. Tightly butt ends of blankets, leaving no voids.
- 2. In areas where gypsum board is called for on the walls and ceiling, install the ceiling first then the wall unless detailed otherwise.
  - a. Verify that electrical receptacle boxes have been properly installed in sound rated walls. Electrical receptacle boxes in walls should be spaced a minimum of 24" apart. Boxes on opposite sides of the wall should not be placed in the same stud cavity.
- 3. Use gypsum board panels of maximum practical length to minimize end joints. Arrange joints on opposite sides of partition walls to occur on different studs and stagger butt joints on the same surface. Where partitions intersect exterior walls, start installation at exterior end to position butt joints as far away from exterior wall as possible. Board shall be brought into contact but not forced into place with all ends and edges neatly fitted.

Use "Floating Interior Angle" application at all ceilings. Bottom edge of gypsum board on walls shall be a maximum of 1/4-inch above floor.

- 4. Attach gypsum board to suspended metal ceiling framing with all edges over framing members using screw fasteners spaced at 12-inches o.c., staggered on abutting edges. Power drive screws at least 1/32-inch deep.
- 5. Attach gypsum board to wood framing supports, fasten 7-inches o.c. on ceilings and 8-inches o.c. on walls. For double fastening method, apply first fastener12-inches o.c. with second fastener in close proximity (2-inches). Fasteners spaced at not less than 3/8-inch from edge and ends of board.
- 6. While fasteners are being driven, hold gypsum board in firm contact with underlying supports, fastening from the center of the board toward ends and edges. Drive fasteners tight, with heads slightly below surface, taking care to avoid breaking the paper face.
- 7. Cut board neatly and fit around pipes, electrical outlets, mechanical work, etc. Remove any loose face paper at cuts and fill holes or openings with quick setting plaster. Where board appears loose from framing, install second fastener within 1-1/2-inches of first.
- 8. Finish in every interior location with metal edge and corner bead unless finishing details are given and edge is covered with molding or trim. Install control joints vertically at corners of door frames, and at a maximum of 30-feet apart on unbroken wall surfaces.
- 9. Finish in every exterior location with plastic edge and corner bead unless finishing details are given and edge is covered with molding or trim.

# D. Sealant Application:

- 1. Acoustical Sealant Installation: At sound-rated assemblies and elsewhere as indicated, seal construction at perimeters, behind control joints, and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C 919 and with manufacturer's written recommendations.
- 2. Partition Perimeter: Apply a 1/4-inch minimum bead of sealant on each side of plates, including those used at intersections with dissimilar wall construction. Immediately install gypsum board, squeezing sealant into firm contact with adjacent surfaces. Fasten board as specified. If any gaps are larger than 1/4", fill with backer rod prior to the application of acoustical sealant. If gaps are larger than 1/2", patch with gypsum board prior to the application of acoustical sealant.
- 3. Partition Intersections: Before taping and finishing, seal edges of face layer of gypsum board abutting intersecting partitions.
- 4. Control Joints: Before installing control joints, apply sealant in back of joint to reduce flanking sound path.

5. In all sound-rated walls, electrical receptacle boxes shall be sealed around the perimeter with acoustical caulk, and all unused knock-out holes shall be plugged with knock-out caps.

# E. Joint Finishing:

- 1. Level 1, ASTM C840 and GA-214-10: Rough taping permitted only in concealed spaces and service or unfinished areas as scheduled, including gypsum board which will be covered by rigid finish material fully concealing joints and which will not telegraph unevenness.
- 2. Level 3 Finish, ASTM C840 and GA-214-10: Apply Level 3 finish with medium orange peel texture to all gypsum board walls and ceilings, except as follows: Apply Level 4 finish to gypsum board walls and ceilings in Common Room 103, Lobby 100 including surrounding areas, Hallway 112, Offices 101, 102, 105, and 107.
  - a. Tape joint compound and finishing compound as recommended by manufacturer of gypsum board.
  - b. Using suitable tool or machine, apply a thin uniform layer of joint compound approximately 3-inches wide to the joint to be reinforced.
  - c. Center tape over the joint and seat into the compound, leaving sufficient compound under the tape to provide proper bond.
  - d. Apply first and fill (second) coats of joint compound over joints, angles, fastener heads, and accessories.
  - e. Touch-up and sand between coats and after last coat as needed to produce a surface free of visual defects and ready for light texture.
  - f. Use only water resistant materials with moisture resistant type gypsum board.
  - g. Upon completion of finish sanding to a smooth surface, remove all dust from wall surface. Wipe down the entire wall surface with a damp sponge mop and apply a "Light Orange Peel" texture.

# 3. Level 4, ASTM C840 and GA-214-10:

- a. Tape joint compound and finishing compound as recommended by manufacturer of gypsum board.
- b. Using suitable tool or machine, apply a thin uniform layer of joint compound approximately 3-inches wide to the joint to be reinforced.
- c. Center tape over the joint and seat into the compound, leaving sufficient compound under the tape to provide proper bond.
- d. Apply first, fill (second), and finish (third) coats of joint compound over joints, angles, fastener heads, and accessories.

- e. Touch-up and sand between coats and after last coat as needed to produce a surface free of visual defects and ready for decoration.
- f. Use only water resistant materials with moisture resistant type gypsum board.
- g. Upon completion of finish sanding to a smooth surface, remove all dust from wall surface. Wipe down the entire wall surface with a damp sponge mop.
- h. Apply Level 4 Finish to all exposed paper faced gypsum board, except where Level 1 is allowed, or Level 3 is scheduled.

## 3.2 INSTALLATION OF TRIM AND ACCESSORIES

- A. Corner Beads: Install at external corners, using longest practical lengths.
- B. Edge Trim: Install at locations where gypsum board abuts dissimilar materials and as indicated.
  - 1. U-Bead: Use at exposed panel edges.
  - 2. L-Bead: Use at all exposed terminations of gypsum board, at all floor joints and joints to receive sealants.

# 3.3 CLEANING

A. Do not dispose of or leave excess gypsum board materials or debris on the premises. Leave each area broom clean after completing gypsum board work. Clean spots and spills of taping and finishing compounds from all adjacent surfaces and equipment.

END OF SECTION

## PART 1 GENERAL

# 1.1 SUMMARY

A. Furnish all labor, material, equipment, and services necessary for the installation of acoustical ceilings, complete with suspension systems.

## B. Related Sections:

1. Division 1 Section "Design-Build Requirements" for suspended acoustical ceilings.

## 1.2 REFERENCES

- A. Acoustical and Insulating Materials Association Bulletin.
- B. American Society for Testing and Materials (ASTM).

# 1.3 SUBMITTALS

- A. Submit the following in accordance with Division 1 Section "Submittal Procedures."
- B. Samples of exposed tee grid and acoustical board for review of color.
- C. Shop drawings showing coordination of suspension grid layout with room dimensions and penetrations of ceiling mounted equipment. Include layout of systems utilizing acoustic isolation components.
- D. Suspension System Design Data: Copies of Engineered Design calculations, drawings and documentation prepared by a structural engineer registered in the State of Oregon, showing compliance and classification of light, intermediate, or heavy duty system. Include manufacturer's literature or ICC Reports and identification of connection devices and approved loading capabilities.
- E. Manufacturer's Suspension System Data: When using a standard 24-inch x 24-inch grid system in lieu of an Engineered Design, submit copies of manufacturer's literature or ICC Report indicating light, intermediate, or heavy duty system. Include fixture schedule and other ceiling supported equipment and their weight, with connection devices and approved loading capabilities.

# 1.4 QUALITY ASSURANCE

- A. Installer's Qualifications: All work performed by skilled acoustical mechanics in the best and most professional manner. Material installed to provide a proper and symmetrical pattern in each area with joints straight and true and all corners level.
- B. Regulatory Agency Requirements: All ratings in conformance with the Acoustical and Insulating Materials Association Bulletin.
- C. Seismic Requirements:

- 2. Suspended acoustical ceiling systems, with or without lighting fixtures, air terminals, or other ceiling mounted items shall comply with the requirements of ASTM C635, ASTM C636, and the building code.
- 3. Ceiling areas of 144 s.f. or less surrounded by walls which connect directly to the structure above shall be exempt from these standards.
- 4. Light Duty systems to be used only where no loads other than ceiling acoustical materials weighing not more than 1.5 lbs./s.f. are supported by the suspension system.
- 5. Intermediate and Heavy Duty classification systems shall be used where suspension system is used to support acoustical material weighing more than 1.5 lbs./s.f., lighting fixtures or other equipment.

# 1.5 DELIVERY, STORAGE, AND HANDLING

A. Properly store material within the building in such a manner and sufficiently in advance of installation to ensure adjustment to building temperatures and humidities.

# 1.6 PROJECT CONDITIONS

A. Do not begin installation until residual moisture from concrete, plaster and other wet application material is dissipated, building enclosed with permanent heating/cooling equipment in operation.

# 1.7 SEQUENCING AND SCHEDULING

A. Coordinate with Divisions 23 and 26 for installation of heating and lighting components integrated in the ceiling installation.

# 1.8 WARRANTY

A. Provide manufacturer's standard warranty, 3 year minimum. This Warranty shall be in addition to, and not a limitation of, other rights the Owner may have against the Contractor under the Contract Documents.

# 1.9 MAINTENANCE

A. Extra Materials: Furnish to the Owner in factory-sealed containers a 2% overrun of acoustical board from the same production run as that used in this installation.

# PART 2 PRODUCTS

# 2.1 MANUFACTURERS

- A. Acoustical Board: Armstrong, USG, CertainTeed.
- B. Exposed Tee Grid: Armstrong, CertainTeed.

C. Other Manufacturers: Submit Substitution Requests prior to bid date in accordance with Division 1 Section "Product Requirements."

# 2.2 MATERIALS

- A. ACT-1, Acoustical Board:
  - 1. Mineral fiber, angled tegular edge, 24-inches x 48-inches x 3/4-inch thick, IBC Class A flame-spread index per ASTM E84, LR 0.85, NRC 0.70, CAC 35 minimum.
  - 2. Product: Armstrong Cortega, 2767, color white.
- B. Suspension System
  - 1. ACT-1:
    - a. Exposed Tee: Main and cross tees, 1-1/2-inches deep, 15/16-inch wide, exposed surfaces finished with flat white baked enamel, color to match acoustical board. Matching wall angles and Armstrong BERC 2 seismic clips.
      - (1) Products:
        - a Armstrong "Prelude XL Seismic Rx" at non-fire rated ceilings.
- C. Attachment Devices: Size for five times design load indicated in ASTM C 635, Table 1, Direct Hung unless otherwise indicated.
- D. Wire for Hangers and Ties: ASTM A 641, Class 1 zinc coating, soft annealed, with a yield stress load of at least time three design load, but not less than 12 gauge
- E. Acoustical Insulation:
  - 1. Mineral fiber unfaced blankets, 24-inches x 48-inches x 3-inches thick, 2.5 lb./cu.ft. density, 85 percent post-industrial recycle content.
  - 2. Product: Thermafiber, Inc. "Thermafiber SAFB."

## PART 3 EXECUTION

# 3.1 INSTALLATION

- A. Suspension Systems:
  - 1. System to be supported on minimum 12 gauge galvanized hanger wire at 4-feet o.c. Suspension wires spaced at greater than 4-feet shall be 10 gauge.
  - 2. Approved type attachment devices capable of supporting five times the ceiling load and not less than 100 lbs. Powder driven devices not permitted. Vertical wires attached with a minimum of three turns and not hang more than 1-in-6 out-of-plumb unless countersloping hangers are provided.

- 3. Carrying channels and main runners to be level within 1/8-inch in 12-feet with hangers taut. Bending or kinking of hangers not permitted. Deflection limited to 1/360 (1/8-inch) in 4-feet. Fixture loads causing excess deflection shall be independently supported or the grid supplementally supported within 6-inches of each corner, and such loads shall not cause rotation of runners more than 2 degrees from vertical. Provide trapeze type system where obstructions preclude direct attachment. All runners shall be supported within 8-inches of wall or discontinuity.
- 4. Lateral bracing required in lieu of Engineered Design installed within 4-feet of walls and at 12-feet o.c. in each direction. Install four 12 gauge wires within 2-inches of a main runner intersection with a cross runner and splayed at 90 degrees from each other and at an angle not exceeding 45 degrees of the ceiling plane.
- 5. Adjacent and parallel to the wall, secure a stabilizer bar to the members perpendicular to the wall to prevent spreading. The wall closure member may be used at two adjacent walls with clearances maintained at the other two walls.
- 6. Seismic Clips: Install in compliance with ASTM C636, CISCA, and standard industry practices.

# 7. Light Fixture Support:

- a. Positively attach all lighting fixtures to the suspended ceiling system. The attachment device shall have a capacity of 100% of the lighting fixture weight acting in any direction.
- b. When intermediate systems are used, 12 gauge hangers shall be attached to the grid members within 3-inches of each corner of each fixture. Tandem fixtures may utilize common wires.
- c. Where heavy-duty systems are used, supplemental hangers are not required if a 48-inch modular hanger pattern is followed. When cross runners are used without supplemental hangers to support lighting fixtures, these cross runners must provide the same carrying capacity as the main runner.
- d. Lighting fixtures weighing less than 56 lbs. shall have, in addition to the requirements outlined above, two 12-gauge hangers connected from the fixture housing to the structure above. These wires may be slack. Lighting fixtures weighing 56 lbs. or more shall be supported directly from the structure above by approved hangers.
- e. Pendant-hung lighting fixtures shall be supported directly from the structure above using 9 gauge wire or approved alternate support without using the ceiling suspension system for direct support.

# 8. Air Terminal Support:

- a. Ceiling mounted air terminals or services weighing less than 20 lbs. shall be positively attached to the ceiling suspension main runners or to cross runners with the same carrying capacity as the main runners.
- b. Terminals or services weighing 20 lbs. but not more than 56 lbs., in addition to the above, shall have two 12-gauge hangers connected from the terminal or service to the ceiling system hangers or to the structure above. These wires may be slack.
- c. Terminals or services weighing more than 56 lbs. shall be supported directly from the structure above by approved hangers.
- B. Exposed Tee Suspension System: Where suspended acoustic tee bar ceilings are called for on the Drawings, the suspension system shall be an exposed T grid. Standard hangers placed 48-inches o.c. in both directions. Exposed metal parts finished with white baked enamel. Suspension system hung in a true plane with a grid pattern of 2-feet x 2-feet unless otherwise noted.
- C. Tegular edge boards that are cut to fit less than full size ceiling grid modules shall have a matching tegular edge routed into the cut edge. Paint the routed tegular edge with paint type and color to match the factory finish.
- D. Acoustical Insulation: Place batts above suspended ceiling as detailed and align with ceiling tile.

# 3.2 COMPLETION

E. Adjusting Defective Work: Adjust grid height as required to maintain ceiling system leveled to within 1/8-inch in 12-feet. Remove and replace panels and tiles which are improperly placed, broken, or damaged. Adjust perimeter molding where gaps between molding and vertical surface exceeds 1/8-inch. Adjust suspension system grid to form flush hairline joints.

# 3.2 CLEANING

A. Clean exposed surfaces of acoustical panel ceilings, including trim, edge moldings, and suspension system members. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage. Remove and replace ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION

### PART 1 GENERAL

### 1.1 SUMMARY

A. Furnish all labor, material, equipment, and services required to install resilient floor covering and base. Prepare floors to receive new material.

### 1.2 REFERENCES

A. American Society for Testing and Materials (ASTM).

### 1.3 SUBMITTALS

- A. Submit the following in accordance with Division 1 Section "Submittal Procedures."
- B. Sample of each color and pattern of resilient flooring and welding rods. Do not start work until samples of material have been approved.

### 1.4 QUALITY ASSURANCE

A. Conform to resilient flooring manufacturer's installation instructions.

### 1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver finish materials to job site only when satisfactory conditions for storage can be provided. Maintain in manufacturer's unbroken packages with original labels thereon.

### 1.6 PROJECT CONDITIONS

- A. Do not begin installation until the work of all other trades including painting has been completed and the temperature of the rooms maintained at 70°F at least 48 hours before work proceeds.
- B. The Owner will employ the services of an Independent Testing Laboratory (ITL) for testing the moisture content of concrete slabs. Cooperate with the Testing Laboratory by providing the required environmental conditions for moisture testing.

### 1.7 WARRANTY

A. Provide manufacturer's standard warranty for each resilient flooring type.

### 1.8 MAINTENANCE

A. Extra Materials: Furnish to Owner two boxes of same run of each pattern and color of plank. Save usable pieces of sheet vinyl floor covering and package in paper wrapped rolls, labeled on wrapping, securely tied.

### PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Product manufacturers are listed below.
- B. Other Manufacturers: Submit Substitution Requests prior to bid date in accordance with Division 1 Section "Product Requirements."

### 2.2 MATERIALS

- A. Luxury Vinyl Plank (FF1): Armstrong "Wide Plank Luxury Vinyl."
  - 1. Size: 7.2" wide x 48" long x 0.160" thick.
  - 2. Collection: LUXE Plank with Fas Tak Install
  - 3. Design: Castletown
  - 4. Pattern/Color: Carbonized Gray, Low Gloss: #A6755
  - 5. Warranty: 30 years
- B. Resilient Athletic Flooring (FF2): Mondo "Sport Impact"
  - 1. Size: 36" x 36" tile x 10mm thick.
  - 2. Collection: Sport Impact Strength System
  - 3. Pattern/Color: Dark Gray 018
  - 4. Surface Texture Sealskin
  - 5. Warranty: 10 years
- C. RB-1, Rubber Base:
  - 1. ASTM F1861 Type TS, Group 1, thermoset vulcanized SBR rubber, continuous roll, 1/8-inch gauge, 4-inch top-set, coved toe at hard floor finishes, straight base at carpet, 6-inch base at dwelling unit toilet rooms.
  - 2. Manufacturers: Roppe, Flexco, Burke/Mercer, Johnsonite, and Nora.
  - 3. RB-1, Color: As selected by Architect or Owner from manufacturer's full color range.
- D. Stair Skirting:
  - 1. ASTM F1861 Type TS, Group 1, thermoset vulcanized SBR rubber, 0.080-inch thick sheet.
  - 2. Color: To match rubber base.
  - 3. Manufacturers: Roppe, Flexco, Burke/Mercer, Johnsonite, and Nora.

- E. Vinyl Reducing Strip:
  - 1. Size: 1-inch wide; thickness to match floor covering.
  - 2. Manufacturers: Roppe, Flexco, Burke/Mercer, Johnsonite, and Nora.
  - 3. Color: As selected by Architect from manufacturer's full color range.
- F. Adhesives: Refer to product manufacturer's recommendations for appropriate low VOC adhesive. Use only adhesives approved by resilient flooring manufacturer.
- G. Mastic Underlayment and Patching Compound:
  - 1. As recommended by the flooring manufacturer for this application

### PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, with installer present, for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance.
  - 1. Verify that finishes of substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
  - 2. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Prepare substrates according to manufacturer's written recommendations to ensure adhesion of resilient products.
- B. Concrete Substrates: Prepare according to ASTM F710 except for:
  - 1. Moisture testing paid for by the Owner:
  - 2. Removal of curing compounds and hardeners used to reduce moisture emissions
  - 3. Remove all dust and other contaminants from the underlayment prior to installation.

### 3.3 INSTALLATION

- A. Vinyl Plank: Install using manufacturer's written installation system, with cove base where scheduled. Applicators shall be experienced in this type of installation.
  - 1. Contractor shall inspect flooring substrate and accept the substrate as suitable for installation of the specified product, prior to installation.

- 2. Contractor shall prepare flooring substrate as recommended by the flooring manufacturer to provide a smooth, flat and level installation.
- 3. Install using Armstrong "Fas Tak" written installation system, per the manufacturer's instructions.
- 4. Architect or Owner shall provide direction for plank flooring installation for each unique condition or location.
- 5. Pre-plan installation so that planks will lay square with axis of room, varying the widths of border plank slightly to maintain field, border planks more than 1/2-plank wide and approximately equal in width on each side. Fit accurately to wall and adjoining surfaces and cut to and around all permanent fixtures. Hold edges of plank 1/8-inch away from all walls and other vertical surfaces. Gap to be covered by base.
- 6. Installation shall follow the manufacturer's requirements for air temperature range during and 48 hours following the flooring installation.
- B. Vinyl Reducing Strip: Install edge reducing strip at all exposed edges of resilient flooring in doorways or borders of resilient flooring and other floor finish, except not required where carpet binder bar is provided, or at metal thresholds.

### C. Base:

- 1. Install top-set base on floor covering with corners neatly fitted.
- 2. Install straight base at carpets and coved base at hard floor finishes.
- 3. Inside corners mitered and outside corners formed from continuous roll extending at least 12-inches beyond corner and installed with contact cement.
- 4. Install base on cabinets where scheduled.
- 5. Where wall finish opening at floor is over 1/4-inch, do not install base until gap in substrate has been reduced to 1/4-inch or less with appropriate filler material.
- 6. Cut coved toe back at 45-degree angle at door frame terminations.

### 3.4 CLEANING

- A. When floors have sufficiently seated themselves to permit cleaning and other trades have completed their work, sweep and damp mop the floors. Do not wash or machine scrub the floor for at least 5 days after installation.
- B. Demonstration: Provide instruction for Owner's maintenance personnel on proper procedures of maintaining linoleum flooring.

### 3.5 PROTECTION

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### RESILIENT FLOORING

A. Cover and protect finished installation from damage from other trades using a non-staining, temporary floor protection system without taping to the surface of the flooring and approved by flooring manufacturer.

END OF SECTION

### PART 1 GENERAL

### 1.1 SUMMARY

A. Furnish all labor, materials, equipment, and services necessary for the installation of carpet.

### 1.2 REFERENCES

- A. American Association for Textile Chemists and Colorists (AATCC).
- B. American Society for Testing and Materials (ASTM).
- C. Carpet and Rug Institute (CRI).

### 1.3 SUBMITTALS

- A. Submit the following in accordance with Division 1 Section "Submittal Procedures."
- B. Shop drawings showing the layout for each area to receive carpet. Show carpet color, trim strips, and any pertinent installation details, including location of seams and direction changes. Do not install carpet prior to layout approval.
- C. Product Data: Data on specified products describing physical and performance characteristics, patterns and colors available, and methods of installation.
- D. Written certification from carpet manufacturer to the Owner stating that the register numbered carpet furnished was manufactured in accordance with these Specifications.

### E. Samples:

- 1. 6-inch x 6-inch samples of each carpet and pad.
- F. Carpet manufacturer's maintenance and cleaning procedures for maximum life and appearance of carpet. This includes but is not limited to commercial cleaning, spot cleaning and vacuum cleaning for each carpet selected.
- G. Warranty, as described below.
- H. Certification and description of reclamation and recycling process.
- I. Carpet manufacturer certification of compliance with the Carpet and Rug Institute Green label Indoor Air Quality Test Program.

### 1.4 QUALITY ASSURANCE

A. Indoor Air Quality: Carpet shall meet or exceed the minimum standards contained in the Carpet and Rug Institute (CRI) consumer information label.

### 1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver all carpet to the job site in original mill wrappings, each package having register number tags attached or register number marked on packaging. Do not deliver material to job site until

notification and arrangements are made to properly handle, store, and protect materials. Store under cover in well ventilated spaces as soon as delivered; protect from damage, dirt, stains, and moisture during transit and storage.

### 1.6 PROJECT CONDITIONS

A. Do not begin installation until the work of all other trades including painting has been completed and the temperature of the rooms maintained at 70 degrees F at least 48 hours before work proceeds.

### 1.7 SEQUENCING AND SCHEDULING

A. Make provisions for and do all necessary work to receive or adjoin other work, install carpet accessories, and provide holes and openings necessary to fit work of other trades.

### 1.8 WARRANTY

- A. Contractor's Warranty: Written one year warranty starting at Substantial Completion and covering all repair or replacement due to defective materials or their installation. Any manufacturer's regular guarantee shall remain in effect for its full duration in addition to Contractor's guarantee.
- B. Manufacturer's Warranty: (Broadloom 10-year commercial limted warranty with stain and color)
  - 1. Ten year warranty against 10% loss of face fiber.
  - 2. Ten year warranty against edge ravelling, snags, picks, runs, and delamination.
  - 3. Ten year warranty against permanent staining. (Claim must be made within 3 days of occurrence.)
  - 4. Ten year warranty to maintain colorfastness to light and atmospheric contaminants This carpet will not display a significant change in color due to exposure to light or exposure to atmospheric contaminants (Ozone or Oxides of Nitrogen)
  - 5. Ten year warranty against generating static build-up in excess of 3.5 KV as tested by AATCC Test Method 134
  - 6. Antimicrobial effectiveness warranted for life of carpet.

### 1.9 MAINTENANCE

- A. Extra Materials: Furnish scheduled overrun for future repairs and replacement, wrapped, packaged and labeled at the factory. Same dye lot and run as carpet installed. Save and package usable remnants; label and deliver to Owner.
- B. Retain and identify trim pieces of usable size. Package and store same as specified for Overrun, below.
- C. Overrun Schedule (each color):

Installed Overrun

0 - 50 sq.yds. 10%

### PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Product manufacturers are listed below.
- B. Other Manufacturers: Submit Substitution Requests prior to bid date in accordance with Division 1 Section "Product Requirements."

### 2.2 MATERIALS

- A. All materials new and of domestic manufacture. Carpet of first quality and from the same dye lot for each color to be installed. Materials, construction, and appearance are based on the following performance specifications.
- B. CPT-1, (FF4) Carpet, Broadloom:
  - 1. Manufacturer: Mohawk Group
  - 2. Collection: New Basics III
  - 3. Style: BC398
  - 4. Color: Anodized Lapis, #559
  - 5. Installation: Glue down, 6# Pad.
  - 6. Construction: Broadloom.
  - 7. Flammability: Class 1
- C. CPT-2, (FF3) Carpet, Tile:
  - 1. Manufacturer: Mohawk Group
  - 2. Collection: New Basics III Tile
  - 3. Style: BT400
  - 4. Color: Anodized Lapis, #559
  - 5. Installation: Glue-down tile.
  - 6. Construction: Tile.
  - 7. Size: 24" x 24" (.61m x .61m)
  - 8. Flammability: Class 1

### D. WM-1, Walk-Off Mat:

1. Manufacturer: Bentley

2. Style: Rough Idea.

3. Color: Outline #800115

4. Installation: Glue-down, quarter-turn

### E. Accessories:

- 1. Edging for Glue-Down Carpet: Metal or vinyl edging of standard color to complement carpet color as selected by Architect.
- 2. Pad: Perimeter tackless carpet gripper, smooth edge or appropriate for type of carpet.
- 3. Adhesives: Solvent-free adhesives and seam sealants with low VOC emissions as recommended by carpet manufacturer. Zero-VOC if available, maximum VOC level not to exceed 50 g/l. The use of seam sealants containing 1,1,1-trichloroethane or toluene shall not be allowed.

### PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, with installer present, for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance.
  - 1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of carpet products.
  - 2. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Prepare substrates according to manufacturer's written recommendations to ensure adhesion of carpet products.
- B. Do not install carpet until all other trades have completed their work in the area to be carpeted.
- C. Inspect carpet before laying for streaking, shading, spots, soil, tears, pull tufts, or other defects. Remove defective carpet from premises and replace with undamaged carpet.
- D. Acclimate carpet a minimum of 24 hours prior to installation.

### 3.3 INSTALLATION

A. Broadloom:

- 1. Install carpet in accordance with manufacturer's recommendations for seaming technique and proper amount of stretch in width and lengths of broadloom carpet.
- 2. Broadloom Seams: Cement all seams of broadloom carpet. Use continuous lengths and as broad widths as possible to minimize the placement of seams in traffic lanes. Locate seams as indicated on shop drawings. Cut edges true, properly treated, and cemented to form invisible non-raveling seams.
- 3. Double cut carpet seams, with accurate pattern match. Make cuts straight, true, and unfrayed. Apply seam adhesive to all cut edges immediately.
- 4. Glue-Down: Conform to manufacturer's direct glue-down installation instructions and recommended materials for adhesive installation using only recommended adhesives and primers.
- 5. Pad: Install tackless carpet gripper per manufacturer's instructions. Trim pad neatly to grippers. Stretch cushion and butt all seams for wrinkle-free underlayment.
- 6. Locate change of color or pattern between rooms under door centerline.
- 7. Trim carpet neatly at walls and around interruptions. Tuck edges into space between tackless strip and wall.

### B. Carpet Tile:

- 1. Blend carpet tiles from different cartons to ensure minimal variation in color match. Lay carpet tile in square pattern, with pile direction parallel to next unit, set parallel to building lines.
- 2. Locate change of color or pattern between rooms under door centerline.
- 3. Fully adhere carpet tile to substrate.
- 4. Trim carpet tile neatly at walls and around interruptions.
- C. Walk-Off Mat: (See above, can provide if desired.)
  - 1. Blend walk-off mat tiles from different cartons to ensure minimal variation in color match. Lay walk-off mat tile in square pattern, with pile direction parallel to next unit, set parallel to building lines.
  - 2. Fully adhere walk-off mat tile to substrate.

### 3.4 CLEANING

A. Remove debris after installation and clean carpet of all spots with manufacturer approved spot remover. Remove all threads with sharp scissors and thoroughly vacuum clean. Installed carpet shall be free of spots and dirt, and be without tears, fraying, or pulled tufts.

### 3.5 DEMONSTRATION

A. Instruct Owner in proper care and maintenance of the carpet.

### 3.6 PROTECTION

- A. Protection of carpet after completion of installation is specified as general work and is made a part of the work of all trades doing work in areas after carpet installation.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure carpet is without damage or deterioration at the time of Substantial Completion.

END OF SECTION

### PART 1 GENERAL

### 1.1 SUMMARY

A. Furnish all labor, material, equipment, and services necessary for and incidental to painting work. Paint surfaces in finished room areas designated. Paint new walls and infill construction to match adjacent existing walls. Paint only areas which normally require a paint finish for proper appearance and best serviceability such as wood, gypsum board, hollow metal, and handrails.

### 1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM).
- B. Master Painters Institute (MPI).
- C. Painting and Decorating Contractors of America (PDCA).

### 1.3 DEFINITIONS

- A. Regardless of the specular gloss name paint manufacturers give their products, provide specular gloss as measured on a 60° and 85° geometry Parallel-Beam Glossmeter per ASTM D523 and as defined by Master Painters Institute as follows:
  - 1. Gloss Level 1: Traditional matte finish; flat. Gloss at 60°: Maximum 5 units. Sheen at 85°: Maximum 10 units.
  - 2. Gloss Level 2: High side sheen flat; velvet-like finish. Gloss at 60°: Maximum 10 units. Sheen at 85°: 10 to 20 units.
  - 3. Gloss Level 3: Traditional eggshell-like finish. Gloss at 60°: 10 to 25 units. Sheen at 85°: 10 to 35 units.
  - 4. Gloss Level 4: Satin-like finish. Gloss at 60°: 20 to 35 units. Sheen at 85°: Minimum 35 units.
  - 5. Gloss Level 5: Traditional semi-gloss. Gloss at 60°: 35 to 70 units.

### 1.4 SUBMITTALS

- A. Submit in accordance with requirements of Division 1 Section "Submittal Procedures."
- B. Samples: Samples of mixed paint applied to surfaces approximating job conditions with test areas painted on job if required. 12-inch x 12-inch minimum size of samples. Obtain preliminary approval of samples before doing any work on job.
- C. Complete materials list indicating all materials proposed for use; show manufacturer's name, material type and name, color name and formulation, gloss level, and location where material will be used. Revise list for changes made during construction and resubmit. Where paint provided varies from specified manufacturer's product, submit product data for both the specified basis of design product and proposed paint product. Clearly note any variance between submitted product data and specified product data.

- D. Paint manufacturer certification of compliance with the VOC and chemical component limits of Green Seal requirements.
  - 1. Flat paint: Maximum of 50 grams/liter VOC.
  - 2. Non-flat paints and Primers: Maximum of 150 grams/liter VOC.
- E. Painting subcontractor's PDCA membership status for national, state, and local levels.

### F. Closeout Submittals:

1. Coating Maintenance Manual: Provide coating maintenance manual including area summary with finish schedule, area detail designating location where each product/color/finish was used, product data pages, material safety data sheets, care and cleaning instructions, touch-up procedures, and color samples of each color and finish used.

### 1.5 QUALITY ASSURANCE

- A. Paints and coatings shall comply with the VOC and chemical component limits of Green Seal requirements.
- B. Painter shall be a PDCA member at national, state, and local levels.
- C. Mock-ups:
  - 1. Brush-out areas, 2-feet x 2-feet, for each color and gloss level for review and prior to final color approval. After acceptance of color brush out, use that work as the reference standard to be matched by subsequent completed work.
  - 2. 10 l.f. of paint color and finish for handrails, trim, and other linear elements of in-place surfaces. Acceptable samples may be incorporated into the Work.

### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Designate one location for the storage and mixing of materials. Keep location in a neat and clean condition at all times.
- B. Deliver all materials to the job site in new and unopened containers, with the manufacturer's name, brand name, batch number, color, directions for tinting, mixing and application on a printed label on every container.

### 1.7 MAINTENANCE

A. Extra Materials: Furnish one gallon of each color and paint type for future repairs, packaged and labeled at the factory. Extra paint shall be mixed at the same time as paint installed.

### PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Sherwin Williams Building Standard Paints
  - 1. Paint colors for new wall construction and adjacent areas to blend finish.
  - 2. Sherwin Williams Colors 7596 Only Natural, 7717 Ligonier Tan, 0032 Needle Point Navy, 6249 Storm Cloud, 7069 Iron Ore, 7068 Grizzle Gray, 6113 Interactive Cream

### 2.2 MATERIALS

### A. Interior:

- 1. BASIS OF DESIGN, SW,
  - a. Gypsum Board Wall New Construction
    - (1) Prime Coat
    - (2) Second and Third Coats Interior Latex
  - b. Interior Wood Trim:
    - (1) Prime Coat SW Latex Wood Primer
    - (2) Second and Third Coats SW, Interior water-based alkyd enamel
  - c. Hollow Metal Door and Frame, Ferrous and Non-ferrous Metals.
    - (1) Prime Coat
    - (2) Second and Third Coats SW, Interior water-based alkyd enamel

### PART 3 EXECUTION

### 3.1 PROTECTION

A. Protection of Surfaces and Cleaning: Protect floors and other adjoining surfaces from paint droppings and spillage of materials.

### 3.2 SURFACE PREPARATION

### A. General:

- 1. Carefully examine all surfaces over which finish is to be applied and ensure surface is suitable for the proper finish. Do not proceed with the work until such conditions are acceptable. Beginning work denotes acceptance of substrates.
- 2. All surfaces shall be thoroughly dry before any finish is applied.

### B. Wood:

- 1. Prime and back prime all woodwork immediately upon receipt at the job. One coat primer or undercoat as used for finishing on new work.
- 2. Properly sand wood surfaces before any paint is applied. Knots or sappy places shall be given one coat of shellac at least twelve hours before being painted. Shellac is not to be used on any other surfaces. Use putty or wood filler of the same shade as the finish coat in filling nail holes, checks, and other blemishes, then lightly sand smooth as soon as filler has hardened.

### C. Metal:

- 1. All metal installation shall be made complete and ready for painting. Touch-up shop or prime coats that have been damaged with material of the same type and quality as originally used on the shop coat. Thoroughly remove all rust previous to this priming operation.
- 2. Prepare substrate and apply coatings in strict adherence with coating manufacturer's instructions.
- D. Gypsum Board Surfaces: Paint shall not be applied to any surface until it is thoroughly dry and cured. Prime surfaces that show hot spots or alkali in order to prevent such blemishes from showing through the paint. Brush off all loose particles or crystals which may have formed.

### 3.3 APPLICATION

- A. Employ workers skilled in the application of paint products specified.
- B. When paint mixing is required on the job, perform mixing on the premises immediately before applying, and thoroughly stir and strain all materials. Do not change or reduce any material in any way except as specified by paint manufacturer.
- C. Except where method of application is specifically noted, all materials shall be applied by brush or roller. Application by spray only where approved. All spray application shall be by airless method only.
- D. Coverage and Workmanship:
  - 1. Assume all responsibility for paint coats applied over surfaces and undercoats which have not been inspected.
- E. Drying: Apply paints to surfaces at atmospheric temperatures of not less than 50°F and maintain this minimum temperature throughout the drying time. Ensure adequate ventilation in all painted spaces. Allow sufficient time to elapse as recommended by the manufacturer, between successive coats, to permit proper drying. Modify as necessary to suit adverse weather conditions.

### F. Interior:

1. Wood Enamel: Where scheduled. All surfaces are to receive three coats, one prime coat and two coats of enamel. Sheen of finish as specified above or selected. Sand smooth all

surfaces after puttying, removing excess putty and prime coat imperfections. Sand lightly between second and third coats. Paint top, bottom and edges of all doors the same number of coats as the door faces after doors have been fitted.

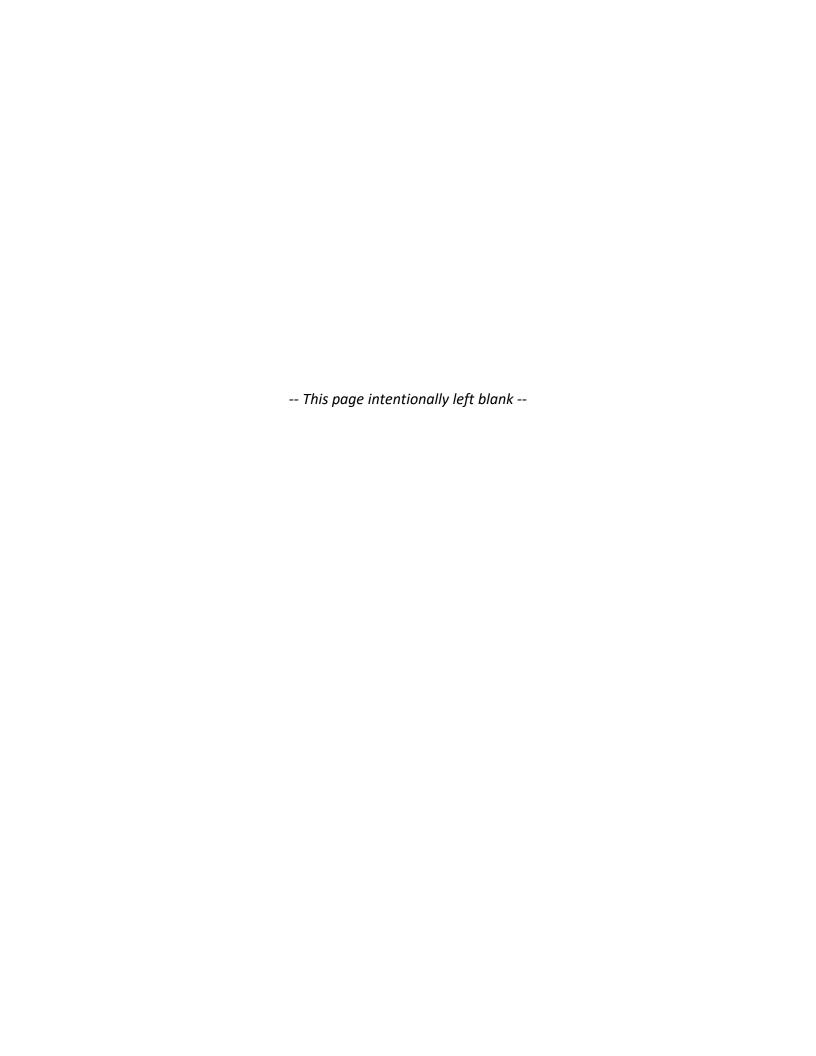
- 2. Metal Enamel: All new surfaces are to receive three coats (total including prime coat) of materials as specified above.
- 3. Gypsum Board: All new surfaces shall receive three coats of material, as specified above. Remove dust from surfaces, clean off or seal all stains and marks which may show or bleed through finishes.

### 3.4 COLOR SCHEDULE

A. Match existing adjacent surfaces in color and sheen.

**END OF SECTION** 







### **CERTIFICATE OF COMPLETION**

(FINAL ACCEPTANCE)

Project	::	
Contra	ctor:	
Contra	ct Signed:	Contract Expires:
Contra	ct Completed:	Delinquent:
	hereby certify that all wo ntract Documents for the	nas been performed and materials supplied in accordance with the plans, specifications, ove work, and that:
1.	Not less than the preva workers, and mechanic	g rates of wages, as ascertained by the Contracting Agency, have been paid to laborers, inployed on this work;
2.		norized substitutions or assignments of subcontractors; nor have any subcontracts been ames of the subcontractors having been submitted to the Owner prior to the start of
3.	All claims and indebted specifications have bee	s for material and labor and other service performed in connection with these aid;
4.		ial Accident Fund (ORS 279B.220), the State of Oregon Unemployment Compensation, the State Department of Revenue (ORS 316.162 to 316.212), hospital associations, 30) have been paid;
5.	All private property and requirements.	sement areas have been satisfactorily restored in accordance with the Contract
Ву:		Dated:
	Contractor's Project Ma	ger
	y hereby accepts the proj s the above Contractor Ce	as complete in compliance with the plans, specifications, and contract documents and ication of Compliance.
CITY O	F WILSONVILLE	
By:		Dated:
•	Project Manager	
	s stated differently in the ing of the two (2) year bo	ntract Documents, the date of signing by the City Project Manager constitutes the ed warranty period.

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## Appendix B – Bonds

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### PERFORMANCE BOND

(Capital Projects)

DOND NO

	BUND NO.
	PREMIUM: \$
KNOW ALL MEN BY THESE PRESENTS, that we,	
as Principal, and	("Surety"), a company duly organized
and licensed to do business in the State of	, and duly licensed to conduct business as a
Surety under the laws of the State of Oregon, are held ar	
in the penal sum of	Dollars
(\$) lawful money of the United States,	for the payment of which sum well and truly to be
made, we bind ourselves, our heirs, administrators, exec	utors, successors, and assigns, jointly and severally,
firmly by these presents.	
THE CONDITION OF THE FOREGOING OBLIGATION IS SUC	CH THAT, WHEREAS, said Principal has entered into a
contractual agreement, including all exhibits attached th	ereto and all documents incorporated by reference
therein (collectively referred to herein as the "Agreemen	nt"), with said Obligee, which Agreement is identified as
	("Project"),
pursuant to which said Principal undertakes and agrees t	o perform all labor and furnish all equipment and
material, in accordance with all the terms and conditions	s set forth in said Agreement; and to save harmless the
Obligee from any claim for damages or injury to property	y or persons arising by reason of said work, as set out
more fully in said Agreement; and to do and perform all t	things in said Agreement as required, in the time and
manner and under the terms and conditions therein set	forth; and in conformity with all laws, state and
national, applicable thereto.	

NOW, THEREFORE, if the said Principal shall well and truly do and perform all the covenants and obligations of said Agreement on its part to be done and performed at the time and in the manner specified therein, and in all respects according to their true intent and meaning, and shall defend, indemnify, and save harmless the Obligee, its officers, agents, and employees, as therein stipulated, only then this obligation shall be null and void; otherwise, it shall be and remain in full force and effect. The completion of all such covenants and obligations shall only be considered to have occurred upon the written final acceptance of all Project work by Obligee and the expiration of any warranty period, as provided under the Agreement.

The Surety hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of said Agreement or the specifications accompanying the same shall in any manner affect its obligations under this Bond and it does hereby waive notice of any such change, extension, alteration, or addition to the terms of the Agreement or to the work or to the specifications.

If the Principal shall be declared to be in default in the performance of any part of the Agreement, the Surety must, within the same time frame allowed to the Principal, cure or cause to be cured the default or must otherwise immediately pay the entire penal sum of the Bond to the Obligee.

This obligation also includes the obligation to promptly pay, as due, payment to any person, co-partnership, association, or corporation furnishing medical, surgical, and hospital care or other needed care and attention incidental to sickness or injury to the employees of said Principal, pursuant to the laws of Oregon, or collected or deducted from the wages of said employees pursuant to any law, contract, or agreement for the purpose of providing or paying for such services, and shall do all things required of said Principal by the laws of Oregon.

The Surety acknowledges that the Surety shall not be entitled to assert any defense for failure of performance that the Principal might have by operation of law.

As a part of the obligation secured hereby, and in addition to the penal sum specified thereunder, there shall be included all reasonable costs, expenses, and fees ("Costs"), including reasonable attorney fees, incurred by the Obligee in enforcing the obligations described herein, all to be included in any judgment rendered, and which shall bear interest at the judgment rate then in effect until paid in full.

Except for Costs and attorney fees, which shall be in addition thereto, the Surety's obligation shall not exceed the penal sum of the Bond.

This Bond is given and received under the authority of ORS Chapter 279, the provisions of which hereby are incorporated into this Bond and made a part hereof.

Signed and sealed on	, 2018.
PRINCIPAL NAME:	
Ву:	-
Print Name:	-
As Its:	
SURETY NAME:	
Ву:	-
Print Name:	-
As Its: Attorney in Fact	

The attorney-in-fact who executes this Bond on behalf of the surety company must attach a copy of his/her power-of-attorney as evidence of his/her authority.

To each executed original of this Bond, there must be attached a complete set of the contract documents, as the term is defined in the "Standard Specifications and Special Provisions," with all corrections, interlineations, signatures, etc., completely reproduced therein.

### **PAYMENT BOND**

	BOND NO
KNOW ALL MEN BY THESE PRESENTS, that we,	("Surety"), a corporation duly, and duly licensed to conduct business as erally held and firmly bound unto the City of Dollars be payment of which sum we jointly and
these presents.  THE CONDITION OF THIS BOND IS SUCH THAT, WHEREAS, the Princ	ipal herein, on the day of ct with the Obligee whereby said Principal naterials; all sums due the Workers' se, the unemployment compensation trust
NOW, THEREFORE, if the Principal herein shall promptly pay all persand sums due for workers' compensation insurance or equivalent, sompensation, sums due to the Department of Revenue, to him an or about said work, then this obligation shall be null and void; othe effect.	social security and unemployment d to his subcontractor, or to their assigns, on

PROVIDED, HOWEVER, that this Bond is subject to the following conditions:

- (a) All materialmen, and all persons who shall supply such laborers, mechanics, or subcontractors with material, supplies, or provisions for carrying on such work, shall have a direct right of action against the Principal and Surety on this Bond, second only to the right of the Obligee under this Bond, which right of action shall be asserted in proceedings instituted in the appropriate court in the State of Oregon, and insofar as permitted by the laws of Oregon, such right of action shall be asserted in a proceeding instituted in the name of the Obligee to the use and benefit of the person, firm, or corporation instituting such action and of all other persons, firms, or corporations having claims hereunder, and any other person, firm, or corporation having a claim hereunder shall have the right to be made a party to such proceeding (but not later than one year after the complete performance of said contract and final acceptance of the work in the contract) and to have such claim adjudicated in such action and judgment rendered thereon.
- (b) The Surety, for the value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations under this Bond and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the contract or to the work or to the specifications.
- (c) The Principal herein shall faithfully and truly observe and comply with the terms of the contract and shall promptly make payments to all persons supplying labor or material for any prosecution of the work

As Its: Attorney in Fact

provided for in such contract and shall not permit any lien or claim to be filed or prosecution against the Obligee on account of any labor or material furnished, and shall promptly pay all contributions or amounts due the Workers' Compensation Board or equivalent and all contributions or amounts due the state employment compensation trust fund incurred in the performance of said contract, and shall also pay all sums of money withheld from the employees and payable to the state tax commission pursuant to ORS 316.711, and shall do all things required of said Principal by the laws of the State of Oregon.

This Bond is given and received under the authority of ORS Chapter 279, the provisions of which hereby are incorporated into this Bond and made a part hereof.

SIGNED, SEALED, AND DATED this \_\_\_\_\_ day of \_\_\_\_\_\_, 2018.

PRINCIPAL NAME:	
Ву:	
Print Name:	
As Its:	
SURETY NAME:	
	•
Ву:	
Print Name:	

The attorney-in-fact who executes this Bond on behalf of the surety company must attach a copy of his/her power-of-attorney as evidence of his/her authority.

To each executed original of this Bond, there must be attached a complete set of the contract documents, as the term is defined in the "Standard Specifications and Special Provisions," with all corrections, interlineations, signatures, etc., completely reproduced therein.

PAYMENT BOND 4 February 7, 2024

Bond #\_\_\_\_\_

### **PUBLIC WORKS CONSTRUCTION**

### **WARRANTY AND MAINTENANCE BOND**

(Capital Projects)

	, as Principal, and
	, a corporation organized under the
State of and authorized to tran	sact surety business in the State of Oregon, as Surety, declare
	rs, and assigns are jointly and severally bound unto the City of
Wilsonville, Oregon, Obligee, in the sum of	
	will be made upon demand if Principal fails to meet the
obligations as described below.	
The Principal has constructed certain public wo	rks improvements for a project known as:
, and ic	dentified by the City of Wilsonville as File No
·	project plans, were accepted by the City of Wilsonville on the Construction Documents for the Project, and to ensure post-
construction quality and landscape survivability	y, the Principal has agreed, as a condition of final approval of said
public works construction, to warrant to the Cit	ty of Wilsonville that the construction is, and will remain for a
period of two (2) years from the date of accept	ance, free from defects in material and workmanship and that all
	ans, will be maintained in good condition and replaced, as
	ranty by the Principal is in addition to and not in lieu of any other
warranties provided by various suppliers or ma	nufacturers.
project plans and the warranty described above	rincipal shall fully perform according to the terms of the as-built e, and if no claim on said warranty is unsatisfied at the conclusion arranty period, then this obligation shall be void, otherwise to pal's liability to the City of Wilsonville.
	Date:
(Project Name)	
( - <b>)</b>	
PRINCIPAL:	CORPORATE SURETY
Ву:	Ву:
Print Name:	Print Name:
As Its:	As Its:
(title)	(title)
	(Address)
	(Address)
	(City, State, Zip)
To be completed by City:	
File No.:	Date of Acceptance of Construction:

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# **Appendix C- Plans and Details**

- Plans and details bound separately -

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# CITY OF WILSONVILLE POLICE DEPARTMENT INTERIM RENOVATIONS

30000 TOWN CENTER LOOP E WILSONVILLE, OR 97070 CITY OF WILSONVILLE

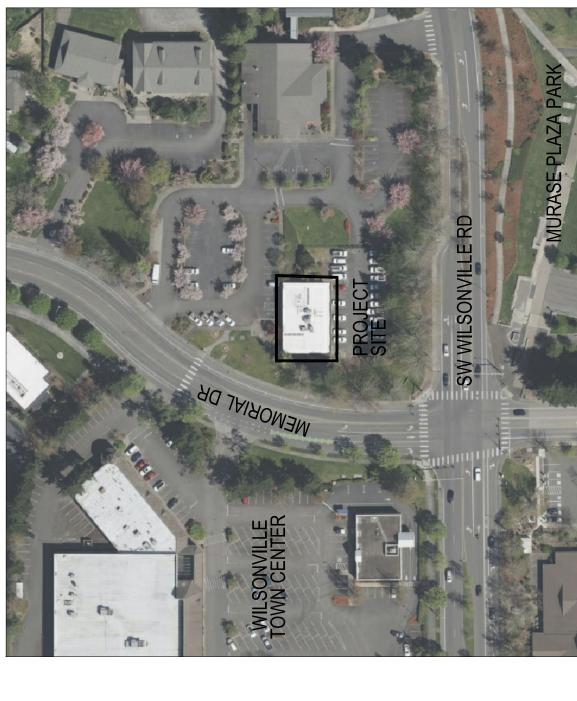
ISSUED FOR PERMIT/BID **FEBRUARY 6, 2024** 

# **VICINITY MAP**

**AERIAL MAP** 



■ PROJECT SITE



BUILDING AND SILE INFO	II E INFO	PROJECI IEAM	DKAWING LIST
SITE LOCATION	30000 SW TOWN CENTER LOOP EAST WILSONVILLE, OR 97070	OWNER CITY OF WILSONVILLE 29799 SW TOWN CENTER LOOP E	COVER <u>ARCHITECTURAL</u>
TAX LOT	31W13CD02702	WILSONVILLE, OR 97070 503.570.1542	A1.0 DEMOLITION PLANS A2.0 FLOOR PLANS AND STAIR
ZONING	PDC-TC	ARCHITECT DAO ARCHITECTURE LLC	A2.1 REFLECTED CEILING PLANS A3.0 DETAILS
JURISDICTION	CITY OF WILSONVILLE, OREGON 29799 SW TOWN CENTER LOOP E	516 SE MORRISON ST, SUITE 800 PORTLAND, OR 97214 503.388.3680	PROJECT DESCRIPTION
	503.682.4960	STRUCTURAL ENGINEER KPFF CONSULTING ENGINEERS 111 SW 5TH AVE, SUITE 2500 PORTLAND, OR 97204 503.227.3251	THE PROJECT SCOPE INCLUDES RENOVATIONS FOR THE WILSONVILLE DEPARTMENT TO OCCUPY THE ENTIRI BUILDING THEY CURRENTLY SHARE W PUBLIC WORKS DEPARTMENT.
EXISTING CONSTRUCTION TYPE V-B, UN-SPRINKLERED	E V-B, UN-SPRINKLERED	GENERAL CONTRACTOR TBD	A NEW STAIR WILL CONNECT THE TW FLOORS WHILE AN EXISTING STAIR W SEALED. SEVERAL DOORS WILL BE A
OCCUPANCY TYPE	В		NON-LOADBEARING PARTITIONS WILL MODIFIED AND NEW WALLS WILL BE AS NOTED.
			TO OUR KNOWLEDGE, NO ADA ISSUE CURRENTLY EXIST OR ARE ANTICIPAT

BUILDING AND SITE INFO	LE INFO	PROJECT TEAM	DRAWING LIST
SITE LOCATION	30000 SW TOWN CENTER LOOP EAST WILSONVILLE, OR 97070	OWNER CITY OF WILSONVILLE 29799 SW TOWN CENTER LOOP E	COVER ARCHITECTURAL
TAX LOT	31W13CD02702	WILSONVILLE, OR 97070 503.570.1542	A1.0 DEMOLITION PLANS A2.0 FLOOR PLANS AND STAIR PLANS A2.1 REELECTED CEILING PLANS
ZONING	PDC-TC	ARCHITECT DAO ARCHITECTURE 11.0	A3.0 DETAILS
JURISDICTION	CITY OF WILSONVILLE, OREGON 29799 SW TOWN CENTER LOOP E WILSONVILLE, OR 97070	516 SE MORRISON ST, SUITE 800 FORTLAND, OR 97214 503.388.3680	PROJECT DESCRIPTION
	503.682.4960	STRUCTURAL ENGINEER KPFF CONSULTING ENGINEERS 111 SW 5TH AVE, SUITE 2500 PORTLAND, OR 97204 503.227.3251	THE PROJECT SCOPE INCLUDES RENOVATIONS FOR THE WILSONVILLE POLICE DEPARTMENT TO OCCUPY THE ENTIRE BUILDING THEY CURRENTLY SHARE WITH THE PUBLIC WORKS DEPARTMENT.
EXISTING CONSTRUCTION TYPE	V-B, UN-SPRINKLERED	GENERAL CONTRACTOR TBD	A NEW STAIR WILL CONNECT THE TWO FLOORS WHILE AN EXISTING STAIR WILL BE SEALED. SEVERAL DOORS WILL BE ADDED OR MODIFIED. SEVERAL EXISTING AND
OCCUPANCY TYPE	В		NON-LOADBEARING PARTITIONS WILL BE MODIFIED AND NEW WALLS WILL BE ADDED, AS NOTED.
BUILDING STORY HEIGHT	TWO STORIES		TO OUR KNOWLEDGE, NO ADA ISSUES CURRENTLY EXIST OR ARE ANTICIPATED WITH THIS RENOVATION. THE UPPER LOBBY IS OPEN TO THE PUBLIC AND THE RESTROOMS
BUILDING HEIGHT	24'-0" (NO CHANGE)		REMAIN AVAILABLE.
SQUARE FOOTAGE	2 STORIES @ 4000 SF = ROOD SF TOTAL (NO CHANGE)		THE POLICE DEPARTMENT IS TO REMAIN OPEN DURING CONSTRUCTION.
			ASSOCIATED WORK TO MODIFY SUSPENDED CEILINGS, LIGHTING, POWER, SECURITY, ALARMS, DATA TO BE SUB—CONTRACTOR DESIGN—BUILD AND PERMITTED AS REQUIRED

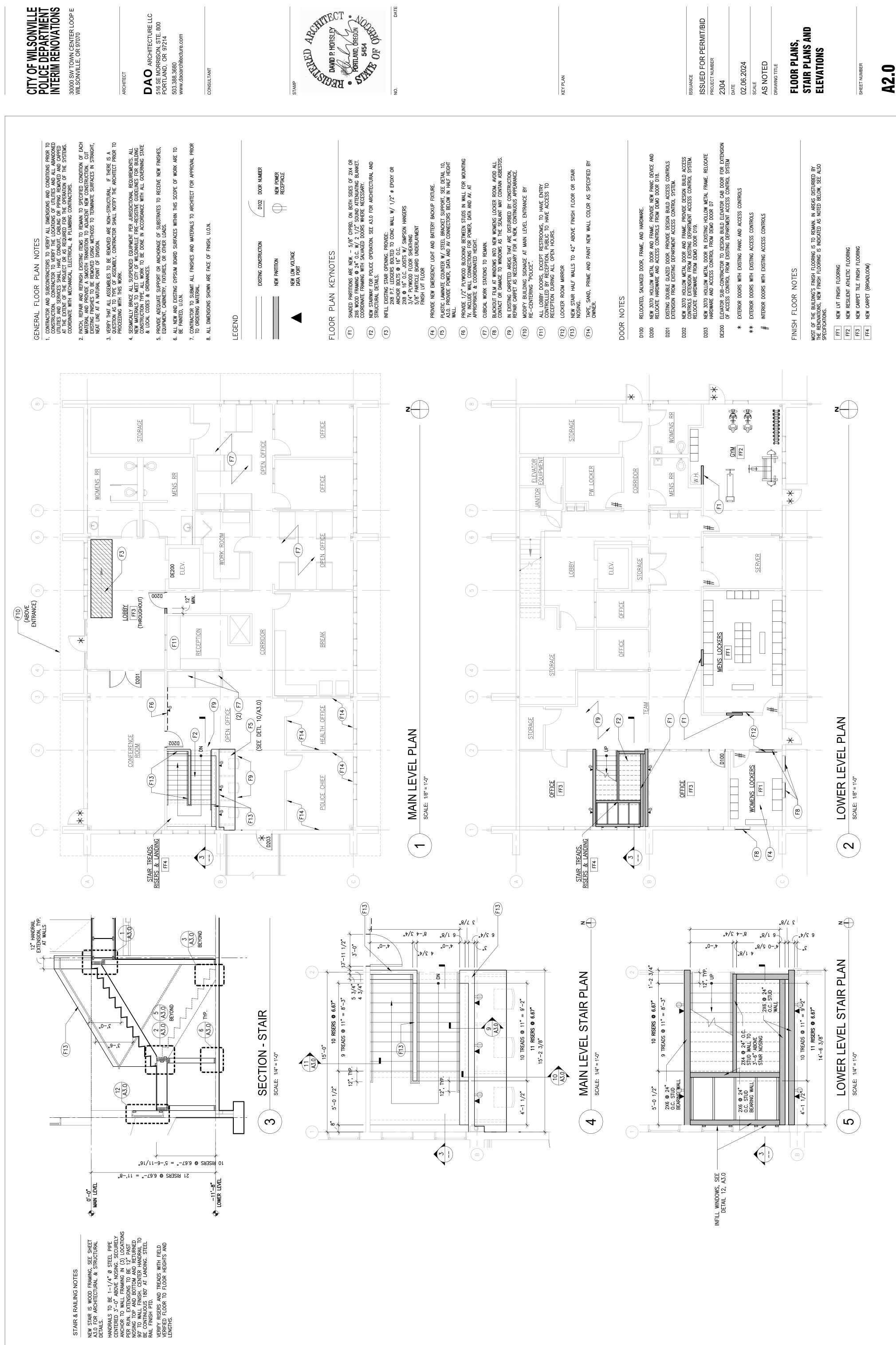
GENERAL CONTRACTOR TO COORDINATE WITH OWNER TO MAINTAIN CRUCIAL OPERATIONS WHILE MODIFYING EXISTING SYSTEMS TO ACCOMMODATE THE NEW SPACES, LAYOUT, AND FULLY FUNCTIONING SYSTEMS.

GENERAL CONTRACTOR TO COORDINATE, AS DIRECTED BY OWNER, FOR REMOVAL, STORAGE ON SITE, AND RELOCATION OF OFFICE EQUIPMENT AND FURNISHINGS IN ORDER TO MAINTAIN OCCUPANCY DURING THE CONSTRUCTION PERIOD.



DATE

A1.0



DATE

SHEET NUMBER **A2.1** 

REFLECTED CEILING PLANS

AS NOTED

02.06.2024

ISSUED FOR PERMIT/BID
PROJECT NUMBER

2304

DAVID P. HORSLEY THE PORTION OF OPPOSITE SASA DATE STAMP

MOST OF THE BUILDING'S FINISH CEILING IS TO REMAIN. IN AREAS DISTURBED BY THE RENOVATIONS, NEW ACT FINISH CEILING ASSEMBLY IS INDICATED, SEE ALSO SPECIFICATIONS. RELOCATE EXISTING MECHANICAL DIFFUSERS OR OTHER EQUIPMENT, OR PROVIDE NEW AS NECESSARY FOR A FULLY FUNCTIONING SYSTEM SERVING THE NEW SPACES. RELOCATE EXISTING LIGHT FIXTURES OR PROVIDE NEW AS NECESSARY (TO MATCH EXISTING) TO SERVE THE NEW SPACES AS INDICATED.

(2) $(\mathfrak{Z})$ 

EXISTING OPTICAL FIBER CABLE ENTERING THE BUILDING'S SW CORNER AND CONTINUING THROUGH THE LOWER LEVEL CEILING TO THE SERVER ROOM. G.C. TO LOCATE AND PROTECT THIS LINE THROUGHOUT THE CONSTRUCTION. 

CEILING PLAN LEGEND EXISTING CEILING CONSTRUCTION

AIR DIFFUSER—SUPPLY SEE CEILING PLANS EXISTING AIR DIFFUSER—SUPPLY EXISTING AIR GRILLE-RETURN LIGHT FIXTURE -RELOCATED OR NEW IF NEC. X EXISTING LIGHT FIXTURE

EXIT SIGNAGE **8**  $\bigotimes$ 

 $\bigcirc$ (2)  $(\mathfrak{Z})$ **—** --(o) (L) 4 (M)  $(\mathfrak{Z})$ **— N** X X X X X X

(2)

(2)

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LOWER LEVEL REFLECTED CEILING PLAN scale: 1/8" = 1:0"

2

GENERAL CEILING PLAN NOTES

 $\bigcirc$ 

(w)-

(r)

4

(M)

(N) -

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CITY OF WILSONVILLE POLICE DEPARTMENT INTERIM RENOVATIONS

30000 SW TOWN CENTER LOOP E WILSONVILLE, OR 97070

2. CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR TO VERIFY THE LOCATIONS OF DIFFUSERS, LIGHTS AND ALL OTHER CEILING MOUNTED EQUIPMENT OR APPURTENANCES. CONFLICTS SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR OWNER BEFORE CONSTRUCTION. 1. PRIMARY CEILING AREAS ARE EXISTING.

3. VERIFY THAT ALL ASSEMBLIES TO BE REMOVED ARE NON-STRUCTURAL. IF THERE IS A QUESTION AS TO TYPE OF ASSEMBLY, CONTRACTOR SHALL NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH THIS WORK.

4. SEISMICALLY BRACE ALL SUSPENDED EQUIPMENT PER JURISDICTIONAL REQUIREMENTS AND PROVIDE WALL BRACING ABOVE CEILING IF NEC.

6. SUSPENDED CEILING EQUIPMENT, LIGHTING, AND TRIM COLOR TO BE WHITE. 5. ALL WOOD BLOCKING, NAILERS, ETC. TO BE FIRE RETARDANT.

**DAO** ARCHITECTURE LLC 516 SE MORRISON, STE. 800 PORTLAND, OR 97214

7. EXISTING LIGHTING AND EGRESS LIGHTING ARE TO REMAIN. PROVIDE NEW LIGHTING WHERE NEC. TO MATCH EXISTING. COORDINATE ALL LINE AND LOW VOLTAGE APPURTENANCES. COORDINATE WITH ARCHITECT OR OWNER ON ALL SWITCH LOCATIONS AND ZONING. PROVIDE SYSTEMS COMPLIANT WITH ALL APPLICABLE CITY AND STATE CODES AND GUIDELINES. 8. GENERAL EXISTING MECH. DIFFUSERS LOCATION SHOWN. FIELD VERIFY AND ADJUST TO ACHIEVE LOCATIONS SHOWN. BALANCE THE SYSTEM ACCORDINGLY.

10.FOR TRADE PERMITS, IF REQUIRED, GENERAL CONTRACTOR TO PROVIDE SUB-CONTRACTOR DESIGN-BUILD DOCUMENTATION FOR PERMITTING. THESE INCLUDE HVAC, MECHANICAL, LIGHTING, POWER, ALARM, SECURITY, DATA AND SUSPENDED CEILINGS. 9. ADJUST EMERGENCY AND EGRESS LIGHTING TO MEET CODE AND FIRE DEPARTMENT REQUIREMENTS.

x

m

(3)

CEILING PLAN KEYNOTES

PROVIDE NEW CEILING ASSEMBLY IN THIS AREA. RELOCATE EXISTING LIGHTS, DIFFUSERS, AND ANY OTHER CEILING MOUNTED EQUIPMENT, AND ADJUST DUCTWORK AND POWER OR LOW VOLTAGE WIRING/CONNECTIONS AS NEC.

PROVIDE NEW CEILING ASSEMBLY IN THIS PORTION OF THIS AREA, (SOME PORTIONS OF THE ADJACENT GRID MAY REMAIN BUT SOILED TILES TO BE REPLACED, FIELD VERIFY CONDITIONS. FOR CONSTRUCTABILITY PURPOSES, I MAY BE ADVANTAGEOUS TO PROVIDE NEW GRID AND TILE THROUGHOUT ROOM. IN EITHER CASE, RELOCATE EXISTING LIGHTS, DIFFUSERS, AND ANY OTHER CEILING MOUNTED EQUIPMENT, AND ADJUST DUCTWORK AND POWER OR LOW VOLTAGE WIRING/CONNECTIONS AS NEC.)

MAIN LEVEL REFLECTED CEILING PLAN SCALE: 1/8" = 1'-0"

ACT CEILING GRID (2X4 W/2X2 LOOK)

AIR GRILLE—RETURN SEE CEILING PLANS

KEY PLAN

SMOKE DETECTOR -NEW AS NOTED

