

CONSTRUCTION SERVICES CONTRACT

THIS CONTRACT is made and entered into by and between YAMHILL COUNTY, a political subdivision of the State of Oregon, acting by and through its Department of Health and Human Services, hereinafter referred to as the "County", and ROSS BUILDERS NORTHWEST, LLC, an Oregon corporation whose Federal Employer Identification No. is 41-3112515, hereinafter referred to as the "Contractor".

RECITALS

WHEREAS, The County requires the services of a construction services contractor for the 310 Northeast Kirby Street Remodel Project (the "Project"); and

WHEREAS, The Contractor possesses the knowledge, qualifications, and experience to perform the work required for, the Project; and

WHEREAS, A procurement of the construction services described herein was done in compliance with ORS 279C and YCR Division 49; and

NOW, THEREFORE, in consideration of the promises and the mutual covenants and conditions set forth herein, and for other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, it is hereby agreed by the parties as follows:

AGREEMENT

1. **COMMENCEMENT AND COMPLETION DATE.** This Contract shall become effective, and the Work required hereunder shall commence, upon the County's issuance of a *Notice to Proceed*. The Work must be completed no later than date set within the *Notice to Proceed*, unless the deadline is extended or otherwise modified pursuant to Section 9.
 - a. **Penalty for Failure to Meet Deadline.** The parties agree that the County has a substantial interest in the timely completion of the Project and all Work to be performed under this Contract in accordance with the agreed upon schedule. However, the parties agree that the damages to be anticipated from the failure of the Contractor to complete the Work under this Contract in the specified time are uncertain and difficult to establish. The parties therefore desire to liquidate the County's damages for the Contractor's failure to complete the Project and all Work on time. The parties therefore agree that the Contractor is liable for and shall pay as liquidated damages to the County the sum of \$1,000 per day for each calendar day to commence on the first calendar day after the required completion date under this Contract and to continue after each and every calendar day until all Work is satisfactorily completed as specified in the Contract Documents.
2. **CONSIDERATION.** As consideration for the performance of all terms and conditions set forth in this Contract, the County shall pay the Contractor a sum not to exceed \$808,530.00 (the "Not-to-Exceed Amount") in the manner and at the time provided in, and subject to, the terms and conditions in the attached Exhibit A, *Project Specifications*, and Exhibit B, *Project Drawings*, each of which is attached hereto and incorporated herein by this reference. The County shall make payment upon receipt and acceptance of the services as

invoiced by the Contractor. The County shall pay invoices within thirty (30) days after an invoice has been received and approved by the authorized a County representative.

- a. At the sole discretion of the County, "Additive Alternate Bid No. 1", as defined in the attached Exhibit C, *Bid Form*, may be added to the Not-to-Exceed Amount if the corresponding change in Project scope or materials or methods of construction described in the Bidding Documents is accepted by the County.
- b. The compensation provided herein shall be exclusive, and the County shall neither pay nor provide Contractor with any fringe benefits, including, but not limited to, retirement, health insurance, workers' compensation insurance, unemployment insurance, or sick leave. No additional compensation or alternate form thereof shall be payable by the County to the Contractor for any purpose whatsoever unless otherwise agreed in writing. The Contractor shall be responsible for paying all income taxes, Social Security or self-employment taxes and any other taxes or assessments imposed by any governmental body incurred by reason of the County's payment of compensation hereunder to Contractor.

3. **RETAINAGE BY THE COUNTY.** The County may reserve as retainage from any progress payment an amount not to exceed five (5) percent of the payment. As the Work progresses, the County may reduce the amount of the retainage and may eliminate retainage on any remaining monthly Contract payments after 50 percent of the Work under the Contract is completed if, in the County's opinion, such Work is progressing satisfactorily. Any retainage reserved by the County shall be withheld and released in accordance with ORS 279C.550 to 279C.580.

- a. If the Contract exceeds \$500,000, the County may place amounts deducted as retainage into an interest-bearing escrow account, and if it does, any interest on the retainage amount will be paid to the Contractor. In accordance with ORS 279C.5570(2), such interest shall accrue from the date the payment request is approved by the County until the date the retainage is paid to the Contractor to which it is due.

4. **WORK TO BE PERFORMED BY THE CONTRACTOR.** The Contractor agrees to perform, to the satisfaction of the County, the Work as detailed in the *Project Specifications*, attached hereto as Exhibit A, including any addenda thereto, the *Project Drawings*, attached hereto as Exhibit B, and the *Bid Form*, attached hereto as Exhibit C (collectively, the "Contract Documents"). "Work" means the construction and any related services required by or reasonably inferred from the Contract Documents, whether completed or partially completed, including (except as otherwise expressly stated in this Contract) all other labor, materials, equipment, tools, permits, fees, licenses, facilities, taxes, transportation, supervision, temporary constructions of every nature, and all other services, management, and facilities of every nature whatsoever necessary to fulfill the Contractor's duties herein within the term of the Contract.

- a. Additional Work Obligations. Unless otherwise stipulated in the Contract Documents, additional Work obligations of the Contractor include the following:
 - i. The Contractor shall obtain and pay for all necessary permits and licenses, except for those specifically excluded in the Contract Documents, including, but not limited to, permits and licenses required for the construction of the Work, for temporary obstructions, enclosures, opening of streets for pipes, walls, utilities, environmental work, and others as required for the Project. The Contractor shall be responsible for all violations of the law in

connection with the construction or caused by obstructing streets, sidewalks or otherwise. The Contractor shall give all requisite notices to public authorities. The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent or other proprietary rights and save harmless and blameless from loss, on account thereof, Yamhill County, and its departments, divisions, members and employees.

- ii. The Contractor shall keep on the Project site, during the progress of the Work, a competent superintendent and any necessary assistants who shall be satisfactory to the County and who shall represent the Contractor on the site. Directions given to the superintendent by the County's authorized representative shall be confirmed in writing provided to the Contractor by the County.
- iii. The Contractor shall prepare, review for compliance with the Contract Documents, approve, and submit to the County drawings, product data, samples, and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the County or of separate contractors.
- iv. The Contractor shall confine equipment, storage of materials, and operation of the Work to the limits indicated by Contract Documents, law, ordinances, permits, or directions of the County's authorized representative. The Contractor shall follow the County's authorized representative's instructions regarding use of premises, if any.

5. **WARRANTY OF WORK.** Neither the final payment nor any provision of the Contract Documents shall relieve the Contractor from responsibility for defective Work and, unless a longer period is specified, the Contractor shall correct all defects that appear in the Work within a period of one year from the date of issuance of the written notice of Substantial Completion by the County, except for latent defects which will be remedied by the Contractor at any time they become apparent. The County shall give the Contractor notice of defects with reasonable promptness. The Contractor shall perform such warranty work within a reasonable time after the County's demand. If the Contractor fails to complete the warranty work within such period as the County determines reasonable, or at any time in the event of warranty work consisting of emergency repairs, the County may perform such work and the Contractor shall reimburse the County all costs of the same within ten (10) days after demand without affecting the Contractor's obligations.

6. **INDEPENDENT CONTRACTOR.** This agreement is not a contract of employment. The County does not seek to hire Contractor as an employee(s) of the County nor does the Contractor desire to be an employee(s) of the County for performance of the services described herein. The parties intend that the Contractor, in performing the services specified herein, shall be and act as an independent contractor and shall have professional control of the Work and the manner in which it is performed. The Contractor shall have the sole authority to determine the manner and means of performing the services described herein, and the County shall not interfere with, control, or direct the manner or method in which such services are performed; provided, the County shall direct Contractor as to the Work to be assigned and shall have the right to direct the required results to the extent such direction may be consistent with the nature of the Contractor's services. The Contractor shall not be considered an agent of the County, and the County shall not be responsible for any claims,

Within the timeframe allowed by law in the State of Oregon.

demands, or causes of action of any kind or character arising in favor of any person, on account of personal injuries, or death, or damage to property occurring, growing out of, incident to, or resulting directly or indirectly from the operations or activities of the Contractor.

7. ARCHTIECT AS PROJECT SUPERVISOR.

- a. Project Supervisor. Randal S. Saunders of RSS Architecture, PC, is the "Project Supervisor" for the County. The County shall provide contract administrative services for the Project through the Project Supervisor. The Project Supervisor may engage and delegate authority to such additional staff and professional and technical consultants as the County deems necessary to assist in performing its administrative tasks. The Contractor shall direct all Project communications to the County in accordance with the Contract Documents, or as the County directs in writing.
- b. Authority. The Project Supervisor shall be the initial point of contact for matters related to performance, payment, authorization, and to carry out the responsibilities of the County. The Project Supervisor shall have free access to the Work and the job site at all times and shall review and approve or take other appropriate action upon the Contractor's submittals such as shop drawings, product data and samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Based on the Project Supervisor's evaluations of the Work and the Contractor's Applications for Payment, the Project Supervisor shall review and certify the amounts due the Contractor and shall issue Certificates of Payment in such amounts. The Project Supervisor shall have the authority to reject Work that does not conform to the Contract Documents and to require inspection or testing of the Work.

8. SUBCONTRACTORS.

- a. The County reserves the right to reject any subcontractor proposed that was not included in the Contractor's quote. Further, the Contractor shall not retain a subcontractor to which the County has a reasonable objection.
- b. The Contractor shall pay all subcontractors as required by the Contractor's contracts with those subcontractors. The Contractor agrees that the County has no direct or indirect contractual obligation or other legal duty whatsoever to pay the subcontractors of the Contractor or otherwise ensure that the Contractor makes full and timely payment to those subcontractors for services performed on the Project.
- c. The Contractor covenants and agrees to bind any and all subcontractor(s) for performance of the Work under this Contract. Any reference to the Contractor herein shall include any and all subcontractor(s) ad infinitum.

9. CONTRACT MODIFICATIONS. Unless otherwise stipulated in the Contract Documents, the County may modify this Contract as follows:

- a. Minor Changes in the Work. The County may, at its discretion, issue a "Field Order" or "Supplemental Instructions" authorizing minor changes in the Work performed under the Project, so long as the changes do not involve adjustment to the Contract sum or the Contract time. These minor changes may include details to clarify the Work to be performed. Via e-mail or letter, the Contractor must acknowledge receipt of instruction authorizing minor changes in the Work and incorporate these changes in the as-built drawings.

- b. Change Order Procedures. Either the County or the Contractor may initiate a request for proposed changes in Work to be performed under the Project via a "Change Order." For all proposed changes, a Change Order form must be used to record the proposed changes to the Project. The Change Order must contain a description of all changes in Work, a detailed accounting of the proposed change in total cost, and an outline of any changes in the Project's schedule. The Contractor must then sign form and submit it to the County for final approval and authorization.
 - c. Amendments. This Contract may be amended to the extent permitted by applicable statutes, administrative rules, ordinances, and the Yamhill County Public Contracting Rules. For anticipated amendments, this Contract may be amended only in accordance with and to the extent provided in the original solicitation document. No amendment shall bind either party unless in writing and signed by both parties.

- 10. COMPLIANCE WITH ORS 279B.220. For all services provided under this Contract, the Contractor shall: (i) pay promptly, as due, all persons supplying labor or material; (ii) pay all contributions or amounts due the Industrial Accident Fund from the Contractor or any subcontractor; (iii) not permit any lien or claim to be filed or prosecuted against the County or any subdivision thereof; and (iv) pay to the State of Oregon Department of Revenue all sums withheld from employees pursuant to ORS 316.167. If the Contractor does not pay promptly any claim that is due for the services furnished to the Contractor by any subcontractor in connection with this Contract, the County may pay such claim and charge that payment against any payment due to the Contractor under this Contract. The County's payment of a claim does not relieve the Contractor or its surety, if any, from their obligations for any unpaid claims.

- 11. HOURS OF LABOR; COMPLIANCE WITH PAY EQUITY PROVISIONS.
 - a. Pursuant to ORS 279B.235(3), the Contractor shall pay the Contractor's employees who perform Work under this Contract at least time and a half for all overtime in excess of 40 hours a week, and for Work performed on any legal holiday as specified in ORS 279B.020, except for employees who are excluded under ORS 653.010 to 653.261 or under 29 U.S.C. 201 to 209 from receiving overtime.
 - b. Pursuant to ORS 279B.235(1)(b), the Contractor shall comply with the prohibition set forth in ORS 652.220. Such compliance is a material element of this Contract and failure to comply is a breach that entitles the County to terminate the Contract for cause.
 - c. Pursuant to ORS 279B.235(1)(c), the Contractor shall not prohibit any of the Contractor's employees from discussing the employee's rate of wage, salary, benefits or other compensation with another employee or another person and may not retaliate against an employee who discusses the employee's rate of wage, salary, benefits or other compensation with another employee or another person.
 - d. Pursuant to ORS 279B.235(5)(b), the Contractor shall notify, in writing, any person employed by the Contractor under this Contract, either at the time of hire or before Work begins 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 Contractor may require the employees to work.

- 12. WORKERS' COMPENSATION. If the Contractor is a subject employer for workers' compensation or unemployment insurance purposes, Contractor shall provide such workers' compensation and unemployment coverage benefits at its sole cost and expense and shall

provide proof of such insurance and benefits at the County's request. The parties hereto specifically agree that this Contract will render the Contractor and the Contractor's employees, if any, ineligible for benefits under ORS 656.029 and that the County shall not be liable for, responsible for, or in any way or manner be required to provide, workers' compensation benefits for the Contractor or the Contractor's employees.

13. COMPLIANCE WITH LAWS. The Contractor shall comply with all federal, state, and local laws, codes, regulations and ordinances applicable to the provision of services under this Contract, including, without limitation, the provisions of: (i) Title VI of the Civil Rights Act of 1964; (ii) Section V of the Rehabilitation Act of 1973; (iii) the Americans with Disabilities Act of 1990 (Pub L No 101- 336), ORS 659.425, and all amendments of and regulations and administrative rules established pursuant to those laws; and (iv) all other applicable requirements of federal and state civil rights and rehabilitation statutes, rules, and regulations. Any violation by Contractor of any applicable law required in the provision of services hereunder shall constitute breach of this Contract, and Contractor shall be solely liable for any and all claims arising out of, connected with, or as a result of the violation.

14. COMPLIANCE WITH PROCUREMENT STATUTES. The Contractor shall comply with the following statutory regulations pertaining to public construction contracts:
 - a. The Contractor shall make payment promptly, as due, to all persons supplying to the Contractor labor or material for the performance of the Work provided for in this Contract. ORS 279C.505(1)(a).
 - b. The Contractor shall pay all contributions or amounts due the Industrial Accident Fund from the Contractor or first-tier subcontractor incurred in the performance of this Contract. ORS 279C.505(1)(b).
 - c. The Contractor shall not permit any lien or claim to be filed or prosecuted against the state or a county, school district, municipality, municipal corporation or subdivision thereof, on account of any labor or material furnished. ORS 279C.505(1)(c).
 - d. The Contractor shall pay to the Department of Revenue all sums withheld from employees under ORS 316.617. ORS 279C.505(1)(d).
 - e. The Contractor shall demonstrate upon request that an employee drug testing program is in place. ORS 279C.505(2).
 - f. The Contractor shall salvage or recycle construction and demolition debris if feasible and cost effective. In contracts for lawn and landscape maintenance, the Contractor shall compost or mulch yard waste material at an approved site if feasible and cost-effective. ORS 279C.510(1).
 - g. The Contractor and any subcontractor shall promptly pay, as due, all persons supplying labor and services furnished to the Contractor or first-tier subcontractor by any person in connection with this Contract as the claim becomes due. If the Contractor or subcontractor fails to pay any such claim, the County may pay the claim and charge the payment against the funds due or to become due the Contractor by reason of the Contract. ORS 279C.515(1).
 - h. The Contractor and/or any first-tier subcontractor shall make payment to any person furnish labor or materials in connection with this Contract within 30 days after receipt of payment from the County or the Contractor. The Contractor or first-tier subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10-day period that payment is due under ORS 279C.580(4) and ending upon final payment, unless payment is subject to a good

faith dispute as defined in ORS 279C.580. The rate of interest charged to the Contractor or first-tier subcontractor on the amount due shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve district that includes Oregon on the date that is 30 days after the date when payment was received from the contracting agency or from the Contractor, but the rate of interest may not exceed 30 percent. The amount of interest may not be waived. ORS 279C.515(2).

- i. The Contractor or any subcontractor shall make payment to any person furnishing labor or materials in connection with this Contract. The person may file a complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580. ORS 279C.515(3).
- j. The Contractor and any subcontractor shall comply with all applicable provisions of federal, state or local statutes, ordinances and regulations dealing with the prevention of environmental pollution and the preservation of natural resources that affect the Work under the Contract. ORS 279C.525.
- k. The Contractor shall promptly, as due, make payment to any person, co-partnership, association or corporation furnishing medical, surgical and hospital care services, or the needed care and attention incident to sickness or injury, to the employees of the Contract, of all sums that the Contractor agrees to pay for the services 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, pursuant to ORS 279C.530(1).
- l. If the Contractor is a subject employer, the Contractor shall comply with ORS 656.017. ORS 279C.530(2).
- m. No person shall be employed by the Contractor for more than ten hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where public policy absolutely requires it, and in such cases the laborer shall be paid at least time-and-a-half pay for all overtime in excess of 40 hours a week and for Work performed on any legal holiday specified in ORS 279C.540.
- n. The Contractor shall comply with maximum hours of work, holidays and overtime per ORS 279C.540 and time limit on claims for overtime per ORS 279C.545.
- o. The Contractor shall comply with ORS 279C.550 through 279C.570 regarding withholding of retainage. The withholding of retainage by the Contractor shall be in accordance with ORS 701.420 and 701.430.
- p. The Contractor shall comply with ORS 279C.570 regarding prompt payment, progress payments, and rate of interest.
- q. The Contractor shall include in each subcontract for property or services entered into by the Contractor and a first-tier subcontractor, including a material supplier, for the purpose of performing a construction contract: (i) a payment clause that obligates the Contractor to pay the first-tier subcontractor for satisfactory performance under its subcontract within 10 days out of such amounts as are paid to the Contractor by the County; and (ii) an interest penalty clause that obligates the Contractor, if payment is not made within 30 days after receipt of payment from the contracting agency, to pay to the first-tier subcontractor an interest penalty on amounts due in the case of each payment not made in accordance with the payment clause included in the subcontract. These clauses must also be included in each of the Contractor's subcontracts and in each of the first-tier subcontractor's subcontracts and each of the first-tier subcontractor's, subcontractors shall include these clauses in their subcontracts with each lower-tier subcontractor or supplier. ORS 279C.580.

- r. The Contractor and any subcontractor shall comply with ORS 279C.605 regarding Notice of Claim.
- s. The Contractor shall not discriminate against a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns or an emerging small business, in the awarding of subcontracts. ORS 279A.110
- t. Unless contrary to federal law, the Contractor shall not accept a bid from Subcontractors to perform the work as described in ORS 701.005 under this Contract unless such subcontractors are registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 at the time they submit their bids to the Contractor.
- u. Unless contrary to federal law, the Contractor shall certify that each landscape contractor, as defined in ORS 671.520(2), performing Work under this Contract holds a valid landscape contractor's license issued pursuant to ORS 671.560.
- v. The following notice is applicable to contractors who perform excavation work:
ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center at (503)232-1987.

15. PREVAILING WAGE REGULATIONS.

- a. This Contract is subject to the following Bureau of Labor and Industries (BOLI) wage requirements and the prevailing wages rates set forth in the following booklet, as amended, which is incorporated herein by reference with the same force and effect as though fully set forth herein, and is available at the following web link:
http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx
 - Prevailing Wage Rates for Public Works Contracts in Oregon issued June 2023.
 - Prevailing Wage Rates Apprenticeship Rates issued June 2023.
- b. The Contractor shall provide the County with a copy of the certified payroll weekly for recording purposes. ORS 279C.860; OAR 839-025-0010
- c. 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. ORS 279C.830(2); OAR 839-025-0020(e)
- d. Workers employed under this Contract shall be paid not less than the applicable state prevailing rate of wage. ORS 279C.830(1)(c); OAR 839-025-0020(3)(a)
- e. If the Project is subject to both the state prevailing wage rate law and the federal Davis-Bacon Act, the Contractor shall pay the higher of the applicable state or federal prevailing rate of wage. ORS 279C.830(1)(b); OAR 839-025-0020(4)(c)
- f. If the Contractor fails to pay for labor and services, the County can pay for them and withhold these amounts from payments to the Contractor. ORS 279C.515; OAR 839-025-0020(2)(a)
- g. The Contractor must pay daily, weekly, weekend and holiday overtime as required in ORS 279C.540. ORS 279C.520(1); OAR 839-025-0020(2)(b)
- h. The employer must give written notice to the workers of the number of hours per day and days per week they may be required to work. ORS 279C.520(2); OAR 839-025-0020(2)(c)

- i. The Contractor must make prompt payment for all medical services for which the Contractor has agreed to pay, and for all amounts for which the Contractor collects or deducts from the worker's wages. ORS 279C.530; OAR 839-025-0020(2)(d)
 - j. The Contractor must 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. ORS 279C.830(2)(b); OAR 839-025-0020(2)(e)(B)
 - k. The Contractor shall certify that all subcontractors performing work described in ORS 701.005(2) will be registered with the Construction Contractors Board or licensed by the State Landscape Contractors Board in accordance with ORS 701.035 to 701.055 before the subcontractors commence Work under the Contract.
16. **INDEMNIFICATION.** The Contractor shall defend, indemnify, and hold harmless the County, its officers, agents, and employees from any claims, liabilities, demands, damages, actions, or proceedings arising from or relating to the acts or omissions of the Contractor in connection with the performance of any services required hereunder. The Contractor shall be responsible for any damage to property, injury to persons, and any loss, expense, inconvenience, and/or delay that may be caused by, or result from, the carrying out of services under this Contract.
- a. Environmental Contamination. The Contractor will be held responsible for and shall indemnify, defend (with counsel of the County's choice) and hold harmless the County from and against any costs, expenses, damages, claims, and causes of action, including attorney fees, or any of them, resulting from all spills, releases, discharges, leaks and disposal of environmental pollution, including storage, transportation, and handling during the performance of the Contract which occur as a result of, or are contributed to, the negligence or actions of Contractor or its personnel, agents, or subcontractors or any failure to perform in accordance with the Contract Documents, except to the extent otherwise void under ORS 30.140.
17. **RISK OF LOSS.** The risk of loss or damage to the subject matter of this Contract arising from any cause whatsoever, including acts of God, shall be upon the Contractor until such time as the County has accepted the Work as required hereunder.
18. **INSURANCE.** Unless otherwise stipulated in the Contract Documents, the Contractor shall, at its expense, obtain the following insurance coverage and keep them in effect during the entire term of this Contract:
- a. Comprehensive General Liability Insurance (including contractual liability and completed operations coverage) with a per occurrence limit of not less than \$2,000,000 and an aggregate limit of not less than \$4,000,000, covering all activities and operations of the Contractor.
 - b. Commercial Automobile Liability Insurance, with a per occurrence limit of not less than \$2,000,000 and an aggregate limit of not less than \$4,000,000, for all owned, non-owned, and hired vehicles used in the performance of the services required hereunder; and
 - c. Additional Insurance Requirements:
 - i. All insurance policies shall be written on an occurrence basis and be in effect for the term of this Contract. Written authorization from the County is required for any insurance policy written on a claims-made basis. Any insurance policy authorized to be written on a claims-made basis shall be in

effect for the term of this Contract plus for three (3) years after the termination of this Contract.

- ii. Insurance coverage shall apply on a primary and non-contributory basis.
- iii. Prior to commencing services, the Contractor shall furnish current Certificate(s) of Insurance for all required insurance to the County. The insurance must be provided by an insurance company or entity that is authorized to transact the business of insurance and issue coverage in the State of Oregon, with an AM best rating of at least A-. The Certificate shall provide, by policy endorsement, if necessary, that the County, its officers, employees, agents, and volunteers are additional insureds with respect to the Contractor's services provided under this Contract and that there shall be no cancellation, termination, non-renewal, material change to, potential exhaustion of aggregate limits, or reduction of limits of the required insurance without at least 30 days written notice from the Contractor or its insurer to the County. If requested, the Contractor shall provide complete copies of insurance policies to the County.

19. **BONDS REQUIRED.**

- a. Performance and Payment Security. The Contractor shall furnish bonds issued by a surety approved by the County covering faithful performance of this Contract and payment of obligations arising thereunder. The cost of the bonds shall be equal to 100 percent of the Contract's total not-to-exceed amount. The Contractor shall deliver the required bonds to the County not later than the date of execution of the Contract, or if the Work is to be commenced prior thereto in response to a letter of intent, the Contractor shall, prior to commencement of the Work, submit evidence satisfactory to the County that such bonds will be furnished. The Contractor shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney. Upon request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.
- b. Public Works Bond. Throughout the term of the Contract, the Contractor shall have on file with the Construction Contractors Board a public works bond in compliance with ORS 279C.836 and OAR 839-025-0015, unless otherwise exempt under those provisions. The Contractor shall also include in every subcontract a provision requiring a subcontractor to have a public works bond filed with the Construction Contractors Board before starting the Work, unless otherwise exempt, and shall verify that the subcontractor has filed a public works bond before permitting the subcontractor to start Work.

20. **TERMINATION.**

- a. County's Termination for Convenience. The County may terminate this Contract in whole or in part whenever the County determines that termination of the Contract is in the best interest of the County. The County will provide the Contractor with written notice of a termination for convenience at least thirty (30) calendar days before the intended termination date. By the termination date, the Contractor shall provide the County with immediate and peaceful possession of the Project site. Such termination shall be without liability or penalty, and in no circumstance shall Contractor be entitled to lost profits for work not performed due to termination. No

termination for convenience shall prejudice any obligations or liabilities of either party already accrued prior to the effective date of termination.

- b. County's Termination for Cause. The County may immediately terminate this Contract without liability or penalty for either of the following causes by the mailing of written notice to the Contractor at the Contractor's address provided herein, specifying the cause:
- i. The Contractor breaches any of the provisions of this Contract;
 - ii. The Contractor no longer holds all licenses or certificates that are required to perform the services required under this Contract;
 - iii. The County lacks lawful funding, appropriations, limitations, or other expenditure authority at levels sufficient to allow the County, in the exercise of its reasonable discretion, to pay for the Contractor's services; or
 - iv. Federal, state, or local laws, regulations, or guidelines are modified or interpreted in such a way that either the services under this Contract are prohibited, or the County is prohibited from paying for such services from the planned funding source.
- c. Contractor's Termination for Cause. The Contractor may terminate this Contract for cause if the County fails to pay the Contractor pursuant to this Contract. The Contractor may also terminate this Contract for cause if the County commits any material breach or default of any covenant, warranty, obligation, or agreement under this Contract and such breach or failure is not cured within thirty (30) calendar days after delivery of the Contractor's notice, or such longer period as the Contractor may specify in such notice.
21. **FORCE MAJEURE.** Neither the County nor the Contractor shall be held responsible for delay or default caused by fire, riot, civil disobedience, acts of God, or war where such cause was beyond the reasonable control of the County or the Contractor. The Contractor shall, however, make all reasonable efforts to remove or eliminate such a cause of delay or default and shall, upon the cessation of the cause, diligently pursue performance of its obligations under this Contract. The risk of loss or damage to the subject matter of this agreement shall be upon the Contractor until such time as the County has accepted the services required hereunder.
22. **ASSIGNMENT; DELEGATION; SUCCESSOR.** The Contractor shall not assign, delegate, nor transfer any of its rights or obligations under this Contract without the County's prior written consent. The County's written consent does not relieve the Contractor of any obligations under this Contract, and any assignee, transferee, or delegate is considered the Contractor's agent. The provisions of this Contract shall be binding upon and shall inure to the benefit of the parties to the Contract and their respective successors and assigns.
23. **GOVERNING LAW, JURISDICTION, VENUE, & ATTORNEY FEES.** This Contract shall be governed and construed in accordance with the laws of the State of Oregon, without resort to any jurisdiction's conflict of laws rules or doctrines. Any claim, action, suit, or proceeding (collectively, "the claim") between the County (and/or any other agency or department of Yamhill County) and the Contractor that arises from or relates to this Contract shall be brought and conducted solely and exclusively within the Circuit Court of Yamhill County for the State of Oregon. Provided, however, if the claim must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. The Contractor hereby consents to the *in*

personam jurisdiction of said courts. Each party shall be responsible for the party's own attorney fees, costs, and disbursements at all times including appeals.

24. RECORDS. The Contractor shall maintain all fiscal records relating to this Contract in accordance with generally accepted accounting principles. In addition, the Contractor shall maintain any other records pertinent to this Contract in such a manner as to clearly document the Contractor's performance hereunder. The Contractor acknowledges and agrees that the County, the Oregon Secretary of State's Office, the Federal Government and their duly authorized representatives shall have access to such fiscal records and all other documents that are pertinent to this Contract for the purpose of performing audits and examinations and making transcripts and excerpts. All such fiscal records and pertinent documents shall be retained by the Contractor for a minimum of six (6) years (except as required longer by law) following final payment and termination of this Contract, or until the conclusion of any audit, controversy or litigation arising out of or related to this Contract, whichever date is later.
25. NOTICES. All notices, bills, and payments shall be made in writing and may be given by personal delivery or by mail. Notices, bills, and payments sent by mail should be addressed as follows:
- County: Randal S. Saunders
RSS Architecture, PC
2225 Country Club Road
Woodburn Oregon 97071
(503) 982-1211
- Contractor: Eric Ross
Ross Builders Northwest, LLC
3155 SE Century Blvd, Ste B
Hillsboro, OR 97123
(503) 523-6868
26. FOREIGN CONTRACTOR. If the Contractor is not domiciled in or registered to do business in the State of Oregon, the Contractor shall promptly provide to the Oregon Department of Revenue and the Secretary of State Corporation Division all information required by those agencies relative to this Contract. The County shall withhold final payment under this Contract until the Contractor has met this requirement.
27. TAX CERTIFICATION. The Contractor hereby certifies that it is not in violation of any Oregon Tax Laws and that it shall continue to comply with Oregon Tax Laws during the term of this Contract. Pursuant to ORS 279B.045, the Contractor's failure to comply with the Oregon Tax Laws is considered a default for which the County may terminate the Contract and seek damages and other relief as available. For purposes of this certification, "Oregon Tax Laws" means those programs listed in ORS 305.380(4).
28. WAIVER. The failure of either party to enforce any provision of this Contract shall not constitute a waiver by that party of that or any other provision of this Contract, or the waiver by that party of the ability to enforce that or any other provision in the event of any subsequent breach.

29. ENTIRE AGREEMENT. This Contract constitutes the entire agreement between the parties on the subject matter hereof. No waiver, consent, modification or change of terms or provisions of this agreement shall bind either party unless in writing and signed by both parties. Such waiver, consent, modification, or change, if made, shall be effective only in the specific instance and for the specific purpose given. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this agreement.
30. COUNTERPARTS. This Contract and any subsequent amendments may be executed in any number of counterparts (including by facsimile, PDF, or other electronic transmission), each of which so executed shall be deemed to be an original, and such counterparts shall together constitute one agreement binding on all parties.
31. SEVERABILITY. If any provision of this Contract shall be held invalid or unenforceable by any court or tribunal of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision, and the obligations of the parties shall be construed and enforced as if the Contract did not contain the particular term or provision held to be invalid.
32. SURVIVAL. All rights and obligations shall cease upon termination of this Contract, except for those rights and obligations that by their nature or express terms survive termination of this agreement. Termination shall not prejudice any rights or obligations accrued to the parties prior to termination.

THIS AGREEMENT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES. NO WAIVER, CONSENT, MODIFICATION OR CHANGE IN TERMS OF THIS AGREEMENT SHALL BIND EITHER PARTY UNLESS IN WRITING AND SIGNED BY BOTH PARTIES. SUCH WAIVER, CONSENT, MODIFICATION OR CHANGE, IF MADE, SHALL BE EFFECTIVE ONLY FOR THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS OR REPRESENTATIONS, ORAL OR WRITTEN NOT SPECIFIED HEREIN REGARDING THIS AGREEMENT. THE CONTRACTOR, BY SIGNATURE OF ITS AUTHORIZED REPRESENTATIVE, HEREBY ACKNOWLEDGES THAT HE/SHE HAS READ THIS AGREEMENT, UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

[remainder of page intentionally blank; signature page follows]

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed, this Contract on the date indicated by their duly authorized officials.

ROSS BUILDERS NORTHWEST, LLC

[Signature]
Signature

Eric L. Ross
Name (printed)

Owner
Title

10/20/2023
Date

YAMHILL COUNTY

[Signature]
Chair, LINDSAY BERSCHAUER

[Signature]
Commissioner, MAKY STARRETT

[Signature]
Commissioner, KIT JOHNSTON

11.2.23
Date

APPROVED AS TO FORM:

[Signature]
By:
Jodi Gollehon, Assistant County Counsel

APPROVED AS TO CONTENT:

[Signature]
By:
Joe Moore, Facilities Manager

Accepted by Yamhill County
Board of Commissioners on
11.2.23 by Board Order
#BO.23-415

PROJECT MANUAL
Including Specifications
for Construction of

310 NORTHEAST KIRBY STREET REMODEL

FOR

YAMHILL COUNTY PUBLIC HEALTH
412 NORTHEAST FORD STREET
MCMINNVILLE, OREGON 97128
(503) 434-7525

Prepared by

RSS ARCHITECTURE, P.C.
2225 Country Club Road
Woodburn, Oregon 97071
(503) 982-1211

Architect's Project No. 23.05

JUNE 2023

Project No. 23.05
Division 0 - Inside Cover Page
Section 00000
page 1



PROJECT MANUAL
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Architect's Project No. 23.05

JUNE 2023

Project No. 23.05
Division 0 - Project Directory
Section 00002
page 1

PROJECT DIRECTORY

Owner: Yamhill County Public Health
412 Northeast Ford Street
McMinnville, Oregon 97128
(503) 434-7525
Bill Michielsen, MPH; CPH

Architect: **RSS ARCHITECTURE, P.C.**
2225 Country Club Road
Woodburn, Oregon 97071
(503) 982-1211
Randal S. Saunders, Architect/President

Plumbing Engineer: CBD ENGINEERING, LLC
35468 Riverside Drive Southwest
Albany, Oregon 97321
(541) 619-7287
David Bachmeier, P.E.

END OF PROJECT DIRECTORY

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SECTION 00030

INVITATION TO BID

1 PART 1 GENERAL

1.1 NOTICE TO BIDDERS

- A. Sealed bids for the 310 Northeast Kirby Street Remodel project will be received by Lincoln County until 2:00 p.m. local time; Thursday August 24 6, 2023. Bids are due at the receptionist counter in the Yamhill County Public Health building at 412 Northeast Ford Street; McMinnville, Oregon 97128. Bid opening will be conducted in the conference room of the same building. Bid proposals received will be publicly opened and read aloud at 4:00 p.m. local time; on Thursday August 24, 2023. The project consists of demolition and reconstruction in various spaces at 310 Northeast Kirby Street; McMinnville, Oregon 97128.
- B. In accordance with State Law, Yamhill County uses and incorporates the Oregon Attorney General's Model Public Contract Rules (Oregon Administrative Rules) Chapter 137, Division 46, Division 47, Division 49, and Division 40 (Public Improvements) into contract documents related to this project.
- C. Vendors shall use recyclable products to the maximum extent economically feasible in the performance of the contract work set forth in this document. Bidder shall specify the minimum, if not exact, percentage of recycled paper in paper products or recycled product in products offered, and both the post consumer and secondary waste content regardless of whether the product meets what percentage of recycled material respecified for recycled paper or recycled products in ORS 279A.010 and ORS 279A. For paper products the bidder shall also specify the fiber type. The contractor may certify a zero percent recycled paper or product.

1.2 PRE-BID CONFERENCE

- A. All prospective General Contractor bidders are required to attend a mandatory pre-bid conference at the project site on Thursday August 17, 2023 at 3:00 p.m. local time. Pre-bid conference will be held at the project site; meet in the entry lobby at 310 Northeast Kirby Street; McMinnville, Oregon 97128. The pre-bid conference is to assist prospective bidders with comprehension of the Project Documents and required scope of work. Attendance will be taken and only those General Contractors registered in attendance will be allowed to submit a bid proposal. Sub-contractors intending to bid the project are strongly encouraged to attend the pre-bid conference. Attendance at the pre-

1.2 PRE-BID CONFERENCE (CONTINUED)

- A. (continued) bid conference by Sub-contractors is not mandatory.

1.3 PROJECT DOCUMENTS

- A. Project Documents, consisting of Specifications, Drawings, Bid Forms, Addenda, and Agreement Documents may be examined at the office of **RSS ARCHITECTURE, P.C.**, 2225 Country Club Road, Woodburn, Oregon 97071; (503) 982-1211, and at the following locations:

Yamhill County Public Health	McMinnville, Oregon
Oregon Contractor Plan Center	Clackamas, Oregon
Eugene Builders Exchange	Eugene, Oregon
McGraw-Hill Construction Dodge	Portland, Oregon
DJC Plan Center	Portland, Oregon
Salem Contractors Exchange	Salem, Oregon
Willamette Valley HBA & Bid Center	Corvallis, Oregon
Reed Construction Data	Portland, Oregon

- B. Copies of the Bid/Contract Documents may be PURCHASED by prospective bidders from SALEM PRINTING & BLUEPRINT, 475 Ferry Street, Salem, Oregon 97301, (503) 363-6097 for the cost of reproduction and, if desired, cost of shipping. THERE IS NO DEPOSIT OR REFUND ON THESE DOCUMENTS; prospective bidders will purchase documents for their own use. Project Documents can be shipped to Contractors via mail/package service "cash on delivery" (c.o.d). Bonafide prime bidders MUST register their business name, address, and telephone number when purchasing documents in order to receive any addenda or other pertinent information. FAILURE TO DO SO IS SOLELY THE RESPONSIBILITY OF THE BIDDER.
- C. Bidders are advised to obtain copies of all portions of all Project Documents. Neither the Owner or Architect will be responsible for use of partial or incomplete sets of documents by prospective Bidders.

1.4 BID SUBMITTAL & BOND REQUIREMENTS

- A. No bid will be considered unless fully completed in the manner provided in the "Instructions to Bidders" upon the bid form provided by the Architect and accompanied by a bid bond, cashiers check or certified check executed in favor of Yamhill County; McMinnville, Oregon in an amount not less than 10% of the total amount of the bid. Bid bonds will be accompanied by power of attorney bearing the same date as the bond. Bid bond, cashiers check, or certified check to be forfeited as a fixed and liquidated damage should the bidder neglect or refuse to enter into a contract and provide suitable bond for the faithful performance of the work in the event the contract is awarded to them. FACSIMILE/ELECTRONIC COPIES OF THE ABOVE MENTIONED DOCUMENTS SHALL BE REJECTED.

1.4 BID SUBMITTAL & BOND REQUIREMENTS (CONTINUED)

- B. The successful bidder will be required to furnish a performance and labor & material bond in the amount of one hundred percent (100%) of the Contract as security for the faithful performance of this contract and as security for payment of all persons performing labor under this contract and furnishing materials in connection with this contract. FACSIMILE/ELECTRONIC COPIES OF THE ABOVE MENTIONED DOCUMENTS SHALL BE REJECTED.
- C. No bid will be considered unless the FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM is submitted no later than the advertised bid opening date and time: 4:00 p.m. local time, Thursday August 24, 2023. It is the responsibility of the Bidder to separately submit the DISCLOSURE FORM and any additional sheets, with the Project Name clearly marked, at the location indicated by the specified Disclosure Deadline. FACSIMILE/ELECTRONIC COPIES OF THE ABOVE MENTIONED DOCUMENTS SHALL BE REJECTED.
 - 1. The first tier subcontractor list may be submitted with the sealed bid at bid submittal deadline: 2:00 p.m. local time; Thursday August 24, 2023 at the bidders' preference.

1.5 PREVAILING WAGE RATES & WORKERS COMPENSATION INSURANCE

- A. The successful bidder and all subsequent subcontractors shall comply with requirements of ORS 279C.800 to 279C.870 and produce appropriate certificates indicating compliance.
- B. The successful bidder and all subsequent subcontractors shall comply with ORS 656.017, Oregon Workers' Compensation Law, and produce appropriate certificates that they have complied.
- C. All subject employers working under this contract shall either be employers that will comply with ORS 656.0171.6 or employers that are exempt under ORS 656.126.
- D. The successful Bidder Shall comply with the minimum rates for wages for laborers and mechanics as determined by the Secretary of Labor in accordance with the provisions of the Davis-Bacon and related acts.

1.6 RESIDENT BIDDER

- A. Yamhill County will not consider a bid proposal unless it contains a statement as to whether a bidder is a resident bidder as defined in ORS 279A.120.

1.7 CONTRACTOR REGISTRATION

- A. Yamhill County will not consider a bid proposal unless it contains a statement by the bidder that they are certified/registered with the Oregon Construction Contractors Board, in accordance with ORS Chapter 700.

1.8 NON-COLLUSION AFFIDAVIT

- A. All Bidders shall certify on the Bid Form their bid has been arrived at by the bidder independently and has been submitted without any collusion designed to limit independent bidding or competition. All Bidders shall certify on the Bid Form no member, officer, or employees of Yamhill County or its designees or agents, no member of the governing body of Yamhill County and no other public official of Yamhill County exercises any functions or responsibilities with respect to this contract during his/her tenure or for one year thereafter, shall have any interest, direct or indirect, in work to be performed in connection with this contract. All contractors shall incorporate, or cause to be incorporated, in all subcontracts a provision prohibiting such interest. Yamhill County will not consider a bid proposal unless it contains a non-collusion affidavit, part of the Bid Proposal form, signed by the bidder.

1.9 LOWEST RESPONSIBLE BIDDER

- A. In determining the Lowest Responsible Bidder Yamhill County will utilize standards of responsibility as outlined in ORS 279C.375. This may include referencing the Oregon Construction Contractors Board (CCB) Web Site to determine, "Contractors Not Qualified to Hold or Bid Upon Public Contracts or Public Improvement Projects". The Internet URL for the CCB Home Page is: <http://www.oregon.gov/CCB/pages/index.aspx>. Verification of current list information may be followed up with telephone contact with the CCB Office.

1.10 RIGHTS OF YAMHILL COUNTY

- A. It is the intent of Yamhill County to award a Contract to the lowest responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed funds available. Yamhill County shall have the right to waive informalities or irregularities in a Bid received and to accept the Bid which, in Yamhill County's judgement, is in Yamhill County's own best interests.

Bill Michielsen; MPH, CPH
Yamhill County Public Health
McMinnville, Oregon

SECTION 00100

INSTRUCTIONS TO BIDDERS

1 PART 1 GENERAL

1.1 STATEMENT OF WORK

- A. The work contemplated under this Contract is to include all necessary superintendence, labor, equipment, tools, and accessories, transportation, materials, and services necessary for and reasonably incidental to the 310 Northeast Kirby Street Remodel project. The project address is: 310 Northeast Kirby Street; McMinnville, Oregon 97128. The work is to be completed in all respects and in full conformity with the Contract Documents.

1.2 PRE-QUALIFICATION

- A. For the purpose of this project the Owner elects to not pre-qualify Bidders. The submittal of a bid bond, performance and labor bond, and certificate of insurance shall be required as specified within the Contract Documents.
- B. The Owner requires attendance at the pre-bid conference by General Contractor Bidders as delineated in the Invitation to Bid, paragraph 1.2.

1.3 EXISTING CONDITIONS AND DIMENSIONS

- A. Field verify existing conditions prior to bid opening. Request clarification from the Architect for conditions found that are in conflict with information shown on the drawings or specified PRIOR TO BID OPENING.
- B. Field verify existing dimensions prior to bid opening. Do not scale measurements or dimensions from the drawings. Bid errors resulting from scaled measurements/dimensions shall be solely the responsibility of the Bidder.
- C. Field verify dimensions of new openings, new construction, and new equipment/devices prior to ordering any material components subject to field dimensions. Successful bidder is responsible for dimensions which shall be confirmed and correlated at the project site for compatibility with project components intended to be a part of the Work.
- D. Project components ordered or obtained for incorporation with the work that are not compatible with verified dimensions shall be solely the responsibility of the successful Bidder.
- E. Where new utility infrastructure is to be integrated with existing utility infrastructure field verify

1.3 EXISTING CONDITIONS AND DIMENSIONS (CONTINUED)

- E. (continued) existing utilities are in place and of the type, size, and use as shown on the drawings. Field verify existing utility infrastructure is operating properly prior to connection to new infrastructure. Do not connect new utility infrastructure to abandoned or non-functioning existing utility infrastructure.
- F. Field verify existing structure materials prior to bid opening. Require clarification from the Architect for materials found that are in conflict with information shown on the Drawings or specified prior to bid opening. Bid errors resulting from failure to field verify existing structure materials shall be solely the responsibility of the successful Bidder.
- G. Failure to field verify existing conditions and new or existing dimensions by the Bidder will not be reason to change the Contract Sum after award of a Contract to the successful Bidder.
- H. Specified criteria of paragraphs A., B., C., D., E., and F. listed above apply to Work of the project prior to bid and during construction by the successful Bidder.

1.4 MECHANICAL, ELECTRICAL, AND PLUMBING WORK COORDINATION (IF ANY)

- A. Work of all utility and infrastructure systems sub-contractors shall be coordinated by the General Contractor.
- B. Work shall be coordinated to allow installation of utility systems and infrastructure without conflict in location, routing, and space use. Do not allow work without sub-contractor coordination prior to physical implementation.
- C. Verify utility systems interface compatibility prior to bid opening. Request clarification from the Architect for systems found that are in conflict with each other shown on the drawings or specified prior to bid opening. Failure to verify utility systems interface shall be solely the responsibility of the Bidder.
- D. Where new utility infrastructure is to be integrated with existing utility infrastructure field verify existing utilities are in place and of the type, size, and use as shown on the drawings. Field verify existing utility infrastructure is operating properly prior to connection to new infrastructure. Do not connect new utility infrastructure to abandoned or non-functioning existing utility infrastructure.
- E. Specified criteria of paragraphs A., B., and C. listed above apply to Work of the project prior to bid and during construction by the successful Bidder.

1.5 PROCUREMENT OF PROJECT DOCUMENTS

- A. Copies of the Bid/Contract Documents may be PURCHASED by prospective bidders from SALEM PRINTING & BLUEPRINT, 475 Ferry Street, Salem, Oregon 97301, (503) 363-6097 for the cost of reproduction and, if desired, cost of shipping. THERE IS NO DEPOSIT OR REFUND ON THESE DOCUMENTS; prospective bidders will purchase documents for their own use. Project Documents can be shipped to Contractors via mail/package service "cash on delivery" (c.o.d). Bonafide prime bidders MUST register their business name, address, and telephone number when purchasing documents in order to receive any addenda or other pertinent information. FAILURE TO DO SO IS SOLELY THE RESPONSIBILITY OF THE BIDDER.
- B. Bidders are advised to obtain copies of all portions of all Project Documents. Neither the Owner or Architect will be responsible for use of partial or incomplete sets of documents by prospective Bidders.

1.6 DEFINITIONS

- A. Bidding Documents include the Advertisement for Bids, Instructions to Bidders, the Bid Form, the proposed Contract Documents, and any Addenda issued prior to receipt of Bids.
- B. All definitions set forth in the General Conditions of the Contract for Construction or in other Contract Documents are applicable to the Bidding Documents.
- C. Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when Construction Contract is executed.
- D. A Bid is a complete and properly signed proposal to do the Work or designated portion thereof for the sums stipulated therein supported by data called for by the Bidding Documents.
- E. Base Bid is the sum stated in the Bid for which the Bidder offers to perform the work described as the Base Bid, to which Work may be added or deducted for sums stated in Alternate Bids (if any).
- F. An Alternate Bid (if any) is an amount stated in the bid to be added to the amount of the Base Bid if the corresponding change in Project scope or materials or methods of construction described in the Bidding Documents is accepted by the Owner.
- G. A Bidder is one who submits a Bid for a Prime Contract with the Owner for the Work described in the proposed Contract Documents.

1.6 DEFINITIONS (CONTINUED)

- H. A sub-bidder is one who submits a bid to a Bidder for materials or labor for a portion of the Work.

1.7 BIDDER'S REPRESENTATIONS

- A. Each Bidder by making their Bid represents they have read and understand ALL the Project Documents and their Bid is made in accordance therewith. The Bidder by making their Bid represents that they have visited the site and familiarized themselves with the local conditions under which the work is to be performed. The Bidder by making their Bid represents that the Bid is based upon the products, systems, and equipment described in the Project Documents WITHOUT EXCEPTIONS.
- B. Project Documents are available as specified herein. Neither the Owner or the Architect will be responsible for distribution of those documents. CONTRACTOR IS ADVISED TO EXAMINE ALL PORTIONS OF THE DOCUMENTS AS THEY FORM THE CONTRACT FOR CONSTRUCTION. Neither the Owner or the Architect will be responsible for use by the Contractor or subcontractor of partial or incomplete sets of documents.
- C. Each Bidder by making their Bid represents they have bid all portions of the project as delineated in the drawings and specifications - base bid, all alternate bids (if any), all unit prices (if any), all bid schedules (if any). Bidder shall provide a complete and fully inclusive bid, leaving no stipulated or incomplete portions. Submitted bids failing to meet any of the above criteria will be considered non-responsive and shall be rejected.

1.8 DISCREPANCIES AND AMBIGUITIES

- A. Discrepancies between drawings and specifications, omissions, doubt as to meaning, and other questions should be brought to the attention of the Architect not less than seven (7) days prior to bid opening, and they will be answered by addendum addressed to all prime bidders of record. Questions received less than seven (7) days before the bid opening date can not be answered by addendum.
- B. All Addenda issued during time of bidding will be incorporated into the Contract. NEITHER THE OWNER NOR THE ARCHITECT WILL BE RESPONSIBLE FOR ORAL INTERPRETATIONS. The Architect shall make all decisions regarding discrepancies between drawings and specifications, based upon which ever of the Contract Documents represents the original intent.
- C. Addenda will be issued to the Owner, plan exchanges, SALEM PRINTING & BLUEPRINT; and prime bidders of record

1.8 DISCREPANCIES AND AMBIGUITIES (CONTINUED)

- C. (continued) registered as purchasing documents. Neither the Owner or the Architect will be responsible for the distribution of Addenda to sub-contractors.

1.9 PRODUCT SUBSTITUTIONS

- A. Mention of special brands, materials, and devices on Drawings or in Specifications are for the purpose of establishing criterion of quality and character desired. Substitutions will be considered by the Architect when received seven calendar (7) days prior to bid opening and, if approved, will be confirmed in writing and published in Addenda prior to bid date.
- B. All requests for approval must be submitted in TRIPLICATE on the Construction Specifications Institute "Substitution Request Form" IN HARD COPY, most recent edition. Include a self-addressed stamped envelope; REQUESTS WITHOUT RETURN ENVELOPE/POSTAGE WILL NOT BE CONSIDERED. Requests received by the Architect less than seven (7) calendar days prior to bid opening will not be considered. FACSIMILE/ELECTRONICALLY TRANSMITTED SUBSTITUTION REQUESTS WILL NOT BE CONSIDERED. No substitutions will be considered after the Contract Awards unless specifically provided for in the Contract Documents.
- C. If the Architect approves any proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. BIDDERS SHALL NOT RELY UPON APPROVALS MADE IN ANY OTHER MANNER. NO RESPONSE FROM THE ARCHITECT IS NOT TO BE CONSTRUED AS AN ASSUMED APPROVAL.
- D. Review Specifications Sections 00600 and 01600 for additional product substitution information, criteria, and requirements.

1.10 BID FORMS AND BIDDING PROCEDURE

A. BID FORMS

1. Bid Form includes the Proposal, Bidder's Statement of Equal Opportunity Employment, Bidder's Statement of Non-Collusion, Bidders Statement of Local Labor Preference, and any attachments that may be included with the Proposal (e.g. List of Sub-contractors).
2. Bids shall be submitted on the Forms provided by the Architect.
3. All blanks on the bid Form shall be filled in by typewriter or manually in ink. Bidder shall bid all portions of the project as broken down on the bid form - base bid, all alternate bids (if any), all unit prices (if any), all bid schedules (if

1.10 BID FORMS AND BIDDING PROCEDURE (CONTINUED)

A. BID FORMS (CONTINUED)

3. (continued) any). Bidder shall complete the bid form in its entirety, leaving no blank, stipulated, or incomplete portions. Submitted bid forms failing to meet any of the above criteria are non-responsive and shall be rejected.
4. Where so indicated by the makeup of the Bid Form, sums shall be expressed in both words and figures, and in case of discrepancy between the two, the written amount shall govern.
5. Any interlineation, alteration, or erasure must be initialed by the signer of the Bid.
6. BIDDER SHALL MAKE NO ADDITIONAL STIPULATIONS ON THE BID FORM NOR QUALIFY THE BID IN ANY OTHER MANNER.
7. Each copy of the Bid shall include the legal name of the bidder and a statement whether the Bidder is a Sole Proprietor, Partnership, Corporation, or any other legal entity and each copy shall be signed by the person or persons legally authorized to bind the Bidder to a Contract.
8. A Bid by a Corporation shall further give the State of Incorporation and have the Corporate Seal affixed.
9. A Bid submitted by an Agent shall have a current Power of Attorney attached certifying Agent's authority to bind Bidder.
10. FACSIMILE/ELECTRONICALLY TRANSMITTED BID FORMS SHALL BE REJECTED.

B. BID SECURITY

1. Each Bid shall be accompanied with either a cashier's check, certified check, or Bid Bond payable to Yamhill County in a specific amount not less than ten (10) percent of the total proposed Bid price.
2. Bid Bond shall be furnished by a bonding company licensed to do business in the State of Oregon. Bid Bond shall be accompanied by power of attorney bearing the same date as the bond. Facsimile copies of the Bid Bond and Power of Attorney form shall be rejected.
3. Security of the successful Bidder to whom the contract is awarded will be returned when the Bidder's formal written Agreement, Performance and Payment Bond, and Certificate of Insurance have been properly executed, delivered to, and accepted by Yamhill County.
4. Yamhill County reserves the right to retain the Bid Security of the next two (2) lowest Bidders until the low Bidder enters into an agreement with Yamhill County or until no more than forty-five (45) calendar days after the Bid opening, whichever comes first. Bid Security

1.10 BID FORMS AND BIDDING PROCEDURE (CONTINUED)

B. BID SECURITY (CONTINUED)

4. (continued) of all other Bidders will be returned as soon as practicable after the Bid opening.
5. Any bidder with whom an Agreement is offered, who defaults in executing the Agreement or in furnishing the Performance & Payment Bond and Certificate of Insurance within the time and in the manner required shall forfeit its Bid Security, in whole or in part, as liquidated damages, but not as a penalty, up to the full amount of the Bid Security or the difference between the low Bid and the next acceptable Bid, whichever is greater.
6. In addition Yamhill County shall be entitled to payment for damages and expenses, including attorney fees, with or without action, to enforce the Owner's rights hereunder.
7. FACSIMILE/ELECTRONICALLY TRANSMITTED COPIES OF BID SECURITY SHALL BE REJECTED.

C. SUBMISSION OF BIDS

1. All copies of the Bid, the Bid Security, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the Owner and shall be identified with the Project name and the Bidder's name and address.
2. If the bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "BID ENCLOSED" on the face thereof.
3. Bids shall be deposited at or received by Yamhill County prior to the time and date for receipt of bids indicated in the Invitation to Bid for bids or any extension thereof made by Addendum. Bids shall be sent to/deposited with Yamhill County.

Mailing address for bid proposals is:

Yamhill County Public Health
412 Northeast Ford Street
McMinnville, Oregon 97128
Attention: Bill Michielsen; MPH, CPH

Mailed bid proposals will only be accepted if received prior to the date and time proposals are due as indicated in the Invitation to Bid.

Street address for bid proposals is:

Same as the mailing address above.

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

1.10 BID FORMS AND BIDDING PROCEDURE (CONTINUED)

C. SUBMISSION OF BIDS (CONTINUED)

5. Bidders shall assume full responsibility for timely delivery at location designated for receipt of Bids.
6. Oral, telephone, facsimile, e-mail, or telegraph Bids are invalid and will not receive consideration.
7. No bid will be considered unless the FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM is submitted as specified. It is the responsibility of the Bidder to submit the DISCLOSURE FORM and any additional sheets, with the Project Name clearly marked, at the location indicated by the specified Disclosure Deadline. FACSIMILE/ELECTRONICALLY TRANSMITTED COPIES OF THE ABOVE MENTIONED DOCUMENTS SHALL BE REJECTED.

D. MODIFICATION OR WITHDRAWAL OF BID

1. A Bid may not be modified, withdrawn, or canceled by the bidder for forty-five (45) days following the time and date designated for the receipt of Bids and Bidder so agrees in submitting a Bid.

E. NOTICE OF INTENT TO AWARD CONTRACT

1. When a decision is made regarding to whom Yamhill County intends to award the contract, the Owner will provide written notice to all project bidders of the Owner's intent to award the Contract in accordance with OAR 137-047-0610.
2. This notice shall constitute a final decision of Yamhill County if no written protest of the notice of award is filed with Yamhill County within fourteen (14) calendar days of the date of this Notice of Award pursuant to local contracting rules.

F. SUBCONTRACTORS LIST

1. THE SUCCESSFUL BIDDER SHALL SUBMIT TO THE ARCHITECT NO MORE THAN TWENTY-FOUR (24) HOURS AFTER NOTICE OF SELECTION A COMPLETE LIST OF ALL SUB-CONTRACTORS, MATERIAL SUPPLIERS, AND MANUFACTURERS PROPOSED FOR THIS WORK. Submission of a Bid by a Contractor shall signify the Bidder agrees with and will comply with provisions governing submission as stated in the Supplemental General Conditions. FAILURE TO COMPLY WITH THIS REQUIREMENT WILL RESULT IN REJECTION OF THE BID PROPOSAL.

G. TIME SCHEDULE OF THE WORK

1. Time is of the essence for this project. Bidder shall be cognizant of having to perform this work within the time frame indicated by said Bidder on

1.10 BID FORMS AND BIDDING PROCEDURE (CONTINUED)

G. TIME SCHEDULE OF THE WORK (CONTINUED)

1. (continued) the Bid Form. Failure to complete the work within the indicated time frame will result in the assessment of liquidated damages as described on the Bid Form.
2. Time frame proposed for completing the work will be a factor, in addition to bid sum, for awarding a contract for the work.

1.11 DRUG TESTING PROGRAM FOR PUBLIC IMPROVEMENT CONTRACTS

A. Pursuant to ORS 279C-505(2), Owner's performance under this Contract is conditioned upon the Contractor's compliance with the following contractor representations and warranties.

B. Contractor represents and warrants the following:

1. Contractor has at the time of the execution of this contract, and shall maintain during the term of this contract, an employee drug testing program for its employees that include, at a minimum, the following:
 - a) A written employee drug-testing policy,
 - b) Required drug testing for all new Subject Employees or alternatively, required testing of all Subject Employees every six (6) months on a random selection basis,
 - c) Required testing of a Subject Employee when the Contractor has reasonable cause to believe the Subject Employee is under the influence of drugs, and
 - d) Required testing of a Subject Employee when the Subject Employee is involved in:
 - an incident causing an injury requiring treatment by a physician, or
 - an incident resulting in damage to property or equipment.
2. A drug testing program that meets the above requirements will be deemed a "Qualifying Employee Drug-Testing Program". For the purposes of this section, an employee is a "Subject Employee" only if that employee will be working on the Project job site.

1.12 CRIMINAL HISTORY CHECK/PHOTOGRAPHIC IDENTIFICATION

A. The names of all Contractor and all Subcontractor employees who will be on the job site for more than one day must be submitted to These employees shall fill out a criminal history form provided. Criminal history checks will be processed through a public agency of the Owner's choosing. Yamhill County shall bear the cost of processing such criminal history checks.

1.12 CRIMINAL HISTORY CHECK/PHOTOGRAPHIC IDENTIFICATION
(CONTINUED)

- B. Yamhill County will prohibit employment or contract status of any individual who refuses to consent to a criminal history check or to be fingerprinted or falsely swears to the non-conviction of any crime.
- C. No individual found to have been convicted of any crime listed in ORS 342.143 or of an attempt to commit one of the listed crimes shall be allowed to work on any Yamhill County site.
- D. It is vital employees are instructed to accurately complete criminal history forms. Crimes listed in ORS 342.143 which automatically bar an individual from employment with or contracting with Yamhill County are primarily crimes of violence, crimes against children, and sex related crimes. Falsely swearing you have not been convicted of a crime shall cause Yamhill County to terminate employment or contract status even if the crime is not listed in ORS 342.143.
- E. All employees working on site for five or more days shall wear a Name and Photo Identification Badge. Any employee on site for five or fewer days shall wear a visitor badge. The general contractor shall provide all Visitor badges. The Photo ID badge shall be the responsibility of the Contractor to provide. Badge shall state Yamhill County name, name of the project, employee name, and company they represent.

1.13 ON SITE CONDUCT AND BEHAVIOR

- A. Foul language, swearing, and/or high volume conversations are not permitted on the project site.
- B. Firearms are not permitted on Yamhill County property.
- C. Alcohol or non-prescription drugs are not permitted on Yamhill County property. If prescription drugs are necessary, they shall not be in plain view.
- D. Pornographic materials are not permitted on Yamhill County property.
- E. Tobacco products of any kind are not permitted on Yamhill County property.

1.14 SAFETY AND SECURITY

- A. The Contractor shall adhere to the following safety and security requirements for the Contractor's safety and the safety of others:
 - 1. Contractor shall keep strict accountability for all personal items and tools to insure safety of clients and staff.

1.14 SAFETY AND SECURITY (CONTINUED)

A. (continued):

2. Lock all vehicles, canopies, etc., when not in use. Valuables should not be in plain view.
3. All occupational safety and health requirements pertaining to the work must be adhered to.
4. All posted traffic and speed signs must be followed.

END OF INSTRUCTIONS TO BIDDERS

SECTION 00300

BID FORM

Bid: Yamhill County Public Health
310 Northeast Kirby Street Remodel
McMinnville, Oregon

Time & Date: 2:00 p.m. local time, Thursday August 24, 2023
(BIDS ARE DUE)
4:00 p.m. local time, Thursday August 24, 2023
(BIDS WILL BE OPENED)

Mail To: Yamhill County Public Health
412 Northeast Ford Street
McMinnville, Oregon 97128
Attention: Bill Michielsen, MPH, CPH

Hand Delivery: Yamhill County Public Health
412 Northeast Ford Street
McMinnville, Oregon 97128

The undersigned Bidder declares they have carefully examined the drawings and the specifications, HAVE MADE AN EXAMINATION OF THE SITE OF THE PROPOSED WORK AND HAVE MADE SUCH INVESTIGATIONS NECESSARY TO DETERMINE THE CHARACTER OF MATERIAL AND THE CONDITIONS TO BE ENCOUNTERED. The undersigned hereby proposes to furnish all material and labor and perform all work to complete the Yamhill County Public Health 310 Kirby Street Remodel project in strict compliance with the Contract Documents as prepared by **RSS ARCHITECTURE, P.C.** and to be bound by the following:

Invitation to Bid
Instructions to Bidders
Bid Form
Contract Forms
General Conditions
Supplementary General Conditions
Prevailing Wage Rates for Public Works Contracts in Oregon
Referenced Oregon Revised Statutes
Specifications and Drawings
Addenda (if any)

BASIC BID

_____ Dollars

and _____ Cents (\$_____)

ALLOWANCES

The undersigned acknowledges including within the base bid sum shown above the cash allowance amount specified in section 01200, paragraph 1.2.F.1. FAILURE TO INCLUDE THE CASH ALLOWANCE AMOUNT SPECIFIED WITHIN THE BASE BID SUM SHALL BE GROUNDS FOR REJECTION OF THIS BID PROPOSAL.

ALTERNATES

The undersigned proposes to furnish all labor and materials, to perform all work relating to the following additive construction alternates as described in specification section 01030 ALTERNATES:

ADDITIVE ALTERNATE BID NO. 1. ADD all work to complete remodel work for the southwest corner of the building as shown on the drawings and specified herein.

ADD _____ Dollars and _____ Cents (\$ _____)

ADD _____ Calendar days to the Project Completion Date listed below.

ADDENDA

The following Addenda have been received and their costs are included in this Bid Proposal:

- Addendum No. _____ Date _____

COMPLETION DATE

IT IS UNDERSTOOD TIME IS OF THE ESSENCE AND THE COMPLETION DATE INDICATED BELOW WILL BE A CONSIDERATION IN AWARDING THE BID.

Basic Bid Completion Date: the undersigned agrees to complete the project, in total, and be ready to depart the site, punch list and project paperwork completed, no later than _____ calendar days after receiving formal written notice to proceed. It is understood the completion date listed above takes into account the average climatic range and usual industrial conditions prevailing in this locality.

The undersigned agrees, if awarded the Contract, to execute and deliver to the Owner, through the Architect, within ten (10) days after receiving the Contract Form an Agreement and a satisfactory Performance and Payment bond in an amount equal to one hundred percent (100%) of the Contract Sum using forms called for by the Owner. The undersigned further agrees to prepare and deliver to the Owner, through the Architect, a schedule of values, subcontractor list, products list, and project schedule within the time period specified for each item indicated in the project specifications.

LIQUIDATED DAMAGES

It is further agreed unless extended in accordance with "The General Conditions of the Contract for Construction" the undersigned will pay, as liquidated damages to the Owner for any delay beyond the completion date named above the sum of one thousand dollars and no cents (\$1,000.00) per calendar day for each day required beyond that date.

GUARANTEE OF BID

The undersigned agrees to guarantee all bids for a period of forty-five (45) calendar days.

BID BOND

The undersigned agrees the bid security accompanying this proposal is the measure of liquidated damages which the Owner will sustain by the failure of the undersigned to execute and deliver the above named Agreement and surety; and that if the undersigned defaults in executing that agreement within ten (10) days of written notification of the award of the contract to them or in furnishing the surety, then the check or bid bond shall become the property of the Owner; but if this proposal is not accepted within forty-five calendar (45) days of the time set for the submission of the bids, or if the undersigned executes and delivers said contract and bond, the check or bid bond shall be returned.

PREVAILING WAGE RATES

It is agreed the undersigned shall comply with the requirements of ORS 279C.800 to 279C.870 if the cost of the project exceeds \$50,000.00. Reference PREVAILING WAGE RATE specification section included in the project manual. It is agreed the Owner shall pay a fee to the Bureau of Labor and Industries pursuant to the provisions of ORS 279C-825(1). The fee is one-tenth of one percent of the price of the Contract, but not less than \$250.00 or more than \$7,500.00, regardless of the Contract price.

WORKERS' COMPENSATION REQUIREMENTS

It is agreed the undersigned shall comply with the requirements of ORS 656.017, Oregon Workers' Compensation Law.

OWNER'S RIGHTS

It is the intent of Yamhill County to award a Contract to the lowest responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. Yamhill County shall have the right to waive informalities or irregularities in a Bid received and to accept the Bid which, in Yamhill County's judgement, is in Yamhill County's own best interests.

NON-COLLUSION AFFIDAVIT

The undersigned certifies the bid has been arrived at by the bidder independently and has been submitted without any collusion designed to limit independent bidding or competition. The undersigned further certifies that no official or employee of Yamhill County shall have any interest, direct or indirect, in work to be performed in connection with this contract. All contractors shall incorporate, or cause to be incorporated, in all subcontracts a provision prohibiting such interest.

CERTIFICATE OF REGISTRATION

The undersigned certifies that the Bidder is certified/registered with the Oregon Contractors Board in accordance with ORS Chapter 700.

By (name): _____

Title: _____

Date: _____

Name of Firm: _____

Address: _____

(City) (State) (Zip)

Telephone Number: _____

By: _____

(Signature of Authorized Official. If bid is a partnership, one of the partners must sign bid.)

Official Capacity: _____

If corporation, attest: _____

(Secretary of Corporation)

SEAL (if Corporate)

Corporation

Partnership

Individual

Oregon Contractors Board Registration Number: _____

EQUAL OPPORTUNITY EMPLOYMENT CERTIFICATION

I, _____ (name of bidder) certify:

1. All applicable Federal and Oregon State laws and regulations and all City policies and regulations pertaining to equal employment opportunities and employment discrimination on the basis of race, religion, age, mental or physical handicap, national origin, or sex will be complied with.
2. Affirmative steps must be taken to assure small, minority, and women-owned business and firms located in labor surplus areas are used when possible as sources of supplies, equipment, construction, and services. Affirmative steps shall include the following:
 - a. Include any such qualified firms on solicitation lists.

EQUAL OPPORTUNITY EMPLOYMENT CERTIFICATION (CONTINUED)

2. (continued)
 - b. Assure such firms are solicited whenever they are potential sources.
 - c. When economically feasible, divide total requirements into smaller tasks or quantities to permit such firms maximum opportunities for participation through subcontracting.
 - d. Where possible, establish delivery schedules which will encourage such participation.
 - e. Use the services and assistance of the Small Business Administration, the Office of Minority Business Enterprise (Department of Commerce), the Community Services Administration and other sources when appropriate.
3. During performance of the proposed Contract:
 - a. Bidder intends to use the following listed trades in performing the work:

(Subcontractors, material supplier and manufacturers list shall be submitted to the Architect within twenty-four (24) hours after official bid opening).
4. During performance of the proposed Contract, Bidder shall not discriminate against any subcontractor, employee, applicant for employment, or application for subcontract because of race, color, religion, sex, handicap, or national origin. Bidder shall take positive steps to achieve the goals of utilizing applicants for subcontracts and employment in the Work without regard to their race, color, religion, sex, handicap, or national origin.

Positive steps shall include:

 - a. Avoidance of unlawful discrimination.
 - b. Efforts in recruitment to fill openings without discrimination.
 - c. Training for advancement, and
 - d. Refusing to make, renew or use collective bargaining agreements which are known to result in discrimination excluding minority individuals.
5. The successful Bidder shall provide Yamhill County all information needed to complete any Minority, Women and Emerging Small Business Activity Report. Report form may be received by the successful Bidder from Yamhill County. Required information shall be provided prior to disbursement of final payment to the successful Bidder by Yamhill County.

Name of Bidder: _____

By (signature): _____

Title: _____

Date: _____

RESIDENT BIDDER CERTIFICATION

(Place a check in the appropriate box)

The undersigned is considered []
The undersigned is not considered []

a resident bidder as defined in ORS 279A.120.

Name of Bidder: _____

By (signature): _____

Title: _____

Date: _____

ACCESS TO RECORDS

The grantee or any of their authorized representatives, shall have access to any books, documents, papers, and records of the successful bidder for three years after Yamhill County makes final payments and all other pending matters are closed.

Name of Bidder: _____

By (signature): _____

Title: _____

Date: _____

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM (OAR 137-049-360)

**PROJECT NAME: YAMHILL COUNTY PUBLIC HEALTH 310 NORTHEAST KIRBY STREET
REMODEL**

BID # _____ BID CLOSING: Date: _____ Time: _____ AM PM

DISCLOSURE DEADLINE: Date: _____ Time: _____ AM PM

This form must be submitted within two (2) working hours of the advertised bid closing date and time, no later than the **DISCLOSURE DEADLINE** stated above.

List below the Name, Address, Dollar Value, Construction Contractor Board (CCB) number, if required, Contact Name and Telephone Number of each subcontractor that will be furnishing labor or materials that are required to be disclosed. Enter "NONE" if there are no subcontractors that need to be disclosed. **(IF NEEDED, ATTACH ADDITIONAL SHEETS).**

<u>NAME/ADDRESS</u>	<u>DOLLAR VALUE/CCB#</u>	<u>CONTACT NAME/PHONE #</u>
1) _____ _____	\$ _____ _____ CCB#	_____ _____
2) _____ _____	\$ _____ _____ CCB#	_____ _____
3) _____ _____	\$ _____ _____ CCB#	_____ _____

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

- 5% of the total Contract Price, but at least \$15,000 (including all alternates). If the Dollar Value is less than \$15,000, do not list the subcontractor above, or
- \$350,000 regardless of the percentage of the total Contract Price.

Bids which are submitted by Bid Closing, but for which the separate and sealed disclosure submittal has not been submitted by the specified deadline, are not Responsive and shall not be considered for Contract Award!

Form Submitted By (Bidder Name): _____

Contact Name: _____ Phone # _____

Provide Form to: Yamhill County Public Health
412 Northeast Ford Street
McMinnville, Oregon 97128
Attention: Bill Michielsen, MPH, CPH

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM (CONTINUED)
(OAR 137-049-360)

Unless otherwise stated in the original solicitation, this document shall not be faxed. It is the responsibility of the Bidders to separately 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 Instruction to Bidders.

INSTRUCTIONS FOR FIRST-TIER SUBCONTRACTOR DISCLOSURE

Bidders are required to disclose information about certain first-tier subcontractors when the contract value for a Public Improvement is greater than \$100,000 (see ORS 279C.370). Specifically, when the contract amount of a first-tier subcontractor is greater than or equal to (i) 5% of the project bid, but at least \$15,000, or (ii) \$350,000 regardless of the percentage, you must disclose the following information about that subcontract within two (2) hours of bid closing:

- The subcontractor's name and address, and
- The subcontractor's Construction Contractor Board registration number if one is required, and
- The subcontract dollar value.

If you will not be using any subcontractors that are subject to the above disclosure requirements, you are required to indicate "NONE" on the First Tier Subcontractor Disclosure Form.

THE OWNER MUST REJECT A BID IF THE BIDDER FAILS TO SUBMIT THE DISCLOSURE FORM WITH THIS INFORMATION BY THE STATED DEADLINE. OAR 137-049-360.

To determine disclosure requirements, the Owner recommends you disclose subcontract information for any subcontractor as follows:

- 1) Determine the lowest possible contract price. That will be the base bid amount less all deductive alternate bid amounts (exclusive of any options that can only be exercised after contract award), if any.
- 2) Provide the required disclosure information for any first-tier subcontractor whose potential contract services (subcontractor base bid amount plus all additive alternate bid amounts, exclusive of any options that can only be exercised after contract award, if any) are greater than or equal to:
 - (i) 5% of that lowest contract price, but at least \$15,000,
or
 - (ii) \$350,000 regardless of the percentage.

Total all possible work for each subcontractor in making this determination (e.g., if a subcontractor will provide \$15,000 worth of services on the base bid and \$40,000 on an additive alternate, then the potential amount of subcontractor's services is \$55,000. Assuming that \$55,000 exceeds 5% of the lowest contract price, provide the disclosure for both the \$15,000 services and the \$40,000 services)".

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Division 0 - Bid Form
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page 9

INSTRUCTIONS FOR FIRST-TIER SUBCONTRACTOR DISCLOSURE (CONTINUED)

SUBMISSION: A Bidder shall submit the disclosure form required by OAR 137-040-0017 within two (2) working hours of Bid Closing in the manner specified by the Invitation to Bid. See highlighted Invitation to Bid instructions on the SUBCONTRACTOR DISCLOSURE FORM.

RESPONSIVENESS: Compliance with the disclosure and submittal requirements of ORS 279C.370 and this rule is a matter of Responsiveness. Bids which are submitted by Bid Closing, but for which the separate disclosure submittal has not been made by the specified deadline, are not responsive and shall not be considered for Contract award.

END OF BID FORM

SECTION 00600

CONTRACT FORMS

The listed Contract forms shall be used on this project.

AGREEMENT: Abbreviated Form of Agreement Between Owner and Contractor, AIA A107, Agreement form for construction projects of limited scope where the basis of payment is a stipulated sum.

BID BOND: AIA A310, latest edition; or other as specified herein.

PERFORMANCE BOND: AIA A312, latest edition; or other as specified herein.

PAYMENT BOND: AIA A312, latest edition; or other as specified herein.

GENERAL CONDITIONS: General Conditions of the Contract for Construction, AIA 201, 1997 edition, are a part of the Contract Documents for this project. If not bound herein, a copy of these documents may be examined at the office of the Architect:

RSS ARCHITECTURE, P.C.
2225 Country Club Road
Woodburn, Oregon 97071
(503) 982-1211

The Contractor and all Subcontractors shall read and be governed by them. In case of conflict between the General Conditions and these Specifications, the Specifications shall govern.

PROJECT FORMS:

1. Certificate of Insurance, ACORD 25-S, latest edition.
2. Application and Certificate for Payment, AIA G702, G702A, latest edition.
3. Field Order, furnished by Architect.
4. Proposal Request, furnished by Architect.
5. Change Order, furnished by Architect.
6. Certificate of Substantial Completion, AIA G704, latest edition.
7. Contractor's Affidavit of Payment of Debts and Claims, AIA G706, G706A, latest edition.
8. Consent of Surety Company to Final Payment, AIA G707, latest edition.

PROJECT FORMS (CONTINUED):

9. Substitution Request Form, Construction Specifications Institute - N.W. Region; Substitution Request Form, latest edition.
10. Criminal History Background Check Form, included in this specification section (see below).

CRIMINAL HISTORY BACKGROUND CHECK FORM

Please type or print clearly.

As Appears on Drivers License

Name: _____
(Last Name) (First Name) (Middle Name)

Date of Birth: _____ Sex: _____
MM/DD/YY

List other Names Previously Used: _____
(Includes Maiden Name)

Social Security No: _____

Driver License/Identification Card No.: _____

Providing your social security number on this form is voluntary. If you choose not to disclose this social security number, this will not be basis for denial of employment or any rights, services or benefits to which you are otherwise entitled. If you do provide the number the law enforcement agency utilized for the background check will use it as an additional identifier to search for any criminal record you may have. Your social security number will be used as stated above. State and federal laws protect the privacy of your records.

Mailing Address: _____
Full Street Address/Post Office Box

City: _____ State: _____ Zip + 4: _____

A. Have you **EVER** been convicted of a sex-related crime? [] Yes [] No

If yes, was the conviction in Oregon or another state? (Please specify if another state.) State: _____

If yes, did the crime involve force of minors? [] Yes [] No

B. Have you **EVER** been convicted of a crime involving violence or threat of violence? [] Yes [] No

If yes, was the conviction in Oregon or another state? (Please specify if another state.) State: _____

C. Have you **EVER** been convicted of a crime involving criminal activities in drugs or alcoholic beverages? [] Yes [] No

If yes, was the conviction in Oregon or another state? (Please specify if another state.) State: _____

CRIMINAL HISTORY BACKGROUND CHECK FORM (CONTINUED)

- D. Have you **EVER** been convicted of any crime except a minor traffic violation? (Includes Traffic Crimes) [] Yes [] No
- E. Have you been arrested within the last three years for a crime for which there has not yet been an acquittal or dismissal? [] Yes [] No

Advisory: A check of the applicant's criminal history will be made by the County to verify the responses to the preceding questions.

I hereby grant to Yamhill County permission to check civil or criminal records to verify any statement made on this form. Regardless of whether the applicant grants consent, Lincoln County will conduct a criminal offender record of contractors and contractor employees working with or around children. The application is entitled to review their criminal history for inaccurate or incomplete information. Discrimination by an employer on the basis of arrest records alone may violate federal civil rights law. The applicant may obtain further information concerning the applicant's rights by contacting the Bureau of Labor and Industries, Civil Rights Division, State Office Building, Suite 1070, Portland, Oregon 97232, telephone (503) 731-4075.

I acknowledge reading the receipt of this notice.

Applicants Signature: _____ Date: _____

END OF CONTRACT FORMS

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SECTION 00700

GENERAL CONDITIONS

STANDARD FORM

General Conditions of the Contract for Construction, AIA A201, 1997 edition, are a part of this Contract Documents for this project. If not bound herein, a copy of these documents may be examined at the office of the Architect:

RSS ARCHITECTURE, P.C.
2225 Country Club Road
Woodburn, Oregon 97071
(503) 982-1211

The Contractor and all Subcontractors shall read and be governed by them.

CONFLICTS

In case of conflict between the General Conditions and these Specifications, the General Conditions shall govern.

END OF GENERAL CONDITIONS

SECTION 00800

SUPPLEMENTARY GENERAL CONDITIONS

1 PART 1 GENERAL

1.1 GENERAL

- A. These Supplementary General Conditions to the AIA Document A201, "General Conditions of the Contract for Construction", 1997 edition, contain modifications, deletions, and additions to certain articles of the AIA General Conditions and shall take precedence. Where any part of the AIA General Conditions is amended, voided, or superseded by the Supplementary General Conditions, the unaltered provisions shall remain in effect.

1.2 ARTICLE 1, 1.2 CORRELATION, AND INTENT

- A. Delete Paragraph 1.2.1 and replace with the following:

1.2.1 In the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following priorities:

1. The Agreement.
2. Addenda, with those of later date having precedence over those of earlier date.
3. The Supplementary Conditions.
4. The General Conditions of the Contract for Construction.
5. Drawings and Specifications.

In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by Addendum, the better quality or greater quantity of Work shall be provided in accordance with the Architect's interpretation.

1.3 ARTICLE 1, 1.2 CORRELATION, AND INTENT

- A. Add the following Subparagraph 1.2.4:

1.2.4 If work is required in a manner to make it impossible to produce first class work or should discrepancies appear among Contract Documents, request interpretation before proceeding with Work. If Contractor fails to make such request, no excuse will thereafter be entertained for failure to carry out work in satisfactory manner.

1.4 ARTICLE 1, 1.2 CORRELATION, AND INTENT

- A. Add the following Subparagraph 1.2.5:

1.2.5 Reference to Code and Standard Specifications mean and intends latest edition of such Specifications published and/or adopted at date of invitation to

1.4 ARTICLE 1, 1.2 CORRELATION, AND INTENT (CONTINUED)

- A. Add the following Subparagraph 1.2.5 (continued):

1.2.5 (continued) bid. Where brand name materials are specified and no installation instructions given herein, Contractors shall install same to specifications and instructions, latest edition of manufacturer.

1.5 ARTICLE 2, 2.1 DEFINITION

- A. Add the following Subparagraph 2.1.3:

2.1.3 The Owner is defined as:

Yamhill County Public Health
412 Northeast Ford Street
McMinnville, Oregon 97128

1.6 ARTICLE 2, 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

- A. Delete Subparagraph 2.2.5 and substitute the following:

2.2.5 The Contractor will be furnished free of charge a Portable Document Format (PDF) file of project drawings and specifications. This is in addition to drawing and specification sets submitted to the Agency having jurisdictional authority for plan review and building permit. Additional hard copy sets of documents would be furnished at the cost of reproduction, postage and handling.

1.7 ARTICLE 3, 3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

- A. Add the following to Subparagraph 3.3.1:

The Contractor will review with all Subcontractors methods and materials to be used to verify their compliance with all safety standards and laws and be responsible for compliance with same to insure safe, hazard free conditions for all persons visiting or working on the entire project.

1.8 ARTICLE 3, 3.7 PERMITS, FEES, AND NOTICES

- A. Delete Subparagraph 3.7.1 and substitute the following paragraph:

3.7.1 The Owner shall secure and pay for plan check and building permit fees. The Contractor shall secure and pay for utility hook-up fees, and any or all other fees or inspections necessary for proper execution and completion of the contract which are legally required when bids are received or negotiations concluded.

1.9 ARTICLE 4, 4.1 ARCHITECT

- A. Add the following Subparagraph 4.1.1.1:

4.1.1.1 The Architect is defined as:

RSS ARCHITECTURE, P.C.
2225 Country Club Road
Woodburn, Oregon 97071

1.10 ARTICLE 4, 4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT

- A. Add the following Subparagraphs 4.2.9.1 through 4.2.9.3:

4.2.9.1 The Architect will make an inspection for the determination of Substantial Completion and one for determination of Final Acceptance. SUCH INSPECTIONS WILL BE MADE ONLY AFTER RECEIPT OF HARD COPY WRITTEN NOTIFICATION OF READINESS FOR SUCH INSPECTIONS FROM THE CONTRACTOR.

4.2.9.2 Should additional inspections beyond those listed in 4.2.9.1 be required due to Contractor's failure to satisfactorily complete all work, the Contractor shall become responsible for all costs incurred by the Owner in conjunction with required re-inspections. A deductive Change Order shall be prepared using the following hourly rates as the basis for calculating the amounts to be deducted:

Architect: \$136.00 per hour plus all reimbursable expenses at direct cost.

4.2.9.3 The amount to be deducted from the Contract shall be calculated by multiplying the hours expended in additional inspections and documentation by the hourly rate(s) listed in 4.2.9.2.

1.11 ARTICLE 4, 4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT

- A. Add the following sentence to the end of subparagraph 4.3.7.2:

4.3.7.2 No such claim related to weather will be considered or validated without complete documentation as described in subparagraph 4.3.7.2.

1.11 ARTICLE 7, 7.2 CHANGE ORDERS

- A. Add the following to Subparagraph 7.2.3:

7.2.3 Shop drawings submitted to the Architect for review do not constitute "in writing" unless it is brought to the attention of the Architect, in written form, specific changes are being suggested. In any event, changes to Drawings & Specifications by means of shop drawings become the responsibility of the person initiating any changes.

1.12 ARTICLE 7, 7.3 CONSTRUCTION CHANGE DIRECTIVES

A. Article 7.3.6 shall be amended as follows:

7.3.6 In the first sentence, delete the words "a reasonable allowance for overhead and profit" and substitute "an allowance for overhead and profit in accordance with the schedule set forth below".

The maximum allowance for overhead and profit combined, included in the total cost to the Owner, shall be based on the following schedule:

1. For any Work performed by the Contractor, any sub-contractors, or any sub sub-contractors the following percent of the total cost of the change:

Cost up to \$1,000.00: 15%.
Cost between \$1,001.00 and \$10,000.00: 12%.
Cost over \$10,000.00: 10%.

Cost to which overhead and profit is to be applied shall be determined in accordance with Subparagraph 7.3.6.

Hourly labor rates submitted by the Contractor must indicate a breakdown of that rate according to wages, benefits, profit & overhead.

In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor their propriety can be seen by inspection, shall be accompanied by a completed itemization of costs including labor, materials, and subcontracts. Labor and materials shall be itemized in the manner prescribed. Where major cost items are Subcontracts, they shall be itemized also. In no case will a change involving over \$500.00 be approved without such itemization.

BOND AND INSURANCE COSTS ATTRIBUTED TO A CHANGE IN THE CONTRACT SUM AND/OR SCOPE OF WORK SHALL BE INCLUDED AS A PART OF THE PERCENTAGES INDICATED ABOVE AS MAXIMUM ALLOWANCE FOR PROFIT AND OVERHEAD.

1.13 ARTICLE 8, 8.2 PROGRESS AND COMPLETION

A. Add the following Subparagraphs 8.2.4, 8.2.5, and 8.2.6:

8.2.4 It is hereby understood and mutually agreed by and between the Contractor and the Owner that the date of beginning and the time for completion of the work to be done are essential conditions of the Contract.

1.13 ARTICLE 8, 8.2 PROGRESS AND COMPLETION (CONTINUED)

- A. Add the following Subparagraphs 8.2.4, 8.2.5, and 8.2.6 (continued):

8.2.5 The Contractor agrees that said work shall be pursued regularly, diligently, and at such a rate of progress that will insure Final Acceptance thereof within the time specified. It is expressly understood and agreed by and between the Contractor and the Owner that the time for the completion of the work described herein is reasonable taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

8.2.6 Final Acceptance shall occur on or before the date of completion indicated on the Contractor's bid form.

1.14 ARTICLE 9, 9.2 SCHEDULE OF VALUES

- A. Add the following sentence to Subparagraph 9.2.1:

Submit on AIA Document G703, latest edition.

1.15 ARTICLE 9, 9.3 APPLICATIONS FOR PAYMENT

- A. Add the following sentence to Subparagraph 9.3.1:

The form of Application for Payment shall be a notarized AIA Document G702, Application and Certification for payment, supported by AIA Document G703, Continuation Sheet.

1.16 ARTICLE 9, 9.4 CERTIFICATES FOR PAYMENT

- A. Add the following Subparagraphs 9.4.1.1, 9.4.1.2, and 9.4.1.3:

9.4.1.1 Based upon Certificates for Payment submitted to the Architect by the Contractor and Certificate for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract as follows:

On or about the tenth (10th) day of each month, ninety-five (95) percent of the Certificate for Payment issued by the Architect properly allocable to labor, materials, and equipment incorporated in the Work and ninety-five (95) percent of the portion of the Contract Sum properly allocable to materials and equipment suitably stored at the site or some other location agreed upon in writing by the parties up to the twenty-fifth (25th) day of that month less the aggregate of previous payments in each case; and upon substantial completion of the entire work a sum sufficient to increase the total payments to ninety-five (95) percent of the Contract Sum, less such retainage as the Architect

1.16 ARTICLE 9, 9.4 CERTIFICATES FOR PAYMENT (CONTINUED)

- A. Add the following Subparagraphs 9.4.1.1, 9.4.1.2, and 9.4.1.3 (continued):
- 9.4.1.1 (continued) shall determine for all incomplete Work and unsettled claims.
 - 9.4.1.2 The Owner may reduce the amount of said retainage to less than five percent (5%) of the Contract price pursuant to ORS 279C.550 to 279C.570.
 - 9.4.1.3 The Owner shall pay to the Contractor interest at a mutually agreeable rate of interest not to exceed one and a half percent (1.5%) per month of the final payment due the Contractor pursuant to ORS 279C.550 to 279C.570.

1.17 ARTICLE 9, 9.6 PROGRESS PAYMENTS

- A. Add the following Subparagraph 9.6.8:
- 9.6.8 If the Contractor fails, neglects or refuses to make payments of any claim for labor or services furnished to the contractor or a Subcontractor by any person in connection with a "public contract", as defined in ORS 279C, as such claim becomes due, the proper officers representing the Owner or State, pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to come due the Contractor by reason of this contract, but the payment of a claim in the manner authorized herein shall not relieve the Contractor or his surety from his or its obligation with respect to any unpaid claims.

1.18 ARTICLE 11, 11.1 CONTRACTOR'S LIABILITY INSURANCE

- A. Add the following clauses 11.1.1.8, 11.1.1.9, 11.1.1.10, 11.1.1.11, and 11.1.1.12:
- 11.1.1.8 The Contractor shall furnish to the Owner certificate(s) of insurance executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth below. The Contractor shall, at its own expense, obtain and keep in force insurance coverage, which shall be maintained in full force and effect during the term of the contract. The Contractor shall furnish evidence in the form of a Certificate of Insurance that insurance shall be provided, and a copy shall be forwarded to the Owner within fifteen (15) calendar days of the contract effective date.

1.18 ARTICLE 11, 11.1 CONTRACTOR'S LIABILITY INSURANCE (CONTINUED)

- A. Add the following clauses 11.1.1.8, 11.1.1.9, 11.1.1.10, 11.1.1.11, and 11.1.1.12 (continued):

11.1.1.9 Liability Insurance

- 1) **Commercial General Liability Insurance:** The Contractor shall maintain general liability (CGL) insurance and, if necessary, commercial umbrella insurance, with a limit of not less than \$2,000,000.00 per each occurrence. If CGL insurance contains aggregate limits, the General Aggregate limit shall be at least twice the "each occurrence" limit. CGL insurance shall have products-completed operations aggregate limit of at least two times the "each occurrence" limit. CGL insurance shall be written on ISO occurrence from GC 00 01 (or a substitute form providing equivalent coverage). All insurance shall cover liability assumed und under an insured contract (including the tort liability of another assumed in a business contract), and contain separation of insureds (cross liability) condition.
- 2) Additionally, the Contractor is responsible for ensuring that any subcontractors provide adequate insurance coverage for the activities arising out of subcontracts.
- 3) **Business Auto Policy:** As applicable, the Contractor shall maintain business automobile liability and, if necessary, commercial umbrella liability insurance with a limit not less than \$2,000,000.00 per accident. Such insurance shall cover liability arising out of "Any Auto". Business automobile coverage shall be written on ISO form CA 00 01 1990 or later edition, or substitute liability form providing equivalent coverage.

11.1.1.10 Employers Liability ("Stop Gap") Insurance

- 1) In addition, the Contractor shall buy employers liability insurance and, if necessary, commercial umbrella liability insurance with limits not less than \$2,000,000.00 each accident for bodily injury by accident or \$2,000,000.00 each employee for bodily injury by disease.

1.18 ARTICLE 11, 11.1 CONTRACTOR'S LIABILITY INSURANCE (CONTINUED)

- A. Add the following clauses 11.1.1.8, 11.1.1.9, 11.1.1.10, 11.1.1.11, and 11.1.1.12 (continued):

11.1.1.11 Additional Provisions (continued)

Above insurance policy shall include the following provisions:

- 1) **Additional Insured.** The Owner, elected and appointed officials, agents and employees shall be named as an additional insured on its all general liability, excess, umbrella and property insurance policies. All insurance provided in compliance with this contract shall be primary as to any other insurance or self-insurance programs afforded to or maintained by the Owner.
- 2) **Cancellation.** The insurer shall give the Owner thirty (30) calendar days advance notice of cancellation or non-renewal of any insurance used in the performance of this contract.
- 3) **Insurance Carrier Rating.** All insurance and bonds shall be issued by companies admitted to do business within the State of Oregon and have a rating of A-, Class VII or better in the most recently published edition of Best's Reports.

11.1.1.12 Worker's Compensation Coverage

- 1) The Contractor will at all times comply with all applicable workers' compensation, occupational disease, and occupational health and safety laws, statutes, and regulations to the full extent applicable. The Owner will not be held responsive in any way for claims filed by the Contractor or their employees for services performed under the terms of this Contract.

1.21 ARTICLE 11, 11.5 PERFORMANCE BOND AND PAYMENT BOND

- A. Delete Subparagraph 11.4.1 and 11.5.1 and substitute the following:

11.5.1 The Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder. Bonds may be obtained through the Contractor's usual source and the cost thereof shall be included in the Contract Sum. The amount of each bond shall be equal to one hundred percent (100%) of the contract Sum.

1.21 ARTICLE 11, 11.5 PERFORMANCE BOND AND PAYMENT BOND (CONTINUED)

- A. Delete Subparagraph 11.4.1 and 11.5.1 and substitute the following (continued):

11.5.1 (continued) Submit on AIA Document A312, latest edition.

11.5.1.1 THE CONTRACTOR SHALL DELIVER THE REQUIRED BONDS TO THE OWNER NOT LATER THAN SEVEN CALENDAR DAYS FOLLOWING THE DATE THE AGREEMENT IS ENTERED INTO, or if the Work is to be commenced prior thereto in response to a letter of intent, the Contractor shall, prior to the commencement of the work, submit evidence satisfactory to the Owner that such bonds will be furnished.

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

1.22 ARTICLE 12, 12.2 CORRECTION OF WORK

- A. Add the following clauses 12.2.2.4 through 12.2.2.6 to 12.2.2:

12.2.2.4 The warranty period relating to faulty products and workmanship will begin on the date appearing on the Certificate of Substantial Completion, or if a Certificate of Substantial Completion is not issued, on the date appearing on the Final Certificate of Payment to the Contractor, whichever is earlier. The Owner's use of the project will not alter the warranty period herein defined.

12.2.2.5 The Contractor shall and hereby does warrant against ordinary wear and usage the Work described in appropriate Specifications Sections as noted and for the periods of time stated.

12.2.2.6 The warranties specified are an extension of the one year warranty called for in the Contract Documents to the period of time specified and are in addition to any guaranty bond called for elsewhere.

END OF SUPPLEMENTARY GENERAL CONDITIONS

SECTION 00900

PREVAILING WAGE RATES

1 PART 1 GENERAL

1.1 STANDARD FORM

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

1.2 CURRENT WAGE RATES

- A. Oregon Bureau of Labor and Industries Prevailing Wage Rates for Public Works Contracts in Oregon subject to the State Prevailing Wages Rates dated January 1, 2023.
 - 1. Amendments to January 1, 2023 Rates will be issued April 1, 2023 and July 1, 2023. Such Amendments may apply to this project depending upon bid date for the scope of work.
- B. Applicable wage rate information are available electronically at:
www.oregon.gov/boli.
- C. The Contractor and all Subcontractors shall read and be governed by them.
- D. This project is funded by local public agency monies - Contractor shall utilize the prevailing wage rates published that reflect this funding of the project.
- E. Workers on this project shall be paid the applicable prevailing wage rates.

1.3 PUBLIC WORKS BOND

- A. Every Contractor and Subcontractor must have a public works bond filed with the Oregon Construction Contracting Board (CCB) before starting work on the project, unless exempt.
- B. Every subcontract shall require the subcontractor to file a public works bond with the Oregon Construction Contracting Board (CCB) before starting work on the project, unless exempt.

1.4 CERTIFIED PAYROLL

- A. Contractors and Subcontractors are required to prepare weekly certified payroll reports and submit them to the Owner, via the Architect, with each monthly pay request, or if no pay request is submitted by the fifth business day of the following month.
- B. Weekly certified payroll reports are public records and shall be made available on request. Redact social security numbers if included on reports.
- C. If the Contractor does not file certified payroll reports as required (at least once per month), the Owner must and shall withhold twenty-five percent (25%) of amounts due to the Contractor, in addition to any other required retainage.
- D. Once certified payroll reports are submitted, the Owner or Contractor must and shall pay amounts withheld within fourteen (14) calendar days.

1.5 MISCELLANEOUS

- A. All employers shall give a written schedule to employees showing the number of hours per day and days per week the employee may be required to work.
- B. Daily, weekly, weekend, and holiday overtime shall be paid in accordance with ORS 279C.540.
- C. If an Employer fails to pay for labor or services, the Owner can pay and withhold those amounts from payments due the Contractor or Subcontractor.
- D. Employer shall pay for any medical services they have agreed to pay to employees.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

Not Used.

END OF PREVAILING WAGE RATES

SECTION 00930

REQUEST FOR INTERPRETATION

1 PART 1 GENERAL

1.1 In addition to Project General Conditions Articles, and Supplementary General Conditions criteria, the following shall apply to the Contract:

- A. In the event the Contractor or a Subcontractor, at any tier, determines some portion of the Drawings, Specifications, or other Contract Document require clarification or interpretation, the Contractor shall submit in writing a Request for Interpretation (RFI) to the Architect.
- B. The RFI shall clearly describe the issues for which the clarification or interpretation is requested for, and why a response is needed. The RFI shall also set forth the Contractor's interpretation or understanding of the issues.
- C. Prior to submitting a RFI from a Subcontractor the General Contractor shall review the RFI for completeness and appropriateness.
- D. The Architect will review each RFI and determine whether or not the document qualifies as an RFI as defined below. If the Architect determines the document is not a legitimate RFI, it will be returned to the Contractor unreviewed as to content.
- E. The Architect will respond to RFI's within 5 working days after receipt of RFI from Contractor, unless a longer time is required to provide an adequate response. If a longer time is required, the Architect will within 5 working days notify the Contractor of the anticipated response time. An extension of the contract time will not be considered unless the Contractor submits a written request for extension to the Architect within 5 working days thereafter.
- F. RFI responses from the Architect will not alter requirements of the Contract Documents. If the Contractor believes the Architect's response does affect the Contract Sum or Contract Time, the Contractor shall within 5 working days, submit a written notice to the Architect, stating proposed changes and documenting the response for such changes. Failure to give such notice shall waive the Contractor's right to seek additions to the Contract Sum or extension to the Contract Time under the Contract General Conditions.

1.2 UNACCEPTABLE RFI CLAIMS

- A. The Owner will not authorize increase to the Contract Sum or extensions to the Contract Time caused by the Contractor's additional field or office staffing, project delays, decreased labor productivity, etc. When such claims are caused by any or all of the following:
1. Project Communications.
 2. Substitution Requests.
 3. Resubmitting rejected Shop Drawings or other Submittals.
 4. Response to Architect's Notices of non-conforming Work.
 5. Duplicate RFI's.
 6. Contractor originated Value Engineering Requests.
 7. Directing Contractor where to locate requested information within the Drawings, Specifications, or other Contract Documents.

1.3 DEFINITIONS

- A. For the purpose of this section the following definitions apply and they will not be considered as Request for Interpretation (RFI):
1. Project Communications: Routine communications between the Owner, Architect, and Contractor, including correspondence, memos, field reports, test reports, telephone calls, faxed messages, E-mail, etc.
 2. Substitution Requests: Request by the Contractor to substitute products or methods of construction.
 3. Shop Drawings and other Submittals: Contractor prepared drawings, product data, samples, etc. Submitted for Architect's review to ascertain that the Contractor clearly understands the Project design intent and Contract Document requirements.
 4. Value Engineering Requests: Communications regarding Contractor originated Value Engineering requests.
 5. Non-conforming Work: Communications regarding Work that has not been performed in compliance with the Contract Documents.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01010

SUMMARY OF WORK

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Owner furnished products.
- B. Contractor use of site and premises.
- C. Working Hours.
- D. Work Sequence.
- E. Owner occupancy.

1.2 RELATED SECTIONS

- A. Section 01500 - Construction Facilities and Temporary Controls.

1.3 SUMMARY OF WORK

- A. Yamhill County intends to award a contract to the qualified low bidder for the 310 Northeast Kirby Street Remodel project located at 310 Northeast Kirby Street; McMinnville, Oregon 97128. Briefly, this work includes:
 - 1. All necessary superintendence, labor, equipment, tools, and accessories, transportation, materials, and services necessary for and reasonably incidental to the 310 Northeast Kirby Street Remodel project at 310 Northeast Kirby Street; McMinnville, Oregon 97128.
- B. Work shall be started within ten (10) calendar days after signing of an Agreement with the Owner. The Agreement may not be signed prior to approval of the Contractor's Certificate of Insurance by the Owner. The project shall be completed within the calendar day time frame indicated by the Contractor on the Bid Form.
- C. Items noted 'NIC' (Not in Contract), will be furnished and installed by Owner after the Contractor has completed the Work.

1.4 CONTRACTOR USE OF SITE AND PREMISES

- A. Access to Site: Limit movement on and off the site for work as indicated on the Drawings or as agreed to with the Owner.
 - 1. Owner occupancy and use of the site while construction is occurring: The Owner will NOT occupy the building but will conduct activities on the adjacent grounds during construction.

1.4 CONTRACTOR USE OF SITE AND PREMISES (CONTINUED)

- B. Access to Site: Limit movement on and off the site for work as indicated on the Drawings (if any) or as agreed to with Owner officials.

- C. Construction Operations: Limited to areas noted on Drawings; coordinate additional needs with the Owner and Architect. The Contractor shall not damage existing vegetation unless noted for work on the drawings. The Contractor shall not damage: existing building components not indicated for work in this project, utility lines, or electrical service lines unless noted for work on the drawings.
 - 1. In the event the Contractor damages existing building components or existing utility services the Contractor will, at the Owner's discretion, replace/repair the damaged materials or be assessed a charge by the Owner for such damages.

 - 2. In the event damage occurs to an underground system as a direct result of a Contractor's activities, the Contractor shall repair/replace or be assessed a charge at the discretion of the Owner. If repairs are to be made by the Contractor, such repairs shall be inspected by the Architect or agent prior to backfilling. Any galvanized pipe that requires repair shall be repaired at a threaded coupling, not by use of a compression coupling.

- D. The Contractor shall protect sidewalks, asphalt paving, concrete, trees, shrubs, and lawn areas at all times from spillage of materials used in carrying out the work. Prevent materials from clogging catch basins and yard drains; leave drains clean and in proper working conditions at all times.
 - 1. In the event the Contractor damages plant material with equipment or personnel, the Contractor will, at the Owner's discretion, replace/repair the damaged materials or be assessed a charge by the Owner for such damages.

 - 2. In the event damage occurs to any underground utility system as a direct result of a Contractor's activities, the Contractor shall repair/replace or be assessed a charge for such damage at the discretion of the Owner. If repairs are to be made by the Contractor, such repairs will be inspected by the Architect prior to backfilling. Any galvanized pipe that requires repair shall be repaired at a threaded coupling, not by use of a compression coupling.

1.4 CONTRACTOR USE OF SITE AND PREMISES (CONTINUED)

- E. Parking or Driving on Lawn Areas: The Owner forbids parking or driving on all lawn areas.
 - 1. When it becomes necessary, in accordance with the scope of work, to traverse a lawn area, the Contractor shall place plywood on the area to be driven on. The plywood shall be of sufficient thickness and width to support vehicles and prevent rutting of the lawns. Care shall also be taken with respect to existing lawn sprinkler heads (if any).
- F. Utility Outages and Shutdown: Inform the Owner and Architect 72 hours prior to any utility outages or shutdowns which will affect the existing building.

1.5 WORKING HOURS

- A. The Owner will allow construction between 8:00 a.m. and 5:00 p.m. and on any day of the working week - Monday through Friday. Weekend and off-hours work (work occurring other than between 8:00 a.m. and 5:00 p.m.) must be scheduled and approved in advance with the Owner.
- B. Coordination of access to any building/portion of the building or the site on weekends and holidays must be arranged with the Owner at least seventy-two (72) hours in advance.

1.6 ASBESTOS AND OTHER HAZARDOUS MATERIAL

- A. If during the course of the Contract, the Contractor observes or suspects the existence of hazardous materials on site or in any construction component the Contractor shall immediately stop work and notify the Architect. The Owner will arrange for the removal of hazardous materials as required by Owner personnel or by separate contract. Should hazardous materials be found in the structure the Contractor will be required to schedule ten (10) days of slack or "down" time for the removal of hazardous materials without penalty to the Owner for the delay of the Contract.

1.7 WORK SEQUENCE

- A. Construct Work using methods, techniques, and scheduling advantageous to swift completion. Review proposed sequence and scheduling with the Owner and Architect for approval prior to commencing work.
- B. See project phasing requirements indicated on drawings (if any).

1.7 WORK SEQUENCE (CONTINUED)

- C. See project sequencing and construction process requirements indicated on drawings (if any).

1.8 OWNER OCCUPANCY OF SITE

- A. The Owner will occupy and use the site of work while construction is occurring. Contractor shall coordinate work so public and private use of the site is not hazardous to the public, Owner personnel, and the work of the Contract.
- B. Cooperate with Owner to minimize conflict, provide safety provisions, and cooperate to facilitate Owner's operations.
- C. Cooperate with the Owner to facilitate movement of staff (if any) and students (if any) during completion of the project.
- D. Schedule the Work to accommodate requirement of this paragraph.

1.9 EXISTING CONDITIONS AND DIMENSIONS

- A. Field verify existing conditions prior to bid opening. Request clarification from the Architect for conditions found that are in conflict with information shown on the drawings or specified PRIOR TO BID OPENING.
- B. Field verify existing dimensions/measurements prior to bid opening. Do not scale measurements or dimensions from the Drawings. Bid errors resulting from scaled measurements and/or dimensions shall be solely the responsibility of the Bidder.
- C. Field verify dimensions of new openings, new construction, and new equipment/devices prior to ordering and material components subject to field dimensions. Successful bidder is responsible for dimensions which shall be confirmed and correlated at the project site for compatibility with project components.
- D. Project components ordered or obtained for incorporation with the work that are not compatible with verified dimensions shall be solely the responsibility of the successful Bidder.
- E. Field verify structure materials prior to bid opening. Request clarification from the Architect for materials found that are in conflict with information shown on the drawings or specified prior to bid opening. Bid errors resulting from failure to field verify existing structure materials shall be solely the responsibility of the Bidder.

1.9 EXISTING CONDITIONS AND DIMENSIONS (CONTINUED)

- F. Failure to field verify existing conditions and new or existing dimensions by the bidder will not be reason to change the Contract Sum after award of the Contract to the Successful Bidder.
- G. Specified criteria of paragraphs A., B., C., D., E., and F. Listed above apply to Work of the project prior to bid and during construction by the successful Bidder.

1.10 MECHANICAL, ELECTRICAL, AND PLUMBING WORK COORDINATION

- A. Work of all utility systems sub-contractors shall be coordinated by the General Contractor (if any).
 - 1. Systems include, but are not limited to, power, signal, security, data/communications, lighting, electrical, heating/cooling, plumbing, storm drainage disposal, and sewage disposal.
- B. Work shall be coordinated to allow installation of utility systems without conflict in location, routing, and space use between systems. Do not allow work without sub-contractor coordination prior to physical implementation.
- C. Verify utility systems interface prior to bid opening. Request clarification from the Architect for systems found that are in conflict each other shown on the drawings or specified prior to bid opening.
- D. Verify identified existing utility infrastructure indicated to be connected to new utility infrastructure is operational and not abandoned. Verify location of existing utility infrastructure is valid; do not provide/install/connect new utility infrastructure without verifying existing infrastructure is at location indicated.
- E. Failure to verify utility systems interface and coordination, prior to bid and during the course of the work, shall be solely the responsibility of the General Contractor.
- F. Specified criteria of paragraphs A., B., C., D., and E. listed above apply to Work of the project prior to bid and during construction by the successful Bidder.

1.11 INFEASIBLE WORK

- A. If work is required in a manner to make it impossible to produce first class work or should discrepancies appear among Contract Documents, make a written request for interpretation before proceeding with Work. If Contractor fails to make such written request, no excuse will there-after be entertained for failure to carry out work in satisfactory manner.

1.11 INFEASIBLE WORK (CONTINUED)

- B. If work is shown in the Contract Documents that is not possible to complete, or deletion/addition of work in one area makes it impossible or infeasible to complete work in another area, make a written request for interpretation before proceeding with further work. If Contractor fails to make such written request, no excuse will thereafter be entertained for failure to carry out work in satisfactory manner.
- C. Means and methods of construction are solely the responsibility of the Contractor. Bidding means and methods that are deemed infeasible by site conditions, other than concealed conditions, shall be the sole responsibility of the Contractor. The Owner shall not compensate the Contractor for changes to means and methods determined infeasible by site conditions, other than concealed conditions.

1.12 COMPUTER AIDED DRAFTING (CAD) DRAWINGS

- A. CAD files of the Contract Drawings are available from the Architect for use by the Contractor in the execution of Work, or for reproduction for their purposes of this project only under the following provisions:
 - 1. Contractor to pay the Architect the cost of reproduction and electronic media. Minimum charge per request for CAD drawings, PER DRAWING SHEET: \$300.00.
 - 2. Drawings are in AUTOCAD format. Architect makes no representation as to the compatibility of the CAD drawings/files with any hardware or software.
 - 3. All information on the CAD drawings/files is considered instruments of service of the Architect and shall not be used for other projects, for additions or modifications to this project, or completion of this project by others. CAD files remain the property of the Architect and in no case is the transfer of these files a sale.
 - 4. Architect makes no representation regarding the accuracy, completeness, or permanence of the CAD files, nor for fitness for any purpose whatsoever. The files do not represent a Contract.

1.13 SAFETY AND SECURITY

- A. The Contractor shall adhere to the following safety and security requirements for the Contractor's safety and the safety of others:
 - 1. Contractor shall keep strict accountability for all personal items and tools to insure safety of clients and staff.
 - 2. Lock all vehicles, canopies, etc., when not in use. Valuables should not be in plain view.
 - 3. If Contractor is issued a key by the Owner the

1.13 SAFETY AND SECURITY (CONTINUED)

A. (continued)

3. (continued) Contractor is responsible to lock all doors, inside and outside the building, even if doors were unlocked when they came through. Owner's representative will provide the Contractor with a map indicating in red those areas where this requirement will be strictly followed.
4. No tobacco products may be given to clients, or placed in plain view of the clients.
5. No firearms or pornographic materials are permitted on Owner facility grounds.
6. No alcohol or drugs are permitted on County facility grounds. If prescription drugs are necessary, they may not be given to clients or placed in plain view.
7. All occupational safety and health requirements pertaining to the work must be adhered to.
8. All posted traffic and speed signs must be followed.
9. Avoid contact with the staff and students, other than a casual greeting.
10. Contractor shall be responsible for providing access to the workers and for maintaining building security during and after any work period.

1.14 DRUG TESTING PROGRAM

- A. The Owner's performance under this Contract is conditioned upon the Contractor's compliance with the following contractor representations and warranties.
- B. Contractor represents and warrants the following:
 1. Contractor has at the time of the execution of this contract, and shall maintain during the term of this contract, an employee drug testing program for its employees that include, at a minimum, the following:
 - a) A written employee drug-testing policy,
 - b) Required drug testing for all new Subject Employees or alternatively, required testing of all Subject Employees every six (6) months on a random selection basis,
 - c) Required testing of a Subject Employee when the Contractor has reasonable cause to believe the Subject Employee is under the influence of drugs, and
 - d) Required testing of a Subject Employee when the Subject Employee is involved in:
 - an incident causing an injury requiring treatment by a physician, or
 - an incident resulting in damage to property or equipment.

1.14 DRUG TESTING PROGRAM (CONTINUED)

B. Contractor represents and warrants the following (continued):

2. A drug testing program that meets the above requirements will be deemed a "Qualifying Employee Drug-Testing Program". For the purposes of this section, an employee is a "Subject Employee" only if that employee will be working on the Project job site.

1.15 ON SITE CONDUCT AND BEHAVIOR

A. Foul language, swearing, and/or high volume conversations are not permitted on the project site.

B. Firearms are not permitted on the project site.

C. Alcohol or non-prescription drugs are not permitted on the project site.

D. Pornographic materials are not permitted on the project site.

E. Tobacco products of any kind are not permitted on the project site.

1. "Tobacco" is defined as: any lit or unlit cigarette, cigar, pipe, bidi, clove cigarette, and any other smoking product, and spit tobacco, also known as smokeless, dip, chew, and snuff, in any form.

2. No Contractor, sub-contractor, supplier, or any employee of the same; or any site visitor is permitted to inhale, dip, chew, smoke or sell tobacco on the site at any time, including non-school hours.

3. The above is applicable to any Owner building or facility, site/grounds, or parking lots.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01027

APPLICATIONS FOR PAYMENT

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Procedures for preparation and submittal of Applications for Payment.

1.2 RELATED SECTIONS

- A. Owner-Contractor Form of Agreement: Contract Sum/Price, alternate prices, & time schedule for submittals.
- B. Document AIA A201 General Conditions of the Contract for Construction: Progress Payments and Final Payment.
- C. Section 00800 - Supplementary General Conditions: Progress Payments and Final Payment.
- D. Section 00900 - Prevailing Wage Rates.
- E. Section 01028 - Change Order Procedures: Procedures for changes to the Work.
- F. Section 01300 - Submittals: Submittal procedures.
- G. Section 01700 - Contract Closeout: Final Payment.

1.3 SCHEDULE OF VALUES

- A. WITHIN SEVEN (7) CALENDAR DAYS after signing of Agreement, submit to the Architect and Owner a Schedule of Values for the Project. Use continuation page of AIA document G702, with breakdown of project costs by profit, overhead, & individual specification sections of divisions 1 through 16.

1.4 ANTICIPATED PAYMENT AMOUNTS

- A. To assist the Owner, the Contractor, prior to submitting his first Application for Payment, shall deliver to the Owner's Authorized Representative and the Architect a schedule of anticipated payment amounts to be required with each subsequent application.

1.5 FORMAT

- A. AIA G702 - Application and Certificate for Payment including continuation sheets when required.
- B. For each item, provide a column for listing: Item Number; Description of Work; Scheduled Value, Previous Applications: Work in Place and Stored Materials under This Application: Authorized Change Orders; Total

1.5 FORMAT (CONTINUED)

- B. (continued) Completed and Stored to Date Application; Percentage of Completion; Balance to Finish; and Retainage.

1.6 PREPARATION OF APPLICATIONS

- A. Present required information in typewritten form or on electronic media printout.
- B. Execute certification by signature of authorized officer.
- C. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
- D. List each authorized Change Order as an extension on continuation sheet, listing Change Order number and dollar amount as for an original item of Work.
- E. Prepare Application for Final Payment as specified in Section 01700.

1.7 SUBMITTAL PROCEDURES

- A. Submit **THREE HARD COPIES** of each Application for Payment, EACH COPY WITH ORIGINAL SIGNATURE(S) and **EACH COPY NOTARIZED**. Submit to the Architect.
- B. PAYMENT PERIOD: SUBMIT AT INTERVALS STIPULATED IN THE GENERAL CONDITIONS AND SUPPLEMENTARY GENERAL CONDITIONS.
- C. SUBMIT PAYROLL WAGE RATE CERTIFICATES **WITH EACH** APPLICATION AND CERTIFICATE FOR PAYMENT AND FOR THE SAME PERIOD OF TIME AS THE APPLICATION AND CERTIFICATE FOR PAYMENT. See specification section 00900.
- D. SUBMIT TO THE OWNER **VIA THE ARCHITECT**. SUBMIT IN HARD COPY. FACSIMILE/ELECTRONIC VERSIONS WILL BE DISREGARDED.

1.8 EARLY PURCHASE AND PAYMENT OF MATERIALS AND EQUIPMENT

- A. Order materials and equipment requiring long lead or waiting time early so as not to delay progress of the Work.
- B. The Contractor will be reimbursed for early order materials or items upon receipt and verification of quality and quantity against submittals and shipping documents by the Architect. Receipt shall be to the job site or stored at Owner's other premises in an orderly and safe manner, secured from weather damage. Security remains the responsibility of the Contractor.

1.9 SUBSTANTIATING DATA

- A. When Architect requests substantiating information, submit data justifying dollar amounts in question. Data shall include a breakdown of dollar amounts by labor, material, profit & overhead. Failure to do so will delay payment of any portion of the pay request.
- B. Provide one copy of data with cover letter for each copy of submittal. Show Application number and date, and line item by number and description.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01028

CHANGE ORDER PROCEDURES

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Submittals.
- B. Documentation of change in Contract Sum/Price and Contract Time.
- C. Change procedures.
- D. Construction Change Directive.
- E. Stipulated Sum change order.
- F. Execution of change orders.
- G. Correlation of Contractor submittals.
- H. Percentage allowances for Contractor's overhead and profit.

1.2 RELATED SECTIONS

- A. Agreement: Owner-Contractor standard form of Agreement
- B. General Conditions: Governing requirements for changes in the Work, in Contract Sum/Price, and Contract Time.
- C. Supplementary Conditions: Percentage allowances for Contractor's overhead and profit.
- D. 01027 - Applications for Payment: Payment applications.
- E. Section 01300 - Submittals: Work schedule.
- F. Section 01300 - Submittals: Schedule of values.
- G. Section 01600 - Material and Equipment: Product options and substitutions.
- H. Section 01700 - Contract Closeout: Project record documents.

1.3 SUBMITTALS

- A. Submit name of the individual authorized to receive change documents, and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
- B. Change Order Forms: As provided by the Architect.

1.4 DOCUMENTATION OF CHANGE IN CONTRACT SUM/PRICE AND CONTRACT TIME

- A. Maintain detailed records of work done. Provide full information required for evaluation of proposed changes, and to substantiate costs of changes in the Work.
- B. Document each quotation for a change in cost or time with sufficient data to allow evaluation of the quotation.
- C. Provide data to support computations:
 - 1. Quantities of products, labor, and equipment.
 - 2. Taxes, insurance, and bonds.
 - 3. Overhead and profit.
 - 4. Justification for any change in Contract Time.
 - 5. Credit for deletions from Contract, similarly documented.
 - 6. Credit for deletions from Contract, similarly documented.

1.5 CHANGE PROCEDURES

- A. The Architect will advise of minor changes in the Work not involving an adjustment to Contract Sum/Price or Contract Time as authorized by the General Conditions for the Contract, by issuing supplemental instructions on a Field Order form.
- B. The Architect may issue a Proposal Request which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change and the period of time during which the requested price will be considered valid. Contractor will prepare and submit an estimate within fourteen (14) calendar days.
- C. The Contractor may propose a change by submitting a request for change to the Architect, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum/Price and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with Section 01600.

1.6 CONSTRUCTION CHANGE DIRECTIVE

- A. Architect/Engineer may issue a document, signed by the Owner, instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
- B. The document will describe changes in the Work, and will

1.6 CONSTRUCTION CHANGE DIRECTIVE (CONTINUED)

- B. (continued) designate method of determining any change in Contract Sum/Price or Contract Time.
- C. Promptly execute the change in Work.
- D. A Construction Change Directive will be issued by the Architect, per the General Conditions, if necessary to enact Change Order work.

1.7 STIPULATED SUM CHANGE ORDER

- A. Based on Proposal Request and Contractor's fixed price quotation or Contractor's request for a Change Order as approved by Architect/Engineer.
- B. Hourly labor rates submitted by the Contractor shall indicate a breakdown of each rate according to wages, benefits, profit, and overhead.

1.8 EXECUTION OF CHANGE ORDERS

- A. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.

1.9 CORRELATION OF CONTRACTOR SUBMITTALS

- A. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum/Price.
- B. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
- C. Promptly enter changes in Project Record Documents.

1.10 PERCENTAGE ALLOWANCES

- A. The allowable profit and overhead percentage for change orders is specified in the Supplementary General Conditions. Any change orders shall be subject to percentages specified.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01030

ALTERNATES

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Submission procedures.
- B. Documentation of changes to Contract Sum/Price and Contract Time.

1.2 RELATED SECTIONS

- A. Standard Form of Agreement Between Owner and Contractor - Agreement Form: Incorporating monetary value of accepted Alternates.
- B. Section 00300 - Bid Form: Description of and requirements for Alternates.
- C. Section 01300 - Submittals: Work schedule affected by Alternates.
- D. Section 01600 - Material and Equipment: Product options and substitutions.

1.3 DESCRIPTION

- A. The Alternates described in this Section may be exercised at the option of the Owner with the Execution of the Owner/Contractor Agreement.
- B. It is generally the practice of the Owner to exercise Alternates in numerical order. However, the Owner reserves the right to accept Alternates without regard to order or sequence; but, such acceptance shall not impair the selection of a low, responsible, and responsive bidder to whom the Contract may be awarded under an equitable bid procedure.

1.4 REQUIREMENTS

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.5 QUALITY ASSURANCE

- A. For each Alternate which is accepted, coordinate the work of the various trades involved, and modify surrounding work as required to complete the Project as intended.

1.5 QUALITY ASSURANCE (CONTINUED)

- B. In the change-in-price figure for each Alternate, include incidental costs which are attributable to adjustments in the work of other trades which may be required to achieve the contemplated and final conditions.
- C. If there is a question regarding the extent, scope, nature, or intent of the Alternates, contact the Architect for clarification. Failure on the part of the Contractor to clarify any unclear items shall not relieve the Contractor of the responsibility for performing the selected Alternates in accordance with the intent and requirements of the Project Manual and Drawings.
- D. The description of the Alternates hereinafter is qualitative and not quantitative. The Contractor shall determine the quantities of labor and materials and the extent of same required to execute the selected Alternates in accordance with the intent and requirements of the Project Manual and Drawings.

1.6 SELECTION AND AWARD OF ALTERNATES

- A. Alternate bids shall be ADDITIVE sums and work to the base bid work and sum.
- B. The Owner shall select those alternate bids which best serves the Owner's interests and construction budget.

2 PART 2 PRODUCTS

2.1 APPLICATION OF PROJECT DOCUMENTS TO ALTERNATES

- A. The applicable Sections of the Specifications and information on the Drawings apply to the work under each Alternate.

3 PART 3 EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A. ADDITIVE ALTERNATE BID NO. 1 ADD all work to complete remodel work for the southwest corner of the existing building space as shown on the drawings and specified herein.

END OF SECTION

SECTION 01041

PROJECT COORDINATION

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Construction mobilization.
- B. Schedules/sequencing/phased Work.
- C. Submittals.
- D. Project progress meetings.
- E. Closeout procedures.

1.2 RELATED SECTIONS

- A. Section 01010 - Summary of Work: Work sequence and Owner occupancy.
- B. AIA A201, General Conditions For Construction Project: Preconstruction conference.
- C. Section 01700 - Contract Closeout: Contract closeout procedures.

1.3 CONSTRUCTION MOBILIZATION

- A. Cooperate with the Owner and Architect in allocation of mobilization area for site; for field offices and sheds, for building access/security, traffic, and parking facilities. See SUMMARY OF WORK, Section 01010, and CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS, Section 01500, and drawings for additional information.
- B. During construction coordinate use of the site, existing buildings (if any), and any other facilities with the Architect and Owner.
- C. Comply with the instructions of the Architect and Owner for the use of temporary utilities and construction facilities.
- D. Comply with Architect's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.

1.4 SCHEDULES

- A. Submit preliminary progress schedule, Work sequencing, and phased Work plan in accordance with Sections 01300 and 01310.

1.4 SCHEDULES (CONTINUED)

- B. After review by the Architect and Owner, revise and resubmit schedule to comply with revised Project schedule.
- C. During progress of Work, revise and resubmit with Applications for Payment.
- D. Submit a three week duration "rolling" schedule at each scheduled project progress meeting.

1.5 SUBMITTALS

- A. Submit shop drawings, product data and samples in accordance with Section 01300 for review and compliance with Contract Documents, for field dimensions and clearances, for relation to available space, and for relation to Work of separate contracts. Revise and resubmit as required.
 - 1. All product submittals must include a statement that the submitted product complies with all Buy American Act requirements.
- B. FAILURE TO SUBMIT SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES AS SPECIFIED HEREIN SHALL RESULT IN WITHHOLDING OF A PORTION OF THE CONTRACT SUM TO ACCOUNT FOR FAILURE TO FULFILL CONTRACT OBLIGATIONS.
- C. Submit applications for payment on AIA G702 to the Owner via the Architect.
- D. Submit requests for interpretation of Contract Documents, and obtain instructions to the Architect.
- E. Process requests for substitutions, and change orders, through the Architect.
- F. Deliver closeout submittals for review and preliminary inspection reports to the Architect.

1.6 COMPUTER AIDED DRAFTING (CAD) DRAWINGS

- A. CAD files of the Contract Drawings are available from the Architect for use by the Contractor in the execution of Work, or for reproduction for the purposes of this project only under the following provisions:
 - 1. Contractor to Pay The Architect the cost of reproduction and electronic media. Minimum charge per request for CAD drawings: \$300.00.
 - 2. Drawings are in AUTOCAD format. Architect makes no representation as to the compatibility of the CAD drawings/files with any hardware or software.
 - 3. All information on the CAD drawings/files is considered instruments of service of the Architect

1.6 COMPUTER AIDED DRAFTING (CAD) DRAWINGS (CONTINUED)

A. (continued)

3. (continued) and shall not be used for other projects, for additions or modifications to this project, or completion of this project by others. CAD files remain the property of the Architect and in no case is the transfer of these files a sale.
4. Architect makes no representation regarding the accuracy, completeness, or permanence of the CAD files, nor for fitness for any purpose whatsoever. The files do not represent a Contract.

1.7 PROJECT PROGRESS MEETINGS

- A. Project progress meetings will be scheduled and required on a regular basis at a mutually agreed time, place, and day. Meetings will be attended by the Contractor, Owner's representative, and/or Architect.
- B. Project progress meetings may be canceled on a case by case basis as mutually agreed by the Contractor, Owner's representative, and/or Architect.

1.8 CLOSEOUT PROCEDURES

- A. Notify Owner, via the Architect, **IN WRITING** when Work is considered ready for Substantial Completion.
 1. IN WRITING: Hard copy letter or memo on Contractor letterhead stationary.
- B. Comply with Architect's instructions to correct items of Work listed in executed Certificates of Substantial Completion.
- C. Notify Owner, via the Architect, **IN WRITING** when Work is considered finally complete.
 1. IN WRITING: Hard copy letter or memo on Contractor letterhead stationary.
- D. Comply with instructions for completion of items of Work determined by the Architect's final inspection.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01045

CUTTING AND PATCHING

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A Requirements and limitations for cutting and patching of Work.

1.2 RELATED SECTIONS

- A. Section 01010 - Summary of Work.
- B. Section 01300 - Submittals.
- C. Section 01600 - Materials and Equipment: Product Options and Substitutions.
- D. Individual Product Specification Sections:
 - 1. Cutting and patching incidental to Work of the Section.
 - 2. Advance notification to other Sections of openings required in Work of those Sections.
 - 3. Limitations on cutting structural members.

1.3 SUBMITTALS

- A. Submit written request in advance of cutting or alteration which affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather-exposed or moisture resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.
- B. Include in request:
 - 1. Identification of Project.
 - 2. Location and description of affected Work.
 - 3. Necessity for cutting or alteration.
 - 4. Description of proposed Work, and products to be used.
 - 5. Alternatives to cutting and patching.
 - 6. Effect on Work of Owner or separate contractor.
 - 7. Written permission of affected separate contractor.
 - 8. Date and time Work will be executed.

2 PART 2 PRODUCTS

2.1 MATERIALS

- A Primary Products: Those required for original installation.

2.1 MATERIALS (CONTINUED)

- B. Product Substitution: For any proposed change in materials, submit request for substitution under provisions of Section 01600.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Inspect conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching.
- B. After uncovering existing Work, inspect conditions affecting performance of Work.
- C. Beginning of cutting or patching means acceptance of existing conditions.
- D. DO NOT CUT ANY JOIST, HEADER, RAFTER, BEAM, COLUMN OR ANY OTHER STRUCTURAL MEMBER, UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS, WITHOUT PRIOR APPROVAL OF THE ARCHITECT.

3.2 PREPARATION

- A. Provide temporary supports to ensure structural integrity of the Work. Provide devices and methods to protect other portions of Project from damage.
- B. Provide protection from elements for areas which may be exposed by uncovering Work.
- C. Maintain excavations free of water.

3.3 CUTTING AND PATCHING

- A. Execute cutting, fitting, and patching including excavation and fill, if any, to complete Work.
- B. Fit products together, to integrate with other Work.
- C. Uncover Work to install improperly sequenced Work.
- D. Remove and replace defective or non-conforming Work.
- E. Provide openings in the Work for penetration of mechanical and electrical Work.

3.4 PERFORMANCE

- A. Execute Work by methods to avoid damage to other Work, and which will provide appropriate surfaces to receive patching and finishing.

3.4 PERFORMANCE (CONTINUED)

- B. Employ original installer to perform cutting and patching for weather exposed and moisture resistant elements, and sight-exposed surfaces.
- C. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- D. Restore Work with new products in accordance with requirements of Contract Documents.
- E. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. Provide sealant or fire rated sealant at penetrations through surfaces for pipes, sleeves, ducts, conduit, or any other penetrations.
- F. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material that maintains fire rating integrity of penetrated component.
- G. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
- H. Patch, repair, and refinish adjacent surfaces damaged, altered, or in any way affected by cutting and patching to condition equal to or better than existing prior to the start of the cutting and patching work.

END OF SECTION

SECTION 01090

REFERENCE STANDARDS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Reference Standards applicable to this project.

1.2 QUALITY ASSURANCE

- A. For products or workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.3 REFERENCED STANDARDS

A. General Applicability:

1. Unless otherwise shown, referenced items without listed date shown are latest issue.
2. Published standards for materials and operations specified by reference require compliance.
3. In case of conflict between referenced standards and project specifications, project specifications govern.
4. Except to extent of more explicit stringent requirements written directly into Contract Documents, or are required by governing regulations, applicable standards of construction industry have same force and effect for Work (and are made a part of Contract Documents by reference) as if copied directly into contract documents or as if published copies are bound herein.
5. Referenced standards take preference over standards that are not referenced but recognized in construction industry as applicable.
6. Where an industry standard compliance is required, standard in effect as of date of Contract Documents applies, unless shown otherwise.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01120

ALTERATION PROJECT PROCEDURES

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Products and installation for patching and extending Work.
- B. Transition and adjustments.
- C. Repair of damaged surfaces, finishes, and cleaning.
- D. Procedure for addressing hazardous materials.

1.2 RELATED SECTIONS

- A. Section 01041 - Project Coordination: Work scheduling, sequence, and phases.
- B. Section 01045 - Cutting and Patching: Cutting and patching.
- C. Section 01500 - Construction Facilities and Temporary Controls: Temporary enclosures, protection of installed Work, and cleaning during construction.
- D. Section 02225 - Minor Demolition for Remodeling.

2 PART 2 PRODUCTS

2.1 PRODUCTS FOR PATCHING AND EXTENDING WORK

- A. New Materials: As specified in product Sections; match existing Products and Work for patching and extending Work.
- B. Type and Quality of Existing Products: Determine by inspection and testing Products where necessary, referring to existing Work as a standard.

2.2 RE-USE OF EXISTING MATERIALS AND PRODUCTS

- A. Unless otherwise noted on drawings do not re-use existing materials or products for patching and extending Work; do not re-use existing equipment unless noted on drawings.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that demolition is complete, and areas are ready for installation of new Work.

3.1 EXAMINATION (CONTINUED)

- B. Beginning of remodeling/alteration Work means acceptance of existing conditions.

3.2 PREPARATION

- A. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.
- B. Remove unsuitable material not marked for salvage, such as rotted wood, corroded metals, and deteriorated masonry and concrete. Notify Architect prior to removal for inspection and approval.
- C. Remove debris and abandoned items from area and from concealed spaces.
- D. Prepare surface and remove surface finishes to provide for proper installation of new Work and finishes.
- E. Close openings in exterior and/or interior surfaces to protect existing Work from weather and extremes of temperature and humidity. Insulate duct Work and piping to prevent condensation in exposed areas.

3.3 INSTALLATION

- A. Coordinate Work of alterations and renovations to expedite completion, to accommodate Owner occupancy, and minimize disruption of existing building ingress and egress.
- B. Designated areas, Rooms and spaces and Finishes: Complete in all respects including operational mechanical, electrical, and plumbing Work.
- C. Remove, cut, and patch Work in a manner to minimize damage and to provide a means of restoring Products and finishes to original or specified condition.
- D. Refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent finishes.
- E. In addition to specified replacement or removal of equipment and fixtures restore existing plumbing, heating, ventilation, air conditioning, electrical, and security systems to full operational condition.
- F. Install Products as specified in individual Sections.

3.4 TRANSITIONS

- A. Where new Work abuts or aligns with existing, perform a smooth and even transition. Patched Work to match existing adjacent Work in texture and appearance.
- B. When finished surfaces are cut so that a smooth transition with new Work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Architect.

3.5 ADJUSTMENTS

- A. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
- B. Where a change of plane of 1/4 inch or more occurs, request instructions from Architect.
- C. Fit Work at penetrations of surfaces as specified in Section 01045.

3.6 REPAIR OF DAMAGED SURFACES

- A. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- B. Repair substrate prior to patching finish.

3.7 FINISHES

- A. Finish surfaces as specified in individual Product Sections.
- B. Finish patches to product uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

3.8 HAZARDOUS MATERIALS

- A. Hazardous materials such as asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances shall not be allowed on the site nor be used in the Work. The Contractor shall notify the Owner immediately and stop Work in the area affected if any one of the products or materials specified in the Contract Documents or proposed by the Contractor or subcontractors or material suppliers or encountered on the job site contain or are suspected to contain hazardous materials in any form, so that a qualified consultant retained by the Owner can determine whether such materials may be used in the Work or need to be removed from the site or rendered harmless in a manner which will not adversely affect the health of any

3.8 HAZARDOUS MATERIALS (CONTINUED)

- A. (continued) person and which will comply with applicable governmental laws and regulations. Work in the affected area shall be resumed in the absence of any hazardous materials or when it has been rendered harmless by written agreement between Contractor and Owner.

- B. LEAD PAINT
 - 1. Lead paint specifications apply whenever a surface to be painted contains lead and where:
 - a) Manual surface preparation is required (e.g. sanding, scraping)
 - b) Surface preparation other than manual methods is required (e.g. chemical strippers or abrasive removal)
 - c) Complete paint removal to the substrate is required.

 - 2. Paint contains lead in buildings constructed prior to 1978. Lead content can be confirmed through non-destructive testing by x-ray fluorescence (XRF) or paint chip sampling and analysis by atomic absorption (AA) or inductively coupled plasma (ICP).

 - 3. The Contractor shall comply with all applicable regulations. Evidence of compliance with the OSHA Lead Standard - Construction Industry (29 CFR 1926.62) and Respiratory Protection Standard (29 CFR 1910.134) shall be provided to the Architect prior to the start of on-site work. This shall include a copy of the Contractor's Lead Compliance Program, consisting of the following minimum requirements:
 - a) A copy of the Contractor's Respiratory Protection Program, including records of training and fit testing.
 - b) A copy of the Contractor's Lead Exposure Assessment protocol.
 - c) A description of each activity in which lead is emitted including the equipment used, materials involved, control procedures, crew size, job responsibilities, operating procedures and maintenance protocols.
 - d) A description of specific means employed to achieve compliance, including engineering, administrative, and work practice controls.
 - e) A copy of the Contractor's Personal Protective Equipment selection criteria.
 - f) Records of lead hazard training as required by the Lead Standard.

3.8 HAZARDOUS MATERIALS (CONTINUED)

B. LEAD PAINT (continued)

4. The surface preparation method selected shall produce the least amount of lead dust and/or fumes. THE USE OF ABRASIVE BLASTING OR GAS FIRED TORCHES IS PROHIBITED.
5. The Architect shall review and approve the surface preparation method and contaminant control measures selected for use by the Contractor.
6. The Contractor shall post proper warning signs which delineate the work area, indicating: CAUTION LEAD HAZARD - DO NOT ENTER WORK AREA UNLESS AUTHORIZED.
7. The Contractor must ensure that all electrical connections are checked for proper grounding. For wet areas, ground fault protection is required.
8. Access to the work area shall be limited to the Contractor, the Contractor's employees, and persons designated by the Owner. No one shall be allowed to enter the work area without an appropriate NIOSH approved respirator suitable for the work being done.
9. The Contractor shall conduct daily clean-up by vacuuming all paint chips and dust using an industrial vacuum cleaner equipped with High Efficiency Particulate Air (HEPA) filtration. Use of household vacuum cleaners or shop vacs without HEPA filtration is prohibited.
10. The Contractor shall place all waste in suitable (DOT approved) containers, which are to be sealed, secured, and labeled at the end of each work day. Waste generated from lead abatement projects, or other projects that disturb lead containing materials, shall be segregated into the following three waste streams:
 - a) Solid waste generated from surface preparation activities (e.g. paint chips, dust)
 - b) Other solid waste (e.g. plastic sheeting, protective clothing)
 - c) Liquid waste (e.g. wastewater, TSP solution)

The Contractor shall provide for disposal of waste generated from the project.

11. The Contractor shall repaint with suitable lead-free paint and shall provide a copy of the Material

3.8 HAZARDOUS MATERIALS (CONTINUED)

B. LEAD PAINT (continued)

11. (continued) Safety Data Sheet for the product with the bid submittal.
12. The Contractor shall seal off the work area from the remainder of the building by taping doors and/or using plastic sheeting, until all work and clean-up activities are complete. All plastic sheeting shall be 6 mil thickness. Tape shall be waterproof.
13. The Contractor shall use plastic sheeting or impervious cloths to cover vents, grates, furnishings and equipment in the work area.
14. The Contractor shall ensure that the Heating, Ventilating and Air Conditioning (HVAC) system in the work area is shut off or blocked out and isolated prior to and during the work.
15. After the removal of lead paint, the area shall be completely HEPA vacuumed. Dry sweeping is prohibited. The Contractor shall wet mop or sponge all surfaces in the work area on a daily basis. Clean water or a trisodium phosphate (TSP) solution shall be used for cleaning.
16. The Contractor shall use plastic or canvas drop cloths to catch all waste when preparing exterior surfaces. The drop cloths shall be secured to the building, cover all shrubs and trees, and extend at least eight feet from the building. Dust and chips shall be promptly removed from the drop cloths and surrounding affected areas.
17. The Contractor shall assure that all windows or doors are closed and that outdoor air intakes are protected. This also applies to adjacent buildings that are in close proximity to the work area.
18. When using surface preparation methods that generate dust, the Contractor shall construct containment areas to prevent the dispersion of lead-contaminated dust into adjacent areas and/or the environment.
19. When using pressure wash or steam systems for paint preparation, the Contractor shall collect all liquid waste. A system of collection such as gutters, troughs, leaders and barrels shall be designed by the Contractor and submitted to the Architect for review and approval prior to the start of the work.

3.8 HAZARDOUS MATERIALS (CONTINUED)

B. LEAD PAINT (continued)

20. The Contractor shall adhere to all appropriate OSHA regulations including but not limited to scaffolds, fall protection, barricades, fire protection, personal protective equipment, and electrical.
21. The Contractor shall pre-clean all window surfaces with a HEPA vacuum, removing all debris and loose paint chips. Interior surfaces and occupant belongings that cannot be removed shall be protected with one layer of 6 mil polyethylene sheeting, taped at the joints.
22. The Contractor shall protect all exterior surfaces as described in the General Terms and Conditions for Exterior Work.
23. The following sequence of work shall be followed:
 - a) Unscrew and remove exterior stops
 - b) Remove top sash
 - c) Remove parting beads with pry or pliers
 - d) Remove bottom sash
 - e) Remove right and left side window trough casings with a pry
 - f) Pry off head stop
 - g) Remove existing mullions
 - h) Remove exterior header
 - i) HEPA vacuum surrounding surfaces and window wells
24. Custom windows (e.g. stained glass, bow, plate glass) of unusual size, shape and components may require alternate procedures. These procedures shall be developed by the Contractor and submitted to the Architect for approval.

3.9 CLEANING

- A. In addition to cleaning specified in Section 01500 clean Owner occupied areas of Work at the end of each working day.
- B. Keep existing and/or new heating and cooling system ductwork and equipment clean during construction (if any). Provide temporary filters and dust collection to minimize construction debris/dust and air quality complaints (if any). Maintain temporary filter and dust collection measures throughout the course of construction, system start-up, system testing, and system commissioning (if any).

END OF SECTION

SECTION 01200

PRICE AND PAYMENT PROCEDURES

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Cash allowances.
- B. Contingency allowances.
- C. Schedule of values.
- D. Applications for payment.
- E. Change procedures.
- F. Defect assessment.
- G. Unit prices.
- H. Alternates

1.2 CASH ALLOWANCES (IF ANY)

- A. Costs Included in Cash Allowances: Cost of product to Contractor or Subcontractor, labor for installation and finishing; less applicable trade discounts; and delivery to site.
- B. Costs Not Included in Cash Allowances But Included in Contract Sum/Price: Product delivery to site and handling at site, including unloading, uncrating, and storage; and protection of products from elements and from damage.
- C. Architect/Engineer Responsibilities:
 - 1. Consult with Contractor for consideration and selection of products, suppliers, and installers.
 - 2. Select products in consultation with Owner and transmit decision to Contractor.
 - 3. Prepare Change Order.
- D. Contractor Responsibilities:
 - 1. Assist Architect/Engineer in selection of products, suppliers and installers.
 - 2. Obtain proposals from suppliers and installers and offer recommendations.
 - 3. On notification of selection by Architect, execute purchase agreement with designated supplier and installer.
 - 4. Arrange for and process shop drawings, product data, and samples. Arrange for delivery.

1.2 CASH ALLOWANCES (IF ANY) (CONTINUED)

- D. Contractor Responsibilities (Continued):
 - 5. Promptly inspect products upon delivery for completeness, damage, and defects. Submit claims for transportation damage.
- E. Differences in costs will be adjusted by Change Order.
- F. Allowances Schedule:
 - 1. \$50,000.00.
- G. Unused allowances sums will be credited back to the Owner via Change Order.
- H. Owner only will approve any use of the allowance sum.

1.3 SCHEDULE OF VALUES

- A. Submit printed schedule on AIA Form G703 - Continuation Sheet for G702.
- B. Submit Schedule of Values in duplicate within 7 calendar days after date Bid Opening.
- C. Format: Utilize Table of Contents of this Project Manual. Identify each line item with number and title of major specification Section. Identify site mobilization, bonds and insurance, and all other General Conditions costs.
- D. Include in each line item, amount of Allowances specified in this section. [For unit cost Allowances, identify quantities taken from Contract Documents multiplied by unit cost to achieve total for each item.]
- E. Include separately from each line item, direct proportional amount of Contractor's overhead and profit.
- F. Revise schedule to list approved Change Orders, with each Application for Payment.

1.4 APPLICATIONS FOR PAYMENT

- A. See specification section 01027.
- B. Substantiating Data: When Architect/Engineer requires substantiating information, submit data justifying dollar amounts in question. Include the following with Application for Payment:
 - 1. Current construction photographs specified in Section 01380.
 - 2. Partial release of liens from major subcontractors and vendors.

1.4 APPLICATIONS FOR PAYMENT (CONTINUED)

B. (continued)

3. Record documents as specified in Section 01700, for review by Owner which will be returned to Contractor.
4. Affidavits attesting to off-site stored products.
5. Construction progress schedules, revised and current as specified in Section 01310.

1.5 CHANGE PROCEDURES

- A. See specification section 01028.
- B. Contractor may propose changes by submitting a request for change to Architect/Engineer, describing proposed change and its full effect on the Work. Include a statement describing reason for the change, and effect on Contract Sum/Price and Contract Time with full documentation and a statement describing effect on Work by separate or other Contractors. Document requested substitutions in accordance with Section 01600.
- C. Change Order Forms: as used by the Architect.
- D. Execution of Change Orders: Architect/Engineer will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
- E. Correlation Of Contractor Submittals:
 1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
 2. Promptly revise progress schedules to reflect change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
 3. Promptly enter changes in Project Record Documents.

1.6 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of the Architect it is not practical to remove and replace the Work, the Architect will direct appropriate remedy or adjust payment.
- C. The defective Work may remain, but Contract sum/price will be adjusted to new Contract sum/price at discretion of Architect.
- D. Defective Work may be partially repaired to instructions of Architect, and Contract sum/price will be adjusted to new Contract sum/price at discretion of Architect.

1.6 DEFECT ASSESSMENT (CONTINUED)

- E. Individual specification sections may modify these options or may identify specific formula or percentage sum/price reduction.
- F. Authority of Architect to assess defects and identify payment adjustments, is final.
- G. Non-Payment For Rejected Products: Payment will not be made for rejected products for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from transporting vehicle.
 - 4. Products placed beyond lines and levels of required Work.
 - 5. Products remaining on hand after completion of the Work.
 - 6. Loading, hauling, and disposing of rejected products.

1.7 UNIT PRICES (IF ANY)

- A. Authority: Measurement methods are delineated in individual specification sections.
- B. Measurement methods delineated in individual specification sections complement criteria of this section. In event of conflict, requirements of individual specification section govern.
- C. Take measurements and compute quantities. Architect will verify measurements and quantities.
- D. Unit Quantities: Quantities and measurements indicated in Bid Form (IF ANY) are for contract purposes only. Quantities and measurements supplied or placed in the Work shall determine payment. Actual quantities provided shall determine payment.
 - 1. When actual Work requires more or fewer quantities than those quantities indicated, provide required quantities at unit sum/prices contracted.
 - 2. When actual Work requires 10 percent or greater change in quantity than those quantities indicated, Owner or Contractor may claim for Contract Price adjustment.
- E. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals; erection, application or installation of item of the Work; overhead and profit.

1.7 UNIT PRICES (IF ANY) (CONTINUED)

F. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Architect/Engineer multiplied by unit sum/price for Work incorporated in or made necessary by the Work.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01300

SUBMITTALS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Submittal procedures.
- B. Construction progress schedules.
- C. Proposed products list.
- D. Shop drawings.
- E. Product data.
- F. Samples.
- G. Manufacturers' instructions.
- H. Manufacturers' certificates.

1.2 RELATED SECTIONS

- A. Section 01400 - Quality Control: Manufacturers' field services and reports.
- B. Section 01700 - Contract Closeout: Contract warranty and manufacturer's certificates closeout submittals.

1.3 SUBMITTAL PROCEDURES

- A. Transmit each submittal with Architect accepted form.
- B. Submit minimum three copies of ALL submittals PLUS AS MANY ADDITIONAL COPIES WHICH WILL BE RETURNED TO THE CONTRACTOR; minimum three copies of submittals will be retained by the Architect.
 - 1. Hard copies required; electronic copies will be received but NOT reviewed.
- C. Identify Project, Contractor, Subcontractor or supplier; pertinent Drawing sheet and detail number(s), and specification Section number, as appropriate.
- D. Apply Contractor's stamp, signed or initialed certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents.
- E. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.

1.3 SUBMITTAL PROCEDURES (CONTINUED)

- F. Provide space for Contractor and Architect/Engineer review stamps.
- G. Revise and resubmit submittals as required, identify all changes made since previous submittal.
- H. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

1.4 CONSTRUCTION PROGRESS SCHEDULES

- A. SUBMIT INITIAL PROGRESS SCHEDULE IN TRIPLICATE WITHIN FOURTEEN (14) CALENDAR DAYS AFTER DATE OF OWNER-CONTRACTOR AGREEMENT FOR ARCHITECT REVIEW.
 - 1. Hard copies required; electronic copies will be received but NOT reviewed.
- B. Revise and resubmit as required or requested.
- C. Submit Progress Schedule in format specified in Section 01310 and/or as indicated below.
- D. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities.
- E. Indicate estimated percentage of completion for each item of Work at each submission.
- F. Indicate submittal dates required for shop drawings, product data, samples, and product delivery dates.

1.5 PROPOSED PRODUCTS LIST

- A. WITHIN TEN (10) CALENDAR DAYS AFTER DATE OF OWNER-CONTRACTOR AGREEMENT, SUBMIT COMPLETE LIST OF MAJOR PRODUCTS PROPOSED FOR USE, WITH NAME OF MANUFACTURER, TRADE NAME, AND MODEL NUMBER OF EACH PRODUCT.
 - 1. Hard copies required; electronic copies will be received but NOT reviewed.
- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.6 SHOP DRAWINGS

- A. Submit the number of opaque reproductions which Contractor requires, **PLUS THREE COPIES WHICH WILL BE RETAINED BY THE ARCHITECT.**
 - 1. Hard copies required; electronic copies will be received but NOT reviewed.

1.6 SHOP DRAWINGS (CONTINUED)

- B. After review distribute in accordance with Article on Procedures above and for Record Documents described in Section 01700 - Contract Closeout.
- C. Hard copy submittals for shop drawings are required.

1.7 PRODUCT DATA

- A. Submit the number of copies which the Contractor requires, **PLUS THREE COPIES WHICH WILL BE RETAINED BY THE ARCHITECT.**
 - 1. Hard copies required; electronic copies will be received but NOT reviewed.
- B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this Project.
- C. After review, distribute in accordance with Article on Procedures above and provide copies for Record Documents described in Section 01700 - Contract Closeout.

1.8 SAMPLES

- A. Submit samples to illustrate functional and aesthetic characteristics of the Product, with integral parts and attachment devices. Coordinate sample submittals for interfacing Work.
- B. Submit samples of finishes from the full range of manufacturers' standard colors, textures, and patterns for Architect/Engineer's selection.
- C. Include identification on each sample, with full Project information.
- D. Submit the number of samples specified in individual specification Sections; **TWO** of which will be retained by Architect. If number of samples are not indicated in individual specification Sections submit minimum of **THREE**; two of which will be retained by Architect.
- E. Reviewed samples which may be used in the Work are indicated in individual specification Sections.

1.9 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.
- B. Identify conflicts between manufacturers' instructions and Contract Documents.

1.10 MANUFACTURER'S CERTIFICATES

- A. When specified in individual specification Sections, submit manufacturers' certificate to Architect for review, in quantities specified for Product Data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect/Engineer.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 01310
PROGRESS SCHEDULES

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Format.
- B. Content.
- C. Revisions to schedules.
- D. Submittals.

1.2 RELATED SECTIONS

- A. Section 01010 - Summary of Work: Owner occupancy.
- B. Section 01041 - Project Coordination: Schedules/sequencing/phased Work.
- C. Section 01300 - Submittals: Construction Progress Schedules.
- D. Section 01300 - Submittals: Shop drawings.

1.3 FORMAT

- A. Prepare schedules as a horizontal bar chart with separate bar for each major portion of Work or operation, identifying first work day of each week.
- B. Sequence of Listings: The chronological order of the start of each item of Work.
- C. Scale and Spacing: To provide space for notations and revisions.
- D. Sheet Size: Minimum 11 x 17 inches.
- E. Quantity: Three (3) hard copies. Electronic copies are not acceptable.

1.4 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- B. Identify each item by specification section number.
- C. Identify Work of separate stages and other logically grouped activities.
- D. Provide sub-schedules to define critical portions of the entire schedule.

1.4 CONTENT (CONTINUED)

- E. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- F. Provide separate schedule of submittal dates for shop drawings, product data, and samples, including Owner furnished products, and dates reviewed submittals will be required from the Architect. Indicate decision dates for selection of finishes.
- G. Indicate delivery dates for Owner furnished products, if any.

1.5 REVISIONS TO SCHEDULES

- A. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
- B. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
- C. Provide narrative report to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect.

1.6 SUBMITTALS

- A. Submit initial schedule(s) within fourteen (14) calendar days after date of notice of award of contract. After review, resubmit required revised data within seven calendar days.
- B. Submit revised Progress Schedules at each job site meeting with the Architect and/or Owner that occur at the start of each calendar month.
- C. Submit two opaque reproductions of the Progress Schedule to the Architect.

1.7 DISTRIBUTION

- A. Distribute copies of reviewed schedules to Project site file, Subcontractors, suppliers, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules. Submit copy of recipients response to the Architect.

2 PART 2 PRODUCTS

Not Used.

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3 PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01380

CONSTRUCTION PHOTOGRAPHS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Photography.
- B. Prints.
- C. Negatives.
- D. Technique.
- E. Submittals.

1.2 RELATED SECTIONS

- A. General Conditions and applicable Supplementary Conditions: Dates for applications for payment.
- B. Section 01010 - Summary of Work: Stages of the Work.
- C. Section 01700 - Contract Closeout: Project record documents.

1.3 PHOTOGRAPHY

- A. Provide photographs of site and construction throughout progress of Work produced by a photographer acceptable to Architect.
- B. Take photographs during the course of construction to record progress and uncovered conditions to document for the Owner and Architect as follows:
 - 1. Demolition.
 - 2. Existing utilities uncovered during course of the Work.
 - 3. Damaged existing construction.
 - 4. Bench marks, reference points, and construction layout.
 - 5. New construction during the course of the Work.
 - 6. Final completion.
- C. Take photographs as evidence of existing project conditions. Report any existing conditions of consequence to the Architect prior to undertaking the Work.
- D. Schedule photographs of site and construction on a minimum weekly basis.

1.4 PRINTS

- A. Full color; THREE PRINTS OF EACH VIEW.

1.4 PRINTS (CONTINUED)

- B. Paper Surface (Color): matte.
- C. Contrast (Color): High.
- D. Size: 5 x 7 inch; mounted for binder and tabs.
- E. Identify each print on back. Identify name of Project, Architect's project number, phase of Work, orientation of view, date and time of view, name and address of photographer, and photographer's numbered identification of exposure.
- F. Color photocopies are not acceptable.
- G. Digital photographs are acceptable. Submit in hard copy prints and jpg format.

1.5 NEGATIVES

- A. Deliver three sets of negatives/photographs to Owner, via the Architect, with project record documents. Catalog and index negatives in chronological sequence; provide typed table of contents.

1.6 TECHNIQUE

- A. Provide factual presentation.
- B. Provide correct exposure and focus, high resolution and sharpness, maximum depth of field, and minimum distortion.

1.7 VIEWS

- A. Consult with Architect/Engineer for instructions on views required.

1.8 SUBMITTALS

- A. Deliver prints within three days after exposure with transmittal letter specified under Section 01300.
- B. Label back of photographs with subject and date.

1.9 PHOTOGRAPHS REQUIRED

- A. Failure to provide photographs as specified will result in an automatic \$1,500.00 contract sum deduction at the end of the project.

2 PART 2 PRODUCTS

Not Used.

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3 PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01400

QUALITY CONTROL

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Quality assurance and control of installation.
- B. References.
- C. Field samples.
- D. Manufacturers' field services and reports.
- E. Correlation and Intent of Contract Documents.
- F. Code requirements.
- G. Existing conditions and dimensions.
- H. Guarantee of Work.

1.2 RELATED SECTIONS

- A. Section 01010 - Summary of Work.
- B. Section 01090 - Reference Standards.
- C. Section 01300 - Submittals: Submission of Manufacturers' Instructions and Certificates.
- D. Section 01600 - Material and Equipment: Requirements for material and product quality.

1.3 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Unless otherwise specified, perform the Work using workers skilled in the particular type of work involved.
- B. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- C. Comply fully with manufacturers' instructions, including each step in sequence.
- D. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- E. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

1.3 QUALITY CONTROL/ASSURANCE OF INSTALLATION (CONTINUED)

- F. Perform Work by persons qualified to produce workmanship of specified quality.
- G. Should the Owner, in writing, deem anyone on the Work incompetent or unfit for the assigned duties, dismiss the worker immediately or re-assign the worker to a different task requiring a lesser degree of competence.
- H. Work shall be first class in every respect and all Work performed shall be according to the best trade practices.
- I. The Contractor shall maintain effective supervision on the project at all times Work is being performed. The Superintendent shall be the same person throughout the project AND SHALL ATTEND THE PRECONSTRUCTION CONFERENCE.
- J. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.
- K. Unless specified and/or noted otherwise materials and products indicated/specified shall be new; re-use of existing materials and products must be specifically allowed by notation in the Contract Documents. Used materials and products are not allowed unless specified and/or noted otherwise.

1.4 REFERENCES

- A. Conform to reference standard by date of issue current on date of Contract Documents.
- B. Obtain copies of standards when required by Contract Documents.
- C. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.5 FIELD SAMPLES

- A. Install field samples at the site as required by individual specifications Sections for review.
- B. Acceptable samples represent a quality level for the Work.
- C. Where field sample is specified in individual Sections to be removed, clear area after field sample has been accepted by Architect.

1.6 MANUFACTURERS' FIELD SERVICES AND REPORTS

- A. When specified in individual specification Sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Individuals to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- C. Submit report in duplicate within thirty (30) days of observation to Architect for review.

1.7 CORRELATION AND INTENT OF CONTRACT DOCUMENTS

- A. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferred from them as being necessary to produce the intended results.
- B. Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade. THE ARCHITECT WILL NOT ADVISE THE CONTRACTOR AS TO SUBCONTRACTOR WORK RESPONSIBILITY.
- C. The General Contractor and all Sub-Contractors shall examine all portions of the Contract Documents as they form the Contract for Construction. Neither the Owner or the Architect will be responsible for use by the Contractor or Sub-Contractors of partial or incomplete sets of documents.

1.8 CODE REQUIREMENTS

- A. Construction of this project shall be under jurisdiction and codes of City of McMinnville, Yamhill County, State of Oregon Department of Commerce, Oregon State Fire Marshal's Rules and Regulations, requirements of the National Electrical Code, International Building Code/Oregon Structural Specialty Code, International Mechanical Code, and International Fire Code. Contractor shall comply with requirements of latest edition of each listed above.
- B. Comply with Oregon Department of Environmental Quality rules, regulations, and requirements for handling and disposal of hazardous materials.

1.9 EXISTING CONDITIONS AND DIMENSIONS

- A. Field verify existing conditions prior to bid opening. Request clarification from the Architect for conditions found that are in conflict with information shown on the drawings or specified PRIOR TO BID OPENING.
- B. Field verify existing dimensions prior to bid opening. Do not scale measurements or dimensions from the drawings. Bid errors resulting from scaled measurements/dimensions shall be solely the responsibility of the Bidder.
- C. Field verify dimensions of new openings, new construction, and new equipment/devices prior to ordering any material components subject to field dimensions. Successful bidder is responsible for dimensions which shall be confirmed and correlated at the project site for compatibility with project components intended to be a part of the Work.
- D. Project components ordered or obtained for incorporation with the work that are not compatible with verified dimensions shall be solely the responsibility of the successful Bidder.
- E. Where new utility infrastructure is to be integrated with existing utility infrastructure field verify existing utilities are in place and of the type, size, and use as shown on the drawings. Field verify existing utility infrastructure is operating properly prior to connection to new infrastructure. Do not connect new utility infrastructure to abandoned or non-functioning existing utility infrastructure.
- F. Field verify existing building/structure materials prior to bid opening. Require clarification from the Architect for materials found that are in conflict with information shown on the Drawings or specified prior to bid opening. Bid errors resulting from failure to field verify existing structure materials shall be solely the responsibility of the successful Bidder.
- G. Failure to field verify existing conditions and new or existing dimensions by the Bidder will not be reason to change the Contract Sum after award of a Contract to the successful Bidder.
- H. Failure to field verify as specified above is applicable before, during and after the bidding phase of the project.
- I. Specified criteria of paragraphs A., B., C., D., E., and F. listed above apply to Work of the project prior to bid and during construction by the successful Bidder.

1.10 MECHANICAL, ELECTRICAL, AND PLUMBING WORK COORDINATION (IF ANY)

- A. Work of all utility and infrastructure systems sub-contractors shall be coordinated by the General Contractor.
- B. Work shall be coordinated to allow installation of utility systems and infrastructure without conflict in location, routing, and space use. Do not allow work without sub-contractor coordination prior to physical implementation.
- C. Verify utility systems interface compatibility prior to bid opening. Request clarification from the Architect for systems found that are in conflict with each other shown on the drawings or specified prior to bid opening. Failure to verify utility systems interface shall be solely the responsibility of the Bidder.
- D. Where new utility infrastructure is to be integrated with existing utility infrastructure field verify existing utilities are in place and of the type, size, and use as shown on the drawings. Field verify existing utility infrastructure is operating properly prior to connection to new infrastructure. Do not connect new utility infrastructure to abandoned or non-functioning existing utility infrastructure.
- E. Specified criteria of paragraphs A., B., and C. listed above apply to Work of the project prior to bid and during construction by the successful Bidder.

1.11 INFEASIBLE WORK

- A. If work is required in a manner to make it impossible to produce first class work or should discrepancies appear among Contract Documents, make a written request for interpretation before proceeding with Work. If Contractor fails to make such written request, no excuse will there-after be entertained for failure to carry out work in satisfactory manner.
- B. If work is shown in the Contract Documents that is not possible to complete, or deletion/addition of work in one area makes it impossible or infeasible to complete work in another area, make a written request for interpretation before proceeding with further work. If Contractor fails to make such written request, no excuse will thereafter be entertained for failure to carry out work in satisfactory manner.
- C. Means and methods of construction are solely the responsibility of the Contractor. Bidding means and methods that are deemed infeasible by site conditions, other than concealed conditions, shall be the sole responsibility of the Contractor. The Owner shall not compensate the Contractor for changes to means and

1.11 INFEASIBLE WORK (CONTINUED)

- C. (continued) methods when determined infeasible by site conditions, other than concealed conditions.

1.12 GUARANTEE OF WORK

- A. Before final payment is made to the General Contractor, he/she shall furnish a written guarantee to repair or replace any defects caused by faulty workmanship or materials, without additional cost to the Owner. The guarantee shall cover a period of one year from the date of acceptance of the project by the Owner, unless a longer period of coverage is required by the specifications or special provisions.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01410

TESTING LABORATORY SERVICES

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Selection and payment.
- B. Contractor submittals.
- C. Laboratory responsibilities.
- D. Laboratory reports.
- E. Limits on testing laboratory authority.
- F. Contractor responsibilities.
- G. Schedule of inspections and tests.

1.2 RELATED SECTIONS

- A. General Conditions: Inspections, testing, and approvals required by public authorities.
- B. Section 01300 - Submittals: Manufacturer's certificates.
- C. Section 01700 - Contract Closeout: Project Record Documents.
- D. Individual Specification Sections: Inspections and tests required, and standards for testing.

1.3 REFERENCES

- A. ANSI/ASTM D3740 - Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
- B. ANSI/ASTM E329 - Recommended Practice for Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction.

1.4 SELECTION AND PAYMENT

- A. Owner shall employ and pay for services of an independent testing laboratory to perform specified inspection and testing (if any).
- B. Contractor shall employ and pay for services of an independent testing laboratory for any re-testing required as a result of Owner employed tests that indicate non-compliance with the Contract Documents.

1.5 QUALITY ASSURANCE

- A. Comply with requirements of ANSI/ASTM E329.
- B. Laboratory: Authorized to operate in state in which Project is located.
- C. Laboratory Staff: Maintain a full time registered Engineer on staff to review services.
- D. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to either National Bureau of Standards (NBS) Standards or accepted values of natural physical constants.

1.6 LABORATORY RESPONSIBILITIES

- A. Test samples of mixes submitted by Contractor.
- B. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
- C. Perform specified inspection, sampling, and testing of Products in accordance with specified standards.
- D. Ascertain compliance of materials and mixes with requirements of Contract Documents.
- E. Promptly notify Architect and Contractor of observed irregularities or non-conformance of Work or Products.
- F. Perform additional inspections and tests required by Architect or Owner.
- G. Attend preconstruction conferences and progress meetings.

1.7 LABORATORY REPORTS

- A. After each inspection and test, promptly submit one copy of laboratory report to the Owner, the Architect, and the General Contractor. Include:
 - 1. Date issued,
 - 2. Project title and number,
 - 3. Name of inspector,
 - 4. Date and time of sampling or inspection,
 - 5. Identification of product and Specifications Section,
 - 6. Location in the Project,
 - 7. Type of inspection or test,
 - 8. Date of test,
 - 9. Results of tests,
 - 10. Conformance with Contract Documents.
- B. When requested by Architect, provide interpretation of test results.

1.8 LIMITS ON TESTING LABORATORY AUTHORITY

- A. Laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
- B. Laboratory may not approve or accept any portion of the Work.
- C. Laboratory may not assume any duties of Contractor.
- D. Laboratory has no authority to stop the Work.

1.9 CONTRACTOR RESPONSIBILITIES

- A. Deliver to or provide for laboratory at designated location, adequate samples of materials proposed to be used which require testing, along with proposed mix designs.
- B. Cooperate with laboratory personnel, and provide access to the Work.
- C. Provide incidental labor and facilities to provide access to Work to be tested, to obtain and handle samples at the site or at source of products to be tested, to facilitate tests and inspections, storage and curing of test samples.
- D. Notify Architect and laboratory 24 hours prior to expected time for operations requiring inspection and testing services.
- E. Arrange with laboratory and pay for additional samples and tests required by Contractor beyond specified requirements or for re-testing required by non-compliance work.

2 PART 2 DETAILED REQUIREMENTS

2.1 STRUCTURAL CONCRETE (IF ANY)

- A. Slump Test: ASTM C143. Determine slump of fresh concrete from each batch sampled for compressive strength.
 - 1. Prepare tests from same batch as that employed in preparing strength-test specimens, unless otherwise directed.
 - 2. If measured slump falls outside specified limits retest immediately from another portion of the same load. In event of second failure concrete shall be considered as failing specifications requirements.
 - 3. Samples shall be taken once per day (minimum), no less than once per 150 cubic yards of concrete cast in any one day.
- B. Air-Content Test: ASTM C231. Provide one test for each set of compressive strength specimens.

2.1 STRUCTURAL CONCRETE (IF ANY) (CONTINUED)

- C. Compressive Strength Test: Take cylinders for each grade and strength of concrete poured each day.
 - 1. Test-break two cylinders at seven days of age, and, unless otherwise directed, break remainder at twenty-eight days.
 - 2. If any one set of two cylinders does not develop full design strength at twenty-eight days of age, cores and load-testing may be called for. All coring and load-testing costs shall be paid by Contractor.
- D. Cast-In-Place Concrete: ASTM C39. Make not less than four standard compressive strength test cylinders for each 100 cubic yards of concrete or fraction thereof.
- E. Core Samples: If concrete samples fail to meet specified compressive strength requirements, concrete shall be considered defective and core samples from selected areas may be taken in accordance with ASTM C42.

2.2 EARTHWORK DENSITY (IF ANY)

- A. See geotechnical engineering report (if any).
- B. In the absence of a geotechnical engineering report:
 - 1. Maximum Density Test: AASHTO T-180 or ASTM D1557; , Method A except Method C when aggregate 3" and larger is specified.
 - 2. Field Compaction Test: ASTM D2922.
 - 3. Provide tests for each 100 cubic yards, or less, for each layer of fill and backfill placed in any one day, for pavement beds and any other earthwork construction which support finished surfaces or structures.

2.3 ASPHALT PAVEMENT (IF ANY)

- A. Conduct one test for each twenty thousand square feet or less, of pavement placed in any one day as follows:
 - 1. Compacted base-rock field density.
 - 2. Placement tests to determine asphalt-cement content, gradation of aggregate voids, temperature, and Marshall stability of mix.
 - 3. Finished product core sample to check compaction and voids.
 - 4. Pavement mixture shall be compacted to at least 92% of the theoretical maximum density (Rice Density) as determined by ODOT TM 306.

2.4 STRUCTURAL STEEL (IF ANY)

- A. Inspection at fabrication shop and job site as follows:
 - 1. Inspection of specification conformance of

2.4 STRUCTURAL STEEL (IF ANY) (CONTINUED)

A. (continued):

1. (continued): fabricated structural steel members and assemblies.
2. Inspection of shop and field welding in accordance with AWS Building Code, section 6 and as follows:
 - a) Stud Welding inspection in accordance with Article 433.
 - b) Visual inspection in accordance with Article 605.
 - c) Liquid penetrant inspection in accordance with ASTM E 165, procedure B.
 - d) Magnetic particle inspection in accordance with ASTM E 109.
 - e) Radiographic inspection in accordance with Appendix B.
 - f) Ultrasonic inspection in accordance with Appendix C.
 - g) Visual inspection of surface preparation prior to shop painting to evaluate cleanliness in accordance with SSPC Pictorial Standards.
 - h) Measure dry film paint thickness in accordance with ASTM D 1005.

2.5 HIGH STRENGTH BOLTING (IF ANY)

A. Inspection at fabrication and job site as follows:

1. Observe calibration procedures and monitor bolt installation to determine all plies of connected material have been drawing together and the selected procedure is properly used to tighten all bolts.
2. All connections required to be slip critical or subject to axial tension shall be inspected to assure the specified procedure is followed to achieve pretension specified in the Building Code.

2.6 MASONRY (IF ANY)

A. Mortar:

1. Prepare in accordance with UBC Standard 24-22 for two inch diameter by four inch long cylinders for each two thousand square feet of wall. Test-break two cylinders at seven days of age, and unless otherwise directed, test-break remainder at twenty-eight days.

B. Grout:

1. Prepare in accordance with UBC Standard 24-22 four cubes approximately 3 x 3 x 6 inches for each twenty cubic yards of grout. Test-break two cubes

2.6 MASONRY (IF ANY) (CONTINUED)

B. (continued):

1. (continued) at seven days of age, and unless otherwise directed, break remainder at twenty-eight days.

2.7 SPECIAL INSPECTIONS (IF ANY)

A. The following special inspections are required and shall be performed by an independent testing agency. The testing agency shall provide copies of all test reports to the Owner, Architect, and Structural Engineer (if any) in a timely manner.

1. Special inspection required during the taking of test specimens and placing of all reinforced concrete except slabs on grade or concrete with specified f'c no greater than 2,500 psi. Test reports shall identify all concrete tested by mix design number (in reference to approved mix design) and identify type of pour (slab, footing, etc.) and location of pour in relation to building grids.
2. Special inspection required of all concrete reinforcement prior to concrete placement except for slab on grade reinforcement.
3. Special inspection required for all structural welding unless welding is performed in a shop approved by the building official. All field welding requires special inspection. Special inspection of welding may be performed on a periodic basis per Building Code. All full penetration welds require continuous inspection from fit up through completion of weld.
4. Special inspection required of all drilled epoxy anchors in concrete or masonry. Inspection to be continuous during anchor installation to insure installation meets all manufacturer's instructions and minimum embedment noted on drawings.
5. Special inspection required for all structural masonry. Required inspection shall occur during the preparation of test prisms, grout samples and mortar samples, at the start of lay up of units, prior to grouting for inspection of cleanouts and reinforcement placement, and during the grouting process. Continuous inspection during the masonry lay up not required.

3 PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01500

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Temporary Utilities: Electricity, lighting, heat, telephone service, water, and sanitary facilities.
- B. Temporary Controls: Barriers, enclosures, protection of the Work, and water control.
- C. Construction Facilities: Access roads, parking, and progress cleaning.

1.2 RELATED SECTIONS

- A. Section 01700 - Contract Closeout: Final cleaning.

1.3 TEMPORARY ELECTRICITY

- A. Electrical service for the project limited to 20 amp 120v circuits will be paid for by the Contractor. Use of the existing building electrical service shall be the responsibility of the Contractor, with the Owner's approval. Coordinate with Owner and Architect for allocation of electrical service cost associated with the work of this project.
- B. Power consumption by the Contractor shall not disrupt Owner's need for continuous service. Disruption of Owner's needs will result in revoking of power consumption privileges from existing service.
- C. Provide power outlets for construction operations, with branch wiring and distribution boxes located as required. Provide flexible power cords as required. Cords and branch wiring shall not conflict with pedestrian traffic or building exiting requirements.

1.4 TEMPORARY LIGHTING

- A. Provide and maintain lighting for construction operations and safe working conditions.
- B. Provide and maintain lighting to exterior staging and storage areas after dark for security purposes.
- C. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required.
- D. Maintain lighting and provide routine repairs.

1.5 TEMPORARY HEAT

- A. Provide and pay for heat devices and heat required to maintain specified conditions for construction operations.
- B. Prior to operation of permanent equipment for temporary heating purposes, verify installation is approved for operation, equipment is lubricated and filters are in place. Provide and pay for operation, maintenance, and regular replacement of filters and worn or consumed parts.
- C. Temporary heat required to maintain construction operations and conditioned spaces equal to or better than existed prior to the start of work of the project for the existing building (if any) while new construction occurs shall be the means and methods construction and cost responsibility of the Contractor, with the Architect and Owner's approval. Coordinate with the Architect and Owner.

1.6 TEMPORARY VENTILATION

- A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
 - 1. Ventilation for paint fumes shall be the means and methods construction and cost responsibility of the Contractor.

1.7 TELEPHONE SERVICE

- A. Provide, maintain and pay for telephone service to field office at time of project mobilization.
- B. Owner's telephones shall not be used to make telephone calls.

1.8 TEMPORARY WATER SERVICE

- A. Water service in reasonable quantities for the project will be paid for by the Owner. Connection to the services shall be the responsibility of the Contractor, with the Owner's approval. Coordinate with the Owner's Representative.
- B. Extend branch piping with outlets located so water is available by hoses with threaded connections. Prevent water service supply lines from freezing.
- D. Temporary water service to provide service continuation to an existing system while new construction occurs shall be the means and methods construction and cost responsibility of the Contractor, with the Owner and Architect's approval. Coordinate with Owner and Architect.

1.9 TEMPORARY SANITARY FACILITIES

- A. The Contractor shall provide restroom facilities for project workers. The Owner's restrooms will not be available for Contractor use.

1.10 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas and to allow for Owner's use of site adjacent to area of Work, and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades and walkways required by the Jurisdiction Having Authority for public rights-of-way and for public access to/from existing buildings and existing parking areas.
- C. Protect non-owned vehicular traffic, stored materials, site and structures from damage.
- D. See drawings for additional information.

1.11 WATER CONTROL (IF ANY)

- A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
 - 1. "Free of water" means ANY source of water - ground water, rain water, utility system water, etc.
- B. Protect site from puddling or running water.
- C. Protect new construction from storm water drainage damage prior to installation of specified drainage system.
- D. Failure to provide water control on site during construction will be solely the Contractor's responsibility.
- E. Water damage to the building from construction activities, or from unprotected exterior openings, shall be solely the Contractor's responsibility to repair and/or replace damaged existing or new materials.
- F. When concrete/masonry saw cutting is a part of the project protect all existing spaces and surfaces from water damage. Control and clean up water used for cutting to prevent damage.
- G. Review drawings for dewatering information (if any).
- H. Review drawings for any wet weather work criteria and information (if any).

1.12 EXTERIOR ENCLOSURES

- A. Provide temporary weather-tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification Sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.
- B. Also see notes on the drawings (if any).

1.13 INTERIOR ENCLOSURES

- A. Provide temporary partitions and ceilings required to separate Work areas from occupied areas, to prevent penetration of dust and moisture into completed areas, and to prevent damage to materials and equipment. Coordinate and review temporary interior enclosures with Architect and Owner prior to implementation.
- B. Also see notes on the drawings (if any).

1.14 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification Sections.
- B. Provide temporary and removable protection for installed Products. Control activity in immediate Work area to minimize damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

1.15 SECURITY

- A. Provide security and facilities to protect Work, and Owner's operations from unauthorized entry, vandalism, or theft.

1.16 PROGRESS CLEANING

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

1.16 PROGRESS CLEANING (CONTINUED)

- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Remove waste materials, debris, and rubbish from site periodically and dispose off-site.

1.17 FIELD OFFICES AND SHEDS

- A. Office: Weather-tight, with lighting, electrical outlets, heating equipment, and equipped with sturdy furniture.
- B. Locate offices and sheds adjacent to construction area; coordinate with Owner and Architect.

1.18 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Do not interrupt any existing service. Prior request and approval of the Owner will enable shutting down any utility required by the Work. Contractor's employees shall not shut down utilities.
- B. Remove temporary above grade or buried utilities, equipment, facilities, materials, prior to Final Application for Payment inspection.
- C. Clean and repair damage caused by installation or use of temporary work. Clean, level, and repair lawn damage caused by installation or use of temporary work or equipment.
- D. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.
- E. Restore existing utilities disrupted by construction at time of disruption. Contractor shall be responsible for cost of repairing damaged existing utility.
- F. Do not interrupt, temporarily shut down, or in any way disrupt existing telephone exchange service.

1.19 PROTECTION OF EXISTING SITE AMENITIES

- A. Protect sidewalks, asphalt paving, concrete, trees, shrubs, and lawn areas at all times from spillage of materials used in carrying out the Work. Prevent materials from clogging catch basins and yard drains; leave drains clean and in proper working condition.

1.19 PROTECTION OF EXISTING SITE AMENITIES (CONTINUED)

A. (continued)

1. In the event the Contractor damages plant material with equipment or personnel, the Contractor will, at the Owner's discretion, replace/repair the damaged materials or be assessed a charge by the Owner for the damages.
2. In the event damage occurs to an existing utility system or irrigation system as a direct result of a Contractor's activities, the Contractor shall repair/replace or be assessed a charge at the discretion of the Owner. If repairs are to be made by the Contractor, the repairs will be inspected by the Architect prior to backfilling. Any galvanized pipe that requires repair shall be repaired at a threaded coupling, not by use of a compression coupling.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01650

STARTING OF SYSTEMS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Starting systems.
- B. Demonstration and instructions.
- C. Testing, adjusting, and balancing.

1.2 RELATED SECTIONS

- A. Section 01400 - Quality Control: Manufacturers field reports.
- B. Section 01700 - Contract Closeout: System operation and maintenance data and extra materials.

1.3 STARTING SYSTEMS

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Notify Architect and Owner seven days prior to startup of each item.
- C. Verify each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, or other conditions which may cause damage.
- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- E. Verify wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of responsible personnel in accordance with manufacturers' instructions.
- G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- H. Submit a written report in accordance with Section 01400 indicating equipment and/or systems have been properly installed and is/are functioning correctly.

1.4 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of final inspection.
- B. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- C. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owners' personnel in detail to explain all aspects of operation and maintenance.
- D. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment.
- E. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

1.5 HVAC TESTING, ADJUSTING, AND BALANCING (IF ANY)

- A. HVAC testing, adjusting, and balancing specified in this section is for use if no other such work is specified elsewhere.
 - 1. Any HVAC testing, adjusting, and balancing specifications elsewhere in the project manual supercede the criteria of this section.
- B. Contractor shall employ and pay for services of an independent firm to perform testing, adjusting and balancing.
- C. Testing objectives:
 - 1. Balancing airflow within distribution systems, including submains, branches, and terminals, to indicated quantities according to specified tolerances.
 - 2. Adjusting total HVAC systems to provide indicated quantities.
- D. Submittals: Submit three copies of certified testing, adjusting, and balancing reports prepared, on approved forms certified by the testing, adjusting, and balancing Agent.
- E. Testing, Adjusting, and Balancing Reports: Use standard forms from SMACNA "HVAC Systems - Testing, Adjusting, and Balancing".
- F. Partial Owner Occupancy: The Owner may occupy completed areas of the project before substantial completion. Cooperate with the Owner during testing, adjusting, and balancing operations to minimize conflicts with the Owner's operations.

1.5 HVAC TESTING, ADJUSTING, AND BALANCING (CONTINUED)

- G. Coordination:
1. Coordinate efforts of factory-authorized service representatives for systems and equipment, HVAC controls installers, and other mechanics to operate HVAC systems and equipment to support and assist testing, adjusting, and balancing activities.
 2. Notice: Provide seven day advance notices to Owner and Architect for each test. Include scheduled test dates and times.
 3. Perform testing, adjusting, and balancing after leakage and pressure tests on air and water distribution systems have been satisfactorily completed.
- H. General Warranty: The national project performance guarantee specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- I. Examination:
1. Examine Contract Documents to become familiar with project requirements and to discover conditions in system designs that may preclude proper testing, adjusting, and balancing of systems and equipment.
 2. Examine approved submittal data of HVAC systems and equipment.
 3. Examine system and equipment installations to verify they are complete and testing, cleaning, adjusting, and commissioning (if any) have been performed.
 4. Examine system and equipment test reports.
 5. Examine systems for functional deficiencies that can not be corrected by adjusting and balancing.
 6. Examine air-handling equipment to ensure clean filters have been installed, bearings are greased, belts are aligned and tight, and equipment with functioning controls is ready for operation.
 7. Examine automatic temperature system components to verify the following:
 - a) Thermostats are located to avoid adverse effects of sunlight, drafts, and cold walls.
 - b) Interlocked systems are operating.
 - c) Changeover from heating to cooling mode occurs according to design values.
 8. Report deficiencies discovered before and during performance of testing, adjusting, and balancing procedures.
- J. Prepare a testing, adjusting, and balancing plan that includes strategies and step-by-step procedures.

1.5 HVAC TESTING, ADJUSTING, AND BALANCING (CONTINUED)

- K. General Testing and Balancing Procedures:
 - 1. Perform testing and balancing procedures on each system according to the procedures contained in SMCNA "HVAC Systems - Testing, Adjusting, and Balancing" and this Section.

- L. Fundamental Air Systems Balancing Procedures:
 - 1. Prepare test reports for both fans and outlets. Obtain manufacturer's outlet factors and recommended testing procedures. Cross-check the summation of required outlet volumes with required fan volumes.
 - 2. Prepare schematic diagrams of systems "as built" duct layouts.
 - 3. Determine the best locations in main and branch ducts for accurate duct airflow measurements.
 - 4. check the airflow patterns from the outside-air louvers and dampers and the return and exhaust air dampers, through the supply fan discharge and mixing dampers.
 - 5. locate start-stop and disconnect switches, electrical interlocks, and motor starters.
 - 6. Check dampers for proper position to achieve desired airflow path.
 - 7. Check for airflow blockages.
 - 8. Check condensate drains for proper connections and functioning.
 - 9. Check for proper sealing of air handling unit components.

- M. Constant Volume Air Systems Balancing Procedures:
 - 1. Procedures apply to constant volume supply, return, and exhaust air systems.
 - 2. Adjust fans to deliver total design air flows within the maximum allowable rpm listed by the fan manufacturer.
 - a) Compare design data with installed conditions to determine variations in design static pressures versus actual static pressures. Compare actual system effect factors with calculated system effect factors to identify where variations occur. Recommend corrective action to align design and actual conditions.
 - b) adjust fan speed higher or lower than design with the approval of the Architect. Make required adjustments to pulley sizes, motor sizes, and electrical connections to accommodate fan speed changes.
 - c) Do not make fan speed adjustments that result in motor overload. Consult equipment manufacturer about fan speed safety factors. Modulate dampers and measure fan motor amperage to ensure no overload will occur. Measure amperage in full cooling, full heating, and economizer modes to determine the maximum required brake horsepower.

1.5 HVAC TESTING, ADJUSTING, AND BALANCING (CONTINUED)

- M. Constant Volume Air Systems Balancing Procedures (continued):
3. Adjust volume dampers for main duct, submain ducts, and major branch ducts to design air flows within specified tolerances.
 4. Adjust terminal outlets and inlets for each space to design air flows within specified tolerances of design values. Make adjustments using volume dampers rather than extractors and the dampers at the air terminals.
- N. Tolerances:
1. Set HVAC system airflow rates within the following tolerances:
 - a) Supply, Return, and Exhaust Fans: Plus 5 to plus 10 percent.
 - b) Air Outlets and Inlets: 0 to minus 10 percent.
- O. Final Report:
1. General: Typewritten or computer printout in letter quality font, on standard bond paper, in three ring binder; tabulated and divided in to sections by tested and balanced systems.
 2. Include a certification sheet in front of binder signed and sealed by the certified testing and balancing engineer.
 - a) Include a list of the instruments used for procedures, along with proof of calibration.
 3. Final Report Contents: In addition to the certified field report data, include the following:
 - a) Other information relative to equipment performance, but do not include approved Shop Drawings and Product Data.
 4. System diagrams: Include schematic layouts of air distribution systems. Present with single line diagrams and include the following:
 - a) Quantities of outside, supply, return, and exhaust air flows.
- P. Air Handling Unit Test Reports; for air handling units with coils include the following:
1. Unit Data:
 - a) Unit identification.
 - b) Location.
 - c) Make and type.
 - d) Model number and unit size.
 - e) Manufacturer's serial number.
 - f) Unit arrangement and class.
 - g) Discharge arrangement.
 2. Motor Data:
 - a) Make and frame type and size.
 - b) Horsepower and rpm.
 - c) Volts, phase, and hertz.
 - d) Full load amperage and service factor.

1.5 HVAC TESTING, ADJUSTING, AND BALANCING (CONTINUED)

- Q. Air Handling Unit Test Reports; for air handling units with coils include the following (continued):
 - 3. Test Data; include design and actual values for the following:
 - a) Total airflow rate in cfm.
 - b) Outside airflow in cfm.
 - c) Return airflow in cfm.
 - d) Outside air damper position.
 - e) Return air damper position.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

3.1 SCHEDULE

- A. Start up, adjust, test, balance, and make operable any and all new or existing (existing affected by the work of this project) mechanical, electrical or plumbing systems to a function and condition equal to or better than existed prior to start of construction.
- B. Clean, sanitize, inspect, and comply with local jurisdiction requirements for use of any new or existing domestic water or sewer system affected by Work of this project.
- C. All existing equipment (if any) and apparatus affected by Work of this project shall perform equal to or better than existed prior to commencement of the project. Equipment and apparatus performance shall be the responsibility of the successful Bidder.
- D. Any dust, debris, or damage generated by existing equipment by Work of this project shall solely be the responsibility of the successful Bidder to remedy to the Owner's satisfaction.

END OF SECTION

SECTION 01700

CONTRACT CLOSEOUT

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Closeout procedures.
- B. Final cleaning.
- C. Adjusting.
- D. Project record documents.
- E. Operation and maintenance data.
- F. Warranties.
- G. Spare parts and maintenance materials.

1.2 RELATED SECTIONS

- A. Section 01400 - Quality Control: Guarantees and warranties.
- B. Section 01500 - Construction Facilities and Temporary Controls: Progress cleaning.

1.3 CLOSEOUT PROCEDURES

- A. Submit **WRITTEN CERTIFICATION** that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect inspection.
- B. Provide submittals to Architect that are required by governing, project funding, or other authorities.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- D. Owner will occupy all of the building as specified in Section 01010.

1.4 FINAL REVIEW AND PAYMENT

- A. Prior to completion the Contractor shall inspect the Work and make a "punch list" noting all items that are incomplete and/or incorrect.
- B. The Contractor shall notify all Subcontractors in writing of incomplete and/or incorrect items. Notify far enough in advance of the Completion Date so Work can be completed on schedule. Said Work shall be immediately corrected.

1.4 FINAL REVIEW AND PAYMENT (CONTINUED)

- C. Should conditions prevail which prohibit some elements of the Work from being accomplished, but the work-in-place will perform the primary function (i.e., painting can not be completed due to high moisture content of masonry walls, etc.) the Contractor shall record the reason with this "punch list" item requesting temporary delay in completion from the Owner in writing.
- D. Notify the Owner in writing, via the Architect, that all items are completed and ready for final review or else that the Work product is fully usable, but some listed deficiencies remain to be completed. Submit all record documents at this time.
- E. The Owner will review all documents. When documents include a Contractor's request for delay in completion the Owner will review all Work which is certified as complete to the best knowledge of the Contractor. The Owner will also review the listed incomplete Work and assign a value to such incomplete work.
- F. The Contractor shall make the required corrections to the Work expeditiously. Upon Owner occupancy, sufficient retainage monies will be held to pay for incomplete Work, should the Contractor fail to perform. A letter will be addressed to the Contractor informing the Contractor of the project status and the monies available for semi-final payment upon receipt of billing.
- G. When Contract closeout procedures are completed and all punch list deficiencies have been corrected, final acceptance by the Owner will be documented. The Contractor will receive written notice of acceptance of the Work and notification that final payment may be billed and released.

1.5 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean glass and surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- C. Clean equipment and fixtures to a sanitary condition.
- D. Clean filters of operating equipment.
- E. Clean debris from area of Work.
- F. Clean site; sweep existing paved areas where materials have been stored or disposed of.

1.5 FINAL CLEANING (CONTINUED)

- G. Clean existing building areas (if any); remove dust, debris, and any deliterious materials associated with the scope of work. Leave existing building areas (if any) in a condition equal to or better than existed prior to the start of the work of this project.
- H. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.6 ADJUSTING

- A. Adjust operating Products and equipment to ensure smooth and unhindered operation.

1.7 PROJECT RECORD DOCUMENTS

- A. Maintain on site, three sets of the following record documents; record actual revisions to the Work:
 - 1. Contract Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other Modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and Modifications.
- E. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Contract Drawings.
- F. Submit documents to Owner, as part of the Operations and Maintenance Data manual.

1.8 OPERATION AND MAINTENANCE DATA

- A. Submit three sets, including project record documents upon 75% completion of the Work for review by the Owner's Authorized Representative and Architect prior to submission of any pay request for more than 75% of the work. No payments beyond 75% shall be made by the Owner until three (3) complete copies of O & M Manuals have been received. Bind in an 8-1/2 x 11 inch text pages, three D side ring binders with durable plastic covers.
 - 1. Electronic copies shall be rejected.
- B. Prepare binder covers with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are required.
- C. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- D. Contents: Prepare a Table of Contents for each volume, with each Product or system description identified.
- E. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, Subcontractors, and major equipment suppliers.
- F. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - 1. Significant design criteria.
 - 2. List of equipment.
 - 3. Parts list for each component.
 - 4. Operating instructions.
 - 5. Maintenance instructions for equipment & systems.
 - 6. Maintenance instructions for finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.
- G. Part 3: Project documents and certificates, including the following:
 - 1. Shop drawings and product data.
 - 2. Air and water balance reports.
 - 3. Certificates.
 - 4. Photocopies of warranties and bonds.
- H. Submit completed volume in final form ten (10) days prior to final inspection. This copy will be reviewed after final inspection with Architect comments as necessary. Revise content of documents as required prior to final submittal.
- I. Submit final volumes revised, within ten days after final inspection.

1.9 WARRANTIES

- A. Provide duplicate notarized copies. Identify Owner's responsibilities under the terms of the warranties.
- B. Execute and assemble documents from Subcontractors, suppliers, and manufacturers.
- C. Provide Table of Contents and assemble in three D side ring binder with durable plastic cover.
- D. Submit prior to final Application for Payment.
- E. All warranties and guaranties shall commence and become effective beginning on the date of Final Acceptance by the Owner.

1.10 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification Sections.
- B. Deliver to Project site and place in location as directed.

2 PART 2 PRODUCTS

Not used.

3 PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 02225

MINOR DEMOLITION FOR REMODELING

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Removal of designated building construction, equipment, and fixtures.
- B. Removal of designated construction.
- C. Identification of utilities.

1.2 RELATED SECTIONS

- A. Section 01010 - Summary of Work: Owner's continued occupancy.
- B. Section 01045 - Cutting and Patching.
- C. Section 01120 - Alteration Project Procedures.
- D. Section 01500 - Construction Facilities and Temporary Controls: Temporary enclosures and cleanup during construction.
- E. Section 01700 - Contract Closeout: Project record documents.

1.3 SHOP DRAWINGS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Indicate demolition, removal sequence, and location of salvageable items; location and construction of temporary work.

1.4 PROJECT RECORD DOCUMENTS

- A. Submit under provisions of Section 01700.
- B. Accurately record actual locations of capped utilities, subsurface obstructions, and unknown items uncovered during demolition.

1.5 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code requirements for demolition Work, safety of structure, and dust control.
- B. Obtain required permits from authorities.
- C. Notify Owner and affected utility companies (if any) before starting Work and comply with their requirements.
- D. Do not close or obstruct existing egress to exits.

1.5 REGULATORY REQUIREMENTS (CONTINUED)

- E. Do not disable or disrupt existing building fire or life safety systems without 72 hour prior notice to the Owner's representative and Architect.
- F. Conform to regulatory procedures applicable when discovering hazardous or contaminated materials. Do not resume operations affected by such materials until receiving instructions from Architect or Owner's representative.

1.6 SCHEDULING

- A. Schedule Work to coincide with new construction.
- B. Describe demolition removal procedures and schedule prior to commencing demolition Work.

1.7 PROJECT CONDITIONS

- A. Conduct demolition to minimize interference with adjacent and occupied building areas.
- B. Cease operations immediately if structure appears to be in danger and notify Architect or Owner's representative. Do not resume operations until directed.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

3.1 PREPARATION

- A. Provide, erect, and maintain temporary barriers and/or insulated partitions at locations shown on the drawings or between existing heated interior spaces and the exterior.
- B. Erect and maintain weatherproof enclosures for exterior openings.
- C. Erect and maintain temporary partitions to prevent spread of dust, odors and noise to permit continued Owner occupancy, as specified in Section 01010 and/or shown on the drawings.
- D. Protect existing finishes, construction, materials, utilities, and equipment which are not to be demolished or relocated.
- E. Prevent movement of structure; provide required bracing and shoring.
- F. Mark location of existing utilities to remain.

3.1 PREPARATION (CONTINUED)

- G. Repair all utilities damaged by demolition immediately.
- H. Provide appropriate temporary signage including signage for exit or building egress.

3.2 DEMOLITION REQUIREMENTS

- A. Conduct demolition to minimize interference with adjacent and occupied building areas.
- B. Cease operations immediately if structure appears to be in danger. Notify Architect. Do not resume operations until directed.
- C. Maintain protected egress and access to the existing building while Work is occurring.

3.3 DEMOLITION

- A. Disconnect and identify designated utilities within demolition areas.
- B. Demolish in an orderly and careful manner. Protect existing structural members and surfaces not requiring demolition.
- C. Except where noted otherwise, remove demolished materials from site. Do not burn or bury materials on site except as noted otherwise.
- D. Remove demolished materials from site as Work progresses except where noted otherwise. Upon completion of Work, leave areas in clean condition.
- E. Remove temporary Work.

3.4 SCHEDULES

- A. See drawings for notes and information indicating demolition, disposal, and removal of miscellaneous existing building components.

3.5 ADDITION, REMODEL, AND RENOVATION PROJECTS

- A. Damage to existing building components remaining caused by demolition work shall be patched, repaired, and re-finished to a condition equal to or better than existed prior to start of demolition.

END OF SECTION

SECTION 02225

MINOR DEMOLITION FOR REMODELING

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Removal of designated building construction, equipment, and fixtures.
- B. Removal of designated construction.
- C. Identification of utilities.

1.2 RELATED SECTIONS

- A. Section 01010 - Summary of Work: Owner's continued occupancy.
- B. Section 01045 - Cutting and Patching.
- C. Section 01120 - Alteration Project Procedures.
- D. Section 01500 - Construction Facilities and Temporary Controls: Temporary enclosures and cleanup during construction.
- E. Section 01700 - Contract Closeout: Project record documents.

1.3 SHOP DRAWINGS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Indicate demolition, removal sequence, and location of salvageable items; location and construction of temporary work.

1.4 PROJECT RECORD DOCUMENTS

- A. Submit under provisions of Section 01700.
- B. Accurately record actual locations of capped utilities, subsurface obstructions, and unknown items uncovered during demolition.

1.5 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code requirements for demolition Work, safety of structure, and dust control.
- B. Obtain required permits from authorities.
- C. Notify Owner and affected utility companies (if any) before starting Work and comply with their requirements.
- D. Do not close or obstruct existing egress to exits.

1.5 REGULATORY REQUIREMENTS (CONTINUED)

- E. Do not disable or disrupt existing building fire or life safety systems without 72 hour prior notice to the Owner's representative and Architect.
- F. Conform to regulatory procedures applicable when discovering hazardous or contaminated materials. Do not resume operations affected by such materials until receiving instructions from Architect or Owner's representative.

1.6 SCHEDULING

- A. Schedule Work to coincide with new construction.
- B. Describe demolition removal procedures and schedule prior to commencing demolition Work.

1.7 PROJECT CONDITIONS

- A. Conduct demolition to minimize interference with adjacent and occupied building areas.
- B. Cease operations immediately if structure appears to be in danger and notify Architect or Owner's representative. Do not resume operations until directed.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

3.1 PREPARATION

- A. Provide, erect, and maintain temporary barriers and/or insulated partitions at locations shown on the drawings or between existing heated interior spaces and the exterior.
- B. Erect and maintain weatherproof enclosures for exterior openings.
- C. Erect and maintain temporary partitions to prevent spread of dust, odors and noise to permit continued Owner occupancy, as specified in Section 01010 and/or shown on the drawings.
- D. Protect existing finishes, construction, materials, utilities, and equipment which are not to be demolished or relocated.
- E. Prevent movement of structure; provide required bracing and shoring.
- F. Mark location of existing utilities to remain.

3.1 PREPARATION (CONTINUED)

- G. Repair all utilities damaged by demolition immediately.
- H. Provide appropriate temporary signage including signage for exit or building egress.

3.2 DEMOLITION REQUIREMENTS

- A. Conduct demolition to minimize interference with adjacent and occupied building areas.
- B. Cease operations immediately if structure appears to be in danger. Notify Architect. Do not resume operations until directed.
- C. Maintain protected egress and access to the existing building while Work is occurring.

3.3 DEMOLITION

- A. Disconnect and identify designated utilities within demolition areas.
- B. Demolish in an orderly and careful manner. Protect existing structural members and surfaces not requiring demolition.
- C. Except where noted otherwise, remove demolished materials from site. Do not burn or bury materials on site except as noted otherwise.
- D. Remove demolished materials from site as Work progresses except where noted otherwise. Upon completion of Work, leave areas in clean condition.
- E. Remove temporary Work.

3.4 SCHEDULES

- A. See drawings for notes and information indicating demolition, disposal, and removal of miscellaneous existing building components.

3.5 ADDITION, REMODEL, AND RENOVATION PROJECTS

- A. Damage to existing building components remaining caused by demolition work shall be patched, repaired, and re-finished to a condition equal to or better than existed prior to start of demolition.

END OF SECTION

SECTION 02230

SITE CLEARING

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Remove surface debris.
- B. Clear site of plant life and grass.
- C. Remove trees and shrubs.
- D. Remove root system of trees and shrubs.
- E. Topsoil excavation.

1.2 RELATED SECTIONS

- A. Section 01010 - Summary of Work: Work Not In Contract (N.I.C.).

1.3 REGULATORY REQUIREMENTS

- A. Conform to applicable city/county/state regulations for disposal of debris.
- B. Coordinate clearing Work with utility companies.

2 PART 2 PRODUCTS

Not used.

3 PART 3 EXECUTION

3.1 PROTECTION

- A. Locate, identify, and protect utilities that remain, from damage. Contractor shall be responsible to repair existing utilities damaged during construction. Notify Architect of any utilities discovered that are not indicated on the site plan.
- B. Protect features designated to remain, such as final landscaping, existing turf, existing trees, and existing utilities.
- C. Protect bench marks and site reference points from damage or displacement.

3.2 CLEARING

- A. Clear areas required for access to site and execution of Work.
- B. Remove lawn, vegetation, and topsoil material (if any).

3.2 CLEARING (CONTINUED)

- C. Remove trees and shrubs, if any, required to complete construction of the project.
- D. Clear undergrowth and deadwood, if any, without disturbing subsoil, as required to complete construction of the project.
- E. Remove rock material, if any, from site.

3.3 REMOVAL

- A. Remove debris, rock, and extracted plant life from site.

3.4 TOPSOIL EXCAVATION

- A. Excavate topsoil from areas to be further excavated, re-landscaped, or re-graded.
- B. Stockpile in area designated on site to depth not exceeding 8 feet. Protect from erosion. Spread excess topsoil not being reused on site at location(s) designated on-site by the Owner.

3.5 ADDITIONAL INFORMATION

- A. See site plan drawing for additional site work notes and information.

END OF SECTION

SECTION 02315
EXCAVATION AND FILL

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Excavation for paved areas.
- B. Excavation for slabs-on-grade, footings, and sidewalks.

1.2 RELATED SECTIONS

- A. Section 01500 - Construction Facilities and Temporary Controls: Dewatering excavations and water control.
- B. Section 02320 - Backfilling.

1.3 FIELD MEASUREMENTS

- A. Verify that survey benchmark and intended elevations for the Work are as indicated.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

3.1 PREPARATION

- A. Identify required lines, levels, contours, and datum.
- B. Identify known underground, above ground, and aerial utilities. Stake and flag locations.
- C. Notify utility company to remove and/or relocate utilities conflicting with construction.
- D. Protect above and below grade utilities which are to remain.
- E. Protect bench marks, existing structures, sidewalks, paving, and curbs from excavation equipment and vehicular traffic.

3.2 EXCAVATION

- A. Underpin adjacent structures which may be damaged by excavation work, including utilities and pipe chases.
- B. Excavate subsoil required to accommodate building foundations, slabs-on-grade, paving, and site structures.

3.2 EXCAVATION (CONTINUED)

- C. Do not interfere with 45 degree bearing splay of foundation.
- D. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- E. Hand trim excavation. Remove loose matter.
- F. Notify Architect of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- G. Correct unauthorized excavation at no extra cost to Owner.
- H. Correct areas over-excavated by error in accordance with Section 02315.
- I. Stockpile excavated material in area designated on site by Architect and Owner and remove material not being re-used from the site.

3.3 FIELD QUALITY CONTROL

- A. Provide for visual inspection of bearing surfaces.
- B. All new construction shall bear on firm, undisturbed native soil or structural fill described in the geotechnical Engineer report.

3.4 PROTECTION

- A. Protect excavations by methods required to prevent cave-in or loose soil from falling into excavation.
- B. Protect bottom of excavations, and soil adjacent to and beneath foundation, from freezing.
- C. Prevent accumulation of water in excavated areas. Should bearing surfaces be softened by water or frost, re-excavate to solid bearing and fill with compacted gravel fill as specified.
- D. Protect excavations by methods required to discourage access by unauthorized personnel to such excavations.

END OF SECTION

SECTION 02320

BACKFILL

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Site filling and backfilling.
- B. Fill under slabs-on-grade, footings, sidewalks, and paving.
- C. Consolidation and compaction.
- D. Fill for over-excavation.

1.2 RELATED SECTIONS

- A. Section 01410 - Testing Laboratory Services: compaction testing.
- B. Section 02315 - Excavation.

1.3 REFERENCES

- A. ANSI/ASTM C136 - Method for Sieve Analysis of Fine and Coarse Aggregates.
- B. ANSI/ASTM D-1557 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10 lb Rammer and 18 inch Drop.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.

2 PART 2 PRODUCTS

2.1 FILL MATERIALS

- A. See geotechnical engineering report (if any).
- B. In the absence of a geotechnical engineering report:
 - 1. Base Fill - Crushed granular fill: crushed gravel, rock, or washed natural stone; free of shale, clay, friable material, sand, debris; 1½ inch minus containing less than 5 percent fines passing through the no. 200 sieve.
 - 2. Gravel Fill - Crushed granular fill: crushed gravel, rock, or washed natural stone; free of shale, clay, friable material, sand, debris; ¾ inch minus containing less than 5 percent fines passing through the no. 200 sieve.

2.1 FILL MATERIALS (CONTINUED)

B. (continued)

3. Pea Gravel: Natural stone; washed, free of clay, shale, organic matter; graded in accordance with ANSI/ASTM C136, to the following:
 - a. Minimum Size: 1/4 inch.
 - b. Maximum Size: 1/2 inch.
4. Sand: Natural river or bank sand; washed, free of silt, clay, loam, friable or soluble materials, or organic matter; graded in accordance with ANSI/ASTM C136, within the following limits:
 - a. No more than ten percent passing the No. 200 sieve.
5. Subsoil: Reused, free of gravel larger than 1 inch size, and debris.
6. Topsoil: Reused, free of gravel larger than 1 inch size, and debris. Imported topsoil to be free of grass, roots, gravel, debris or any other deleterious materials.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify fill materials to be re-used are acceptable. Maintain optimum moisture content of on-site fill material to be re-used.
- B. Maintain optimum moisture content of sand fill material; do not allow sand to contain excess moisture.

3.2 PREPARATION

- A. Prior to placement of fill, proof roll exposed subsoil surface with a loaded dump truck or water truck.
- B. Cut out soft areas of subgrade not capable of insitu compaction. Backfill with granular gravel fill specified and compact to density equal to or greater than requirements for subsequent backfill material.
- C. Prior to placement of aggregate base course material at floor or paved areas, proof roll exposed subsoil surfaces with a half loaded dump truck.

3.3 BACKFILLING

- A. Backfill areas to contours and elevations with unfrozen materials.
- B. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen or spongy subgrade surfaces.

3.3 BACKFILLING (CONTINUED)

- C. Base and Gravel Fill: Place and compact materials in continuous layers not exceeding geotechnical engineering report recommendation. 8 inches compacted depth. Compact to 95 percent of the maximum density as determined by ASTM D-1557-78.
 - 1. In the absence of a geotechnical engineering report: continuous layers not exceeding 8 inches compacted depth.
- D. Subsoil Fill: Place and compact material in continuous layers not exceeding geotechnical engineering report recommendation. Compact to 95 percent of the maximum density as determined in accordance with ASTM D-1557-78.
 - 1. In the absence of a geotechnical engineering report: continuous layers not exceeding 8 inches compacted depth.
- E. Topsoil Fill: Place and compact material in continuous layers not exceeding geotechnical engineering report recommendation. Compact to 95 percent of the maximum density as determined in accordance with ASTM D-1557-78.
 - 1. In the absence of a geotechnical engineering report: continuous layers not exceeding 6 inches compacted depth.
- F. Employ a placement method that does not disturb or damage foundation waterproofing or utilities in trenches.
- G. Maintain optimum moisture content of backfill materials to attain required compaction density. Do not allow backfill materials to contain excessive moisture.
- H. Slope grade away from new construction minimum 2 inches in 8 ft, unless noted otherwise.
- I. Make grade changes gradual. Blend slope into level areas. Leave no low spots where water may puddle on surface.
- J. Remove surplus backfill materials from the site.
- K. Leave fill material stockpile areas completely free of excess fill materials.
- L. Import fill material as required to bring site grading up to indicated elevations.
- M. Cover each days excavation with structural fill before the end of each day.

3.4 TOLERANCES

- A. Top Surface of Backfilling Under Floor Slabs and paved Areas: Plus or minus one-half inch (1/2") from required elevations.

3.5 FIELD QUALITY CONTROL

- A. Field inspection and testing will be performed under the provisions of Section 01410.
- B. If tests indicate Work does not meet specified requirements, remove Work, replace and retest at no cost to Owner.
- C. Proof roll compacted fill surfaces under slabs-on grade and paving.

3.6 PROTECTION OF FINISHED WORK

- A. Protect finished Work under provisions of Section 01500.
- B. Recompact fills subjected to vehicular traffic.

3.7 SCHEDULE

- A. Building Base (if any):
 - 1. Base fill, 1-1/2 inch minus, compacted to 95 percent; see grading profiles on drawings for thickness of material.
- B. Structural Footings:
 - 1. Base fill, 1-1/2 inch minus, minimum six inches thick, compacted to 95 percent.
- C. Interior Slabs-On-Grade (if any):
 - 1. Gravel fill, 3/4 inch minus, minimum six inches thick, compacted to 95 percent.
- D. Exterior Slab-On-Grade:
 - 1. Gravel fill, 3/4 inch minus, minimum six inches thick, compacted to 98 percent.
- E. Fill Under Asphaltic-Concrete Paving:
 - 1. Gravel fill, 12 inch minimum; first 8 inches 1-1/2 inch minus, next 4 inches 3/4 inch minus; fill to 3 inches below finish paving elevation, compacted to 95 percent.
- F. Fill Under Landscape Areas:
 - 1. Minimum six inches topsoil as specified, compacted to 90 percent.

END OF SECTION

SECTION 02516

DISINFECTION OF WATER DISTRIBUTION

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Disinfection of potable water distribution and transmission system; and testing and reporting results.

1.2 RELATED SECTIONS

- A. Section 15010 - General Mechanical Provisions.
- B. Section 15050 - Basic Materials and Methods.
- C. Section 15400 - Plumbing.

1.3 REFERENCES

- A. American Water Works Association:
 - 1. AWWA B300 - Hypochlorites.
 - 2. AWWA B301 - Liquid Chlorine.
 - 3. AWWA B302 - Ammonium Sulfate.
 - 4. AWWA B303 - Sodium Chlorite.
 - 5. AWWA C600 - Installation of Ductile-Iron Water Mains and Their Appurtenances.
 - 6. AWWA C651 - Disinfecting Water Mains.

1.4 SUBMITTALS

- A. Product Data: Submit procedures, proposed chemicals, and treatment levels for review.
- B. Test Reports: Indicate results comparative to specified requirements.
- C. Certificate: Certify cleanliness of water distribution system meets or exceeds City of McMinnville Public Works standards/requirements.

1.5 CLOSEOUT SUBMITTALS

- A. Disinfection Report:
 - 1. Type and form of disinfectant used.
 - 2. Date and time of disinfectant injection start and time of completion.
 - 3. Test locations.
 - 4. Name of person collecting samples.
 - 5. Initial and 24 hour disinfectant residuals in treated water in ppm for each outlet tested. Date and time of flushing start and completion.
 - 6. Disinfectant residual after flushing in ppm for each outlet tested.

1.5 CLOSEOUT SUBMITTALS (CONTINUED)

- B. Bacteriological Report:
 - 1. Date issued, project name, and testing laboratory name, address, and telephone number.
 - 2. Time and date of water sample collection.
 - 3. Name of person collecting samples.
 - 4. Test locations.
 - 5. Initial and 24 hour disinfectant residuals in ppm for each outlet tested.
 - 6. Coliform bacteria test results for each outlet tested.
 - 7. Certify water conforms, or fails to conform, to bacterial standards of authority having jurisdiction.

- C. Water Quality Certificate: Certify water conforms to quality standards of City of McMinnville, suitable for human consumption.

1.6 QUALITY ASSURANCE

- A. Perform Work in accordance with City of McMinnville Public Works standards.

1.7 QUALIFICATIONS

- A. Water Treatment Firm: Company specializing in disinfecting potable water systems specified in this section with minimum five documented experience.

- B. Testing Firm: Company specializing in testing and examining potable water systems, certified and approved by State of Oregon.

- C. Submit bacteriologist's signature and authority associated with testing.

2 PART 2 PRODUCTS

2.1 DISINFECTION CHEMICALS

- A. Chemicals: Those required and approved by the City of McMinnville.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify piping system has been cleaned, inspected, and pressure tested.

- B. Perform scheduling and disinfecting activity with start-up, water pressure testing, adjusting and balancing, demonstration procedures, including coordination with related systems.

3.2 INSTALLATION

- A. Provide and attach required equipment to perform the Work of this section.
- B. Perform disinfection of water distribution system and installation of system and pressure testing.
- C. Maintain disinfectant in system for minimum 24 hours.
- D. Flush, circulate, and clean until required cleanliness is achieved; use municipal domestic water.
- E. Replace permanent system devices removed for disinfection.

3.3 FIELD QUALITY CONTROL

- A. Section 01650 - Starting of Systems: Field inspecting, testing, adjusting, and balancing.
- B. After final flushing and before pipeline is connected to existing system, or placed in service, employ an approved independent testing laboratory to sample, test and certify water quality suitable for human consumption.

END OF SECTION

SECTION 02740

FLEXIBLE PAVEMENT

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Asphaltic concrete paving and surface sealer; wearing binder or base course.
- B. Aggregate base course.

1.2 RELATED SECTIONS

- A. Section 02320 - Backfilling: Compacted subbase for paving.

1.3 REFERENCES

- A. MS-2 - Mix Design Methods for Asphalt Concrete and Other Hot Mix Types - The Asphalt Institute (AI).
- B. MS-3 - Asphalt Plant Manual - The Asphalt Institute (AI).
- C. MS-8 - Asphalt Paving Manual - The Asphalt Institute (AI).
- D. MS-19 - Basic Asphalt Emulsion Manual, The Asphalt Institute (AI).
- E. ASTM D946 - Penetration-Graded Asphalt Cement for Use in Pavement Construction.
- F. OSHD - Oregon State Highway Division, Standard Specifications for Highway Construction.
- G. AASHTO - American Association of State Highway and Transportation Officials.

1.4 PERFORMANCE REQUIREMENTS

- A. Paving: Designed for parking of commercial vehicles and movement of trucks up to 30,000 lbs.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with OSHD Standard Specifications for Highway Construction.
- B. Mixing Plant: Conform to OSHD Standard Specifications for Highway Construction.
- C. Obtain materials from same source throughout.

1.6 REGULATORY REQUIREMENTS

- A. Conform to applicable city/county/state regulations for paving work on public property.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Do not place asphalt when base surface temperature is less than 50 degrees F, or surface is wet or frozen.

2 PART 2 PRODUCTS

2.1 MATERIALS

- A. Asphalt Cement: In accordance with State Highways Section 702, or conforming to the requirements of AASHTO M226; grade AR4000.
- B. Cement Treated Base: In accordance with the requirements of OSHD Section 308 - Plant Mix Cement Treated Base. Base shall attain compressive strength of 1,000 psi at seven days. Submit mix design and test data for approval to Architect.
- C. Asphalt Concrete: In conformance with the requirements of OSHD Section 403.
- D. Aggregate Base: Clean, 1 - 1 ½ inch minus plant-mixed crushed rock or crushed gravel, free from foreign material and meeting requirements of OSHD 703.07.
- E. Acceptance of Materials: All materials shall be subject to inspection for suitability as the Architect may elect, prior to or during incorporation into the Work.

2.2 ACCESSORIES

- A. Tack Coat: In accordance with OSHD standards.
- B. Seal Coat: AI MS-19, slurry type.

2.3 ASPHALT PAVING MIX

- A. Use dry material to avoid foaming. Mix uniformly.
- B. Binder Course: 4.5 to 6 percent of asphalt cement by weight in mixture in accordance with OSHD standards.
- C. Wearing Course: 5 to 7 percent of asphalt cement by weight in mixture in accordance with OSHD standards.

2.4 SOURCE QUALITY CONTROL

- A. Provide mix design for asphalt under provisions of Section 01300.
- B. Submit proposed mix design of each class of mix for review prior to commencement of work.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that compacted granular base is dry and ready to support paving and imposed loads.
- B. Verify gradients and elevations of base are correct.

3.2 PREPARATION - TACK COAT

- A. Apply tack coat in accordance with OSHD standards.
- B. Apply tack coat to contact surfaces of curbs, and gutters.
- C. Coat surfaces of catch basin frames with oil to prevent bond with asphalt pavement. Do not tack coat these surfaces.

3.3 PLACING ASPHALT PAVEMENT - DOUBLE COURSE

- A. Install Work in accordance with State Highway Department standards.
- B. Place asphalt within 24 hours of applying primer or tack coat.
- C. Place first asphalt course with 2 inch compacted thickness.
- D. Compact pavement by rolling. Do not displace or extrude pavement from position. Hand compact in areas inaccessible to rolling equipment.
- E. Develop rolling with consecutive passes to achieve even and smooth finish, without roller marks.
- F. Repeat primer/tack, 1 ½ inch compacted thickness asphalt pavement, and rolling as specified above for second course.

3.4 SEAL COAT

- A. Apply seal coat to surface course in accordance with OSHD standards.

3.5 TOLERANCES

- A. Flatness: Maximum variation of 1/4 inch measured with 10 foot straight edge.
- B. Scheduled Compacted Thickness: Within 1/8 inch.
- C. Variation from True Elevation: Within 1/4 inch.

3.6 FIELD QUALITY CONTROL

- A. Field testing will be performed under provisions of Section 01410.

3.7 PROTECTION

- A. Immediately after placement, protect pavement from mechanical injury for two days.

3.8 SCHEDULES

- A. New Pavement as indicated on the drawings.
 - 1. New pavement where existing pavement is affected by the work of this project. Return existing paved areas with new pavement to a condition equal to or better than existed prior to the start of work.
- B. Transition from new to existing paving:
 - 1. Make smooth, level, and uniform transition from new to existing paving. Do not leave lip or curb where new and existing paving transition.

END OF SECTION

SECTION 02750

RIGID PAVEMENT

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Concrete sidewalks, ramps (if any), utility pads, and parking areas (if any).
- B. Aggregate base course.

1.2 RELATED SECTIONS

- A. Section 02320 - Backfilling: Compacted subbase for paving.
- B. Section 03100 - Concrete Forms and Accessories
- C. Section 03200 - Concrete Reinforcement
- D. Section 03300 - Cast-In-Place Concrete

1.3 REFERENCES

- A. ACI 301 - Specifications for Structural Concrete for Buildings.
- B. ACI 304 - Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete.
- C. ASTM A497 - Welded Deformed Steel Wire Fabric for Concrete Reinforcement.
- D. ASTM A615 - Deformed and Plain Billet-Steel for Concrete Reinforcement.
- E. ASTM C33 - Concrete Aggregates.
- F. ASTM C94 - Ready Mix Concrete.
- G. ASTM C150 - Portland Cement
- H. ASTM C260 - Air-Entraining Admixtures for Concrete.
- I. ASTM C309 - Liquid Membrane-Forming Compounds for Curing Concrete.
- J. ASTM C494 - Chemical Admixtures for Concrete.
- K. ASTM D1751 - Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction.
- L. ASTM D1752 - Preformed Rubber & Cork Expansion Joint Fillers for Concrete Paving & Structural Construction.

1.4 SUBMITTALS FOR REVIEW

- A. Section 01300 - Submittals: Procedures for submittals.
- B. Product Data: Provide data on joint filler, admixtures, and curing compounds.

1.5 QUALITY ASSURANCE

- A. Obtain cementitious materials from same source throughout.

1.6 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code standards for work on public property.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Do not place concrete when base surface temperature is less than 40 degrees F, or surface is wet or frozen.

2 PART 2 PRODUCTS

2.1 FORM MATERIALS

- A. Form Materials: As specified in Section 03100.
- B. Joint Filler: ASTM D1751 type; 1/2 inch thick, manufactured by Burke; or approved.

2.2 REINFORCEMENT

- A. Reinforcing Steel and Fiber Reinforcing: Type specified in Section 03200.
- B. Dowels: ASTM A615; 40 ksi yield grade, plain steel, galvanized finish.

2.3 CONCRETE MATERIALS

- A. Concrete Materials: As specified in Section 03300.
- B. Air entrainment for all exposed concrete.

2.4 ACCESSORIES

- A. Curing Compound: ASTM C309, Type 1D, Class A & B; RES-X CURING COMPOUND manufactured by Burke; or approved.
- B. Liquid Surface Sealer: INDUSTRIAL CONCRETE SEALER manufactured by Burke; or approved.
- C. Joint Sealers: Specified in Section 07900.

2.5 CONCRETE MIX

- A. Mix and deliver concrete in accordance with Section 03300.
- B. Use accelerating admixtures in cold weather only when approved by Architect. Use of admixtures will not relax cold weather placement requirements.
- C. Use calcium chloride only when approved by Architect.
- D. Use set retarding admixtures during hot weather only when approved by Architect.

2.6 SOURCE QUALITY CONTROL AND TESTS

- A. Submit proposed mix design of concrete to appointed firm for review prior to commencement of work.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify compacted subgrade and granular base is acceptable and ready to support paving and imposed loads.
- B. Verify gradients and elevations of base are correct.

3.2 PREPARATION

- A. Moisten base to minimize absorption of water from fresh concrete.
- B. Notify Architect minimum 24 hours prior to commencement of concreting operations.

3.3 FORMING

- A. Place and secure forms to correct location, dimension, profile, and gradient.
- B. Assemble formwork to permit easy stripping and dismantling without damaging concrete.
- C. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

3.4 REINFORCEMENT

- A. Place reinforcement as indicated on drawings and shop drawings.
- B. Interrupt reinforcement at expansion joints.
- C. Place dowels and/or reinforcement to achieve pavement and curb alignment as detailed.

3.5 PLACING CONCRETE

- A. Place concrete as specified in Section 03300.
- B. Ensure reinforcement, inserts, embedded parts, formed joints and sleeves (if any) are not disturbed during concrete placement.
- C. Place concrete continuously over the full width of the panel and between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.
- D. Wet cure for seven days or used approved curing compound.

3.6 JOINTS

- A. Place expansion joints at 20 foot intervals. Align curb and sidewalk joints.
- B. Place joint filler between paving components and building or other appurtenances.
- C. Place control joints at 5 foot intervals. Saw cut joints 3/16 inch wide at an optimum time after finishing. Cut 1/3 into depth of slab.
- D. Also see joint details on drawings.

3.7 FINISHING

- A. Curbs: Light broom.
- B. Sidewalk Paving: Light broom, radius to 1/2 inch radius, and trowel joint edges.
 - 1. Vertical walls (if any): Sack Finish.
 - 2. Stair Tread/Risers (if any): Light broom and trowel joint edges.
- C. Direction of Texturing: Parallel to pavement direction.
- D. Tool all edges to 3/4 inch radius.
- E. Place curing compound and/or sealer on exposed concrete surfaces immediately after finishing. Apply in accordance with manufacturer's instructions.

3.8 TOPSET CURB (IF ANY)

- A. Place concrete curb directly over asphalt paving at locations shown on drawings.
- B. Coat area to receive curb with approved bonding agent prior to placing concrete.

3.8 TOPSET CURB (IF ANY) (CONTINUED)

- C. Curb may be hand formed or extruded.
- D. Wet cure for seven days or use approved curing compound.

3.9 DEEP CURB (IF ANY)

- A. Form in place or slipform deep curb to dimensions, lines, and grades shown on the drawings.
- B. Wet cure for seven days or use approved curing compound.

3.10 TOLERANCES

- A. Maximum Variation of Surface Flatness: 1/2 inch in 10 ft.
- B. Maximum Variation From True Position: 1/2 inch.

3.11 PROTECTION

- A. Immediately after placement, protect sidewalks and curbs from premature drying, excessive hot or cold temperatures, and mechanical injury.
- B. Do not permit vehicular traffic over sidewalks and curbs for 7 days minimum after finishing.

3.12 SCHEDULE

- A. Concrete Sidewalks, Utility Pads, and Ramps (if any): 2,500 psi 28 day concrete, natural color Portland cement, broom finish.
- B. Concrete Walls (if any): 2,500 psi 28 day concrete, profile as indicated on drawings, reinforcing as indicated on drawings, light broom finish on walking surfaces, sack finish on exposed vertical concrete surfaces.

END OF SECTION

SECTION 02763

PAINTED PAVEMENT MARKINGS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Traffic lines and markings.
- B. Legends.
- C. Paint.
- D. Glass beads.

1.2 RELATED SECTIONS

- A. Section 02740 - Flexible Pavement.
- B. Section 02750 - Rigid Pavement.
- C. Section 09900 - Paints and Coatings.

1.3 REFERENCES

- A. American Association of State Highway and Transportation Officials:
 - 1. AASHTO M247 - Standard Specification for Glass Beads Used in Traffic Paint.
- B. American Society for Testing and Materials:
 - 1. ASTM D34 - Standard Guide for Chemical Analysis of White Pigments.
 - 2. ASTM D126 - Standard Test Methods for Analysis of Yellow, Orange, and Green Pigments Containing Lead Chromate and Chromium Oxide Green.
 - 3. ASTM D562 - Standard Test Method for Consistency of Paints Using the Stormer Viscometer.
 - 4. ASTM D711 - Standard Test Method for No-Pick-Up Time of Traffic Paint.
 - 5. ASTM D713 - Standard Practice for Conducting Road Service Tests on Fluid Traffic Marking Materials.
 - 6. ASTM D969 - Standard Test Method for Laboratory Determination of Degree of Bleeding of Traffic Paint.
 - 7. ASTM D1394 - Standard Test Methods for Chemical Analysis of White Titanium Pigments.
 - 8. ASTM D1475 - Standard test Method for Density of Liquid Coatings, Inks, and Related Products.
 - 9. ASTM D1640 - Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature.
 - 10. ASTM D2202 - Standard Test Method for Slump of Sealants.
 - 11. ASTM D2371 - Standard Test Method for Pigment Content of Solvent-Reducible Paints.

1.3 REFERENCES (CONTINUED)

B. (continued):

12. ASTM D2621 - Standard Test Method for Infrared Identification of Vehicle Solids From Solvent-Reducible Paints.
13. ASTM D2743 - Standard Practices for Uniformity of Traffic Paint Vehicle Solids by Spectroscopy and Gas Chromatography.

1.4 PERFORMANCE REQUIREMENTS

- A. Paint Adhesion: Adhere to road surface forming smooth continuous film one minute after application.
- B. Paint Drying: Tack free by touch so as not to require coning or other traffic control devices to prevent transfer by vehicle tires within two minutes after application.

1.5 SUBMITTALS

- A. Product Data: Submit paint formulation for each type of paint.
- B. Test Reports: Submit source and acceptance test results in accordance with AASHTO M247.
- C. Manufacturer's Installation Instructions: Submit instructions for application temperatures, eradication requirements, application rate, line thickness, type of glass beads, bead embedment and bead application rate, and any other data on proper installation.
- D. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

1.6 QUALITY ASSURANCE

- A. Perform Work in accordance with Oregon State Highway Division standard.

1.7 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing Products specified in this section with minimum five years documented experience.
- B. Applicator: Company specializing in performing work of this section with minimum five years documented experience and approved by manufacturer.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Invert containers several days prior to use when paint has been stored more than 2 months. Minimize exposure to air when transferring paint. Seal drums and tanks when not in use.

1.8 DELIVERY, STORAGE, AND HANDLING (CONTINUED)

- B. Glass Beads. Store glass beads in cool, dry place. Protect from contamination by foreign substances.

1.9 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply materials when surface and ambient temperatures are outside temperature ranges required by paint product manufacturer.
- B. Do not apply exterior coatings during rain or snow when relative humidity is outside humidity ranges, or moisture content of surfaces exceed those required by paint product manufacturer.
- C. Do not apply paint when temperatures are expected to fall below 60 degrees F for 24 hours after application.
- D. Volatile Organic Content (VOC). Do not exceed State or Environmental Protection Agency maximum VOC on traffic paint.

1.10 WARRANTY

- A. Furnish three year manufacturer's warranty for traffic paints.

1.11 MAINTENANCE SERVICE

- A. Furnish service and maintenance of traffic paints for three years from Date of Substantial Completion.

2 PART 2 PRODUCTS

2.1 PAINTED PAVEMENT MARKINGS

- A. Furnish materials in accordance with Oregon State Highway Divisions standards.
- B. Paint: Ready mixed, conventional and fast dry waterborne traffic paints, lead-free, non-toxic, NASSHTO Test Deck, minimum retroreflectance of 100 mcfs, durability rating of 6 or more after in place for 9 months.
- C. Glass Beads: AASHTO M247, Type 1, coated to enhance embedment and adherence with paint.

2.2 EQUIPMENT

- A. Continuous Longitudinal Line Application Machine: Use application equipment with following capabilities.
 - 1. Dual nozzle paint gun to simultaneously apply parallel lines of indicated width in solid or broken patterns or various combinations of those patterns.
 - 2. Pressurized bead-gun to automatically dispense glass beads onto painted surface, at required application rate.

2.2 EQUIPMENT (CONTINUED)

- A. (continued)
 - 3. Measuring device to automatically and continuously measure length of each line placed, to nearest foot.
 - 4. Device to heat paint to 125 degrees F for fast dry applications.
- B. Machine Calibration:
 - 1. Paint Guns: Calibrate to simultaneously apply paint binder at uniform rates as specified with an allowable tolerance of plus or minus 1 mil.
 - 2. Bead Guns: Calibrate to dispense glass beads simultaneously at specified rate. Check guns by dispensing glass beads into gallon container for predetermined fixed period of time. Verify weight of glass beads.
- C. Other Equipment:
 - 1. For application of crosswalks, intersections, stop lines, legends and other miscellaneous items by walk behind strippers, hand spray or stencil trucks, apply with equipment meeting requirements of this section. Do not use hand brushes or rollers. Optionally apply glass beads by hand.

2.3 SOURCE QUALITY CONTROL

- A. Test and analyze traffic paints in accordance with ASTM D34.
- B. Make paints and glass beads available for inspection at manufacturer's factory prior to packaging for shipment. Notify Architect at least seven days before inspection is allowed.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not apply paint to concrete surfaces until concrete has cured for 28 days.

3.2 PREPARATION

- A. Maintenance and Protection of Traffic:
 - 1. Provide short term traffic control in accordance with Section 01500.
 - 2. Prevent interference with marking operations and to prevent traffic on newly applied markings before markings dry.
 - 3. Maintain access to existing facility and other properties requiring access.

3.2 PREPARATION (CONTINUED)

- B. Surface Preparation.
 - 1. Clean and dry paved surface prior to painting.
 - 2. Blow or sweep surface free of dirt, debris, oil, grease or gasoline.

3.3 APPLICATION

- A. Agitate paint for 1-15 minutes prior to application to ensure even distribution of paint pigment.
- B. Dispense paint at ambient 125 degrees F to wet-film thickness of 15 mils, except dispense edge markings to wet-film thickness of 12 mils.
- C. Apply glass beads at rate of 6 pounds per gallon per liter) of paint.
- D. Apply markings to indicated dimensions at indicated locations.
- E. Prevent splattering and over spray when applying markings.
- F. Unless material is track free at end of paint application convoy, use traffic cones to protect markings from traffic until track free. When vehicle crosses a marking and tracks it or when splattering or over spray occurs, eradicate affected marking and resultant tracking and apply new markings.
- G. Collect and legally dispose of residues from painting operations.
- H. Install Work in accordance with Oregon State Highway Division standards.

3.4 APPLICATION TOLERANCES

- A. Maximum Variation from Wet Film Thickness: 1 mil.
- B. Maximum Variation from Wet Paint Line Width: Plus or minus 1/8 inch.
- C. Maximum Variation from Specified Application Temperature: Plus or minus 5 degrees F.

3.5 FIELD QUALITY CONTROL

- A. Inspect for incorrect location, insufficient thickness, line width, coverage, retention, uncured or discolored material, and insufficient bonding.
- B. Replace defective pavement markings as specified throughout 3 year warranted period. Replace markings damaged by anti-skid materials, studded tires, tire chains, chemical deicers, snow plowing or other loss of

3.5 FIELD QUALITY CONTROL (CONTINUED)

- B. (continued) marking material regardless of cause. When markings are damaged by pavement failure or by Owner's painting, crack sealing, or pavement repair operations, Contractor is released from warranty requirements for damaged work.

3.6 PROTECTION OF FINISHED WORK

- A. Protect painted pavement markings from vehicular and pedestrian traffic until paint is dry and track free. Follow manufacturer's recommendations or use minimum of 30 minutes. Consider barrier cones as satisfactory protection for materials requiring more than 2 minutes dry time.

END OF SECTION

SECTION 03100

CONCRETE FORMS AND ACCESSORIES

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Formwork for cast-in place concrete, with shoring, bracing and anchorage.
- B. Openings for other work.
- C. Form accessories.
- D. Form stripping.

1.2 PRODUCTS INSTALLED BUT NOT FURNISHED UNDER THIS SECTION

- A. Section 03300 - Cast-In-Place Concrete: Supply of concrete accessories for placement by this section.
- B. Section 05500 - Metal Fabrications: Supply of metal fabrications for placement by this section.

1.3 RELATED SECTIONS

- A. Section 03200 - Concrete Reinforcement.
- B. Section 03300 - Cast-in-Place Concrete.

1.4 REFERENCES

- A. ACI 301 - Structural Concrete for Buildings.
- B. ACI 318 - Building Code Requirements for Reinforced Concrete.
- C. ACI 347 - Recommended Practice For Concrete Formwork.
- D. ANSI/ASME A17.1 - Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks
- E. PS 1 - Construction and Industrial Plywood.

1.5 DESIGN REQUIREMENTS

- A. Design, engineer and construct formwork, shoring and bracing to conform to design and Building Code requirements; resultant concrete to conform to required shape, line and dimension.

1.6 SUBMITTALS

- A. Submit under provisions of Section 01300.

1.6 SUBMITTALS (CONTINUED)

- B. Shop Drawings: Indicate pertinent dimensions, materials, bracing, and arrangement of joints and ties.
- C. Product Data: Provide data on void form materials and installation requirements.

1.7 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301.

1.8 QUALIFICATIONS

- A. Design formwork under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State of Oregon.

1.9 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code requirements for design, fabrication, erection and removal of formwork.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect and handle products to site under provisions of Section 01600.
- B. Deliver void forms and installation instructions in manufacturer's packaging.
- C. Store off ground in ventilated and protected manner to prevent deterioration from moisture.

1.11 COORDINATION

- A. Coordinate this Section with other Sections of work which require attachment of components to formwork.
- B. If formwork is placed after reinforcement resulting in insufficient concrete cover over reinforcement before proceeding, request instructions from Architect.

2 PART 2 PRODUCTS

2.1 WOOD FORM MATERIALS

- A. Plywood: Douglas Fir species; solid one side, tight face sheathing; sound undamaged sheets with clean, true edges.
- B. Lumber: Douglas Fir species; No. 2 or better grade; with grade stamp clearly visible.

2.2 PREFABRICATED FORMS

- A. Preformed Steel Forms: Minimum 16 gage matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished surfaces.
- B. Glass Fiber Fabric Reinforced Plastic Forms: Matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished concrete surfaces.
- C. Void Forms: Moisture resistant treated paper faces, biodegradable, structurally sufficient to support weight of wet concrete mix until initial set; 2 inches thick.

2.3 FORMWORK ACCESSORIES

- A. Form Ties: Snap-off type, galvanized metal, adjustable length, cone type, with waterproofing washer, free of defects that could leave holes larger than 1 inch in concrete surface.
- B. Form Release Agent: Colorless mineral oil which will not stain concrete, or absorb moisture or impair natural bonding or color characteristics of coating intended for use on concrete, if any.
- C. Corners: Chamfer, rigid plastic or wood strip type; 3/4 x 3/4 inch size; maximum possible lengths.
- D. Flashing Reglets: Galvanized steel, 22 gage thick, longest possible lengths, with alignment splines for joints, non-filled, release tape sealed slots, anchors for securing to concrete formwork.
- E. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Sized as required, of sufficient strength and character to maintain formwork in place while placing concrete.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify lines, levels and centers before proceeding with formwork. Ensure that dimensions agree with drawings.

3.2 EARTH FORMS

- A. Hand trim sides and bottom of earth forms. Remove loose soil prior to placing concrete.

3.3 ERECTION - FORMWORK

- A. Erect formwork, shoring and bracing to achieve design requirements, in accordance with requirements of ACI 301.

3.3 ERECTION - FORMWORK (CONTINUED)

- B. Provide bracing to ensure stability of formwork. Shore or strengthen formwork subject to over stressing by construction loads.
- C. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shores.
- D. Align joints and make watertight. Keep form joints to a minimum.
- E. Obtain approval before framing openings in structural members which are not indicated on Drawings.
- F. Provide chamfer strips on external corners of beams, joists, columns, and at each side of top of walls.
- G. Install void forms in accordance with manufacturer's recommendations. Protect forms from moisture or crushing.

3.4 APPLICATION - FORM RELEASE AGENT

- A. Apply form release agent on formwork in accordance with manufacturer's recommendations.
- B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.
- C. Do not apply form release agent where concrete surfaces will receive special finishes or applied coverings which are effected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.

3.5 INSERTS, EMBEDDED PARTS, AND OPENINGS

- A. Provide formed openings where required for items to be embedded in passing through concrete work.
- B. Locate and set in place items which will be cast directly into concrete.
- C. Coordinate with work of other sections in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, other inserts, and components of other Work.
- D. Install accessories in accordance with manufacturer's instructions, straight, level, and plumb. Ensure items are not disturbed during concrete placement.
- E. Provide temporary ports or openings in formwork where required to facilitate cleaning and inspection. Locate openings at bottom of forms to allow flushing water to drain.

3.5 INSERTS, EMBEDDED PARTS, AND OPENINGS (CONTINUED)

- F. Close temporary openings with tight fitting panels, flush with inside face of forms, and neatly fitted so joints will not be apparent in exposed concrete surfaces.

3.6 FORM CLEANING

- A. Clean forms as erection proceeds, to remove foreign matter within forms.
- B. Clean formed cavities of debris prior to placing concrete.
- C. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.
- D. During cold weather, remove ice and snow from within forms. Do not use de-icing salts. Do not use water to clean out forms, unless formwork and concrete construction proceed within heated enclosure. Use compressed air or other means to remove foreign matter.

3.7 FORMWORK TOLERANCES

- A. Construct formwork to maintain tolerances required by ACI 301.

3.8 FIELD QUALITY CONTROL

- A. Inspect erected formwork, shoring, and bracing to ensure that work is in accordance with formwork design, and that supports, fastenings, wedges, ties, and items are secure.
- B. Do not reuse wood formwork more than two times for concrete surfaces to be exposed to view. Do not patch formwork.

3.9 FORM REMOVAL

- A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads.
- B. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
- C. Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged. Discard damaged forms.

END OF SECTION

SECTION 03200
CONCRETE REINFORCEMENT

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Reinforcing steel bars, fiber reinforcing, and accessories for cast-in place concrete.

1.2 RELATED SECTIONS

- A. Section 03100 - Concrete Forms and Accessories.
- B. Section 03300 - Cast-in-Place Concrete.

1.3 REFERENCES

- A. ACI 301 - Structural Concrete for Buildings.
- B. ACI 318 - Building Code Requirements For Reinforced Concrete.
- C. ACI SP-66 - American Concrete Institute - Detailing Manual.
- D. ANSI/ASTM A82 - Cold Drawn Steel Wire for Concrete Reinforcement.
- E. ANSI/ASTM A184 - Fabricated Deformed Steel Bar Mats for Concrete Reinforcement.
- F. ANSI/ASTM A185 - Welded Steel Wire Fabric for Concrete Reinforcement.
- G. ANSI/AWS D1.4 - Structural Welding Code for Reinforcing Steel.
- H. ANSI/AWS D12.1 - Reinforcing Steel Welding Code.
- I. ASTM A615 - Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
- J. ASTM A704 - Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement.
- K. AWS D12.1 - Welding Reinforcement Steel, Metal Inserts and Connections in Reinforced Concrete Construction.
- L. CRSI - Concrete Reinforcing Steel Institute Manual of Practice.
- M. CRSI 63 - Recommended Practice For Placing Reinforcing Bars.

1.3 REFERENCES (CONTINUED)

- N. CRSI 65 - Recommended Practice For Placing Bar Supports, Specifications and Nomenclature.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Indicate bar sizes, spacings, locations, and quantities of reinforcing steel and fiber reinforcing, bending and cutting schedules, and supporting and spacing devices.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Each piece of steel grade-marked, or each shipment accompanied by grade certificate.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301.
- B. Maintain one copy of document on site.

1.6 QUALIFICATIONS

- A. Design reinforcement under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State of Oregon.

1.7 COORDINATION

- A. Coordinate with placement of formwork, formed openings and other Work.

2 PART 2 PRODUCTS

2.1 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615, 60 ksi yield grade; deformed billet steel bars.
- B. Fibrous Reinforcing: 100 percent virgin polypropylene, fibrillated fibers containing no reprocessed olefin materials and specifically manufactured to an optimum gradation for use as concrete secondary reinforcement. Volume per cubic yard shall equal a minimum of 0.1% (1.5 pounds). Manufacturer: Fibermesh Company; or approved.

2.2 ACCESSORY MATERIALS

- A. Tie Wire: Minimum 16 gage black annealed steel, FS QQ-W-461.

2.2 ACCESSORY MATERIALS (CONTINUED)

- B. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions including load bearing pad on bottom to prevent vapor barrier puncture.
- C. Special Chairs, Bolsters, Bar Supports, Spacers Adjacent to Weather Exposed Concrete Surfaces: Plastic coated steel type; size and shape as required.

2.3 FABRICATION

- A. Fabricate concrete reinforcing in accordance with CRSI Manual of Practice.
- B. Weld reinforcement in accordance with ANSI/AWS D1.4.
- C. Locate reinforcing splices not indicated on Drawings, at point of minimum stress.

3 PART 3 EXECUTION

3.1 PLACEMENT

- A. Place, support and secure reinforcement against displacement. Do not deviate from required position.
- B. Do not displace or damage vapor barrier, if any.
- C. Accommodate placement of formed openings:
 - 1. Conform to applicable Building Code requirements for concrete cover over reinforcement and as indicated on Drawings.
- D. See Section 03300 for location of fibrous reinforcing in concrete (if any).

END OF SECTION

SECTION 03300

CAST-IN-PLACE CONCRETE

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Cast-in-place concrete footings and foundation walls (if any).
- B. Floors and slabs on grade or at floor/ceiling assemblies (if any).
- C. Cast-in-place concrete curbs, sidewalks, and equipment pads.
- D. Control, and expansion and contraction joint devices associated with concrete work, including joint sealants.

1.2 RELATED SECTIONS

- A. Section 03100 - Concrete Forms and Accessories.
- B. Section 03200 - Concrete Reinforcement.

1.3 REFERENCES

- A. ACI 301 - Structural Concrete for Buildings.
- B. ACI 302 -Guide for Concrete Floor and Slab Construction.
- C. ACI 304 - Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete.
- D. ACI 305R - Hot Weather Concreting.
- E. ACI 306R - Cold Weather Concreting.
- F. ACI 308 - Standard Practice for Curing Concrete.
- G. ACI 318 - Building Code Requirements for Reinforced Concrete.
- H. ANSI/ASTM D994 - Preformed Expansion Joint Filler for Concrete (Bituminous Type).
- I. ASTM C33 - Concrete Aggregates.
- J. ASTM C94 - Ready-Mixed Concrete.
- K. ASTM C150 - Portland Cement.
- L. ASTM C260 - Air Entraining Admixtures for Concrete.
- M. ASTM C494 - Chemicals Admixtures for Concrete.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Provide data on joint devices, attachment accessories, and admixtures.
 - 1. Submit shop drawing of control joint/key joint layout for review and approval prior to joint installation.
- C. Manufacturer's Installation Instructions: Indicate installation procedures and interface required with adjacent Work.
- D. Design Mix: Provide data on material contents from mixing plant prior to placement of concrete.

1.5 PROJECT RECORD DOCUMENTS

- A. Submit under provisions of Section 01700.
- B. Accurately record actual locations of embedded utilities and components which are concealed from view.

1.6 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301.
- B. Maintain one copy of document on site.
- C. Acquire cement and aggregate from same source for all work.
- D. Conform to ACI 305R when concreting during hot weather.
- E. Conform to ACI 306R when concreting during cold weather.

1.7 FIELD SAMPLES AND TESTING

- A. Provide under provisions of Section 01410.

1.8 COORDINATION

- A. Coordinate the placement of joint devices with erection of concrete formwork and placement of form accessories.

2 PART 2 PRODUCTS

2.1 CONCRETE MATERIALS

- A. Cement: ASTM C150, Type I - Normal Portland type; use only one brand and manufacturer for all concrete.
- B. Fine and Coarse Aggregates: ASTM C33.
- C. Water: Clean and not detrimental to concrete.

2.2 ADMIXTURES

- A. Air Entrainment: ASTM C260; provide in exterior curbs, ramps, steps, and flatwork in the following quantity: 3 to 5 percent of concrete volume.
- B. Chemical: ASTM C494, Type A - Water Reducing admixture; at all slabs on grade.

2.3 ACCESSORIES

- A. Bonding Agent: Epoxy resin adhesive; manufactured by Sonneborn, Sonocrete, Burke, JEF, Con-Bond, or approved.
- B. Vapor Barrier: fabric reinforced plastic film, type recommended for below grade application; "Moistop" manufactured by Fortifiber Corporation, or approved.
- C. Non-Shrink Grout: Premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents; capable of developing minimum compressive strength of 2,200 psi in 48 hours and 6,000 psi in 28 days; manufactured by Burke Company, Sonneborn, or approved.

2.4 JOINT DEVICES AND FILLER MATERIALS

- A. Interior Joint Filler: ASTM D1752; Closed cell polyethylene, closed cell foam, resiliency recovery of 95 percent if not compressed more than 50 percent of original thickness; Sonoflex F manufactured by Sonneborn, or approved.
- B. Exterior Joint Filler: Asphalt impregnated fiberboard or felt, 1/2 inch thick, conforming to AASHTO M-33; Burke Fiber Expansion Joint or approved.
- C. Key (Construction) Joint Devices: Integral extruded plastic, formed to tongue and groove profile, knockout holes spaced at 6 inches; Keyed Kold Joint manufactured by Burke Company, or approved.
- D. Control Joint Devices: ASTM B221; plastic strip of longest manufactured length at each location, flush mounted; Zip Strip Joint Former manufactured by Burke Company, or approved.
- E. Sealant: ASTM C920; urethane non-sag compound; Sonolastic NP 1 manufactured by Sonneborn, or approved.

2.5 CONCRETE MIX

- A. Mix and deliver concrete in accordance with ASTM C94.
- B. Select proportions for normal weight concrete in accordance with ACI 301.

2.5 CONCRETE MIX (CONTINUED)

- C. Provide concrete for footings and foundation walls to the following criteria:
 - 1. Compressive Strength (28 days): 2,500 psi.
 - 2. Slump: 4 inches plus or minus one inch, when tested in accordance with ASTM C-143.
 - 3. W/C ratio: 0.52 maximum.
 - 4. This concrete has been designed for $f_c' = 2500$ psi. No special inspection is required.
- D. Provide concrete for interior & exterior slabs, curbs, parking bumpers, sidewalks, equipment pads, and miscellaneous applications to the following criteria:
 - 1. Interior Slabs Compressive Strength (28 days): 3,500 psi.
 - 2. All other listed items Compressive Strength (28 days): 2,500 psi.
 - 2. Slump: 4 inches plus or minus one inch, when tested in accordance with ASTM C-143.
 - 3. W/C ratio: 0.45 maximum.
- E. Use fibrous reinforcing at:
 - 1. All interior & exterior slabs, sidewalks, and equipment pads.
- F. Use accelerating admixtures in cold weather only when approved by the Architect. Use of admixtures will not relax cold weather placement requirements.
- G. Use calcium chloride only when approved by the Architect.
- H. Use set retarding admixtures during hot weather only when approved by the Architect.
- I. Add air entraining agent to normal weight concrete mix for work exposed to exterior.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify requirements for concrete cover over reinforcement.
- B. Verify that anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, plumb, level, and straight; and will not cause hardship in placing concrete.

3.2 PREPARATION

- A. Prepare previously placed concrete by cleaning with steel brush and applying bonding agent in accordance with manufacturer's instructions.

3.3 PLACING CONCRETE

- A. Place concrete in accordance with ACI 301.
- B. Notify Architect and Jurisdictional Authority Building Official minimum 24 hours prior to commencement of operations.
- C. Ensure reinforcement, inserts, embedded parts, formed joint fillers, and joint devices are not disturbed during concrete placement.
- D. Install vapor barrier under interior slabs on grade. Lap joints minimum 6 inches and seal watertight by taping edges and ends.
- E. Repair vapor barrier damaged during placement of concrete reinforcing. Repair with vapor barrier material; lap over damaged areas minimum 6 inches and seal watertight.
- F. Install joint sealant in accordance with manufacturer's instructions.
- G. Install joint devices in accordance with manufacturer's instructions.
- H. Install construction joint device in coordination with floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.
 - 1. Unless otherwise shown on the drawings provide and install control/key joints in concrete floor slabs:
 - a) Establish joint grid pattern in slab 20'-0" on center each way, maximum.
 - b) Adjust patten 5'-0" +/- each way to align with walls, changes in floor elevation, and to coordinate with floor finishes.
- I. Place concrete continuously between predetermined expansion, control, and construction joints.
- J. Consolidate placed concrete by mechanical vibrating equipment supplemented by hand-spading, rodding or tamping. Do not use vibrators to transport concrete inside forms.
- K. Do not interrupt successive placement; do not permit cold joints to occur.
- L. Screed floors and slabs on grade level, maintaining surface flatness of maximum 1/4 inch in 10 ft.

3.4 CONCRETE FINISHING

- A. Provide formed concrete surfaces to be left exposed to the eye with sack rubbed finish.

3.4 CONCRETE FINISHING (CONTINUED)

- B. Steel trowel interior walking surfaces which are exposed to view.
- C. Steel Trowel interior walking surfaces to receive carpet or resilient flooring finish.
- D. Light broom finish at all exterior concrete walking surfaces including equipment pads.
- E. In areas with floor drains, maintain floor elevation at walls; pitch surfaces uniformly to drains at 1/8 inch per foot.

3.5 CURING AND PROTECTION

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
- C. Cure floor surfaces in accordance with ACI 308.
- D. Spraying: Spray water over floor slab areas and maintain wet for 7 days.

3.6 FIELD QUALITY CONTROL

- A. Testing will be performed in accordance with ACI 301 and under provisions of Section 01410.
- B. Provide free access to Work and cooperate with appointed firm.
- C. Submit proposed mix design to the Architect for review and approval prior to commencement of Work.
- D. Tests of cement and aggregates may be performed to ensure conformance with specified requirements.

3.7 PATCHING

- A. Allow Architect to inspect concrete surfaces immediately upon removal of forms.
- B. Excessive honeycomb or embedded debris in concrete is not acceptable. Notify Architect upon discovery. Contractor shall be responsible for and replace at no cost concrete with excessive honeycomb or embedded debris as determined by the Architect.
- C. Patch imperfections as directed or in accordance with ACI 301.

3.8 DEFECTIVE CONCRETE

- A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.
- B. Repair or replacement of defective concrete will be determined by the Architect.
- C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Architect for for each individual area.

END OF SECTION

SECTION 03540

CEMENTITIOUS UNDERLAYMENT

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Liquid applied, cementitious self-leveling floor underlayment.

1.2 REFERENCES

- A. ASTM E286 - Test Method for Surface Flammability of Building Materials Using an 8 Foot (2.44 m) Tunnel Furnace.

1.3 SUBMITTALS FOR REVIEW

- A. Section 01300 - Submittals: Procedures for submittals.
- B. Product Data: Provide physical characteristics, product limitations, and manufacturer's installation instructions.

1.4 SUBMITTALS FOR INFORMATION

- A. Certificate: Certify products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

- A. Applicator: Company specializing in performing the work of this Section with minimum five years documented experience and approved by manufacturer.

1.6 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code criteria for combustibility or flame spread requirements.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Section 01600 - Material and Equipment: Environmental conditions affecting products on site.
- B. Do not install underlayment until floor penetrations and peripheral work are complete.
- C. Maintain minimum ambient temperatures of 50 degrees F 24 hours before, during and 72 hours after installation of underlayment.
- D. During the curing process, ventilate spaces to remove excess moisture.

2 PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Ardex Inc. Type "Ardex K-15" self-leveling underlayment cement.
- B. Section 01600 - Material and Equipment: Product options and substitutions. Substitutions: Permitted.

2.2 MATERIALS

- A. Underlayment: Cementitious based mix.
- B. Water: Potable and not detrimental to underlayment mix materials.
- C. Primer: Manufacturer's recommended type.
- D. Joint and Crack Filler: Latex-based.

2.3 REINFORCEMENT

- A. Lath: Galvanized metal lath mech (3.2 or 3.4 plaster lath) - as shown on drawings (if any).
- B. Fasteners: Hilti SDM 32P8S23 pin and load - as shown on drawings (if any).

2.4 MIXING

- A. Site mix materials in accordance with manufacturer's instructions.
- B. Mix to achieve following characteristics:
 - 1. Compressive Strength: 4,100 psi in accordance with ASTM C109/mod.
 - 2. Fire Hazard Classification: Flame/Smoke rating of 0/0 in accordance with ASTM E286.
- C. Mix to self-leveling consistency.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify substrate surfaces are clean, dry, unfrozen, do not contain petroleum bi-products, or other compounds detrimental to underlayment material bond to substrate.

3.2 PREPARATION

- A. Remove substrate surface irregularities. Fill voids and deck joints with filler. Finish smooth.
- B. Vacuum clean surfaces.

3.2 PREPARATION (CONTINUED)

- C. Prime substrate in accordance with manufacturer's instructions. Allow to dry.
- D. Close floor openings.

3.3 APPLICATION

- A. Install primer in accordance with manufacturer's instructions.
- B. Place to minimum 1/8 inch and maximum 3 ½ inch thickness.
- C. Place before partition installation.
- D. Feather underlayment down to existing flooring for a smooth, consistent, and true transition.

3.4 CURING

- A. Air cure in accordance with manufacturer's instructions.

3.5 APPLICATION TOLERANCE

- A. Top Surface: Level to 1/8 inch in 10 ft.

3.6 FIELD QUALITY CONTROL

- A. Placed Material: Inspecting and testing for conformance to specification requirements.

3.7 PROTECTION OF FINISHED WORK

- A. Section 01700 - Contract Closeout: Protecting installed work.
- B. Do not permit traffic over unprotected floor underlayment surfaces.

3.8 SCHEDULES

- A. Use cementitious underlayment to level floor surface where existing conditions are not suitable for a smooth, level, and true surface.

END OF SECTION

SECTION 04065

MASONRY MORTAR AND GROUT

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Mortar and grout for masonry.

1.2 RELATED SECTIONS

- A. Section 04810 - Unit Masonry Assemblies.

1.3 REFERENCES

- A. ACI 530 - Building Code Requirements for Masonry Structures.
- B. ACI 530.1 - Specifications For Masonry Structures.
- C. ASTM C5 - Quicklime for Structural Purposes.
- D. ASTM C91 - Masonry Cement.
- E. ASTM C94 - Ready-Mixed Concrete.
- F. ASTM C144 - Aggregate for Masonry Mortar.
- G. ASTM C150 - Portland Cement.
- H. ASTM C207 - Hydrated Lime for Masonry Purposes.
- I. ASTM C270 - Mortar for Unit Masonry.
- J. ASTM C387 - Packaged, Dry, Combined Materials, for Mortar and Concrete.
- K. ASTM C404 - Aggregates for Masonry Grout.
- L. ASTM C476 - Grout for Masonry.
- M. ASTM C595 - Blended Hydraulic Cement.
- N. ASTM C780 - Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry.
- O. ASTM C1019 - Method of Sampling and Testing Grout.
- P. ASTM C1072 - Method for Measurement of Masonry Flexural Bond Strength.
- Q. ASTM C1142 - Ready-Mixed Mortar for Unit Masonry.
- R. ASTM E447 - Test Methods for Compressive Strength of Masonry Prisms.

1.3 REFERENCES (CONTINUED)

- S. ASTM E518 - Test Method for Flexural Bond Strength of Masonry.
- T. IMIAC (International Masonry Industry All-Weather Council) - Recommended Practices and Guide Specifications for Cold Weather Masonry Construction.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Include design mix, indicate whether the Proportion or Property specification of ASTM C270 is to be used, required environmental conditions, and admixture limitations.
- C. Samples: Submit two samples of mortar, illustrating mortar color and color range.
- D. Reports: Submit reports on mortar indicating conformance of mortar to property requirements of ASTM C270 and test and evaluation reports to ASTM C780.
- E. Reports: Submit reports on grout indicating conformance of component grout materials to requirements of ASTM C476 and test and evaluation reports to ASTM C1019.
- F. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- G. Submit premix mortar manufacturer's installation instructions under provisions of Section 01300.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 530 and ACI 530.1.
- B. Maintain one copy of each document on site.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle products to site under provisions of Section 01600.
- B. Maintain packaged materials clean, dry, and protected against dampness, freezing, and foreign matter.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Maintain materials and surrounding air temperature to minimum 50 degrees F prior to, during, and 48 hours after completion of masonry work.
- B. Cold Weather Requirements: IMIAC - Recommended Practices and Guide Specifications for Cold Weather Masonry Construction.

2 PART 2 PRODUCTS

2.1 MATERIALS

- A. Portland Cement: ASTM C150, Type I, gray color.
- B. Mortar Aggregate: ASTM C144, standard masonry type; clean, dry, and protected against freezing and foreign material.
- C. Hydrated Lime: ASTM C207, Type S.
- D. Grout Course Aggregate: ASTM C404.
- E. Grout Course Aggregate: Maximum 3/8 inch size.
- F. Water: Clean and potable.
- G. Premix Mortar: ASTM c387, using grey cement, Normal strength.

2.2 MORTAR COLOR

- A. Mortar Color: Grey at mortar visible/not visible to the eye on the construction.

2.3 ADMIXTURES

- G. Water Repellent: Granular type; Dry-Block, W. R. Grace Hydratite, or approved equal.
- H. Retardant: Sika Plastiment, Protex, or approved.

2.4 CALCIUM CHLORIDE & ANTI-FREEZE ADMIXTURES

- A. None permitted.

2.5 MORTAR MIXES

- A. Mortar For Walls and Partitions: ASTM C270, Type S using the Property specification; compressive strength: 1,800 psi.

2.6 MORTAR MIXING

- A. Thoroughly mix mortar ingredients in accordance with ASTM C270 in quantities needed for immediate use.
- B. Maintain sand uniformly damp immediately before the mixing process.
- B. Add mortar color and admixtures in accordance with manufacturer's instructions. Provide uniformity of mix and coloration.
- C. Do not use anti-freeze compounds to lower the freezing point of mortar.

2.6 MORTAR MIXING (CONTINUED)

- D. If water is lost by evaporation, re-temper only within two hours of mixing.
- E. Use mortar within two hours after mixing at temperatures of 90 degrees F, or two-and-one-half hours at temperatures under 50 degrees F.

2.7 MIX TESTS

- A. Testing of Masonry Prisms: IN accordance with ASTM E-447. Construct and test masonry prisms; construct sets of four, two grouted and two ungrouted for every 5,000 square feet of wall area.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Request inspection of spaces to be grouted.

3.2 PREPARATION

- A. Apply bonding agent to existing concrete surfaces.
- B. Plug clean-out holes with brick or block masonry units. Brace masonry for wet grout pressure.

3.3 INSTALLATION

- A. Install mortar in accordance with manufacturer's instructions; ASTM C270.

3.4 FIELD QUALITY CONTROL

- A. Test and evaluate mortar in accordance with ASTM E-447.

3.5 SCHEDULE

- A. Grout solid all cells of masonry units.

END OF SECTION

SECTION 04810

UNIT MASONRY ASSEMBLIES

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Concrete masonry units.
- B. Reinforcement, anchorage, and accessories.

1.2 RELATED SECTIONS

- A. Section 03200 - Concrete Reinforcement: Reinforcement for masonry units.
- B. Section 04065 - Mortar: Mortar and grout.
- C. Section 07900 - Sealants.

1.3 REFERENCES

- A. ANSI/ASTM A82 - Cold-Drawn Steel Wire for Concrete Reinforcement.
- B. ANSI/ASTM C55 - Concrete Building Brick.
- C. ASTM A123 - Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- D. ASTM A167 - Stainless and Heat-Resisting Chromium-Nickel Steel Plate.
- E. ASTM A525 - Steel Sheet, Zinc Coated, (Galvanized) by the Hot-Dip Process.
- F. ASTM A580 - Stainless and Heat-Resisting Steel Wire.
- G. ASTM A615 - Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
- H. ASTM C90 - Hollow Load Bearing Concrete Masonry Units.

1.4 SUBMITTALS

- A. Submit shop drawings under provisions of Section 01300.
- B. Submit shop drawings indicating bars sizes, spacings, locations, quantities of reinforcement, bending and cutting schedules, supporting and spacing devices.
- C. Submit product data under provisions of Section 01300.
- D. Submit manufacturer's certificate under provisions of Section 01300 that products meet or exceed specified requirements.

1.5 QUALIFICATIONS

- A. Installer: Company specializing in performing the Work of this Section with minimum five years documented experience.

1.6 PRE-INSTALLATION CONFERENCE

- A. Convene one week prior to commencing Work of this Section.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site under provisions of Section 01600.
- B. Store and protect products under provisions of Section 01600.

1.8 ENVIRONMENTAL REQUIREMENTS

- A. Maintain materials and surrounding air temperature to minimum 50 degrees F prior to, during, and 48 hours after completion of masonry work.

1.10 SEQUENCING AND SCHEDULING

- A. Coordinate Work under provisions of Section 01040.
- B. Coordinate the masonry work with installation of elevator equipment, structural steel, installation of steel fabricated beam seats, and anchor bolts.

2 PART 2 PRODUCTS

2.1 CONCRETE MASONRY UNITS

- A. Hollow Load Bearing Block Units: ASTM C90, Grade N, Type I - Moisture Controlled; light weight.
- B. Split Face Hollow Load Bearing Block Units (if any): ASTM C90, Grade N, Type I - Moisture Controlled; light weight (IF ANY).
- C. Face Glazed Hollow Load Bearing Block Units (if any): ASTM C744 with resinous surfacing on ASTM C90-90 masonry units, Grade N, Type I - Moisture Controlled; light weight (IF ANY).
 - 1. Color: As selected by Owner from *The Designer Collection*; The Burns and Russell Company Spectra-Glaze units, or approved.
- D. Wall Cap Block: Willamette Greystone 810, or approved (IF ANY).

2.1 CONCRETE MASONRY UNITS (CONTINUED)

- E. Masonry Units: Nominal modular size of 8 x 8 x 16 and/or 8 x 6 x 16 inches, or as noted on Drawings at wall types. Provide special units for 90 degree corners, bond beams, lintels, half block, open ended block, and sills.

2.2 REINFORCEMENT

- A. Reinforcing Steel: specified in Section 03200.

2.3 ACCESSORIES

- A. Preformed Control Joints: Rubber Material, Provide with corner and tee accessories; "Titewall AA1100" manufactured by AA Wire Company Products, or approved.
- B. Building Paper: #15 asphalt saturated felt.
- C. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify field conditions are acceptable and are ready to receive Work.
- B. Verify items provided by other Sections of Work are properly sized and located.
- C. Verify that built-in items are in proper location, and ready for roughing into masonry work.
- D. Beginning of installation means installer accepts existing conditions.

3.2 PREPARATION

- A. Direct and coordinate placement of metal anchors supplied to other Sections.
- B. Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.

3.3 COURSING

- A. Establish lines, levels, and coursing indicated. Protect from displacement.
- B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.
- C. Lay concrete masonry units in running bond. Course one unit and one mortar joint to equal 8 inches high. Form concave mortar joints.

3.4 PLACING AND BONDING

- A. Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other Work.
- B. Lay hollow masonry units with face shell bedding on head and bed joints.
- C. Buttering corners of joints or excessive furrowing of mortar joints are not permitted.
- D. Remove excess mortar as Work progresses.
- E. Interlock wall intersections and external corners.
- F. Do not shift or tap masonry units after mortar has achieved initial set. Where adjustment must be made, remove mortar and replace.
- G. Perform jobsite cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.

3.5 REINFORCEMENT AND ANCHORAGES - REINFORCED UNIT MASONRY

- A. Support and secure reinforcing bars from displacement. Maintain position within $\frac{1}{2}$ inch of dimensioned position.
- B. Place unit masonry reinforcement as shown or noted on Drawings.

3.6 GROUTED COMPONENTS

- A. Grout all units solid.
- B. Reinforce bond beam as indicated on the drawings.
- C. Lap splices minimum 50 bar diameters.
- D. Support and secure reinforcing bars from displacement. Maintain position within $\frac{1}{2}$ inch of dimensioned position.
- E. Place and consolidate grout fill without displacing reinforcing.
- F. See CMU GENERAL NOTES on drawings for additional information.

3.7 BUILT-IN WORK

- A. As Work progresses, build in fabricated metal beam seats, anchor bolts, plates, and other items furnished by other Sections.
- B. Build in items plumb and level.
- C. Bed anchors of metal door frames in adjacent mortar joints. Fill frame voids solid with grout.

3.7 BUILT-IN WORK (CONTINUED)

- D. Do not build in organic materials subject to deterioration.

3.8 TOLERANCES

- A. Maximum Variation From Unit to Adjacent Unit: 1/32 inch.
- B. Maximum Variation From Plane of Wall: 1/4 inch in 10 feet and 1/2 inch in 20 feet or more.
- C. Maximum Variation From Plumb: 1/4 inch per story non-cumulative; 1/2 inch in two stories or more.
- D. Maximum Variation From Level Coursing: 1/8 inch in 3 feet and 1/4 inch in 10 feet; 1/2 inch in 30 feet.
- E. Maximum Variation of Joint Thickness: 1/8 inch in 3 feet.

3.9 CUTTING AND FITTING

- A. Cut and fit for chases, pipes, conduit, sleeves, grounds, and louvers. Coordinate with other Sections of Work to provide correct size, shape, and location.
- B. Obtain Architect approval prior to cutting or fitting masonry work not indicated or where appearance or strength of masonry work may be impaired.
- C. Cut and fit unit masonry to provide correct size, shape, and location.

3.10 CLEANING

- F. Clean Work under provisions of Section 01700.
- G. Remove excess mortar and mortar smears.
- H. Replace defective mortar. Match adjacent Work.
- I. Clean soiled surfaces with cleaning solution.
- J. Use non-metallic tools in cleaning operations.

3.11 PROTECTION OF FINISHED WORK

- A. Protect finish installation under provisions of Section 01500.
- B. Without damaging completed Work, provide protective boards at exposed external corners which may be damaged by construction activities.

3.12 CMU GENERAL NOTES

- A. See Drawings for CMU GENERAL NOTES which provide additional construction information.

END OF SECTION

SECTION 05500

METAL FABRICATIONS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Shop fabricated metal items, galvanized and prime painted.

1.2 RELATED SECTIONS

- A. Section 09900 - Painting: Paint finish.

1.3 REFERENCES

- A. ASTM A36 - Structural Steel.
- B. ASTM A53 - Hot-Dipped, Zinc-coated Welded and Seamless Steel Pipe.
- C. ASTM A123 - Zinc (Hot-Galvanized) Coatings on Products Fabricated From Rolled, Pressed and Forged Steel Shapes, Plates, Bars, and Strip.
- D. ASTM A153 - Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
- E. ASTM A283 - Carbon Steel Plates, Shapes, and Bars.
- F. ASTM A307 - Carbon Steel Externally Threaded Standard Fasteners.
- G. ASTM A325 - High Strength Bolts for Structural Steel Joints.
- H. ASTM A386 - Zinc-Coating (Hot-Dip) on Assembled Steel Products.
- I. ASTM A500 - Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Round and Shapes.
- J. ASTM A501 - Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.
- K. AWS A2.0 - Standard Welding Symbols.
- L. AWS D1.1 - Structural Welding Code.
- M. SSPC - Steel Structures Painting Council.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.

1.4 SUBMITTALS (CONTINUED)

- B. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.
- C. Indicate welded connections using standard AWS A2.0 welding symbols. Indicate net weld lengths.

1.5 QUALIFICATIONS

- A. Prepare Shop Drawings under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed in the State of Oregon.
- B. Welders' Certificates: Submit under provisions of Section 01300, certifying welders employed on the Work, verifying AWS qualification within the previous 12 months.

1.6 FIELD MEASUREMENTS

- A. Verify field measurements are as indicated on shop drawings and as instructed by the manufacturer.

2 PART 2 PRODUCTS

2.1 MATERIALS

- A. Steel Tubing: ASTM A500, Grade B.
- B. Plates: ASTM A36.
- C. Bolts, Nuts, and Washers: ASTM A307; galvanized to ASTM A153 for galvanized components, unless otherwise noted on the drawings.
- D. Welding Materials: AWS D1.1; type required for materials being welded.
- H. Touch-Up Primer for Galvanized Surfaces: Zinc rich type.
- I. Light gage steel connectors (if any): Simpson "Strong-Tie" products or approved.

2.2 FABRICATION

- A. Fit and shop assemble in largest practical sections, for delivery to site.
- B. Fabricate items with joints tightly fitted and secured.
- C. Continuously seal joined members by continuous welds.

2.2 FABRICATION (CONTINUED)

- D. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.
- E. Exposed Mechanical Fastenings: Flush countersunk screws or bolts; unobtrusively located; tamper and vandal proof type; consistent with design of component, except where specifically noted otherwise.
- F. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.

2.3 FINISHES

- A. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.
- B. Galvanize all metal fabrications to ASTM A123. Provide minimum 1.25 oz/sq ft galvanized coating.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify field conditions are acceptable and are ready to receive work.
- B. Beginning of installation means erector accepts existing conditions.

3.2 PREPARATION

- A. Clean and strip primed steel items to bare metal where site welding is required.
- B. Supply items required to be cast into concrete or embedded in masonry with setting templates, to appropriate sections.

3.3 INSTALLATION

- A. Install items plumb and level, accurately fitted, free from distortion or defects.
- B. Allow for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.
- C. Field weld components indicated on shop drawings.
- D. Perform field welding in accordance with AWS D1.1.

3.3 INSTALLATION (CONTINUED)

- E. Obtain Architect approval prior to site cutting or making adjustments not scheduled.
- F. After erection, prime welds, abrasions, and surfaces not shop primed, except surfaces to be in contact with concrete.

3.4 ERECTION TOLERANCES

- A. Maximum Variation From Plumb: 1/4 inch per story, non-cumulative.
- B. Maximum Offset From True Alignment: 1/4 inch.

3.5 SCHEDULE

- B. All metal fabrications for a complete and operable project.

END OF SECTION

SECTION 06112

FRAMING AND SHEATHING

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Structural wall and roof framing.
- B. Built-up structural beams.
- C. Wall and roof sheathing.
- D. Preservative treatment of wood.
- E. Miscellaneous framing and sheathing.
- F. Telephone and electrical panel boards.
- G. Concealed wood blocking for support of toilet and bath accessories, wall cabinets, wood trim, door hardware, and any other items attached to walls.

1.2 RELATED SECTIONS

- A. Section 06114 - Wood Blocking and Curbing.
- B. Section 06200 - Finish Carpentry.

1.3 REFERENCES

- A. ALSC - American Lumber Standards Committee: Softwood Lumber Standards.
- B. ANSI A208.1 - Mat-Formed Wood Particleboard.
- C. ANSI/AHA A135.4 - Basic Hardboard.
- D. APA: American Plywood Association.
- E. AWPA (American Wood Preservers Association) C1 - All Timber Products Preservative Treatment by Pressure Process.
- F. AWPA (American Wood Preservers Association) C20 - Structural Lumber Fire Retardant Treatment by Pressure Process.
- G. NFPA: National Forest Products Association.
- H. WCLIB: West Coast Lumber Inspection Bureau.
- I. WWPA: Western Wood Products Association.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.

1.4 SUBMITTALS (CONTINUED)

- B. Product Data: Provide technical data on insulated sheathing, wood preservative materials, and application instructions.
- C. Samples of Exposed To View Wood Members: Submit two samples, in a size illustrating wood grain, stain, and finish.
- D. Manufacturer's Certificate: Certify that Products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with the following agencies:
 - 1. Lumber Grading Agency: Certified by WCLIB.
 - 2. Plywood Grading Agency: Certified by APA.
- B. In lieu of grade stamping exposed to view lumber and plywood, submit manufacturer's certificate under provisions of Section 01400 that products meet or exceed specified requirements.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle products to site under provisions of Section 01600.

2 PART 2 PRODUCTS

2.1 LUMBER MATERIALS

- A. Lumber Grading Rules: WCLIB.
- B. All lumber shall be kiln dried.
- C. Milling: S4S unless specifically designated otherwise.
- D. All lumber shall be visually stress graded in accordance with ASTM D245.
- E. Built-Up Stud Wood Columns: Douglas Fir-Larch species, Construction grade or better, 19 percent maximum moisture content.
- F. Wood Columns: Douglas Fir-Larch species, No. 1 grade or better, 19 percent maximum moisture content.
- G. Non-structural Light Framing: Douglas Fir-Larch species, Standard grade or better, 19 percent maximum moisture content.
- H. Structural Bearing Wall Studding: Douglas Fir-Larch species, Construction grade or better, 19 percent maximum moisture content.

2.1 LUMBER MATERIALS (CONTINUED)

- I. Beams and Timbers: Douglas Fir-Larch species, No. 1 grade or better, 19 percent maximum moisture content.
- J. Structural Roof Framing: Douglas Fir-Larch species, No. 2 grade or better, 19 percent maximum moisture content.
- K. Miscellaneous Framing: Douglas Fir-Larch species, No. 2 or better grade, 19 percent maximum moisture content.
- L. All lumber materials in contact with cementitious materials shall be pressure treated.

2.2 SHEATHING MATERIALS (IF ANY)

- A. Plywood Roof Sheathing: APA Rated Sheathing Structural I, Span Rating 32/16; Exposure Durability 1; unsanded.
- B. Plywood Exterior Wall Sheathing: APA Rated Sheathing Structural I, Span Rating minimum 32/16; Exposure Durability 1; unsanded.
- C. Plywood Interior Wall Sheathing (if any): APA Rated Sheathing Structural I, Span Rating minimum 32/16; Exposure Durability 1; sanded.
- D. Plywood Floor Sheathing (if any): APA Rated Sheathing Structural I, Span Rating minimum 32/16; Exposure Durability 1; unsanded.

2.3 SHEATHING LOCATIONS (IF ANY)

- A. Roof Sheathing: thickness as indicated on drawings, 48 x 96 inch sized sheets, square edges. Block all unsupported roof sheathing edges.
- B. Exterior Wall Sheathing: thickness as indicated on drawings, 48 x 96 inch sized sheets, square edges.
- C. Interior Wall Sheathing (if any): thickness as indicated on drawings, 48 x 96 inch sized sheets, square edges.
- D. Interior Floor Sheathing (if any): thickness as shown on drawings, 48 x 96 inch sized sheets, tongue & groove edges. APA rated 48/24.

2.4 ACCESSORIES

- A. Fasteners and Anchors:
 - 1. Provide size, type, material, and finish as indicated and as recommended by applicable standards, complying with applicable Federal Specifications for nails, staples, screws, bolts, nuts, washers and anchoring devices. Comply with IBC Standard No. 25.17.

2.4 ACCESSORIES (CONTINUED)

- A. (continued):
 - 2. Fasteners: Hot-dipped galvanized steel for exterior and treated wood locations.
 - 3. Anchors: Toggle bolt type for anchorage to hollow masonry, expansion shield and lag bolt type for anchorage to solid masonry or concrete, and bolt or ballistic fastener for anchorages to steel.
- B. Joist Hangers, Sill Plate Fasteners, and Framing Anchors: Hot dipped galvanized steel, sized to suit framing conditions and as indicated on drawings, manufactured by Simpson Company, or approved.
- C. Building Paper: No. 15 asphalt felt.

2.5 FACTORY WOOD TREATMENT

- A. Wood Preservative (Pressure Treatment): AWPA Treatment C1 using water borne preservative with 0.40 percent retainage.
- B. All lumber materials in contact with cementitious materials shall be pressure treated.

3 PART 3 EXECUTION

3.1 FRAMING

- A. Set structural members level and plumb, in correct position.
- B. Make provisions for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in true alignment until completion of erection and installation of permanent bracing.
- C. Place horizontal members flat, crown side up.
- D. Construct load bearing framing members full length without splices.
- E. Double members at openings over 24 inches wide. Space short studs over and under opening to stud spacing.
- F. Construct double joist headers at ceiling openings and under wall stud partitions that are parallel to floor joists. Frame rigidly into joists.
- G. Block roof framing in excess of 10 feet span at mid-span with 2 x wood blocking. Fit solid blocking at ends of members.
- H. Coordinate installation of plate connected wood trusses, glue laminated structural units, and wood roof rafters.

3.1 FRAMING (CONTINUED)

- I. Curb roof openings except where prefabricated curbs are provided. All wood frame curbs to be pressure treated material. Form corners by alternating lapping side members.
- J. Install minimum 2 x 6 wood blocking/backing behind all items or accessories attached to walls.

3.2 SHEATHING (IF ANY)

- A. Secure roof sheathing perpendicular to framing members with ends staggered and sheet ends over firm bearing. Provide solid edge blocking between sheets.
- B. Secure exterior wall sheathing with long dimension perpendicular to wall studs, with ends over firm bearing and staggered.
- C. Secure interior wall sheathing with long dimension parallel to wall studs, with ends over firm bearing.
- C. Install telephone and electrical panel boards with plywood sheathing material where required. Over size the panel by 12 inches on all sides.

3.3 FASTENERS

- A. Provide nails, spikes, screws and bolts for proper installation of carpentry and millwork. Sizes and quantities required by Building Code and approved by the Architect. Hardware exposed to moisture shall be hot dipped galvanized steel, or approved non-ferrous metal.
- B. Minimum nailing of framing:

CONNECTION

Joist to sill or girder, toe nail:	3 - 8d
Bridging to joist, toe nail each end:	2 - 8d
1" x 6" subfloor or less to each joist, face nail:	2 - 8d
Wider than 1" x 5" subfloor to each joist, face nail:	3 - 8d
2" subfloor to joist or girder, blind and face nail:	2 - 16d
Sill plate to joist or blocking, face nail:	16d @ 1'-4" on center
Top plate to stud, end nail:	2 - 16d
Continuous header, two pieces:	16d @ 1'-4" on center along each edge
Ceiling joists to plate, toe nail:	3 - 8d
Continuous header to stud, toe nail:	4 - 8d
Ceiling joists, laps over partitions, face nail:	3 - 16d
Ceiling joists to parallel rafters, face nail:	4 - 8d

3.3 FASTENERS (CONTINUED)

B. (continued):

CONNECTION

Rafter to plate, toe nail: 3 - 8d
1" brace to each stud and plate, face nail: 2 - 8d
2" planks: 2 - 16d at each bearing

- C. Common or box nails may be used except where otherwise stated. Use common nails only at built-up columns and wide side plate to beam connections.
- D. See Roof & Wall Sheathing Notes/Fastening Schedule for plywood sheathing fastening (if any)
- E. Power driven fasteners: Hilti, as indicated on drawings, or approved.

3.4 FRAMING ACCESSORIES & ANCHORS

- A. Set framing accessories and manufactured anchors level, plumb, and properly aligned.
- B. Cover all wall and roof sheathing with specified building paper.

3.5 TOLERANCES

- A. Framing Members: 1/4 from true position, maximum.

END OF SECTION

SECTION 06114

WOOD BLOCKING AND CURBING

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Blocking at openings.
- B. Wood furring and grounds.
- C. Concealed wood blocking for support of items attached to walls, roof, ceilings, or floors.
- D. Preservative treatment of wood.

1.2 RELATED SECTIONS

- A. Section 06112 - Framing and Sheathing.
- B. Section 06200 - Finish Carpentry.

1.3 REFERENCES

- A. ALSC - American Lumber Standards Committee: Softwood Lumber Standards.
- B. APA: American Plywood Association.
- C. AWPA (American Wood Preservers Association) C1 - All Timber Products Preservative Treatment by Pressure Process.
- D. NFPA: National Forest Products Association.
- E. WCLIB: West Coast Lumber Inspection Bureau.
- F. WWPA: Western Wood Products Association.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Provide technical data on wood preservative materials and application instructions.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with the following agencies:
 - 1. Lumber Grading Agency: Certified by WWPA.

2 PART 2 PRODUCTS

2.1 MATERIALS

- A. Lumber Grading Rules: WWPA.

2.2 MATERIALS (CONTINUED)

- B. Miscellaneous Framing: Douglas Fir-Larch species, 19 percent maximum moisture content, pressure preservative treat where in contact with cementitious materials or as indicated on drawings.

2.3 ACCESSORIES

- A. Fasteners and Anchors:
 - 1. Fasteners: Hot-dipped galvanized steel for high humidity and treated wood locations, unfinished steel elsewhere.

2.4 FACTORY WOOD TREATMENT

- A. Wood Preservative (Pressure Treatment): AWPA Treatment C1 using water borne preservative with 0.25 percent retainage.
- B. PRESSURE TREATED WOOD MATERIAL SHALL BE USED AT ALL BLOCKING AND CURBING LOCATIONS.

3 PART 3 EXECUTION

3.1 FRAMING

- A. Set members level and plumb, in correct position.
- B. Place horizontal members flat, crown side up.
- C. Space framing and furring as indicated on drawings.
 - 1. If not indicated on drawings: 16 inches o.c. maximum.

3.2 SITE APPLIED WOOD TREATMENT

- A. Apply preservative treatment in accordance with manufacturer's instructions.
- B. Brush apply two coats of preservative treatment on wood in contact with cementitious materials or earth.
- C. Allow preservative to dry prior to erecting members.

END OF SECTION

SECTION 06200

FINISH CARPENTRY (IF ANY)

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Finish carpentry items, other than shop prefabricated casework (if any).
- B. Hardware and attachment accessories.

1.2 RELATED SECTIONS

- A. Section 09900 - Painting: Painting and finishing of finish carpentry items.

1.3 REFERENCES

- A. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
- B. AWI - Quality Standards.
- C. FS MMM-A-130 - Adhesive, Contact.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Submit three samples of wood trim 3 inch long.

1.5 QUALITY ASSURANCE

- A. Perform work in accordance with AWI Premium quality.

1.6 QUALIFICATIONS

- A. Fabricator: Company Specializing in fabricating the products specified in this section with a minimum five years documented experience.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect and handle products to site under provisions of Section 01600.
- B. Protect work from moisture damage.

1.8 FIELD MEASUREMENTS

- A. Verify all measurements in the field.

1.9 COORDINATION

- A. Coordinate the work with framing/sheathing rough-in, installation of associated and adjacent components.

2 PART 2 PRODUCTS

2.1 LUMBER MATERIALS

- A. Softwood Lumber: Graded in accordance with AWI Premium; Douglas Fir species, maximum moisture content of 6 percent; with vertical grain of quality suitable for transparent finish.

2.2 FASTENERS

- A. Fasteners: Of size and type to suit application.
- B. Concealed Joint Fasteners: Threaded steel.

2.3 ACCESSORIES

- A. Primer: Alkyd primer sealer type.
- B. Wood Filler: Solvent base, tinted to match surface finish color.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify adequacy of backing and support framing.
- B. Verify mechanical, electrical, and building items affecting work of this section are placed and ready to receive this work.

3.2 INSTALLATION

- A. Install work in accordance with AWI Premium Quality Standard.
- B. Set and secure materials and components in place, plumb and level.
- C. Carefully scribe work abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim to conceal larger gaps.
- D. Install trim with nails or screws at 16 inch on center.

3.3 PREPARATION FOR SITE FINISHING

- A. Set exposed fasteners. Apply wood filler in exposed fastener indentations. Sand work smooth.
- B. Site Finishing: Refer to Section 09900.

3.4 ERECTION TOLERANCES

- A. Maximum Variation from True Position: 1/16 inch.

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3.4 ERECTION TOLERANCES (CONTINUED)

B. Maximum Offset from True Alignment with Abutting
Materials: 1/32 inch.

3.5 SCHEDULE

A. Interior AND exterior:

1. Any Wood Trim Location: vertical grain Douglas Fir
species; profile as detailed, prepare for paint
finish.

END OF SECTION

SECTION 06410

CUSTOM CABINETS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Special fabricated cabinet units.
- B. Countertops.
- C. Cabinet hardware.
- D. Prefinished surfaces.
- E. Preparation for installing utilities.

1.2 REFERENCES

- A. ANSI/BHMA A156.9 - Cabinet Hardware.
- B. AWI - Quality Standards.
- C. FS MM-L-736 - Lumber, Hardwood.
- D. FS MMM-A-130 - Adhesive, Contact.
- E. National Electric Manufacturers Association (NEMA) LD3 - High Pressure Decorative Laminates.
- F. PS 1 - Construction and Industrial Plywood.
- G. PS 20 - American Softwood Lumber Standard.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Indicate materials, component profiles and elevations, assembly methods, joint details, fastening methods, accessory listings, hardware location, and schedule of finishes.
- C. Samples: Submit three, 2 x 2 inch size samples, illustrating cabinet finishes and textures.
- D. Samples: Submit three, 2 x 2 inch size samples, illustrating counter top finish and texture.
- E. Samples: Submit three samples of drawer pulls illustrating finish.

1.4 QUALITY ASSURANCE

- A. Perform work in accordance with AWI Premium quality.

1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum five years documented experience.

1.6 MOCKUP

- A. Provide mockup of full size base cabinet and upper cabinet under provisions of Section 01400.
- B. Provide units with specified countertop; with hardware installed.
- C. Units will be examined to ascertain quality and conformity to AWI quality level standards and specification requirements.
- D. Mockup may remain as part of the Work.

1.7 PRE-INSTALLATION CONFERENCE

- A. Convene one week prior to commencing work of this section.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle products to site under provisions of Section 01600.
- B. Protect units from moisture damage.

1.9 FIELD MEASUREMENTS

- A. Verify field measurements are as indicated on shop drawings and as instructed by the manufacturer.

1.10 COORDINATION

- A. Coordinate the work with plumbing, electrical, and gas rough-in. Beginning of installation means installer accepts existing utilities and surfaces.

2 PART 2 PRODUCTS

2.1 WOOD MATERIALS

- A. Softwood Lumber: PS 20; graded in accordance with AWI Premium; average moisture content of 9 percent; "B & Better" vertical grain Douglas Fir species and grade, or approved.
- B. Hardwood Lumber: FS MM-L-736; graded in accordance with AWI Premium; average moisture content of 9 percent; straight grained clear birch species and grade, or approved.

2.2 SHEET MATERIALS

- A. Softwood Plywood: PS 1; graded in accordance with AWI, Douglas Fir, exterior type at counter tops and where exposed to moisture, interior type elsewhere.
- B. Hardwood Plywood: PS 51; graded in accordance with AWI, core materials of veneer, type of glue recommended for application; birch face veneer and rotary cut.
- C. Wood Particleboard: PS 1; AWI standard, composed of wood chips, medium density, made with high waterproof resin binders or water resistant adhesive; of grade to suit application; sanded faces.
- D. Hardboard: Pressed wood fiber with resin binder, tempered grade, 1/4 inch thick, smooth one side.

2.3 MANUFACTURERS - PLASTIC LAMINATE

- A. Wilsonart TUF SURF II, 107HW.
- B. Wilsonart Cabinet Liner Decorative Laminate, 726.
- C. Substitutions: Under provisions of Section 01600.

2.4 LAMINATE MATERIALS

- A. Plastic Laminate: AWI, 0.050 inch General Purpose quality; color as selected by Architect, and matte surface texture.
- B. Cabinet Liner: AWI, 0.025 inch, high pressure decorative laminate, color as selected by Architect, and low-glare nondirectional surface texture.

2.5 ACCESSORIES

- A. Adhesive: Type recommended by laminate manufacturer to suit application.
- B. Fasteners: Size and type to suit application.
- C. Bolts, Nuts, Washers, Lags, Pins, and Screws: Of size and type to suit application.
- D. Concealed Joint Fasteners: Threaded steel.

2.6 HARDWARE

- A. Shelf Standards and Rests: KV 87.
- B. Shelf Supports: KV 187.
- C. Drawer and Door Pulls: Vinyl recessed pulls, color as selected from manufacturers' standard range.

2.6 HARDWARE (CONTINUED)

- D. Cabinet Locks: Corbin No. 764L.
- E. Catches: Stanley SP45.
- F. Drawer Slides: Full extension ball bearing rollers; Grant 329.
- G. Hinges: Blum #91A653, 180 degree opening.

2.7 FABRICATION

- A. Shop assemble casework for delivery to site in units easily handled and to permit passage through building openings.
- B. Fit shelves, doors, and exposed edges with 3/4 inch matching veneer edging. Use one piece for full length only.
- C. Door and Drawer Fronts: 3/4 inch thick; flush overlay style.
- D. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.
- F. Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.
- G. Apply laminate backing sheet to reverse side of plastic laminate finished surfaces.
- H. Provide cutouts for plumbing fixtures, inserts, appliances, outlet boxes fixtures and fittings. Verify locations of cutouts from on-site dimensions.

2.8 FINISHING

- A. Sand work smooth and set exposed nails and screws.
- B. Apply wood filler in exposed nail and screw indentations.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify adequacy of backing and support framing.

3.2 INSTALLATION

- A. Set and secure casework in place; rigid, plumb, and level.

3.3 INSTALLATION (CONTINUED)

- B. Use fixture attachments in concealed locations for wall mounted components.
- C. Use concealed joint fasteners to align and secure adjoining cabinet units and counter tops.
- D. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.
- E. Secure cabinet and counter bases to floor using appropriate angles and anchorages.
- F. Countersink anchorage devices at exposed locations. Conceal with solid wood plugs of species to match surrounding wood; finish flush with surrounding surfaces.

3.4 ADJUSTING

- A. Adjust work under provisions of Section 01700.
- B. Adjust moving or operating parts to function smoothly and correctly.

3.5 CLEANING

- A. Clean work under provisions of 01700.
- B. Clean casework, counters, shelves, hardware, fittings and fixtures.

END OF SECTION

SECTION 07190

WATER REPELLENT COATING

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Penetrating water repellent coating applied to vertical and horizontal exterior masonry surfaces EXPOSED TO THE WEATHER.

1.2 RELATED SECTIONS

- A. Section 04810 - Unit Masonry Assemblies.
- B. Section 07900 - Joint Sealers.
- C. Section 09900 - Painting.

1.3 REFERENCES

- A. ASTM C 67 - Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile; 1998a.
- B. ASTM C 140 - Standard Test Methods of Sampling and Testing Concrete Masonry Units; 1998b.
- C. ASTM D 3960 - Standard Practice for Determining Volatile Organic Compound Content of Paints and Related Coatings; 1996.
- D. ASTM D 5095 - Standard Test Method for Determination of the Nonvolatile Content in Silanes, Siloxanes, and Silane-Siloxane Blends Used in Masonry Water-Repellent Treatments; 1991 (Reapproved 1997).
- E. ASTM E 96 - Standard Test Methods for Water Vapor Transmission of Materials; 1995.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Provide details of product description, tests performed, limitations to coating, cautionary procedures required during application, and chemical properties including percentage of solids.
- C. Manufacturer's Installation Instructions: Indicate special procedures and conditions requiring special attention.
- D. Color Selection: Submit manufacturer's color chart.
- E. Manufacturer's Certificate: Certify that Products meet or exceed specified requirements.

1.5 QUALIFICATIONS

- A. Manufacturer: Capable of providing field service representation during installation and who will approve the installer and application method.
- B. Applicator: Company specializing in performing the work of this section with minimum three years documented experience and approved by manufacturer.
- C. All coatings, shall be manufactured by the same manufacturer.
- D. Mock-Up or Test Panels: Before full scale application, test products to be used on a mock-up or test panel(s).
 - 1. Review manufacturer's product data sheets to determine suitability of each product for each surface.
 - 2. Apply products using manufacturer-approved application methods, determining actual requirements for surface preparation, coverage rate, number of coats, and application procedures.
 - 3. After 48 hours, review effectiveness of protection, compatibility with substrates, and ability to achieve desired results.
 - 4. Obtain approval of Architect for workmanship, color, and texture before proceeding with work.
 - 5. Test Panels: Inconspicuous section of actual construction.
 - a. Location and quantity as selected by the Architect.
 - b. Size: 4 feet by 4 feet.
 - c. Repair unacceptable work to the satisfaction of the Architect.
- E. Pre-Installation Conference: Hold prior to starting application, to review project conditions, protection requirements, manufacturer's installation instructions, and manufacturer's warranty requirements.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle products to site in time to avoid construction delays.
- B. Protect coating liquid from freezing.
- C. Deliver materials to job site in original and unopened packages and containers bearing manufacturer's name, label, and the following information:
 - 1. Name or title of material.
 - 2. Manufacturer's stock number and date of manufacture.
 - 3. Manufacturer's name.

1.6 DELIVERY, STORAGE, AND HANDLING (CONTINUED)

C. (continued):

4. Contents by volume, for pigment and vehicle constituents.
5. Application instructions.
6. Color name number.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply products under conditions outside the manufacturer's recommendations, which include:
1. Surfaces that are frozen; allow complete thawing prior to installation.
 2. Surface and air temperatures below 40 degrees F.
 3. Surface and air temperatures above 95 degrees F.
 4. When surface or air temperature is not expected to remain above 40 degrees F. for at least 8 hours after application.
 5. Wind conditions that may blow water repellents onto surfaces not intended to be treated.
 6. Less than 24 hours after a rain.
 7. When rain is expected less than 6 hours after installation.

1.8 EXTRA MATERIALS

- A. Provide a one gallon container of each product to the Owner.
- B. Label each container with color, texture, and location of use, in addition to the manufacturer's label.

1.9 WARRANTY

- A. Warranty shall cover the building Owner for ten (10) years from date of project substantial completion. Warranty shall cover chemical staining, ghosting, shadowing, and normal environmental effects, without exception, and will retain reasonable gloss and color stability so long as product is applied according to manufacturer's recommendations.

2 PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. PROSOCO, INC., 3741 Greenway Circle, Lawrence, Kansas 66046; 1-800-255-4255.
- B. Substitutions: Under provisions of Section 01600.
- C. Obtain water repellent materials and surface preparation cleaners from a single manufacturer.

2.2 MATERIALS

A. Water Repellent at Vertical Surfaces: PROSOCO Weather Seal Siloxane; clear penetrating liquid oligomeric siloxane (active substance) and the following characteristics:

1. VOC Content: Less than 760 g/L.
2. Flash Point: 108 degrees F.
3. Specific Gravity: 0.793.
4. Weight: 6.6 lb/gal.
5. Solids by volume: 6 percent.

B. Water Repellent at Horizontal Surfaces: PROSOCO Weather Seal Siloxane; clear penetrating liquid oligomeric siloxane (active substance) and the following characteristics:

1. VOC Content: Less than 760 g/L.
2. Flash Point: 108 degrees F.
3. Specific Gravity: 0.793.
4. Weight: 6.6 lb/gal.
5. Solids by volume: 16 percent.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify joint sealants are installed and cured.
- B. Verify surfaces to be coated are dry, clean, and free of efflorescence, oil, or other matter detrimental to application of coating.
- C. Applicator shall examine areas and conditions of work and notify the General Contractor in writing of any conditions detrimental to proper and timely completion. Do not proceed with work until unsatisfactory conditions have been corrected to an acceptable manner.
- D. Do not begin until mock-up/test panel(s) have been reviewed and approved by the Architect.
- E. Beginning of work indicates acceptance of surfaces and conditions by Applicator.
- F. Do not place coatings over dirt, rust, scale, grease, moisture, or other conditions detrimental to formation of durable film.

3.2 PREPARATION

- A. Delay work until any masonry mortar work is cured a minimum of 28 days.
- B. Remove loose particles and foreign matter.

3.2 PREPARATION (CONTINUED)

- C. Remove oil or foreign substances with a chemical solvent which will not affect coating.
- D. Scrub and rinse surfaces with water and let dry.
- E. Perform other cleaning and preparation procedures in accordance with manufacturer's instructions.

3.3 APPLICATION

- A. Apply coating system in strict accordance with manufacturer's instructions and recommendations, product data, and container label instructions.
- B. Mix materials in strict accordance with manufacturer's instructions; do not dilute unless permitted by manufacturer.
- C. Prevent overspray, wind drift, and splash onto surfaces, materials, and site components not to be treated.
- D. Provide the services of the manufacturer's authorized field representative to verify installed products comply with manufacturer's requirements and with the standard established by the Architect approved mock-up/test panel(s).

3.4 PROTECTION TO FINISHED AND ADJACENT WORK

- A. Protect adjacent surfaces not scheduled to receive coating.
- B. Protect landscaping, Owner's property, existing structures, and vehicles.
- C. If applied to unscheduled surfaces remove immediately by method recommended by coating manufacturer.

3.5 SCHEDULE

- A. Apply water repellent coating to all above grade masonry and surfaces exposed to the weather.

END OF SECTION

SECTION 07213

BATT INSULATION

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Batt insulation and vapor barrier in exterior wall construction (if any).
- B. Batt sound attenuation insulation in interior wall construction and/or floor/ceiling assembly construction (if any).
- C. Batt insulation and vapor barrier in floor and ceiling construction (if any).

1.2 RELATED SECTIONS

- A. Section 07840 - Firestopping.

1.3 REFERENCES

- A. ASTM C665 - Mineral Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.
- B. FS HH-I-521 - Insulation Blankets, Thermal, (Mineral Fiber for Ambient Temperatures).
- C. FS HH-I-558 - Insulation, Blocks, Boards, Blankets, Felts, Sleeving (Pipe and Tube Covering), and Pipe Fitting Covering, Thermal (Mineral Fiber, Industrial Type).

1.4 PERFORMANCE REQUIREMENTS

- A. Materials of this Section shall provide continuity of thermal barrier at building enclosure elements.
- B. Materials of this Section shall provide sound transmission insulation at building interior partitions in conjunction with materials in Section 09260.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

2 PART 2 PRODUCTS

2.1 MANUFACTURERS - INSULATION MATERIALS

- A. Owens-Corning.
- B. Manville.

2.2 MANUFACTURERS - INSULATION MATERIALS (CONTINUED)

- C. Certainteed.
- D. Celotex.
- E. Substitutions: Under provisions of Section 01600.

2.2 MATERIALS

- A. Batt Insulation: FS HH-I-521 Type II - with non-reflective membrane one side; preformed glass fiber batts, conforming to the following:
 - 1. Thermal Resistance R of 19 minimum at walls, R of 19 minimum at floors or ceilings; or as noted on the drawings
 - 2. Facing Faced on one side with integral vapor barrier
- B. Flame Spread Rating: 25.
- C. Tape: Bright aluminum self-adhering type, 2 inch wide.
- D. Sound Attenuation Batt Insulation: FS HH-I-521E Type 1, no membrane; performed glass fiber batt; friction fit, conforming to the following:
 - Thickness 3 inches or as noted on the drawings
 - Wall STC Rating 46 (minimum)

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify substrate, and adjacent materials are dry and ready to receive insulation.

3.2 INSTALLATION

- A. Install insulation/vapor barrier in accordance with insulation manufacturer's instructions.
- B. Install in exterior wall spaces where detailed on drawings, without gaps or voids.
- C. Trim insulation neatly to fit spaces.
- D. Fit insulation tight in spaces and tight to exterior side of mechanical and electrical services within the plane of insulation. Leave no gaps or voids.

3.2 INSTALLATION (CONTINUED)

- E. Install with factory applied vapor barrier facing warm side of building spaces.
- F. Staple in place at maximum 6 inches on center.
- G. Tape seal butt ends, lapped flanges, and tears or cuts in membrane.
- H. Wherever facing of insulation is not covered by additional construction provide minimum flame spread rating of 25 for vapor barrier.

3.3 SCHEDULE

- A. Thermal batt insulation is for exterior walls, floor, and roof systems (if any).
- B. Sound attenuation batt insulation is for interior walls, ceilings, and between floor levels. DO NOT USE thermal batt insulation where sound attenuation batt insulation is called out or where insulation is shown on drawings at interior walls, floors, ceilings, and between floor levels.

END OF SECTION

SECTION 07840

FIRESTOPPING

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Fireproof firestopping materials and accessories for firestopping all penetrations through fire rated assemblies. Assemblies include, but are not limited to fire rated walls, floors, floor/ceiling and roof assemblies:
 - 1. Voids around:
 - a) Pipes
 - b) Ducts
 - c) Conduits
 - d) Cable Trays
 - e) Cables and Wires
 - f) Structural Members
 - 2. Construction Joints that include:
 - a) Joints between curtain walls and floor or roof assemblies
 - b) Intersection points between walls and floors, ceilings or rated roof systems
 - c) Expansion/Seismic Joints
 - 3. Other openings as required by applicable building codes

1.2 RELATED SECTIONS

- A. Section 09260 - Gypsum Board Assemblies: Gypsum wallboard fireproofing.
- B. Section 15010 - General Mechanical Provisions: Mechanical work requiring firestopping.
- C. Section 16010 - General Electrical Provisions: Electrical work requiring firestopping.

1.3 REFERENCES

- A. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
- B. ASTM E119 - Method for Fire Tests of Building Construction and Materials.
- C. ASTM E814 - Test Method of Fire Tests of Through Penetration Firestops.

1.4 PERFORMANCE REQUIREMENTS

- A. Fireproofing Materials: ASTM E119 to achieve a fire rating as required by applicable building code.

1.4 PERFORMANCE REQUIREMENTS (CONTINUED)

- B. Surface Burning: ASTM E84 with a flame spread/fuel contributed/smoke developed rating as required by applicable building code.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Provide data on product characteristics, performance and limitation criteria.
- C. Manufacturer's Installation Instructions: Indicate preparation and installation instructions.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the products specified in this Section with minimum five years documented experience.
- B. Applicator: Company specializing in performing the Work of this Section with minimum five years documented experience and approved by manufacturer.

1.7 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code requirements for fire resistance ratings and surface burning characteristics.

1.8 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply materials of firestop systems when job site conditions are outside the limits permitted by the Manufacturer.
- B. Provide ventilation in areas to receive solvent cured materials.

1.9 SEQUENCING

- A. Sequence Work to permit firestopping materials to be installed after adjacent and surrounding Work is complete.

2 PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Dow Corning Fire Stop System.
- B. United State Gypsum Company Fire Stop System.

2.2 MANUFACTURERS (CONTINUED)

- C. Substitutions: Under provisions of Section 01600.

2.3 FIRESTOP SYSTEM LIMITATIONS

- A. Compatibility: Provide Firestop Systems that are compatible with one another and with substrates under conditions of application and service, as demonstrated by Manufacturer, based on testing and field experience.
- B. Structural Considerations: Firestop Systems do not re-establish the structural integrity of a load-bearing assembly. Consult the Architect prior to drilling or coring operations in any load-bearing assembly. Fire-stop Systems may not support live loads and traffic. Curbs and cover plates may be required to restrict or accommodate potential live loads and traffic. Contractor shall notify Architect if Contractor has reason to believe the integrity of any load-bearing assembly has been violated.
- C. All sealant materials for use in Firestop Systems applied to Construction Joints and in Voids subject to movement shall meet the requirements of ASTM C 719-86 "Adhesion and Cohesion of Elastomeric Joint Sealants under Cyclic Movements: and ASTM C 920-86 "Standard Specification for Elastomeric Joint Sealants".
- D. Use Firestop Systems meeting the requirements of ASTM E 814-83 "Standard Method of Fire Tests of Through-Penetration Fire Stops" or UL 1479 "Fire Tests Through-Penetration Firestops". For installations or configurations not covered by a Firestop System, an engineered judgement shall be obtained from the Manufacturer for the specific application.
- E. All Firestop systems shall comply with the interior finish flame spread and smoke developed requirements, for the area in which they are installed, per ASTM E 84-84 "Standard Test Method for Surface Burning Characteristics of Building Materials" (in addition to ASTM E 814-83 "Standard Method of Fire Tests of Through-Penetration Fire Stops"). Interior finish requirements are specified by applicable Building Code requirements.
- F. Painting or Coating of Installed Firestop Systems: Follow Firestop Systems Manufacturer's recommendations for painting or coating.
- G. All products shall be free of Asbestos.

2.4 ACCESSORIES

- A. Dam Material: Mineral fiber matting, removable.
- B. Retainers: metal clips to support mineral fiber matting.

2.5 FINISHES

- A. Color: Red.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify openings are ready to receive the Work of this Section. Do not proceed until unacceptable conditions are corrected.

3.2 PREPARATION

- A. Clean substrate surfaces of dirt, dust, grease, oil, loose material, or other matter which may affect bond of firestopping material.
- B. Remove incompatible materials which affect bond.
- C. Install backing materials to arrest liquid material leakage.
- D. Provide masking and drop cloths to prevent firestopping materials from contaminating any adjacent surfaces. Remove masking materials promptly following product application.

3.3 APPLICATION

- A. Apply primer and materials in accordance with manufacturer's instructions.
- B. Apply firestopping material in sufficient thickness to achieve rating to uniform density and texture.
- C. Install material at walls or partition openings which contain penetrating sleeves, piping, ductwork, conduit and other items requiring firestopping.
- D. Remove dam material after firestopping material has cured.

3.4 CLEANING

- A. Clean Work under provisions of Section 01700.
- B. Clean adjacent surfaces of firestopping materials.

3.5 PROTECTION OF FINISHED WORK

- A. Protect finished Work under provisions of Section 01500.
- B. Protect adjacent surfaces from damage by material installation.

END OF SECTION

SECTION 07900

JOINT SEALERS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Preparing sealant substrate surfaces.
- B. Sealant and backing.

1.2 REFERENCES

- A. ANSI/ASTM D1056 - Flexible Cellular Materials - Sponge or Expanded Rubber.
- B. ANSI/ASTM D1565 - Flexible Cellular Materials - Vinyl Chloride Polymers and Copolymers (Open-Cell Foam).
- C. ASTM C790 - Use of Latex Sealing Compounds.
- D. ASTM C804 - Use of Solvent-Release Type Sealants.
- E. ASTM C834 - Latex Sealing Compounds.
- F. FS TT-C-00598 - Caulking Compound, Oil and Resin Base Type.
- G. FS TT-S-001657 - Sealing Compound, Single Component, Butyl Rubber Based, solvent Release Type.
- H. FS TT-S-00227 - Sealing Compound: Elastomeric Type, Multi-Component.
- I. FS TT-S-00230 - Sealing Compound: Elastomeric Type, Single Component.
- J. FS TT-S-001543 - Sealing Compound, Silicone Rubber Base.
- K. SWI (Sealing and Waterproofers Institute) - Sealant and Caulking Guide Specification.

1.3 SUBMITTALS

- A. Submit product data under provisions of Section 01300.
- B. Submit product data indicating sealant chemical characteristics, performance criteria, limitations, and color availability.
- C. Submit manufacturer's certificate under provisions of Section 01400 that products meet or exceed specified requirements.

1.4 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in manufacturing the products specified in this Section with minimum five years experience.
- B. Applicator: Company specializing in applying the work of this Section with minimum five years documented experience and approved by sealant manufacturer.

1.5 ENVIRONMENTAL REQUIREMENTS

- A. Do not install solvent curing sealants in enclosed building spaces.
- B. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

1.6 SEQUENCING AND SCHEDULING

- A. Coordinate work under provisions of Section 01041.
- B. Coordinate the work of this Section with all Sections referencing this Section.

1.7 WARRANTY

- A. Provide two year warranty under provisions of Section 01700.
- B. Warranty: Include coverage of installed sealants and accessories which fail to achieve air tight and watertight seal, exhibit loss of adhesion or cohesion, or do not cure.

2 PART 2 PRODUCTS

2.1 SEALANTS

- A. One Component Acrylic Sealant: Acrylic terpolymer, solvent-based, one part, thermoplastic sealant compound; solids not less than 95% acrylic; complying with FS TT-S-00230, Class B, Type II; general use as exposed building construction sealant. DAP Acrylic, DAP, Inc.; Mono, Tremco Manufacturing Company; Maccolastic, Macco-Glidden Division; or approved.
- B. Silicone Rubber Sealant: Silicone rubber based, one-part, non-sag, elastomeric sealant, resistant to mildew, complying with FS TT-S-1543, Class A; and FS TT-S00230, Class A; for interior applications including seal around plumbing fixtures subject to attack by mildew. Provide type recommended by the manufacturer for the porosity of the surfaces. Dow Corning 784 and 785, or approved.

2.2 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- C. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify surfaces and joint openings are ready to receive work and field measurements are as shown on Drawings and recommended by the manufacturer.
- B. Beginning of installation means installer accepts existing surfaces and substrate.

3.2 PREPARATION

- A. Clean and prime joints in accordance with manufacturer's instructions.
- B. Remove loose materials and foreign matter which might impair adhesion of sealant.
- C. Verify that joint backing and release tapes are compatible with sealant.
- D. Perform preparation in accordance with ASTM C790 for latex base sealants.
- E. Protect elements surrounding the work of this Section from damage or disfiguration.

3.3 INSTALLATION

- A. Install sealant in accordance with manufacturer's instructions.
- B. Measure joint dimensions and size materials to achieve required width/depth ratios.
- C. Install joint backing to achieve a neck dimension no greater than 1/3 the joint width.
- D. Install bond breaker where joint backing is not used.
- E. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

3.3 INSTALLATION (CONTINUED)

- F. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- G. Tool joints concave.

3.4 CLEANING AND REPAIRING

- A. Clean work under provisions of Section 01700.
- B. Clean adjacent soiled surfaces.
- C. Repair or replace defaced or disfigured finishes caused by work of this Section.

3.5 PROTECTION OF FINISHED WORK

- A. Protect finished installation under provisions of Section 01500.
- B. Protect sealants until cured.

END OF SECTION

SECTION 08115

STANDARD STEEL FRAMES

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Non-rated and fire rated steel frames for doors.

1.2 RELATED SECTIONS

- A. Section 08212 - Flush Wood Doors.
- B. Section 08710 - Door Hardware.
- C. Section 09900 - Painting: Field painting of frames.

1.3 REFERENCES

- A. ANSI A117.1 - Specifications for Making Buildings and Facilities Accessible to and Usable by Physically Handicapped People.
- B. ANSI/SDI-100 - Standard Steel Doors and Frames.
- C. ASTM A525 - Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.
- D. ASTM E152 - Methods of Fire Tests of Door Assemblies.
- E. DHI - Door Hardware Institute: The Installation of Commercial Steel Doors and Steel Frames, Insulated Steel Doors in Wood Frames and Builder's Hardware.
- F. NFPA 80 - Fire Doors and Windows.
- G. NFPA 252 - Fire Tests for Door Assemblies.
- H. UL 10B - Fire Tests of Door Assemblies.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Indicate frame elevations, reinforcement, hardware cutouts/preparation, window frames (if any), and finish.
- C. Product Data: Indicate frame configuration, anchor types and spacings, location of cut-outs for hardware, reinforcement.
- D. Manufacturer's Installation Instructions: Indicate special installation instructions.

1.4 SUBMITTALS (CONTINUED)

- E. Manufacturer's Certificate: Certify that Products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

- A. Conform to requirements of ANSI/SDI-100 and ANSI A117.1.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum five years documented experience.

1.7 REGULATORY REQUIREMENTS

- A. Fire Rated Frame Construction: Conform to ASTM E152.
- B. Installed Frame Assembly: Conform to NFPA 80 for fire rated class same as fire door.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle products to site under provisions of Section 01600.
- B. Accept frames on site in manufacturer's packaging. Inspect for damage.

1.9 FIELD MEASUREMENTS

- A. Verify field measurements are as indicated on shop drawings and as instructed by the manufacturer.
- B. Verify opening for door is compatible with door unit. Failure to coordinate framing rough opening, door frame opening, and door will solely be the responsibility of the Contractor.

1.10 COORDINATION

- A. Coordinate the work with frame opening construction, door and hardware installation.

2 PART 2 PRODUCTS

2.1 FRAME MANUFACTURERS

- A. Curries.
- B. Steelcraft.
- C. Substitutions: Under provisions of Section 01600.

2.2 FRAMES

- A. Exterior Frames: 16 gage thick material, base metal thickness; hot dipped galvanized.
- B. Interior Frames: 16 gage thick material, base metal thickness; hot dipped galvanized.

2.3 ACCESSORIES

- A. Silencers: Resilient rubber, fitted into drilled hole.
- B. Bituminous Coating: Fibered asphalt emulsion.
- C. Primer: Zinc chromate type.
- D. Grout: Portland cement plaster basecoat material; one part cement to between three and four parts sand.
- E. Frame Anchors: as recommended by frame manufacturer.
- F. Glazing Stops: minimum 20 gage material, finish same as frame.

2.4 FABRICATION

- A. Fabricate frames as welded unit. Weld exposed joints continuously, grind, dress, and make smooth, flush and invisible.
- B. Mullions for Double Doors (if any): Removable type, of same profiles as jambs.
- C. Fabricate frames with hardware reinforcement plates welded in place. Provide mortar guard boxes.
- D. Reinforce frames wider than 48 inches with roll formed steel channels fitted tightly into frame head, hold back from top minimum 1/2 inch.
- E. Prepare frame for silencers. Provide three single silencers for single doors on strike side. Provide two single silencers on frame head at double doors without mullions.
- F. Provide stops and moldings around glazed panels (if any). Provide fixed stops on exterior frames with glazing, on the corridor side of interior units. Secure stops with countersunk machine screws, and form corners with mitered hairline joints. Seal joints watertight.

2.5 FINISH

- A. Steel Sheet: Galvanized to ASTM A525 G60.
- B. Primer: Baked.

2.5 FINISH (CONTINUED)

- C. Field Finish: See Section 09900.
- D. Coat inside of frame profile with bituminous coating to a thickness of 1/16 inch.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify opening sizes and tolerances are acceptable.

3.2 INSTALLATION

- A. Install frames in accordance with ANSI/SDI-100 and DHI.
- B. Install rated frames as indicated on door schedule.
- C. Grout frames full/solid.
- D. Coordinate with gypsum board system and wall construction adjacent to door opening for anchor type and placement. Install quantity and configuration as recommended by frame manufacturer.
- E. Coordinate installation of glass and glazing.
- F. Coordinate installation of frames with installation of hardware specified in Section 08710 and doors in Sections 08114 and 08212.
- G. Install roll formed steel reinforcement channels between two abutting frames. Anchor to structure and floor.
- H. Frames with glass and glazing shall be sealed, watertight, and shall not leak. Seal glass stops watertight.

3.3 TOLERANCES

- A. Maximum Diagonal Distortion: 1/16 inch measured with straight edges, crossed corner to corner.

END OF SECTION

SECTION 08212

FLUSH WOOD DOORS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Flush wood doors; fire rated and non-rated.

1.2 RELATED SECTIONS

- A. Section 08115 - Standard Steel Frames.
- B. Section 08710 - Door Hardware.
- C. Section 09900 - Paints and Coatings: Site finishing doors.

1.3 REFERENCES

- A. ANSI A135.4 - Basic Hardboard.
- B. ANSI/HPMA HP - Hardwood and Decorative Plywood.
- C. ASTM E152 - Methods of Fire Tests of Door Assemblies.
- D. ASTM E413 - Classification for Determination of Sound Transmission Class.
- E. AWI - Quality Standards of the Architectural Woodwork Institute.
- F. NFPA 80 - Fire Doors and Windows.
- G. NFPA 252 - Standard Method of Fire Tests for Door Assemblies.
- H. UL 10B - Fire Tests of Door Assemblies.
- I. Warnock-Hersey - Certification Listings for fire doors.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Illustrate door opening criteria, elevations, sizes, types, swings, undercuts required, special blocking for hardware, identify cutouts for glazing and glazing frame.
- C. Product Data: Indicate door core materials and construction; glazing frame type/construction, veneer species, type and characteristics; factory machining criteria, and factory finishing criteria.

1.4 SUBMITTALS (CONTINUED)

- D. Samples: Submit three samples of door veneer, 12 x 12 inch in size illustrating wood grain, stain color, and sheen.
- E. Manufacturer's Installation Instructions: Indicate special installation instructions.

1.5 QUALITY ASSURANCE

- A. Perform work in accordance with AWI Quality Standard Section 1300, Custom Grade.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum five years documented experience.

1.7 REGULATORY REQUIREMENTS

- A. Fire Door Construction: Conform to ASTM E152.
- B. Installed Fire Rated Door Assembly: Conform to NFPA 80 for fire rated class as scheduled.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle products to site under provisions of Section 01600.
- B. Protect doors with resilient packaging. Do not store in damp or wet areas; or in areas where sunlight might bleach veneer. Seal top and bottom edges if stored more than one week. Break seal on-site to permit ventilation.

1.9 FIELD MEASUREMENTS

- A. Verify field measurements are as indicated on shop drawings and as instructed by the manufacturer.

1.10 COORDINATION

- A. Coordinate the work with door opening construction, door frame and door hardware installation.

1.11 WARRANTY

- A. Provide warranty under provisions of Section 01700 to the following term:
 - 1. Interior Doors: Minimum of Five (5) years.
- B. Include coverage for delamination of veneer, warping beyond specified installation tolerances, defective materials, and telegraphing core construction.

2 PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Marshfield Door Systems, Inc.
- B. Substitutions: Under provisions of Section 01600.

2.2 DOOR TYPES

- A. Flush Interior Doors: 1-3/4 inches thick; solid core construction, fire rated as indicated.

2.3 DOOR CONSTRUCTION

- A. Core (Solid, Non-Rated): AWI Section 1300, Type PC-Particleboard.
- B. Core (Solid, Fire Rated): AWI Section 1300, Type FD 3/4.

2.4 FLUSH DOOR FACING

- A. Veneer Facing (Flush Interior Doors): AWI Premium quality Birch species wood, rotary cut, with book matched grain, for paint or stain finish as scheduled.

2.5 ADHESIVE

- A. Facing Adhesive: Type I - waterproof.

2.6 ACCESSORIES

- A. Glazing Stops: Rolled steel channel shape, mitered corners; prepared for countersink style tamper proof screws.

2.7 FABRICATION

- A. Fabricate non-rated doors in accordance with AWI Quality Standards requirements.
- B. Fabricate fire rated doors in accordance with AWI Quality Standards and to Warnock-Hersey requirements. Attach fire rating label to door.
- C. Provide lock blocks at lock edge and top of door for closer for hardware reinforcement.
- D. Vertical Exposed Edge of Stiles: Of same species as veneer facing.
- E. Fit door edge trim to edge of stiles after applying veneer facing.
- F. Bond edge banding to cores.

2.8 FABRICATION (CONTINUED)

- G. Factory machine doors for finish hardware in accordance with hardware requirements and dimensions. Do not machine for surface hardware. Provide solid blocking for through bolted hardware.
- H. Factory pre-fit doors for frame opening dimensions identified on shop drawings.

2.9 FINISH

- A. Field finish doors in accordance with Section 09900; color as selected by Architect (if any).
- B. Match finish of existing flush wood doors.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify opening sizes and tolerances are acceptable.
- B. Do not install doors in frame openings that are not plumb or are out-of-tolerance for size or alignment.

3.2 INSTALLATION

- A. Install fire rated and non-rated doors in accordance with AWI Quality Standard, NFPA 80 and to Warnock Hersey requirements.
- B. Trim non-rated door width by cutting equally on both jamb edges.
- C. Trim door height by cutting bottom edges to a maximum of 3/4 inch.
- D. Pilot drill screw and bolt holes.
- E. Machine cut for hardware. Core for handsets and cylinders.
- F. Coordinate installation of doors with installation of frames specified in Section 08115 and hardware specified in Section 08710.
- G. Coordinate installation of glass and glazing.

3.3 INSTALLATION TOLERANCES

- A. Maximum Diagonal Distortion (Warp): 1/8 inch measured with straight edge or taught string, corner to corner, over an imaginary 36 x 84 inch surface area.
- B. Maximum Vertical Distortion (Bow): 1/8 inch measured with straight edge or taught string, top to bottom, over an imaginary 36 x 84 inch surface area.

3.4 INSTALLATION TOLERANCES (CONTINUED)

- C. Maximum Width Distortion (Cup): 1/8 inch measured with straight edge or taught string, edge to edge, over an imaginary 36 x 84 inch surface area.

3.5 ADJUSTING

- A. Adjust work under provisions of Section 01700.
- B. Adjust door for smooth and balanced door movement.

END OF SECTION

SECTION 08310

ACCESS DOORS AND PANELS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Fire resistive rated and non-rated access door and frame units.

1.2 RELATED SECTIONS

- A. Section 09900 - Paints and Coatings: Field paint finish.
- B. Section 15010 - General Mechanical Provisions.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Indicate exact location and position of all access door units.
- C. Product Data: Provide sizes, types, finishes, scheduled locations, and details of adjoining work.
- D. Manufacturer's Installation Instructions: Indicate installation requirements, and rough-in dimensions.

1.4 PROJECT RECORD DOCUMENTS

- A. Submit under provisions of Section 01700.
- B. Record actual locations of all access units.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with UL requirements.

1.6 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code regulations for fire rated access units.

1.7 FIELD MEASUREMENTS

- A. Verify field measurements are as indicated on shop drawings and as instructed by the manufacturer.

1.8 COORDINATION

- A. Coordinate the work with mechanical and electrical system work requiring access doors and panels.

1.8 COORDINATION (CONTINUED)

- B. PROVIDE ACCESS DOORS OF SIZE, TYPE, AND QUANTITY REQUIRED FOR SYSTEMS LISTED ABOVE TO COMPLETE THE PROJECT.

2 PART 2 PRODUCTS

2.1 MANUFACTURERS - WALL AND CEILING UNITS

- A. Inryco Inc.
- B. J.L. Industries.
- C. Wilkenson Company, Inc.
- D. The Bilco Company.
- E. Substitutions: Under provisions of Section 01600.

2.2 FABRICATION - WALL AND CEILING UNITS

- A. Fabricate frames and flanges of 14 gage steel.
- B. Fabricate door panels of 14 gage steel.
- C. Weld, fill, and grind joints to assure flush and square unit.
- D. Hardware:
 - 1. Hinge: 165 degree steel constant force closure spring type with extracting pin.
 - 2. Lock: Screw driver slot for quarter turn cam lock.

2.3 FINISHES

- A. Base Metal Protection: Galvanized, hot dipped finish. Prime coat units with baked on primer.
- B. Finish: Two coats baked enamel, color as selected.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify rough openings for door and frame are correctly sized and located.

3.2 INSTALLATION

- A. Install units in accordance with manufacturer's instructions.
- B. Install frames plumb and level in opening. Secure rigidly in place.
- C. Position unit to provide convenient access to concealed work requiring access.

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3.3 SCHEDULE

A. Access Doors: As indicated at paragraph 1.8.B.

END OF SECTION

SECTION 08710

DOOR HARDWARE

1 PART 1 GENERAL

1.1 WORK INCLUDED

- A. Hardware for doors.
- B. Thresholds.
- C. Seals and door gaskets.

1.2 RELATED WORK

- A. Section 08115 - Standard Steel Frames.
- B. Section 08212 - Flush Wood Doors.

1.3 REFERENCES

- A. ADA - Americans With Disabilities Act.
- B. NFPA 80, 101, 105 - National Fire Protection Agency.
- C. BHMA - Builders' Hardware Manufacturers Association.
- D. DHI - Door and Hardware Institute.
- E. IBC - International Building Code as adopted by the State of Oregon.
- F. SDI - Steel Door Institute.

1.4 COORDINATION

- A. Coordinate work of this Section with other directly affected Sections involving manufacturer of any internal reinforcement for door hardware. Send templates within ten (10) days of approved hardware schedule.
- B. Coordinate work of this Section with electrical work to assure power for door hardware/door hardware accessories is available and provided for use. Provide/install/rough-in electrical service to doors no. 1, 2, 8, 12, 21, and 22.

1.5 QUALITY ASSURANCE

- A. Manufacturers: Companies specializing in manufacturing door hardware with minimum five years documented experience. Supplier shall be a factory authorized distributor for specified hardware.

1.5 QUALITY ASSURANCE (CONTINUED)

- B. Hardware Supplier: Company specializing in supplying commercial door hardware with five years documented experience. Supplier shall be a factory authorized distributor for specified hardware.
- C. Hardware supplier shall be or have in their employment a qualified architectural hardware consultant who shall be available on a twenty-four (24) hour notice at the job site by request of the Architect to consult, advise, and assist in the installation of the finish hardware. Manufacturers representatives will not be used unless accompanied by the AHC.
- D. It is the intent of this specification to provide general guidelines for the quality, function, and design of the architectural finish hardware. It is the specific responsibility of the hardware supplier to furnish products which are fully functional, in full compliance with state and local building codes, fire codes, and handicap codes. Any supplier bidding on this section of work will notify the Owner's Project Manager prior to bidding of discrepancies or will be assumed to have included correct material to make this compliance.
- E. Certification: At the completion of the project and prior to final job close-out, the hardware consultant shall visit the project and inspect all hardware installed. Hardware consultant shall advise the Architect by letter that all hardware is per specification, properly installed and correctly adjusted, or note matters that require correction. Failure to perform these obligations after notification shall result in the hiring of a competent consultant and back charge to the Contractor for timely performance of these obligations.

1.6 REGULATORY REQUIREMENTS

- A. Conform to applicable International Building Code regulations for requirements applicable to fire rated doors and frames.

1.7 SUBMITTALS

- A. Submit schedule, shop drawings, and product data under provisions of Section 01300.
- B. Indicate locations and mounting heights of each type of hardware.
- C. Provide product data on specified hardware.
- D. Submit samples under provisions of Section 01300.
- E. Submit samples of hinge and latch sets illustrating style, color, and finish.

1.7 SUBMITTALS (CONTINUED)

- F. Samples: May be incorporated into the Work.
- G. Submit manufacturer's parts lists, templates, and installation instructions under provisions of Section 01300.
- H. Submit manufacturer's certificate under provisions of Section 01400 that hardware meets or exceeds specified requirements.

1.8 HARDWARE SCHEDULE SUBMITTAL

- A. Submitted hardware schedule shall be a vertical schedule of hardware.
- B. List door numbers in numerical sequence.
- C. List each opening, door size, door hand, door and frame material, description of to and from, manufacturer's numbers, and finish.
- D. Deliver six copies of schedule and two sets of catalog cut sheets to the Architect for review.
- E. Hardware supplier shall re-type schedule when changes occur during the project and shall supply the Architect with four new schedules each time a change occurs.

1.9 OPERATION AND MAINTENANCE DATA

- A. Submit operation and maintenance data under provisions of Section 01700.
- B. Include data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.
- C. Instructions supplied with hardware shall be retained by the Contractor for inclusion in the operation and maintenance manual.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site under provisions of Section 01600.
- B. Store and protect products under provisions of Section 01600.
- C. Deliver hardware items individually labeled with door number to match hardware schedule.
- D. General Contractor shall have an experience employee to receive, take charge of, and provide a secure room for hardware.

1.10 DELIVERY, STORAGE, AND HANDLING (CONTINUED)

- E. Deliver construction keys with locksets to job site.
- F. Deliver keys to Owner by shipment direct from hardware supplier.
- G. Protect hardware from theft by cataloging and storing in secure area.

1.11 WARRANTY

- A. Provide five year warranty under provisions of Section 01700.
- B. Warranty: Include coverage of door closers; a ten year warranty.

1.12 MAINTENANCE MATERIALS

- A. Provide special wrenches and tools applicable to each different or special hardware component.
- B. Provide maintenance tools and accessories supplied by hardware component manufacturer.

2 PART 2 PRODUCTS

2.1 RESPONSIBILITY

- A. This specification is intended as a guideline and shall not be construed as a complete list. Hardware supplier shall furnish complete and functional hardware that complies with all applicable fire and life safety codes. Bring to Architect's attention within ten (10) days prior to bid opening any discrepancies that require correction.
- B. Manufacturers, models, size, and finishes: see hardware schedule.
- C. Substitutions will be considered under Section 01600, however, proposed substitution shall be fully and exactly equal to the specified product and the request shall include catalog cut sheets and specifications for each item proposed. Blanket approval by manufacturers name only will not be given. No substitution will be considered after the allowed substitution period, or after the award of contract.

2.2 KEYING

- A. Keying Conference
 - 1. Upon receipt of approved hardware schedule consultant will attend a meeting with the Architect at their earliest convenience.

2.2 KEYING (CONTINUED)

A. (continued)

2. All cylinders will be grand master, master keyed, and construction keyed as directed.
3. Provide 2 change keys per cylinder, 5 grand master keys and 5 master keys all stamped "DO NOT DUPLICATE". Ship to Architect as directed in keying conference.
4. Provide cylinders to match existing.

2.3 FINISHES

- A. Finishes are identified in hardware schedule, but: dull chrome (US26D) unless otherwise noted. Panics and flat goods 630 dull stainless steel. Kickplate and armor plates to be stainless steel. Thresholds to be aluminum unless otherwise noted. Paint closers to match.
- B. Match finish of existing hardware.

2.4 HARDWARE SCHEDULE

A. APPROVED MANUFACTURERS

Product	Manufacturer	Symbol	Substitutions
Butts	Ives	I	Stanley, McKinney
Locks	Schlage	SCH	Sargent
Closers	LCN	LCN	Sargent
Stops	Ives	I	Trimco
Protection plates	Trimco	TRI	Ives, Tice
Gasket	Pemko	P	National Guard

Note: Hardware supplier shall include in their price the cost of a site survey to ensure all hardware specified herein matches existing (lever style, finish, keyway, etc.). Notify Architect immediately if there are any discrepancies.

- B. Substitutions for the manufacturers listed above will be considered by the Architect on an approved equal basis; sufficient data must be submitted by the supplier to determine product equality, including a signed statement indicating substitution is equal to, or better, than the product specified herein. Include with substitution request: specified item, design, catalog number, and finish for each item on which approval is being requested, ten (10) days prior to bid opening. Approval by manufacturer's name only will not be given. Substitutions will not be reviewed after the ten day period or after the project bid.

2.5 HARDWARE GROUPS

- A. Hardware groups are for bidding purposes only. General Contractor to verify and furnish hardware to match existing including lever style, keyway and finish.

Group #1 Door 2

3 ea butts 5BB1HW 4.5 x 4.5 NRP	652	I
1 ea lockset - Owner Furnished Owner	Installed	
1 ea closer 4111 EDA	689	LCN
1 ea kickplate K0050 10 x 2LDW	630	TRI
1 ea wallstop WS406/407 CVX	630	I
1 set gasket S88D	Dur	P

Rough-in power for OFOI lockset

Group #2 Doors 13, 14, 27, 28, 29, 30, 33, 35, 36

3 ea butts 5BB1HW 4.5 x 4.5 NRP	652	I
1 ea lockset ND53RD Rho	626	SCH
1 ea wallstop WS406/407 CCV	630	I
1 set gasket S88D	Dur	P

Group #3 Door 21

3 ea butts 5BB1HW 4.5 x 4.5	652	I
1 ea lockset - Owner Furnished Owner	Installed	
1 ea closer 4011 Reg	689	LCN
1 ea wallstop WS406/407 CVX	630	I
1 set gasket S88D	Dur	P

Rough-in power for OFOI lockset

Group #4 Doors 29, 30

3 ea butts 5BB1HW 4.5 x 4.5	652	I
1 ea privacy ND40S Rho	626	SCH
1 ea wallstop WS406/407 CCV	630	I
1 set gasket S88D	Dur	P

Group #5 Door 39

3 ea butts 5BB1HW 4.5 x 4.5 NRP	630	I
1 ea lockset - Owner Furnished Owner	Installed	
1 ea closer 4111 S Cush	Alum	LCN
1 ea kickplate K0050 10 x 2LDW	630	TRI
1 ea Lockguard LG12	630	I
1 ea Threshold 2005AT	Alum	P
1 ea Door Sweep 345 AV	Alum	P
1 set gasket S88D	Dur	P
1 ea Rain Drip 346 C	Alum	P

Rough-in power for OFOI lockset

Group #6 Doors 1, 8, 12, 22

1 ea lockset - Owner Furnished Owner	Installed	
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Rough-in power for OFOI lockset

3 PART 3 EXECUTION

3.1 INSPECTION

- A. Verify doors and frames are ready to receive work and dimensions are as indicated on shop drawings and as instructed by the manufacturer.
- B. Verify all backing for hardware attachment to substrates, reinforcing, and rough-in work is as required for proper installation. Notify Contractor if conditions are not acceptable.
- C. Beginning of installation means acceptance of existing conditions.
- D. Verify electrical power is available to power operated devices (if any) and of the correct characteristics.

3.2 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and requirements of SDI, ANSI, NFPA 80, BMHA, and DHI.
- B. Use the templates provided by hardware item manufacturer.
- C. Conform to ANSI A117.1 for positioning requirements for the handicapped.
- D. Mounting heights for hardware shall be DHI locations for architectural hardware.
- E. Installer Qualifications: approved by supplier.
- F. Install finish hardware prior to painting for accurate fit, then remove for painting and re-install after final painting.

3.3 ADJUSTING

- A. Adjust hardware for smooth operation, secure latching of devices, and proper operation of hardware.
- B. Replace hardware devices visually or functionally damaged.
- C. Adjust all hardware to conform with ANSI A117.1.
- D. Do not permit adjacent work to damage hardware or finish.
- E. Clean hardware and prevent accumulation of dust, paint, and/or damage to hardware once in place.

END OF SECTION

SECTION 09072

PREPARATION FOR RE-FINISHING

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Removal of designated building construction, equipment, and fixtures.
- B. Removal of designated construction.
- C. Identification of utilities.

1.2 RELATED SECTIONS

- A. Section 01010 - Summary of Work: Owner's continued occupancy.
- B. Section 02221 - Building Demolition.
- C. Section 09900 - Paints and Coatings.

1.3 SHOP DRAWINGS

- A. Submit under provisions of Section 01300.

1.4 SYSTEM DESCRIPTION

- A. Floor and Wall Areas Indicated for Re-finishing: Remove existing membranes to expose original existing construction substrate surfaces.
- B. Coordinate and facilitate work on existing ceilings, floors, and walls with any existing equipment or devices in the area of work.

1.5 ENVIRONMENTAL REQUIREMENTS

- A. Do not threaten existing building contents, indoor air quality, or Owner's intended continued occupancy with means and methods of removing existing coatings, finishes, and membranes.
- B. Submit under provisions of Section 01700.
- C. Accurately record actual locations of any capped utilities, subsurface obstructions, and unknown items uncovered during demolition.

1.6 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code requirements for demolition Work, safety of structure, and pollution control.
- B. Obtain required permits from authorities.

1.6 REGULATORY REQUIREMENTS (CONTINUED)

- C. Notify Owner, Architect, and affected utility companies (if any) before starting Work and comply with their requirements.
- D. Do not close or obstruct existing egress to exits.
- E. Do not disable or disrupt existing building fire or life safety systems without 72 hour prior notice to the Architect and Owner.
- F. Conform to regulatory procedures applicable when discovering hazardous or contaminated materials. Do not resume operations affected by such materials until receiving instructions from the Architect.

1.7 SCHEDULING

- A. Describe demolition removal procedures and schedule prior to commencing demolition Work.

1.8 COORDINATION

- A. Conduct demolition to minimize interference with adjacent and occupied building areas.
- B. Cease operations immediately if structure appears to be in danger and notify the Architect. Do not resume operations until directed.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

3.1 PREPARATION

- A. Provide, erect, and maintain temporary barriers and/or insulated partitions at locations shown on the drawings (if any) or between existing heated interior spaces and the exterior.
- B. Erect and maintain weatherproof enclosures for exterior openings (if any).
- C. Erect and maintain temporary partitions to prevent spread of dust, odors and noise to permit continued Owner occupancy, as specified in Section 01010 and/or shown on the drawings.
- D. Protect existing finishes, construction, materials, utilities, and equipment which are not to be demolished or refinished.
- E. Prevent movement of structure; provide required bracing and shoring.

3.1 PREPARATION (CONTINUED)

- F. Mark location of existing utilities to remain.
- G. Repair all utilities damaged by demolition immediately.
- H. Provide appropriate temporary signage including signage for exit or building egress.

3.2 EXISTING SURFACES TO BE RE-FINISHED

- A. Prepare existing surfaces to be refinished using methods recommended by the new finish product manufacturer.
- B. Verify surfaces are dry and clean, free of all oil, grease, detergent, and other contaminants. Clean all existing surfaces to be re-finished thoroughly prior to new finish product installation.
- C. Rout and vacuum clean moving cracks and joints; fill with new finish product manufacturer's recommended flexible filler material.
- D. Repair non-moving surface deviations with manufacturer's recommended patching compound.

3.3 EXISTING SUBSTRATE PREPARATION

- A. Dry existing substrates to a minimum optimal moisture content of 10%.
- B. Any and all curing compounds, form release agents, oils, chemical contaminants of any type, surface coatings, membranes, dust, loose particles, and laitance shall be completely removed by surface preparation and/or cleaning methods.
- C. Final preparation of existing substrate surfaces for specified finish product application shall be:
 - 1. Methods must be approved by the Architect and the finish product manufacturer's representative. Approval must be in writing for and from all parties.
- D. Acid Etching:
 - 1. Not allowed.

3.4 EXISTING SUBSTRATE CRACKS AND HOLES

- A. Small surface cracks such as crazing or shrinkage cracks that are non-moving shall not be addressed.
- B. Cracks due to movement, or cracks that penetrate into the concrete below the surface shall be routed out forming a groove having a width and depth twice the thickness of the finish product installed thickness.
- C. After routing cracks shall be vacuum cleaned to remove all dust.

3.4 EXISTING SUBSTRATE CRACKS AND HOLES (CONTINUED)

- D. Cleaned cracks shall be filled with finish product manufacturer's recommended product.
- E. Allow minimum 24 hour curing period for crack infill product prior to installing finish product.
- F. Holes shall be cleaned of all debris and vacuumed clean of all dust prior to patching.
- G. Follow finish product manufacturer's recommendations for infill product to fill holes.

3.5 ANCHORING GROOVES (IF ANY)

- A. 1.4 inch wide by 1/4" deep anchoring grooves shall be saw cut in to existing concrete floor surfaces at intervals not to exceed 15'-0" in all directions.
- B. Anchoring grooves as specified above shall be installed at the following locations:
 - 1. At the perimeter of all floor penetrations.
 - 2. Piping and conduit penetrations.
 - 3. Cleanout penetrations.
 - 4. Floor drain penetrations.
 - 5. Access panel or access box penetrations.
 - 6. Stem walls.
 - 7. Equipment.
 - 8. Any door openings.
 - 9. Any foot traffic openings other than door openings.

3.6 SCHEDULES

- A. See drawings for notes and information indicating demolition, disposal, and removal of miscellaneous existing building components.
- B. Existing surfaces: Patch, repair, and re-finish existing surfaces affected by the work of this project to a condition equal to or better than existed prior to the start of the work of the project.

END OF SECTION

SECTION 09260

GYPSUM BOARD ASSEMBLIES

1 PART 1 GENERAL

1.1 WORK INCLUDED

- A. Gypsum board.
- B. Gypsum sheathing.
- C. Taped and sanded joint treatment.
- D. Texture finish.

1.2 RELATED WORK

- A. Section 06112 - Framing and Sheathing.
- B. Section 06114 - Wood Blocking and Curbing.
- C. Section 09900 - Paints and Coatings: Surface finish.

1.3 REFERENCES

- A. ANSI/ASTM C36 - Gypsum Wallboard.
- C. ANSI/ASTM C475 - Joint Treatment Materials for Gypsum Wallboard Construction.
- D. ANSI/ASTM C557 - Adhesive for Fastening Gypsum Wallboard to Wood Framing.
- E. ANSI/ASTM C754 - Installation of Framing Members to Receive Screw Attached Gypsum Wallboard, Backing Board, or Water Resistant Backing Board.
- F. ANSI/ASTM E90 - Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions.
- G. ANSI/ASTM E119 - Fire Tests of Building Construction and Materials.
- H. GA-201 - Gypsum Board for Walls and Ceilings.
- I. GA-216 - Recommended Specifications for the Application and Finishing of Gypsum Board.
- I. GA-600 - Fire Resistance Design Manual.

1.4 QUALITY ASSURANCE

- A. Applicator: Company specializing in gypsum board systems work with five years documented experience and approved by manufacturer.

1.5 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code regulations for fire rated assemblies.

1.6 SUBMITTALS

- A. Submit product data under provisions of Section 01300.
- B. Provide product data on gypsum board, joint tape, and textured finish.
- C. Submit manufacturer's installation instructions under provisions of Section 01300.

1.7 QUALITY ASSURANCE

- A. Perform work in accordance with GA-201, GA-216, and GA-600.

1.8 QUALIFICATIONS

- A. Applicator: Company specializing in performing the work of this section with minimum five years documented experience and approved by manufacturer.

2 PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS - GYPSUM BOARD SYSTEM

- A. United States Gypsum.
- B. Other acceptable manufacturers offering equivalent products:
 - 1. Celotex.
 - 2. Gold Bond.
 - 3. Johns-Manville.
 - 4. G-P Gypsum Corporation
- C. Substitutions: Under provisions of Section 01600.

2.2 FRAMING MATERIALS

- A. Tracks: ASTM C645, GA-216 and GA-600; galvanized sheet steel, 25 gage.
- B. Furring, Framing and Accessories: ASTM C645; GA-216 and Ga-600.
- C. Fasteners: ANSI/ASTM C646; type S bugle head for gypsum board to metal framing; type W bugle head for gypsum board to wood framing.
- D. Adhesive: ANSI/ASTM C557.

2.3 GYPSUM BOARD MATERIALS

- A. Fire Rated Gypsum Board: ANSI/ASTM C36; fire resistive, and where indicated moisture resistant type; UL rated; 5/8 inch thick, maximum permissible length; ends square cut, tapered edges.
- B. Fire Rated Water Resistant Gypsum Board (if any): ASTM C630; fire resistive, 5/8 inch thick, maximum permissible length; ends square cut, tapered edges.
- C. Interior Gypsum Board Ceiling (if any): ASTM C36; fire resistive, 5/8 inch thick, maximum permissible length; tapered edges.
- D. Exterior Gypsum Wall and Soffit Sheathing (if any): ASTM C 1177; fire resistive, UL rated; 5/8" inch thick, maximum permissible length; ends square cut, tapered edges.
 - 1. G-P Gypsum Corporation Dens-Glass Gold Fireguard sheathing, or approved.

2.4 ACCESSORIES

- A. Acoustical Insulation: See section 07213.
- B. Acoustical Sealant: Non-hardening, non-skinning, complying with ASTM C919; for use in conjunction with gypsum board; SHEETROCK acoustical sealant, manufactured by U.S. Gypsum, or approved.
- C. Corner Beads: Metal; galvanized.
- D. Edge Trim: GA 201 and GA 216; USG #200 Series L shaped, #400 Series U shaped as detailed.
- E. Joint Materials: ANSI/ASTM C475; reinforcing tape, joint compound, adhesive, water, and fasteners.
- F. Expansion/Control Joint: USG No. 093.

3 PART 3 EXECUTION

3.1 INSPECTION

- A. Verify site conditions are ready to receive work and opening dimensions are as instructed by the manufacturer.
- B. Beginning of installation means acceptance of existing surfaces and substrate.

3.2 ACOUSTICAL ACCESSORIES INSTALLATION

- A. Install acoustical sealant within partitions in accordance with manufacturer's instructions.

3.3 GYPSUM BOARD INSTALLATION

- A. Install gypsum board in accordance with GA 201, GA 216, and GA 253 and manufacturer's instructions.
- B. Erect single layer of gypsum board in most economical direction, with ends and edges occurring over firm bearing.
- C. Use screws when fastening gypsum board to metal/wood furring or framing.
- D. Treat cut edges and holes in board with sealant.
- E. Place control joints consistent with lines of building spaces as directed.
- F. Place corner beads at external corners. Use longest practical length. Place edge trim where gypsum board abuts dissimilar materials and as indicated.

3.4 JOINT TREATMENT

- A. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
- B. Feather coats onto adjoining surfaces so that camber is maximum 1/32 inch.

3.5 SURFACE TEXTURE

- A. Gypsum board surfaces to be painted shall receive a coat of texture paint, as manufactured by U.S. Gypsum, or approved equal; applied according to manufacturer's recommendation.
- B. Finish appearance:
 - 1. "Light Orange Peel" at all interior gypsum board finishes - if no adjacent existing texture is available.
 - 2. Where adjacent existing texture is present at remodeling match existing texture.
- C. Texture paint shall be sprayed on; rolling only as necessary.

3.6 TOLERANCES

- A. Maximum Variation from True Flatness: 1/8 inch in 10 feet in any direction.

END OF SECTION

SECTION 09650
RESILIENT FLOORING

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Resilient sheet and tile flooring (if any).
- B. Resilient stair risers, tread, and skirting (if any).
- C. Wall base (if any).

1.2 REFERENCES

- A. ASTM E84 - Surface Burning Characteristics of Building Materials.
- B. FS L-F-1641 - Floor Covering, Translucent or Transparent Vinyl Surface, with Backing.
- C. FS L-F-475 - Floor Covering, Vinyl Surface (Tile and Roll), with Backing.
- D. FS SS-T-312 - Tile, Floor: Asphalt, Rubber, Vinyl, Vinyl Composition.
- E. FS SS-W-40 - Wall Base: Rubber and Vinyl Plastic.
- F. ASTM F 2169, Type TS, Standard Specification for Resilient Stair Treads

1.3 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code regulations for flame/fuel/smoke rating requirements of sheet vinyl, vinyl composition tile, sheet rubber, and rubber tile.

1.4 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 01300.
- B. Provide product data on specified products, describing physical characteristics, sizes, patterns and colors available.
- C. Submit samples under provisions of Section 01300.
- D. Submit three samples minimum 6 x 6 inches in size, illustrating color and pattern for each floor material specified.
- E. Submit three 6 inch long samples of base material for each color specified.

1.4 SUBMITTALS (CONTINUED)

- F. Submit manufacturer's installation instructions under provisions of Section 01300.

1.5 OPERATION AND MAINTENANCE DATA

- A. Submit cleaning and maintenance data under provisions of Section 01700.
- B. Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.

1.6 ENVIRONMENTAL REQUIREMENTS

- A. Store materials for three days prior to installation in area of installation to achieve temperature stability.
- B. Maintain ambient temperature required by adhesive manufacturer three days prior to, during, and 24 hours after installation of materials.

1.7 EXTRA MATERIALS

- A. Provide 100 sq ft of flooring and 20 lineal feet of base specified under provisions of Section 01700.

2 PART 2 PRODUCTS

2.1 MANUFACTURERS - SHEET FLOORING (IF ANY)

- A. Flexco.
- B. Substitutions: Under provisions of Section 01600.

2.2 SHEET FLOORING MATERIALS (IF ANY)

- A. Rubber Sheet: 100 percent rubber composition, total thickness of .10 inch (minimum), color and pattern through total thickness; sheet width of 48 inch (minimum); Flexco "Radial II" at rooms indicated on the finish schedule; or approved. Color: as selected from manufacturer's standard range.

2.3 MANUFACTURERS - TILE FLOORING (IF ANY)

- A. Mannington.
- B. Substitutions: Under provisions of Section 01600.

2.4 TILE FLOORING MATERIALS (IF ANY)

- A. Vinyl Plank Tile: 12 x 24 inch size, .315 inch thick; Mannington Adura Max Plank, or approved.
- B. Color: as selected from manufacturer's standard range.

2.4 TILE FLOORING MATERIALS (IF ANY) (CONTINUED)

- C. See schedule at end of Section for color quantity and tile type location(s).

2.5 MANUFACTURERS - STAIR COVERING (IF ANY)

- A. Flexco.
- B. Substitutions: Under provisions of Section 01600.

2.6 STAIR COVERING MATERIALS (IF ANY)

- A. Stair tread: Rubber with integral rounded nosing; Flexco "Radial II" (776 Series) Heavy Duty with 2" safety strip of contrasting color for visually impaired, or approved. Tread color as selected by Owner from manufacturer's standard range.
- B. Stair riser: Rubber, 7" minimum, maintain height and length in one piece, thickness 1/8" minimum, color as selected by Owner from manufacturer's standard range.
- C. Stair skirting (stringer): Rubber, maintain height in one piece and in maximum available lengths, color as selected by Owner from manufacturer's standard range.

2.7 MANUFACTURERS - BASE MATERIALS (IF ANY)

- A. Flexco.
- B. Azrock.
- B. Mercer.
- D. Johnsonite.
- E. Substitutions: Under provisions of Section 01600.

2.8 BASE MATERIALS (IF ANY)

- A. Base: Rubber; match height of existing adjacent base material; 1/8 inch thick; top set coved; premolded external corners.
- B. Base Accessories: Premolded end stops and external corners, of same material, size, and color as base.

2.9 ACCESSORIES

- A. Subfloor Filler: type recommended by flooring material manufacturer.
- B. Primers and Adhesives: Waterproof; types recommended by flooring manufacturer.
- C. Edge Strips: Vinyl.

2.9 ACCESSORIES (CONTINUED)

- D. Sealer and Wax: Types recommended by flooring manufacturer.
- E. Metal trim at top of self-coved sheet vinyl: aluminum, mill finish.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify surfaces are smooth and flat with maximum variation of 1/8 inch in 10 ft, and are ready to receive Work.
- B. Verify concrete floors are dry to an acceptable moisture content, and exhibit negative alkalinity, carbonization, or dusting. Notify Architect immediately if moisture content appears to be excessive (if any).
- C. Beginning of installation means acceptance of existing substrate and site conditions.

3.2 PREPARATION

- A. Remove sub-floor ridges and bumps. Fill low spots, cracks, joints, holes, and other defects with subfloor filler.
- B. Apply, trowel, and float filler to leave a smooth, flat, hard surface.
- C. Prohibit traffic from area until filler is cured.
- D. Vacuum clean substrate.

3.3 INSTALLATION - SHEET, TILE, OR STAIR COVERING MATERIAL (IF ANY)

- A. Install in accordance with manufacturers' instructions.
- B. Mix tile from container to ensure shade variations are consistent.
- C. Spread only enough adhesive to permit installation of materials before initial set.
- D. Set flooring in place, press with heavy roller to attain full adhesion.
- C. Lay flooring with joints and seams in a manner resulting in a minimum number of seams or symmetrical tile patterns.
- D. Install tile to square grid pattern with all joints aligned and with pattern grain parallel for all units and parallel to length. Allow minimum 1/2 full size tile width at room or area perimeter.

3.3 INSTALLATION - SHEET, TILE, OR STAIR COVERING MATERIAL (IF ANY)(CONTINUED)

- E. Install sheet flooring parallel to length of room. Provide minimum of 1/3 full roll width. Double cut sheet and continuously seal with a hot seaming method.
- F. Terminate flooring at centerline of door openings where adjacent floor finish is dissimilar.
- G. Install edge strips at unprotected or exposed edges, and where flooring terminates.
- H. Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.
- K. Cove sheet vinyl up wall surface and at cabinet toe space 6 inches at restrooms (if any).
- L. Chemical or heat weld seams at all sheet vinyl locations; weld type recommended by manufacturer to maintain flooring warranty (if any).

3.4 INSTALLATION - BASE MATERIAL (IF ANY)

- A. Fit joints tight and vertical. Maintain minimum measurement of 18 inches between joints.
- B. Miter internal corners. At external corners, use premolded units.
- C. Install base on solid backing. Bond tight to wall and floor surfaces.
- D. Scribe and fit to door frames and other interruptions.
- E. Seal bottom of base material to floor with bead of sealant.

3.5 PROTECTION

- A. Prohibit traffic on floor finish for 48 hours after installation.

3.6 CLEANING

- A. Remove excess adhesive from floor, base, and wall surfaces without damage.
- B. Clean, seal, and wax floor and base surfaces in accordance with manufacturer's instructions.

3.7 SCHEDULE - BASE MATERIAL

- A. Replicate existing painted wood base at all locations.

END OF SECTION

SECTION 09685

CARPET TILE

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Carpet tile, fully adhered for direct installation on floors, steps, and step risers (IF ANY).
- B. Accessories.

1.2 REFERENCES

- A. ASTM E84 - Surface Burning Characteristics of Building Materials.
- B. FS DDD-C-95 - Carpets and Rugs, Wool, Nylon, Acrylic, Modacrylic.
- C. FS DDD-C-0095 - Carpet and Rugs, Wool, Nylon, Acrylic, Modacrylic, Polyester, Polypropylene.
- D. FS DDD-C-1559 - Carpet, Loop, Low Pile Height, High Density, Woven or Tufted with Attached Cushioning.

1.3 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 01300.
- B. Shop Drawings: Indicate layout of joints, direction of carpet pile, location of edge moldings and layout of carpet tile pattern/direction.
- C. Product Data: Submit data on specified products, describing physical and performance characteristics; sizes, patterns, colors available, and method of installation. Indicate method of joining seams and direction of carpet.
- D. Submit samples under provisions of Section 01300.
- E. Submit three samples minimum 6 x 6 inch in size illustrating color and pattern for each carpet material specified.
- F. Submit manufacturer's installation instructions under provisions of Section 01300.

1.4 OPERATION AND MAINTENANCE DATA

- A. Submit operation and maintenance data under provisions of Section 01700.

1.4 OPERATION AND MAINTENANCE DATA (CONTINUED)

- B. Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning and shampooing.

1.5 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in carpet with five years minimum experience.
- B. Installer: Company with five years minimum documented experience and approved by manufacturer.

1.6 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code regulations for carpet flammability requirements.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Store materials for three days prior to installation in area of installation to achieve temperature stability.
- B. Maintain minimum 70 degrees F ambient temperature three days prior to, during, and 24 hours after installation of materials.

1.8 EXTRA MATERIALS

- A. Provide 50 sq ft of carpeting of each color specified, under provisions of Section 01700.

2 PART 2 PRODUCTS

2.1 MATERIALS

- A. Carpet at all scheduled locations: conforming to the following criteria:

Construction	Tufted
Surface texture	Texture-Twist Loop
Gauge	1/10 inch
Stitch count	8.33 per inch
Pile height	.119 inch
Face yarn	XTI Type 6,6 nylon
Face weight	26 oz. per sq. yd.
Backing Material	PVC with recycled content
Primary back	100% woven synthetic
Secondary backing	Infinity Modular reinforced vinyl composite closed cell polymer with recycled content
Weight density	204,504
Width	24" x 24" carpet tile

2.1 MATERIALS (CONTINUED)

A. (Continued)

Static protection	Integrated Filament, under 3.0 KV when tested under AATCC-134-75.
Flammability	Passes Pill test (ASTM-D-2859)/Class I direct glue Panel Test ASTM-E-648.
Floor Radiant Panel	Meets NFPA Class I when tested under ASTM E-648 Glue Down.
NBS Smoke Chamber	NFPA-258, ASTM-E 662 (450 or less) Flaming Mode.
Warranty	No more than 10% face yarn loss by weight under normal use for 10 years.
Color	Selected from manufacturer's standard range.
Manufacturer	Mannington Commercial; Dalton, Georgia; GAMETIME III.

B. Substitutions: Under provisions of Section 01600.

2.2 ACCESSORIES

- A. Sub-Floor Filler: type recommended by carpet manufacturer.
- B. Primers and Adhesives: Waterproof; types recommended by carpet manufacturer.
- C. Edge Strips: vinyl type, color as selected.
- D. Stair Nosing (if any): Vinyl type, round nose, ribbed top surface, one piece per stair tread width, color as selected.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify substrate surfaces are smooth and flat with maximum variation of 1/8 inch in 10 ft and are ready to receive work.
- B. Verify concrete floor is dry to an acceptable moisture content.
- C. Beginning of installation means acceptance of existing substrate and site conditions.
- D. Immediately notify Architect if substrate conditions indicate excessive moisture.

3.2 PREPARATION

- A. Remove sub-floor ridges and bumps. Fill low spots, cracks, joints, holes, and other defects with sub-floor filler.
- B. Apply, trowel, and float filler to leave smooth, flat, hard surface.
- C. Prohibit traffic until filler is cured.
- D. Vacuum and clean floor substrate surface.

3.3 INSTALLATION

- A. Install carpet tile in accordance with CRI 104.
- B. Do not mix carpet from different cartons unless from same dye lot.
- C. Cut carpet tile clean. Fit carpet tight to intersection with vertical surfaces without gaps.
- D. Cut and fit carpet around interruptions.
- E. Fit carpet tight to intersection with vertical surfaces without gaps.
- F. Install carpet tile in square pattern, with pile direction alternating to next unit, set parallel to building lines or aligned as indicated on shop drawings verify with Architect.
- G. Locate change of color or pattern between rooms under door centerline.
- H. Adhere carpet tile to substrate along centerline of rooms, at perimeter of rooms, where tiles are cut, and at interval recommended by carpet tile manufacturer throughout rooms.
- I. Provide transition strips at all locations where carpet abuts different flooring materials. Verify strip locations and color with Architect prior to installation.
- J. Installation On Stairs or Steps (IF ANY):
 - a. Use one piece of carpet for each tread and riser below. Apply seam adhesive to cut edges.
 - b. Install carpet with pile direction in length of stair.
 - c. Adhere carpet tight to stair treads and risers.
- K. Install carpet underneath existing equipment (if any).

3.4 CLEANING

- A. Remove access adhesive from floor, base, and wall surfaces without damage.
- B. Clean and vacuum carpet surfaces.

3.5 PROTECTION

- A. Prohibit traffic from carpet areas for 24 hours after installation.

END OF SECTION

SECTION 09900

PAINTING

1 PART 1 GENERAL

1.1 WORK INCLUDED

- A. Surface preparation.
- B. Surface finish schedule.

1.2 REFERENCES

- A. ANSI/ASTM D16 - Definitions of Terms Relating to Paint, Varnish, Lacquer, and Related Products.
- B. ASTM D2016 - Test Method for Moisture Content of Wood.

1.3 DEFINITIONS

- A. Conform to ANSI/ASTM D16 for interpretation of terms used in this Section.

1.4 QUALITY ASSURANCE

- A. Product Manufacturer: Company specializing in manufacturing quality paint and finish products with five years experience.
- B. Applicator: Company specializing in commercial painting and finishing with five years experience. and approved by product manufacturer.

1.5 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code regulations for flame/fuel/smoke rating requirements for finishes.

1.6 SUBMITTALS

- A. Submit product data under provisions of Section 01300.
- B. Provide product data on all finishing products.
- C. Submit samples under provisions of Section 01300.
- D. Submit three samples minimum 2 x 2 inch in size illustrating range of colors and textures available for each surface finishing product scheduled, for selection.
 - 1. Submit three "color fan" samples for Owner and Architect review and color selection.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site under provisions of Section 01600.

1.7 DELIVERY, STORAGE, AND HANDLING (CONTINUED)

- B. Store and protect products under provisions of Section 01600.
- C. Deliver products to site in sealed and labeled containers; inspect to verify acceptance.
- D. Container labeling to include manufacturer's name, type of paint, brand name, brand code, coverage, surface preparation, drying time, cleanup, color designation, and instructions for mixing and reducing.
- E. Store paint materials at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in well ventilated area, unless required otherwise by manufacturer's instructions.
- F. Take precautionary measures to prevent fire hazards and spontaneous combustion.

1.8 ENVIRONMENTAL REQUIREMENTS

- A. Provide continuous ventilation and heating facilities to maintain surface and ambient temperatures above 45 degrees F for 24 hours before, during, and 48 hours after application of finishes, unless required otherwise by manufacturer's instructions.
- B. Do not apply exterior coatings during rain or snow, or when relative humidity is above 50 percent, unless required otherwise by manufacturer's instructions.
- C. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.
- D. Minimum Application Temperature for Varnish and Stain Finishes: 65 degrees F for interior or exterior, unless required otherwise by manufacturer's instructions.
- E. Provide lighting level of 80 ft candles measured mid-height at substrate surface.

1.9 EXTRA STOCK

- A. Provide a one gallon container of each color and surface texture to Owner.
- B. Label each container with color, texture, and room locations, in addition to the manufacturer's label.

2 PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS - PAINT & STAIN

- A. Rodda.
- B. Fuller.
- C. Pittsburgh.
- D. Sherwin-Williams.
- E. Glidden.
- F. Miller.
- G. Substitutions: Under provisions of Section 01600.

2.2 MATERIALS

- A. Coatings: Ready mixed, except field catalyzed coatings. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating.
- B. Coatings: Good flow and brushing properties; capable of drying or curing free of streaks or sags.
- C. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified, of commercial quality.

2.3 FINISHES

- A. Refer to schedule at end of Section for surface finish schedule.
- B. APPLY PAINT OR STAIN FINISH TO ALL MATERIALS EXPOSED TO VIEW AND/OR SCHEDULED FOR PAINT FINISH; BACKPRIME COVERED MATERIALS WHERE SPECIFIED HEREIN. LEAVE NO SURFACES ON PROJECT WITHOUT FIELD OR FACTORY FINISH COATING.
 - 1. This means **EVERYTHING**.

3 PART 3 EXECUTION

3.1 INSPECTION

- A. Verify surfaces and substrate conditions are ready to receive work as instructed by the product manufacturer.
- B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

3.1 INSPECTION (CONTINUED)

- C. Do not apply finishes unless moisture content of surfaces are below the following maximums:
 - 1. Plaster and Gypsum Wallboard: 12 percent.
 - 2. Interior Located Wood: 15 percent, measured in accordance with ASTM D2016.
 - 3. Concrete and Concrete Masonry Units: 12 percent.
- D. Beginning of installation means acceptance of existing surfaces and substrate.

3.2 PREPARATION

- A. Remove electrical plates, hardware, light fixture trim, and fittings prior to preparing surfaces or finishing.
- B. Correct minor defects and clean surfaces which affect work of this Section.
- C. Shellac and seal marks which may bleed through surface finishes.
- D. Impervious Surfaces: Remove mildew by scrubbing with solution of tri-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- E. Aluminum Surfaces Scheduled for Paint Finish: Remove surface contamination by steam or high pressure water. Remove oxidation with acid etch and solvent washing. Apply etching primer immediately following cleaning.
- F. Asphalt, Creosote, or Bituminous Surfaces Scheduled for Paint Finish: Remove foreign particles to permit adhesion of finishing materials. Apply compatible sealer or primer.
- G. Concrete to Receive Paint Finish: Remove dirt, loose mortar, scale, salt or alkali power, and other foreign matter. Remove oil and grease with a solution of tri-sodium phosphate; rinse well and allow to dry. Remove stains caused by weathering of corroding metals with a solution of sodium metasilicate after thoroughly wetting with water. Allow to dry.
- H. Gypsum Board Surfaces: Latex fill minor defects. Spot prime defects after repair.
- I. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.
- J. Steel and Iron Surfaces: Remove grease, scale, dirt, and rust. Where heavy coatings of scale are evident, remove by wire brushing or sandblasting; clean by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Spot prime paint after repairs.

3.2 PREPARATION (CONTINUED)

- K. Shop Primed Steel Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.
- L. Interior Wood Items Scheduled to Receive Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime all interior wood scheduled to receive paint finish.
- M. Interior Wood Items Scheduled to Receive Stain Finish: Wipe off dust and grit prior to sealing, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after sealer has dried; sand lightly between coats.
- N. Exterior Wood Scheduled to Receive Paint Finish: Remove dust, grit and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior sealant compound after prime coat has been applied. Back prime all exterior wood scheduled to receive paint finish.
- O. Doors Scheduled for Finishing: Seal top and bottom edges with primer.

3.3 PROTECTION

- A. Protect elements surrounding the work of this Section from damage or disfiguration.
- B. Repair damage to other surfaces caused by work of this Section.
- C. Furnish drop cloths, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces.
- D. Remove empty paint containers from site.

3.4 APPLICATION

- A. Apply products in accordance with manufacturer's instructions.
- B. Do not apply finishes to surfaces that are not dry.
- C. Apply each coat to uniform finish.
- D. Apply each coat of paint slightly darker than preceding coat unless otherwise approved.
- E. Sand lightly between coats to achieve required finish.

3.4 APPLICATION (CONTINUED)

- F. Prime back surfaces of interior and exterior woodwork with primer paint.
- G. Allow applied coat to dry before next coat is applied.
- H. Where clear finishes are required, tint fillers to match wood. Work fillers into the grain before set. Wipe excess from surface.

3.5 CLEANING

- A. As Work proceeds, promptly remove paint where spilled, splashed, or spattered.
- B. During progress of Work maintain premises free of unnecessary accumulation of tools, equipment, surplus materials, and debris.
- C. Collect cotton waste, cloths, and material which may constitute a fire hazard, place in closed metal containers and remove daily from site.

3.6 SCHEDULE - INTERIOR SURFACES

- A. Wood - Painted (including wood doors)
 - 1. One coat alkyd prime sealer; all sides of wood.
 - 2. Two coats alkyd enamel, semi-gloss.
- B. Steel - Unprimed
 - 1. One coat zinc rich primer.
 - 2. Two coats alkyd enamel, semi-gloss.
- C. Steel - Primed
 - 1. Touch-up with original primer.
 - 2. Two coats alkyd enamel, semi-gloss.
- D. Steel - Galvanized
 - 1. Clean with paint-bond solvent.
 - 2. Two coats alkyd enamel, semi-gloss.
- E. Plaster, Gypsum Board
 - 1. One coat alkyd primer sealer.
 - 2. Two coats latex (satin) or alkyd enamel, semi-gloss; see finish schedule for latex or enamel locations.

3.7 SCHEDULE - EXTERIOR SURFACES

- A. Pavement Markings
 - 1. See Specification Section 02763.
- B. Concrete Block
 - 1. See Specification Section 07190.

3.8 COLORS

- A. Colors will be as selected from manufacturer's standard range.
- B. Multiple colors will be selected for interior painting work.
- C. Submit manufacturer's color fan for color selection.

3.9 SCHEDULE

- A. See finish schedule for locations of various materials and finishes.

END OF SECTION

SECTION 10260

WALL AND CORNER GUARDS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Corner guards.

1.2 REFERENCES

- A. ANSI A117.1 - Specifications for Making Buildings and Facilities Accessible To and Usable By Physically Handicapped People.

1.3 PERFORMANCE REQUIREMENTS

- A. Corner guards to resist lateral impact force of 100 pounds at any point without permanent damage.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Indicate physical dimensions, features, anchorage details, and rough-in measurements.
- C. Samples: Submit two sections of corner guard, 24 inches long illustrating component design, configuration, and color and finish.
- D. Manufacturer's Installation Instructions: Indicate installation rough-in measurements and instructions.
- E. Manufacturer's Certificate: Certify that products meet or exceed flame spread rating for surface finish.

1.5 QUALITY ASSURANCE

- A. Conform to ANSI A117.1 requirements for the physically handicapped.

1.6 FIELD MEASUREMENTS

- A. Verify field measurements are as indicated on Drawings and as instructed by the manufacturer.

1.7 COORDINATION

- A. Coordinate the work with wall or partition Sections for installation of concealed blocking or anchor devices.

2 PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Pawling Corporation Pro-Tek CG-52-90 corner guard.
- B. Substitutions: Under provisions of Section 01600

2.2 COMPONENTS

- A. Mounting Brackets and Attachment Hardware: Appropriate to component and substrate.

2.3 FABRICATION

- A. Fabricate components with tight joints, corners and seams.
- B. Predrill holes for attachment.
- C. Form end trim closure by capping and finishing smooth.

2.4 FINISHES

- A. Corner Guard: #304 stainless steel.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify rough-in for components are correctly sized and located.

3.2 INSTALLATION

- A. Install components in accordance with manufacturer's instructions, level and plumb, secured rigidly in position.
- B. Position corner guard above wall base material. If no base material position corner guard at finish floor level.

3.3 SCHEDULE

- A. Corner guards in all locations: 84 inches long.
- B. Mount corner guards at top of wall base (if any). Where no wall base occurs mount corner guard at floor finish.
- C. Locations: all new outside wall corners at the building interior where work of this project is occurring.

END OF SECTION

SECTION 10523

FIRE EXTINGUISHERS AND CABINETS

1 PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Fire extinguishers.
- B. Cabinets.
- C. Accessories.

1.2 RELATED SECTIONS

- A. Section 09900 - Painting: Field paint finish.

1.3 REFERENCES

- A. ANSI/NFPA 10 - Portable Fire Extinguishers.
- B. ANSI/UL 92 - Fire Extinguisher and Booster Hose.
- C. ANSI/UL 711 - Rating and Fire Testing of Fire Extinguishers.
- D. UL 8 - Foam Fire Extinguishers.
- E. UL 154 - Carbon Dioxide Fire Extinguishers.
- F. UL 299 - Dry Chemical Fire Extinguishers.
- G. UL 626 - 2 1/2 Gallon Stored Pressure, Water Type Fire Extinguishers.
- H. UL 1093 - Halogenated Agent Fire Extinguishers.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Indicate cabinet physical dimensions, rough-in measurements for semi-recessed cabinets, and location.
- C. Product Data: Provide extinguisher operational features, color and finish, and anchorage details.
- D. Manufacturer's Certificate: Certify that Products meet or exceed specified requirements.

1.5 OPERATION AND MAINTENANCE DATA

- A. Submit under provisions of Section 01700.
- B. Maintenance Data: Include test, refill or recharge schedules and re-certification requirements.

1.6 REGULATORY REQUIREMENTS

- A. Conform to applicable ANSI/NFPA 10 regulations for requirements for extinguishers.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Do not install extinguishers when ambient temperature may cause freezing of extinguisher ingredients.

2 PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Modern Metal Products.
- B. Samson Metal Products Inc.
- C. Substitutions: Under provisions of Section 01600.

2.2 EXTINGUISHERS

- A. Multi-purpose Dry Chemical Type: UL 4A-60BC, steel tank, with pressure gauge; Class ABC, 10 pound nominal capacity.

2.3 CABINETS

- A. Metal: Formed sheet steel, primed; 18 gage thick base metal.
- B. Configuration: Semi-recessed type, sized to accommodate accessories.
- C. Trim Type: Returned to wall surface.
- D. Door: 18 gage thick, reinforced for flatness and rigidity; latch access.
- E. Door Glazing: Plastic, clear, 1/8 inch thick polycarbonate.
- F. Cabinet Mounting Hardware: Appropriate to cabinet.

2.4 ACCESSORIES

- A. Cabinet Signage: as recommended by cabinet manufacturer.

2.5 FABRICATION

- A. Form cabinet enclosure with right angle inside corners and seams. Form perimeter trim and door stiles.
- B. Pre-drill for anchors.
- C. Hinge doors for 180 degree opening with continuous piano hinge. Provide roller type catch.

2.5 FABRICATION (CONTINUED)

- D. Weld, fill, and grind components smooth.

2.6 FINISHES

- A. Extinguisher: Steel, enamel to manufacturer's standard red color.
- B. Cabinet Exterior Trim and Door: Factory prime.
- C. Cabinet Interior: Baked enamel, color as selected from manufacturer's standard range.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify rough openings for cabinet are correctly sized and located.
- B. Coordinate cabinet type with wall stud framing depth.

3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install cabinets plumb and level in wall openings.
- C. Secure rigidly in place.
- D. Place extinguishers and accessories in all cabinets.

3.3 SCHEDULE

- A. See drawings for locations of fire extinguishers & cabinets and wall framing detail.
- B. Minimum quantity of fire extinguishers and cabinets: two. If locations not shown on drawings coordinate and verify with Architect.

END OF SECTION

SECTION 15010

GENERAL MECHANICAL REQUIREMENTS

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. Contractor to modify the mechanical heating/cooling system. Mechanical system to include but not limited to new and modified duct work along with modifications to other systems per the bid documents.
- B. Contractor to install a complete code compliant plumbing system. Plumbing system to include but not limited to; relocation of domestic water heater, domestic water piping, sanitary sewer, venting, domestic hot water, and new fixtures per plans and schedules.
- C. Division 15 contractor to provide labor, materials for a complete and operable system complying with all the conditions in the Contract Documents. Order of priority of Contract Documents are as follows:
 - 1. Change Orders
 - 2. Addendums
 - 3. Specifications
 - 4. Plans
- D. It is the Contractor's responsibility to satisfy himself as to the nature and location of the work, the general conditions, availability of labor, water, electric power, roads, physical conditions at the site, the existing equipment to remain, existing equipment to be modified or to be removed, and all other matters which can in any way affect the work or the cost thereof under this contract. Any failure by the Contractor to acquaint himself with all available information will not relieve him of responsibility of successfully performing the work.
- E. Provide all required accessories for a complete and operable system as intended, review all manufacturer installation requirements prior to rough in.
- F. Contractor to verify all installation requirements prior to ordering equipment. Verify correct voltage, amperage, physical size, mounting, and access requirements prior to ordering. Notify electrical contractor of discrepancies prior to ordering.
- G. Contractor to provide vibration isolation for all mechanical equipment with moving parts.
- H. Contractor to submit for and obtain all permits required to perform the work as described. Contractor is responsible for the payment of the permits and coordination of all inspections required by the local authority having jurisdiction.
- I. Contractor to install all equipment and accessories in a professional manner, run piping parallel to the building, install equipment plumb and level, with

adequate access for maintenance. Provide permanent plastic laminate labels with equipment identification.

- J. Contractor to provide seismic restraints for all equipment as required by the AHJ. Provide stamped structural calculations as required and submit to the AHJ as requested for approval. Provide all special inspections as required by the AHJ.
- K. Drawings are diagrammatic only, to show general arrangement of mechanical equipment and accessories. Coordinate location of all mechanical equipment with other trades prior to rough in. Provide necessary offsets or transitions as required to install the system in the space provided.
- L. Contractor to field locate existing sanitary sewer piping, verify location and depth prior to saw cutting of existing slab. It is the contractor's responsibility to verify new pipe routing based on actual site conditions prior to any demolition.
- M. Contractor to field locate existing water supply piping, locate adequately sized main piping for branch piping to new fixtures.

1.2 RELATED DOCUMENTS

- A. Division 15 contractor is bond by Division 1, Division 15, Division 16, and supplementary conditions.

1.3 REFERENCE STANDARDS

- A. Compliance with the codes and standards of the following organizations as applicable to the work being performed:
 - 1. Codes, Rules and Regulations of the State of Oregon.
 - 2. Local county/city Codes, Rules and Regulations
 - 3. AMCA
Air Moving and Conditioning Association
 - 4. ADC
Air Diffusion Council
 - 5. NEMA
National Electrical Manufacturers Association
 - 6. FM
Factory Mutual
 - 7. NFPA
National Fire Protection Association
 - 8. ASTM
American Society for Testing Materials
 - 9. UL
Underwriters Laboratories, Inc.
 - 10. NEC
National Electrical Code
 - 11. ASME
American Society of Mechanical Engineers

- 12. ANSI
American National Standards Institute
- 13. OSHA
Occupational Safety and Health Act
- 14. BSA
Board of Standards and Appeals
- 15. MEA
Materials and Equipment Acceptance
- 16. ASHRAE
American Society of Heating, Refrigeration
and Air Conditioning Engineers
- 17. ASA
Acoustical Society of America
- 18. AGA
American Gas Association
- 19. AABC
American Air Balance Council
- 20. NEBB
National Environmental Balancing Bureau

1.4 DEFINITIONS

- A. "Provide" means furnish and install, complete, with the specified material or equipment and perform all required labor to make a complete and functioning installation.
- B. "Install" means to provide labor and materials to receive, unload, assemble, place, mount, seismically brace, connect to all required services, clean, start-up, adjust and commission.
- C. "Clean" means to remove all debris, to wash cabinet inside and out with applicable cleaning solution, chemically clean coils as required to remove trapped dirt, comb coils straight after cleaning, remove all dirt and debris from fan blades, provide new filters, acid flush coils to remove sediment, flush out piping systems until discharge is clear, remove sediment from all strainers and lubricate and place back in service when completed.
- D. "AHJ" Authority Having Jurisdiction.

1.5 PROTECTION

- A. Contractor is responsible for all mechanical equipment and accessories until final completion of the project. Contractor to protect all mechanical equipment and accessories provided from damage, theft, and contamination. Contractor is responsible for the repair/replacement of any damaged or stolen equipment or accessories. Contractor is responsible for cleaning any and all equipment contaminated before final completion. Any equipment used prior to final completion must be protected from debris by temporary placement of filters on all intakes. Contractor responsible for entire system to be clean at

the time of final completion, if debris has contaminated the system during construction the contractor is responsible for removal of debris prior to final acceptance.

1.6 CUTTING AND PATCHING

- A. Contractor to coordinate all required penetrations with other trades prior to rough in.
- B. Contractor is not to cut or notch any framing material without direction from engineer. Contractor will be required to repair/replace any framing member damaged by cutting or notching if done so without prior approval.

1.7 SUBMITTALS

- A. The contractor shall submit prior to ordering or construction of the following equipment and accessories for review. Submittals to include shop drawings, equipment performance, equipment efficiencies, listings, coatings, accessories, warranties and supplier information. Submittals to note on first page any differences between specified item and submitted item.
 - 1. Piping materials, valves, hangers, supports and accessories
 - 2. Damper and damper hardware.
 - 3. Diffusers and Registers
 - 4. Duct Construction and accessories

1.8 OPERATION AND MAINTENANCE MANUALS (O&M)

- A. O&M manuals to include submitted information.
- B. Manufacturer's factory start up forms completed as required for warranty.
Warranty information for all equipment.
- C. Equipment suppliers contact information.
- D. Equipment service requirements and spare parts list.
- E. Record drawings showing all equipment. Location of all valves and mechanical equipment access.

1.9 SUBSTITUTIONS

- A. Contractor is required to provide substitution requests per Division 1, prior to bid closing. All substituted equipment or accessories must be of the same quality of the specified item, the contractor is responsible to verify all installation requirements prior to submission. All variations to the specified item is to be listed on the front page of the substitution request.

1.10 ACCESSIBILITY

- A. Contractor is to provide manufacturer's minimum access for all equipment provided.
- B. Contractor to provide adequate access to all valves, test ports, and controls for all equipment.
- C. Contractor responsible to coordinate installation of all panels, lights, doors for adequate access.
- D. Contractor responsible to maintain all access paths to new equipment, locate piping out of access paths.

1.11 DEMOLITION

- A. Contractor responsible for the removal of all equipment shown in the contract documents shown to be removed. Contractor to dispose of items off site.
- B. Contractor responsible for patching all surfaces exposed after demolition of any existing equipment to match the adjacent surface.
- C. Contractor responsible to remove all components associated with equipment being removed, including but not limited to controls, electrical back to nearest panel, duct work, piping back to the nearest main.

1.12 TESTS

- A. Contractor is responsible to provide all testing required by the AHJ and/or equipment manufacturer. The following systems are required to be tested:
 - 1. Sewer and vent piping per AHJ.
 - 2. Water piping tested per AHJ.

END OF SECTION

SECTION 15050

BASIC MECHANICAL METHODS AND MATERIALS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This section describes the pipe specialties for piping systems including, but not limited, to the following:
 1. Piping support
 2. Pipe
 3. Fittings

1.2 RELATED SECTIONS

- A. Division 15, Division 16 Supplementary Conditions and drawings.

1.3 REFERENCES

- A. ASME
- B. ASTM.
- C. UL

1.4 SUBMITTALS

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
 1. Preparation instructions and recommendations.
 2. Storage and handling requirements and recommendations.
 3. Installation methods.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

PART 2 PRODUCTS

2.1. MECHANICAL PIPE SUPPORTS

- A. Provide piping support system complying with layout, elevations, slope and

support frequency as indicated or required to comply with referenced or applicable codes and ordinances. Installation shall eliminate potential for stress on piping runs, fittings, bends and terminations. Isolate materials to prevent galvanic reaction and abrasive damage due to thermal expansion and vibration. Installation shall not exceed weight capacity of support.

- B. Supports to be adjustable steel clevis type hanger.
- C. Michigan Hanger Co. #400 or approved.

2.2 ABOVE GROUND (INTERIOR) WATER PIPING

- A. Pipe 1" and larger: Copper tube, ASTM B88, Type L or K.
 - 1. Fittings for Copper Tube:
 - A. Wrought copper or bronze castings conforming to ANSI B16.18 and B16.22. Unions shall be bronze, MSS SP72 & SP 110, Solder or braze joints. Use 95/5 tin and antimony for all soldered joints.
 - 2. Adapters: Provide adapters for joining screwed pipe to copper tubing.
 - 3. Solder: ASTM B32 Composition Sb5 HA or HB. Provide non-corrosive flux.
 - 4. Brazing alloy: AWS A5.8, Classification BCuP.

- B. Pipe ¾" and smaller: PEX-a (Engel-Method Crosslinked Polyethylene) Piping: ASTM F 876 and F877 (CAN/CSA-B137.5) by Uponor or approved.
 - 1. PEX-a Fittings: elbows, adapters, couplings, plugs, tees and multi-port tees: ASTM F1960 cold-expansion fitting manufactured from the following material types:
 - 2. UNS No. C69300 Lead-free (LF) Brass.
 - 3. 20% glass-filled polysulfone as specified in ASTM D 6394.
 - 4. Unreinforced polysulfone (group 01, class 1, grade 2) as specified in ASTM D 6394.
 - 5. Polyphenylsulfone (group 03, class 1, grade 2) as specified in ASTM D 6394.
 - 6. Blend of polyphenylsulfone (55-80%) and unreinforced polysulfone (rem.) as specified in ASTM D 6394.
 - 7. Reinforcing cold-expansion rings shall be manufactured from the same source as PEX-a piping manufacturer and marked "F1960".

- C. PEX-to-Metal Transition Fittings:
 - 1. Manufacturers: Provide fittings from the same manufacturer of the piping.
 - 2. Threaded Brass to PEX-a Transition: one-piece brass fitting with male or female threaded adapter and ASTM F 1960 cold-expansion end, with PEX-a reinforcing cold-expansion ring.
 - 3. Brass Sweat to PEX-a Transition: one-piece brass fitting with sweat adapter and ASTM F 1960 cold-expansion end, with PEX-a reinforcing cold-expansion ring.
 - 4. PEX-a to Flange Transition: two-piece brass fitting with lead-free ProPEX adapter and steel flange conforming to ASME B 16.5.

2.3 TRAP PRIMER WATER PIPING:

- A. Pipe: Copper tube, ASTM B88, type K, hard drawn.
- B. Fittings: Bronze castings conforming to ANSI B16.18 Solder joints.
- C. Solder: ASTM B32 composition Sb5. Provide non-corrosive flux.

2.4 DIELECTRIC FITTINGS

- A. Provide dielectric couplings or unions between ferrous and non-ferrous pipe.

2.5 WATER HAMMER ARRESTER:

- A. Closed copper tube chamber with permanently sealed 410 kPa (60 psig) air charge above a Double O-ring piston. Two high heat Buna-N O-rings pressure packed and lubricated with FDA approved silicone compound. All units shall be designed in accordance with ASSE 1010 for sealed wall installations without an access panel. Size and install in accordance with Plumbing and Drainage Institute requirements (PDI WH 201). Provide water hammer arrestors at:
 - 1. All groups of two or more flush valves.
 - 2. All quick opening or closing valves.

2.6 SANITARY waste, drain, and vent PIPING

- A. Storm and Sanitary waste drain and vent piping schedule 40 ABS or PVC rated for DWV per Oregon plumbing code.

2.7 CLEANOUTS

- A. Cleanouts shall be the same size as the pipe, up to 100 mm (4 inches); and not less than 100 mm (4 inches) for larger pipe. Cleanouts shall be easily accessible and shall be gastight and watertight. Minimum clearance of 600 mm (24 inches) shall be provided for clearing a clogged sanitary line.
- B. Cleanouts shall be provided at or near the base of the vertical stacks with the cleanout plug located approximately 600 mm (24 inches) above the floor. The cleanouts shall be extended to the wall access cover. Cleanout shall consist of sanitary tees. Nickel-bronze square frame and stainless steel cover with minimum opening of 150 by 150 mm (6 by 6 inches) shall be furnished at each wall cleanout. Where the piping is concealed, a fixture trap or a fixture with integral trap, readily removable without disturbing concealed pipe, shall be accepted as a cleanout equivalent providing the opening to be used as a cleanout opening is the size required.

2.8 TRAPS

- A. Traps shall be provided on all sanitary branch waste connections from fixtures or equipment not provided with traps. Exposed brass shall be polished brass chromium plated with nipple and set screw escutcheons. Concealed traps may be rough cast brass or same material as pipe connected to. Slip joints are not permitted on sewer side of trap. Traps shall correspond to fittings on cast iron soil pipe or steel pipe respectively, and size shall be as required by connected service or fixture.

2.9 PIPING ACCESSORIES

PART 3 EXECUTION

3.1 PIPE INSTALLATION

- A. The pipe installation shall comply with the requirements of the 2021 Oregon Plumbing Specialty Code and these specifications.
- B. Branch piping shall be installed for waste from the respective piping systems and connect to all fixtures, valves, cocks, outlets, casework, cabinets and equipment, including those specified in other sections.
- C. Pipe shall be round and straight. Cutting shall be done with proper tools. Pipe shall be reamed to full size after cutting.
- D. All pipe runs shall be laid out to avoid interference with other work.
- E. The piping shall be installed above accessible ceilings where possible.
- F. The piping shall be installed to permit valve servicing or operation.
- G. Unless specifically indicated on the drawings, the minimum slope shall be 2% slope.
- H. The piping shall be installed free of sags and bends.
- I. Seismic restraint shall be installed where required by code.
- J. Changes in direction for soil and waste drainage and vent piping shall be made using appropriate branches, bends and long sweep bends. Sanitary tees and short sweep quarter bends may be used on vertical stacks if change in direction of flow is from horizontal to vertical. Long turn double wye branch and eighth bend fittings shall be used if two fixtures are installed back to back or side by side with common drain pipe. Straight tees, elbows, and crosses may be used on vent lines. Do not change direction of flow more than 90 degrees. Proper size of standard increaser and reducers shall be used if pipes of different sizes are connected. Reducing size of drainage piping in direction of flow is prohibited.

3.2 JOINT CONSTRUCTION

- A. For threaded joints, thread pipe with tapered pipe threads according to ASME B1.20.1. The threads shall be cut full and clean using sharp disc cutters. Threaded pipe ends shall be reamed to remove burrs and restored to full pipe

inside diameter. Pipe fittings and valves shall be joined as follows:

1. Apply appropriate tape or thread compound to external pipe threads unless dry seal threading is required by the pipe service
2. Pipe sections with damaged threads shall be replaced with new sections of pipe.

3.3 SPECIALTY PIPE FITTINGS

- A. Transition coupling shall be installed at pipe joints with small differences in pipe outside diameters.
- B. Dielectric fittings shall be installed at connections of dissimilar metal piping and tubing.

3.4 Pipe Hangers, Supports and Accessories:

- A. All piping shall be supported according to the Oregon Plumbing Specialty Code (OPSC) and these specifications. Where conflicts arise between these the code and OPSC, the most restrictive or the requirement that specifies supports with highest loading or shortest spacing shall apply.
- B. Hangers, supports, rods, inserts and accessories used for pipe supports shall be shop coated with zinc chromate primer paint. Electroplated copper hanger rods, hangers and accessories may be used with copper tubing.
- C. Horizontal piping and tubing shall be supported within 300 mm (12 inches) of each fitting or coupling.
- D. Horizontal cast iron piping shall be supported with the following maximum horizontal spacing and minimum hanger rod diameters:
 1. 40 mm or DN40 to 50 mm or DN50 (NPS 1-1/2 inch to NPS 2 inch): 1500 mm (60 inches) with 10 mm (3/8 inch) rod.
 2. 80 mm or DN 80 (NPS 3 inch): 1500 mm (60 inches) with 13 mm (1/2 inch) rod.
 3. 100 mm or DN100 to 125 mm or DN125 (NPS 4 to NPS 5): 1500 mm (60 inches) with 16 mm (5/8 inch) rod.
- E. Vertical piping and tubing shall be supported at the base, at each floor, and at intervals no greater than 4.57 m (15 feet).
- F. Floor, Wall and Ceiling Plates, Supports, Hangers shall have the following characteristics:
 1. Solid or split unplated cast iron.
 2. All plates shall be provided with set screws.
 3. Height adjustable clevis type pipe hangers.
 4. Adjustable floor rests and base flanges shall be steel.
 5. Hanger rods shall be low carbon steel, fully threaded or threaded at each end with two removable nuts at each end for positioning rod and hanger and locking each in place.
 6. Riser clamps shall be malleable iron or steel.
 7. Rollers shall be cast iron.

- G. Miscellaneous materials shall be provided as specified, required, directed or as noted on the drawings for proper installation of hangers, supports and accessories. If the vertical distance exceeds 6 m (20 feet) for cast iron pipe additional support shall be provided in the center of that span. All necessary auxiliary steel shall be provided to provide that support.
- H. Cast escutcheon with set screw shall be provided at each wall, floor and ceiling penetration in exposed finished locations and within cabinets and millwork.

3.5 TESTS

- A. Sanitary waste and drain systems shall be tested in sections.
 - 1. After installing all fixtures and equipment, open water supply so that all p-traps can be observed. For 15 minutes of operation, all p-traps shall be inspected for leaks and any leaks found shall be corrected.

END OF SECTION

SECTION 15400

PLUMBING FIXTURES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Comply with requirements of Public Law 102-486, "Energy Policy Act," regarding water flow rate and water consumption of plumbing fixtures.

1.2 SUBMITTALS

- A. Submit materials in accordance with Conditions of the Contract and Division 01.
- B. Product data for each type of plumbing fixture.
- C. Submittals shall include manufacturer's catalog literature for all products used.

PART 2 - PRODUCTS (See fixture schedule and notes on drawings).

PART 3 - EXECUTION

3.1 INSTALLATIONS

- A. Install fixtures with flanges and gasket seals.
- B. Fasten floor-mounted fixtures to substrate. Fasten fixtures having holes for securing fixture to wall construction, to reinforcement built into walls.
- C. Fasten counter-mounting plumbing fixtures to casework.
- D. Secure supplies to supports or substrate within pipe space behind fixture.
- E. Install individual supply inlets, supply stops, supply risers, and tubular brass traps with cleanouts at fixture.
- F. Install water-supply stop valves in accessible locations.
- G. Install traps on fixture outlets.
 - 1. Omit traps on fixtures having integral traps.
 - 2. Omit traps on indirect wastes, unless otherwise indicated.
- H. Install escutcheons at wall, floor, and ceiling penetrations in exposed, finished locations and within cabinets and millwork. Use deep-pattern escutcheons where required to conceal protruding pipe fittings.
- I. Seal joints between fixtures and walls, floors, and counters using sanitary-type, one-part, mildew-resistant, silicone sealant. Match sealant color to fixture color.
- J. Install piping connections between plumbing fixtures and piping systems and plumbing equipment.

END OF SECTION

SECTION 15800

HVAC DUCTS AND ACCESSORIES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Ductwork and accessories for HVAC including the following:
1. Supply air, exhaust, and relief systems.
 2. Drawings are diagrammatic only, to show general location of duct work, equipment and accessories. Coordinate location of all duct work with other trades prior to rough in. Provide necessary offsets or transitions as required to install the system in the space provided. Do not cut or notch any framing member without prior written approval from structural engineer.
 3. The Contractor shall be responsible for providing a joint and cooperative effort to coordinate the test and balance as specified in Section 15990, "Balancing of Air Systems".
- B. Definitions:
1. SMACNA Standards as used in this specification means the HVAC Duct Construction Standards, Metal and Flexible.
 2. Seal or Sealing: Use of liquid or mastic sealant, with or without compatible tape overlay, or gasketing of flanged joints, to keep air leakage at duct joints, seams and connections to an acceptable minimum.
 3. Duct Pressure Classification: SMACNA HVAC Duct Construction Standards, Metal and Flexible.
 4. Exposed Duct: Exposed to view in a finished room or exposed to weather.

1.2 RELATED WORK

- A. General Mechanical Requirements: Section 15010.
B. Balancing of Air Systems: Section 15990.

1.3 QUALITY ASSURANCE

- A. Duct System Construction and Installation: Referenced SMACNA Standards are the minimum acceptable quality.
- B. Duct Sealing, Air Leakage Criteria, and Air Leakage Tests: Ducts shall be sealed as per duct sealing requirements of SMACNA HVAC Air Duct Leakage Test Manual.
- C. Duct accessories exposed to the air stream, such as dampers of all types (except smoke dampers) and access openings, shall be of the same material as the duct or provide at least the same level of corrosion resistance.

1.4 SUBMITTALS

- A. Submit in accordance with Division 1, SHOP DRAWINGS, PRODUCT DATA, and SAMPLES.
- B. Manufacturer's Literature and Data:
 - 1. Rectangular ducts:
 - a. Schedules of duct systems, materials and selected SMACNA construction alternatives for joints, sealing, gage and reinforcement.
 - b. Duct liner.
 - c. Sealants and gaskets.
 - d. Access doors.
 - 2. Round duct construction details:
 - a. Manufacturer's details for duct fittings.
 - b. Duct liner.
 - c. Sealants and gaskets.
 - d. Access sections.
 - e. Installation instructions.
 - 3. Volume dampers.
 - 4. Upper hanger attachments. Oregon State Structural Engineers stamped calculations for seismic restraints.
 - 5. Flexible ducts and clamps, with manufacturer's installation instructions.
 - 6. Flexible connections.
 - 7. Details and design analysis of alternate or optional duct systems.
 - 8. Duct Accessories, turning vanes, damper actuators and fasteners.

1.5 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American Society for Testing and Materials (ASTM):
 - A653-09.....Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy coated (Galvannealed) by the Hot-Dip process
 - A1011-09a.....Standard Specification for Steel, Sheet and Strip, Hot rolled, Carbon, structural, High-Strength Low-Alloy, High Strength Low-Alloy with Improved Formability, and Ultra-High Strength
 - C1071-05e1.....Standard Specification for Fibrous Glass Duct Lining Insulation (Thermal and Sound Absorbing Material)
 - E84-09a.....Standard Test Method for Surface Burning Characteristics of Building Materials

- C. National Fire Protection Association (NFPA):
 - 90A-09.....Standard for the Installation of Air Conditioning and Ventilating Systems
 - 96-08Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations
- D. Sheet Metal and Air Conditioning Contractors National Association (SMACNA):
 - 2nd Edition – 2005.....HVAC Duct Construction Standards, Metal and Flexible
 - 1st Edition - 1985.....HVAC Air Duct Leakage Test Manual
 - 6th Edition – 2003.....Fibrous Glass Duct Construction Standards
- E. Underwriters Laboratories, Inc. (UL):
 - 181-08Factory-Made Air Ducts and Air Connectors
 - 555-06Standard for Fire Dampers
 - 555S-06Standard for Smoke Dampers

PART 2 - PRODUCTS

2.1 DUCT MATERIALS AND SEALANTS

- A. General: Except for systems specified otherwise, construct ducts, casings, and accessories of galvanized sheet steel, ASTM A653, coating G90; or, aluminum sheet, ASTM B209, alloy 1100, 3003 or 5052.
- B. Joint Sealing: Refer to SMACNA HVAC Duct Construction Standards, paragraph S1.9.
 - 1. Sealant: Elastomeric compound, gun or brush grade, maximum 25 flame spread and 50 smoke developed (dry state) compounded specifically for sealing ductwork as recommended by the manufacturer. Generally provide liquid sealant, with or without compatible tape, for low clearance slip joints and heavy, permanently elastic, mastic type where clearances are larger. Oil base caulking and glazing compounds are not acceptable because they do not retain elasticity and bond.
 - 2. Tape: Use only tape specifically designated by the sealant manufacturer and apply only over wet sealant. Pressure sensitive tape shall not be used on bare metal or on dry sealant.
 - 3. Gaskets in Flanged Joints: Soft neoprene.
 - 4. Aluminum foil type tape.
 - a. 2 mil dead soft, pressure adhesive.
 - b. 2-1/2" width.
 - c. Nashua 324A or approved.

2.2 DUCT CONSTRUCTION AND INSTALLATION

- A. Constructed as outlined in the SMACNA and ASHRAE Standards, for the following pressure classifications or as designated on drawings.
 - 1. Ductwork from downstream of multi-zone unit shall be fabricated to meet minimum 2" w.g. internal pressure.

2. Restroom exhaust and general exhaust ductwork shall be fabricated to meet the lower of either 2" w.g. negative pressure, or the exhaust fan pressure at shut-off.
- B. Provide state of Oregon Structural Engineers Stamp on any duct work requiring seismic calculations.
- C. Seal per SMACNA and ASHRAE essentially air tight, with methods approved in these specifications.
- D. Volume Dampers: Single blade or opposed blade, multi-louver type as detailed in SMACNA Standards. Refer to SMACNA Detail Figure 2-12 for Single Blade and Figure 2.13 for Multi-blade Volume Dampers.
 1. Dampers shall have an external locking manual quadrant. On duct systems with external insulation, the quadrant shall be installed with a standoff bracket to clear the insulation. The quadrant shall have a wing nut for locking the damper in place and a scale for indicating the position of the damper. (A handle attached directly to the damper shaft is not acceptable).
 2. Round ducts: Factory made damper/sleeve. J&J JR307.
 3. Rectangular Ducts:
 - a. Ducts 20" and less:
 1. Duro-Dyne 3/8" Quadline series KS-38.
 - b. Ducts larger than 21":
 1. Duro-dyne 1/2" Quadline series KS-12
- G. Duct Hangers and Supports: Refer to SMACNA Standards Section IV. Avoid use of trapeze hangers for round duct.

2.3 FLEXIBLE AIR DUCT

- A. General: Factory fabricated, complying with NFPA 90A for connectors not passing through floors of buildings. Flexible ducts shall not penetrate any fire or smoke barrier which is required to have a fire resistance rating of one hour or more. Flexible duct length shall not exceed 5 feet. Provide insulated acoustical air duct connectors in supply air duct systems and elsewhere as shown.
- B. Flexible ducts shall be listed by Underwriters Laboratories, Inc., complying with UL 181. Ducts larger than 8 inches in diameter shall be Class 1. Ducts 8 inches in diameter and smaller may be Class 1 or Class 2.
- C. Insulated Flexible Air Duct: Factory made including mineral fiber insulation with maximum C factor of 0.25 at 75 degrees F mean temperature, encased with a low permeability moisture barrier outer jacket, having a puncture resistance of not less than 50 Beach Units. Acoustic insertion loss shall not be less than 3 dB per foot of straight duct, at 500 Hz, based on 6 inch duct, of 2500 fpm.
- D. Application Criteria:
 1. Temperature range: -18 to 93 degrees C (0 to 200 degrees F) internal.
 2. Maximum working velocity: 4000 feet per minute.
 3. Minimum working pressure, inches of water gage: 2500 Pa (10 inches) positive, 500 Pa (2 inches) negative.
- E. Duct Clamps: 100 percent nylon strap, 175 pounds minimum loop tensile strength manufactured for this purpose or stainless steel strap with cadmium

plated worm gear tightening device. Apply clamps with sealant and as approved for UL 181, Class 1 installation.

F. Owens Corning INL-125, ATCO or approved.

2.4 FLEXIBLE DUCT CONNECTIONS

- A. Where duct connections are made to fans, air terminal units, and air handling units, install a non-combustible flexible connection of 29 ounce neoprene coated fabric approximately 6 inches wide. For connections exposed to sun and weather provide hypalon coating in lieu of neoprene. Burning characteristics shall conform to NFPA 90A. Securely fasten flexible connections to round ducts with stainless steel or zinc-coated iron draw bands with worm gear fastener. For rectangular connections, crimp fabric to sheet metal and fasten sheet metal to ducts by screws 2 inches on center. Fabric shall not be stressed other than by air pressure. Allow at least one inch slack to insure that no vibration is transmitted.
- B. Manufactured by Duro Dyne Corporation, Bay Shore, N.Y. or approved.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with provisions of Section 15010, particularly regarding coordination with other trades and work in existing buildings.
- B. Fabricate and install ductwork and accessories in accordance with referenced SMACNA Standards:
 - 1. Drawings show the general layout of ductwork and accessories but do not show all required fittings and offsets that may be necessary to connect ducts to equipment, boxes, diffusers, grilles, etc., and to coordinate with other trades. Fabricate ductwork based on field measurements. Provide all necessary fittings and offsets at no additional cost to the owner. Coordinate with other trades for space available and relative location of HVAC equipment and accessories on ceiling grid. Supply duct sizes on the drawings are inside dimensions which shall be altered by Contractor to other dimensions with the same air handling characteristics where necessary to avoid interferences and clearance difficulties.
 - 2. Provide duct transitions, offsets and connections to dampers, coils, and other equipment in accordance with SMACNA Standards, Section II. Provide streamliner, when an obstruction cannot be avoided and must be taken in by a duct. Repair galvanized areas with galvanizing repair compound.
 - 3. Provide bolted construction and tie-rod reinforcement in accordance with SMACNA Standards.
 - 4. Construct casings, eliminators, and pipe penetrations in accordance with SMACNA Standards, Chapter 6. Design casing access doors to swing against air pressure so that pressure helps to maintain a tight seal.
- C. Install duct hangers and supports in accordance with SMACNA Standards, Chapter 4.

- D. Flexible duct installation: Refer to SMACNA Standards, Chapter 3. Ducts shall be continuous, single pieces not over 5 feet long (NFPA 90A), as straight and short as feasible, adequately supported. Centerline radius of bends shall be not less than two duct diameters. Make connections with clamps as recommended by SMACNA. Clamp per SMACNA with one clamp on the core duct and one on the insulation jacket. Flexible ducts shall not penetrate floors, or any chase or partition designated as a fire or smoke barrier, including corridor partitions fire rated one hour or two hour. Support ducts SMACNA Standards.
- E. Where diffusers, registers and grilles cannot be installed to avoid seeing inside the duct, paint the inside of the duct with flat black paint to reduce visibility.
- F. Protection and Cleaning: Adequately protect equipment and materials against physical damage. Place equipment in first class operating condition, or return to source of supply for repair or replacement, as determined by owner's representative and Engineer. Protect equipment and ducts during construction against entry of foreign matter to the inside, contractor responsible for cleaning both inside and outside before operation and painting if not properly protected during construction. When new ducts are connected to existing ductwork, run system with filter media at the end of existing duct for minimum 8 hours at maximum airflow, remove filter media and attach new ductwork. When designated on drawings clean both new and existing ductwork by mopping and vacuum cleaning inside and outside before operation.

END OF SECTION

SECTION 15990

BALANCING OF AIR SYSTEMS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Requirements for testing, adjusting, and balancing of all air systems, including the associated equipment.
- B. The work includes setting speed and flow, adjusting equipment and devices installed for systems, recording data and recommending solutions to deficiencies in the installed system.

1.2 RELATED WORK

- A. Contract Drawings, Supplemental General Conditions, and Division 1.

1.3 SUBMITTALS

- A. Submit proof that the prepared testing, adjusting and balancing agency meet the specified requirements.
- B. Submit sample forms of the test reports that will be submitted by entity performing work of this Section, indicating all data and parameters included.
- C. Provide certified test reports, signed by the authorized representative of the testing and balancing firm. The reports shall be certified proof that the systems have been tested, adjusted and balanced in accordance with the selected reference standards (NEBB or AABC); are an accurate representation of how the systems are operating. Reports to include a minimum of:
 - 1. Design airflow compared to actual airflow.
 - 2. Model numbers and serial numbers.
 - 3. Amperage and voltage readings.
 - 4. Notes of any discrepancies.

1.4 QUALITY ASSURANCE

- A. The systems shall be tested, adjusted and balanced by mechanics regularly employed by an independent testing, adjusting and balancing Subcontractor. The testing, adjusting and balancing Subcontractor shall have a minimum of 3 years experience.
- B. The project supervisor shall be certified by the Associated Air Balance Council (AABC) or the National Environmental Balancing Bureau

(NEBB).

1.5 PERFORMANCE REQUIREMENTS

- A. Procedures, measurements, instruments and test reports for testing, adjusting and balancing work shall comply with all applicable Federal, State and Local laws, ordinances, regulations and codes, and the latest industry standards including, but not limited to the entities listed below:
 - 1. National Environmental Balancing Bureau (NEBB)
 - 2. Associated Air Balance Council (AABC)
- B. Balance systems to within 10% of design criteria. Coordinate with mechanical contractor to modify the systems as required to meet the 10% requirement.

1.6 JOB CONDITIONS

- A. The contractor shall furnish and install balancing dampers, pressure taps, gauges, valves, and other components as required for a properly balanced system, whether or not specified herein or shown on the Contract Drawings, all at no additional cost to the owner. Adjustment or replacement parts recommended by the testing and balancing specialist shall be made in strict accordance with the respective equipment manufacturer's recommendations.

PART 2 PRODUCTS

2.1 BALANCING EQUIPMENT

- A. Balance report to include equipment used by the balancing contractor, along with documentation of last calibration.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Balancing contractor responsible to provide all equipment required to perform balancing. Contractor is responsible for coordination of the controls system (existing standalone thermostats) in order to perform the balancing as required.
- B. Balancing contractor responsible for obtaining the Contract Documents and understanding the design concepts.
- C. Balancing contractor responsible for review of installation of mechanical systems noting any instances where the installation does not meet the standards as specified.

3.2 TESTING, ADJUSTING AND BALANCING

- A. Balancing contractor to record all equipment data.
- B. Record voltage and amperage readings
- C. Measure airflow at each supply diffuser and return grille for existing air handlers (typical of 3).
- D. Review correct operation of controls as system is tested in all modes.
- E. Permanently mark all settings
- F. Verify operation of all actuators and dampers in system.
- G. Record all data required and prepare report for O&M manuals
- H. Record existing minimum OSA set point for each existing air handling unit.
- I. Record discharge temperature of each air handler in both heating and cooling mode.
- J. Balance new grilles per contract documents, document existing conditions at existing grilles/registers.
- K. Balancer to document location of existing grilles and system serving on plan, no existing documentation exists, typical of three systems. Color code air handler with supply and return registers/grilles.

END OF SECTION

SECTION 16010

GENERAL ELECTRICAL REQUIREMENTS

PART 1 GENERAL

1.1 DESCRIPTION OF WORK

- A. Section 65010 details the general requirements for the Division 16 contractor for the installation of the electrical equipment and systems described in the Contract Documents.
- B. Division 16 contractor to provide labor, materials for a complete and operable system complying to all the conditions in the Contract Documents. Order of priority of Contract Documents are as follows:
 - 1. Change Orders
 - 2. Addendums
 - 3. Schedules
 - 4. Specifications
 - 5. Details
 - 6. Drawings
- C. Drawings are diagrammatic only, to show general arrangement of electrical equipment and accessories. Coordinate location of all electrical equipment with other trades prior to rough in. Provide necessary offsets or transitions as required to install the system in the space provided.
- D. Provide all required accessories for a complete and operable system as intended, review all manufacturer installation requirements prior to rough in. Notify engineer of any conflict between manufacturer's requirements and Contract Documents prior to proceeding with installation.
- E. Contractor to verify all installation requirements prior to ordering of equipment. Verify correct voltage, amperage, physical size, mounting, and access requirements prior to ordering. Notify engineer of discrepancies prior to ordering.
- F. Contractor to notify owner if asbestos is found on the project immediately. No materials containing asbestos are to be used on project.
- G. Contractor to submit for and obtain all permits required to perform the work as described. Contractor is responsible for the payment of the permits and coordination of all inspections required by the local authority having jurisdiction.
- H. Contractor to install all equipment and accessories in a professional manner, run race ways parallel to the building, install equipment plumb and level, with adequate access for maintenance. Provide

permanent plastic laminate labels with equipment identification matching Contract Documents.

- I. Contractor to provide seismic restraints for all equipment as required by the AHJ. Provide stamped structural calculations as required and submit to the AHJ as requested for approval. Provide all special inspections as required by the AHJ.
- J. It is the Contractor's responsibility to satisfy himself as to the nature and location of the work, the general conditions, availability of labor, water, electric power, roads, physical conditions at the site, the existing equipment to remain, existing equipment to be modified or to be removed, and all other matters which can in any way affect the work or the cost thereof under this contract. Any failure by the Contractor to acquaint himself with all available information will not relieve him of responsibility of successfully performing the work.
- K. This specifications and the electrical drawings size equipment, wire, conduit, etc. based on the horse powers of motors and voltage of equipment information available at the time of design and as shown on the plans or specified herein. The contractor is responsible to install wire, conduit, starters, or any other electrical equipment based on equipment actually furnished. The electrical Contractor shall not furnish or install any electrical raceways, conductors, safety switches, contactors, or motor starters of sizes smaller than those required by codes or shown on drawings, or specified in this specifications. The electrical contractor shall coordinate with various trades, and various sections of specifications to provide the properly sized equipment without additional cost to owner.

1.2 RELATED DOCUMENTS

- A. Division 16 contractor is bound by Division 1, Division 16, Supplemental General Conditions and the associated drawings.

1.3 REFERENCE STANDARDS

- A. Compliance with the codes and standards of the following organizations as applicable to the work being performed:
 - 1. Codes, Rules and Regulations of the State of Oregon.
 - 2. Local county/city Codes, Rules and Regulations
 - 3. NEMA
National Electrical Manufacturers Association
 - 4. FM
Factory Mutual
 - 5. NFPA
National Fire Protection Association
 - 6. ASTM
American Society for Testing Materials

7. UL
Underwriters Laboratories, Inc.
8. NEC
National Electrical Code
9. OSHA
Occupational Safety and Health Act
10. BSA
Board of Standards and Appeals
11. MEA
Materials and Equipment Acceptance
12. IES
Illuminating Engineering Society of North America

1.4 DEFINITIONS

- A. "Provide" means furnish and install, complete, with the specified material or equipment and perform all required labor to make a complete and functioning installation.
- B. "Install" means to provide labor and materials to receive, unload, assemble, place, mount, seismically brace, connect to all required services, clean, start-up, adjust and commission.
- C. "Clean" means to remove all debris, to wash inside and out with applicable cleaning solution and place back in service when completed.
- D. "Service" means to clean equipment, lubricate equipment per manufacturer, check for physical damage, verify correct grounding, verify connections and run equipment through all cycles and verify correct operation.
- E. "AHJ" Authority Having Jurisdiction.

1.5 PROTECTION

- A. Contractor is responsible for all electrical equipment and accessories until final completion of the project. Contractor to protect all electrical equipment and accessories provided from damage, theft, and contamination. Contractor is responsible for the repair/replacement of any damaged or stolen equipment or accessories. Contractor is responsible for cleaning any and all equipment contaminated before final completion.

1.6 CUTTING AND PATCHING

- A. Contractor to coordinate all required penetrations with other trades prior to rough in.
- B. Contractor is not to cut or notch any framing material without direction from engineer. Contractor will be required to repair/replace any

framing member damaged by cutting or notching if done so without prior approval.

- C. Contractor to patch all penetrations or wall coverings where equipment has been removed, replaced or abandoned to match the adjacent surface.

1.7 SUBMITTALS

- A. Provide submittals per Division 1 Submittals.
- B. The contractor shall submit prior to ordering or construction of the following equipment and accessories for review. Submittals to include shop drawings, equipment performance, equipment efficiencies, listings, coatings, accessories, warranties and supplier information. Submittals to note on first page any differences between specified item and submitted item.
 - 1. Conductors and raceways.
 - 2. Wiring Devices.
 - 3. Motor Starters.
 - 4. Panels
 - 5. Lighting fixtures

1.8 OPERATION AND MAINTENANCE MANUALS (O&M)

- A. O&M manuals to include submitted information.
- B. Manufacturer's factory start up forms completed as required for warranty. Warranty information for all equipment.
- C. Equipment suppliers contact information.
- D. Equipment service requirements and spare parts list.
- E. Record drawings showing all significant changes to the Contract Documents. Location of all electrical equipment access.
- F. Construction pictures, provide construction pictures showing location of all equipment and accessories covered up by building materials, such as but not limited to raceways in walls, above hard lid ceilings or connections/offsets not readily accessible. Label each picture and make note on as-built drawings of picture location.

1.9 SUBSTITUTIONS

- A. Contractor is required to provide substitution requests per Division 1, prior to bid closing. All substituted equipment or accessories must be of the same quality of the specified item, the contractor is responsible to verify all installation requirements prior to submission. All variations to the specified item is to be listed on the front page of the substitution request.

1.10 ACCESSIBILITY

- A. Contractor is to provide manufacturer's minimum access for all equipment provided.
- B. Contractor to provide adequate access to all valves, test ports, manual vents, gauges and controls for all equipment.
- C. Contractor responsible to coordinate installation of all panels, ceilings, doors for adequate access.
- D. Contractor responsible to maintain all access paths to new or existing equipment, raceways out of access paths.

1.11 DEMOLITION

- A. Contractor responsible for the removal of all equipment shown in the contract documents shown to be removed. Contractor to dispose of items off site.
- B. Contractor responsible for patching all surfaces exposed after demolition of any existing equipment to match the adjacent surface.
- C. Contractor responsible to remove all components associated with equipment being removed, including but not limited to controls, electrical back to nearest panel, and boxes.

1.12 RELOCATION

- A. Carefully remove, clean and restore items designated for relocation to a "like new" condition, and store them for reuse. Install items as designated on plans.

END OF SECTION

SECTION 16050
BASIC ELECTRICAL MATERIALS AND METHODS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section of the specification includes the furnishing, installation, connection and testing of the revised electrical system. It shall include, but not be limited to, coordination and installation of modified circuits, existing equipment relocation, interior lighting system with occupancy sensors meeting 2021 Oregon Energy Efficiency Specialty Code, systems for the building addition and components of the existing system as detailed on plans.
- B. The electrical system shall comply with the latest versions of the National Electrical Code, the 2021 Oregon Electrical Specialty Code, NFPA, ADA and the Illuminating Engineering Society of North America (IES) standards and recommendations.
- C. All components of the electrical system shall be provided and installed in strict conformance of Underwriters Laboratories Inc (UL) listings.

1.2 REFERENCES

- A. EIA/TIA 569A, Commercial Building Wiring Standard.
- B. Federal Communications Commission (FCC), Code of Federal Regulations, Part 68.
- C. National Electric Code (NEC).
- D. National Electrical Manufacturer's Association (NEMA).
- E. National Fire Protection Association (NFPA):
 - 1. NFPA 70: National Electrical Code (copyrighted by NFPA, ANSI approved) - hereinafter referred to as NEC.
- F. Underwriters Laboratory, Inc. (UL).

1.3 SUBMITTALS

- A. Submit under provisions in Division 1.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings: Provide diagrams, schematics of networked systems indicating system performance and identifying components with location.
 - 1. Panel Drawings: Submit dimensional drawings.
 - 2. One Line Diagrams: Submit one line diagrams of the system configuration proposed. Submit one line drawings indicating location and addresses of all hardware, including, but not limited to, panel board

- or load center, circuit breaker, MDP, lights, sensors, time clock and receptacles.
3. Wiring Diagrams: Submit wiring diagrams detailing power, signal, and control systems, clearly differentiating between manufacturers installed wiring and field installed wiring, and between components provided by the manufacturer and those provided by others.
 - a. Submit typical connection diagrams for all components including, but not limited to, panel boards, communications devices, sensors, and time clocks.
 4. Conduit, breakers and wiring as detailed in these specifications.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Installer shall be a licensed electrical firm that shall have minimum of 2 years documented successful installation experience with projects utilizing similar equipment that is required for this project.
- B. Product Requirements:
 1. Product shall be manufactured by an ISO 9001-2000 Certified facility.
 2. Product shall be free from defects in material or workmanship.
 3. Critical manufacturing processes of the product shall have documented in-process inspections and production testing according to ISO 9001-2000.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the Project site in supplier's or manufacturer's original wrappings and containers, labeled with supplier's or manufacturer's name, material or product brand name, and lot number, if any.
- B. Store materials in their original, undamaged packages and containers, inside a well ventilated area protected from weather, moisture, soiling, extreme temperatures, and humidity. Ambient temperature range between -22 degrees F to 131 degrees F (-30 degrees C to 55 degrees C). Ambient humidity range 0% to 95%, non-condensing.
- C. Store on a pallet or shelf elevated from the ground.

1.6 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.7 WARRANTY

- A. Provide manufacturer's standard warranty. Product is warranted free of defects in material or workmanship. Product is warranted to perform the intended

function within design limits.

- B. Field-applied paint coatings on raceway, boxes, plates or fittings shall be excluded from raceway manufacturer's warranty.
- C. Provide a one year warranty on parts and service.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer:
 - 1. Hubbell Wiring Devices-Kellems used for performance and standard reference.
 - 2. Lithonia Lighting used for performance and standard references.
 - 3. WattStopper Sensors used for performance and standard references.

2.2 GENERAL DEVICES

- A. Receptacles: UL Listed, CSA Certified. Black as selected from manufacturer's standard colors. All cover plates to be black with panel and circuit number labeled on face.
 - 1. Hubbell Specification Grade Commercial Series Receptacles:
 - a. Rating and Type: 15 & 20A 125V, 2P 3W, side and backed wired duplex receptacles, tamper resistant, CBRS15BLKWRTR Series. Match existing color.
 - 2. 4-Plex Receptacle Series:
 - a. Rating and Type: 15 & 20A 125V, 2P 3W 4-PLEX receptacles and accessories, HBL415 Series. Match existing color.
- B. Switches: UL Listed UL20, CSA Certified. Colors as selected from manufacturer's standard colors. All cover plates to match existing with panel and circuit number labeled on face.
 - 1. Specification Grade Commercial Series:
 - a. Rating and Type: 15A & 20A, 120-277V AC single pole through four-way, construction series toggle, back and side wired, CSB115 Series.
 - b. Rating and Type: 15A & 20A, 120-277V AC single pole through four-way, commercial series toggle, side wired only, CS320BLK Series.
- C. Ground Fault Products: UL Listed, CSA Certified. Colors as selected from manufacturer's standard colors. All cover plates to match existing with panel and circuit number labeled on face.
 - 1. Hubbell Industrial Tamper Resistant GFCI Series:
 - a. Rating and Type: 15 & 20A, 125V, 2P 3W grounding straight blade AUTOGUARD self test, tamper resistant industrial grade GFCI receptacles, GFR5262SG Series.
 - b. Rating and Type: 15 & 20A, 125V, 2P 3W grounding straight blade tamper resistant industrial grade GFCI receptacles,

GFR5262TR Series.

D. Lighting Fixtures Interior:

1. Per schedule on plans, or approved alternate.

E. Occupancy Sensors

1. Per schedule on plans, approved alternates Philips Lighting, Cooper Lighting or approved alternate.

2.3 ELECTRICAL DELIVERY SYSTEMS

A. Conduits:

1. Electric Metallic Tubing (EMT)
2. Minimum 1/2" conduit size, minimum #12 copper conductors THHN.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates and supporting structures have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify engineer of unsatisfactory preparation before proceeding.
- C. Review all equipment shown on mechanical plans, electrical contractor to verify correct voltage, phase and circuit size prior to equipment ordering and rough in. Coordinate with mechanical contractor all electrical requirements for mechanical equipment prior to purchasing and installation of electrical systems, including line voltage and low voltage control wiring.

3.2 INSTALLATION

- A. Install in strict accordance with the NEC, manufacturer's instructions and requirements indicated in specifications.
- B. Raceway system shall be free of open gaps and exposed uneven cuts.
- C. All outlets, boxes, and enclosures shall be fastened securely to walls or permanent structures.
- D. Verify power wires and data cables are separated by a physical barrier. Power wires and data cables shall not be combined in any channel.
- E. Contractor is not to cut or notch any structural member without prior approval from engineer.
- F. All low voltage wiring is to be concealed in EMT, in walls.
- G. Contractor to provide wiring supports for all low voltage above ceilings, wiring supports to be adequately sized for 30% additional wire capacity, locate to prevent sagging of wires.
- H. Contractor to provide low voltage raceway for all wiring exposed in electrical rooms, mechanical rooms or IT closets, provide for a minimum of 30% additional capacity.
- I. All low voltage connections are to be performed in a junction box with cover.

3.3 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

3.4 INSTRUCTION

- A. Instruction shall be provide on operation of system. Hands-on demonstration of the operation of occupancy sensors and time clocks shall be provided.
Demonstrate setting and adjusting of sensors and time clocks.

END OF SECTION

310 NORTHEAST KIRBY STREET REMODEL

FOR
YAMHILL COUNTY

535 NORTHEAST 5TH STREET

McMINNVILLE, OREGON 97128

ARCHITECT:
ARCHITECTURE, P.C.

Randal S. Saunders Architect/President
2225 COUNTRY CLUB RD. WOODBURN, OREGON 97071 (503) 982-1211 (503) 370-7929

MECHANICAL & ELECTRICAL ENGINEER:

CBD ENGINEERING LLC
35486 RIVERSIDE DRIVE SOUTHWEST ALBANY, OREGON 97121 (541) 619-1281 DAVID BACHMEIER, P.E.

BUILDING CODE INFORMATION:

- OCCUPANCY: B IBC/OSGC SECTION 3041 AND 306.3.
- CONSTRUCTION TYPE: V-B. IBC/OSGC TABLE 504.3.
- SINGLE STORY STRUCTURE.
- EXISTING GROSS AREA: 6,710 SQUARE FEET
- TOTAL: 91 OCCUPANTS
- B OCCUPANCY: 3,000 SQUARE FEET
- OCCUPANT LOAD: OFFICE = 91 OCCUPANTS

PROJECT DESCRIPTION:

PROJECT IS REMODELING OF AN EXISTING ONE STORY BUILDING OFFICE SPACE AT 310 NE KIRBY STREET FOR THE YAMHILL COUNTY PUBLIC HEALTH

REMODEL GENERAL NOTES:

- USE CARE AND CAUTION DURING DEMOLITION TO FIND, IDENTIFY, AND PRESERVE EXISTING UTILITIES. DO NOT DEMOLISH OR ABANDON EXISTING UTILITIES WITHOUT VERIFYING SERVICE FUNCTION AND PENDING NEED FOR THE REMODELED BUILDING.
- REROUTE EXISTING UTILITY LINES NECESSARY TO MAINTAIN EXISTING UTILITY SYSTEMS - EXTERIOR LIGHTING CONDUIT, WATER LINES, ETC. REROUTE WHEN THERE IS A CONFLICT WITH NEW CONSTRUCTION.
- PROTECT THE EXISTING BUILDING FROM DAMAGE DURING DEMOLITION. PROTECT INTERIOR FROM WEATHER INTRUSION. KEEP EXISTING BUILDING CLEAN AND FREE FROM DEMOLITION WORK DEBRIS.
- REMOVE DEMOLISHED MATERIALS FROM SITE. VERIFY WITH OWNER PRIOR TO START OF DEMOLITION WORK ANY SALVAGED MATERIALS DESIRED BY OWNER.
- COORDINATE AND SCHEDULE DEMOLITION WORK WITH BUILDING TENANT (IF ANY) TO MAINTAIN BUILDING ACCESS/EGRESS AT ALL TIMES.
- NOTIFY ADJACENT BUILDING TENANTS OF ANY UTILITY OUTAGES MINIMUM 12 HOURS PRIOR TO THE OCCURRENCE.
- WHERE INTERIOR DEMOLITION REQUIRES FLOOR FINISH REMOVAL REMOVE FLOORING THROUGHOUT THE WHOLE SPACE - NO SPLICING/REPAIRING OF FLOORING IN MID-ROOM UNLESS SPECIFICALLY NOTED OTHERWISE.
- WHERE INTERIOR DEMOLITION REQUIRES WALL FINISH REMOVAL COMPLETE SUCH WORK WITH NEAT AND CLEAN WORKMANSHIP. LEAVE DEMOLITION SO NEW AND EXISTING CONSTRUCTION CAN INTERFACE WITH NO DISTINCTION BETWEEN THE TWO. PATCH, REPAIR AND FINISH FLOOR SURFACE WHERE WALLS ARE REMOVED IN PREPARATION FOR NEW FLOOR FINISH OVER EXISTING SURFACE.
- WHERE INTERIOR DEMOLITION REQUIRES CEILING REMOVAL COMPLETE SUCH WORK WITH NEAT AND CLEAN WORKMANSHIP. LEAVE DEMOLITION SO NEW AND EXISTING CONSTRUCTION CAN INTERFACE WITH NO DISTINCTION BETWEEN THE TWO.
- ANY DAMAGE RESULTING FROM WORK OF THIS PROJECT SHALL BE PATCHED, REPAIRED, AND FINISHED TO A CONDITION EQUAL TO OR EXCEEDING CONDITIONS BEFORE WORK BEGAN.
- FIXTURES AND FINISHES REMOVED TO FACILITATE INSTALLATION OF WORK OF THIS PROJECT SHALL BE STORED TO PREVENT DAMAGE AND REINSTALLED IN ITS ORIGINAL LOCATION UNLESS NOTED OTHERWISE. DAMAGED FIXTURES SHALL BE REPLACED WITH LIKE FIXTURES AT NO COST TO THE OWNER.
- PROTECT ADJACENT BUILDING MATERIALS AND SURFACES FROM DAMAGE DUE TO WORK OF THIS PROJECT. DAMAGE REPAIR SHALL BE COMPLETED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- PROTECT EXISTING VENTILATION OPENINGS FROM PLUGGING OR DAMAGE DUE TO WORK OF THIS PROJECT.
- PROTECT EXISTING HVAC DUCTING FROM DAMAGE DUE TO WORK OF THIS PROJECT. REPAIR OR REPLACE ANY DAMAGE TO A CONDITION EQUAL TO OR BETTER THAN EXISTED PRIOR TO THE WORK OF THIS PROJECT. DAMAGE REPAIR SHALL BE COMPLETED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- PROTECT EXISTING SPACES ABOVE EXISTING CEILING FROM DAMAGE DUE TO WORK OF THIS PROJECT. REPAIR OR REPLACE ANY DAMAGE TO A CONDITION EQUAL TO OR BETTER THAN EXISTED PRIOR TO THE WORK OF THIS PROJECT. DAMAGE REPAIR SHALL BE COMPLETED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- PROTECT EXISTING PIPING AND/OR PIPING INSULATION FROM DAMAGE DUE TO WORK OF THIS PROJECT. REPAIR OR REPLACE ANY DAMAGE TO A CONDITION EQUAL TO OR BETTER THAN EXISTED PRIOR TO THE WORK OF THIS PROJECT. DAMAGE REPAIR SHALL BE COMPLETED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- ACCESS THROUGH SUSPENDED CEILING IS TO BE MADE BY REMOVAL OF CEILING TILES ONLY TO THE GREATEST EXTENT POSSIBLE. EXISTING SUSPENSION GRID TO REMAIN IN PLACE UNLESS NOTED OTHERWISE.
- TAKE CARE DURING ALL ASPECTS OF WORK DURING THIS PROJECT TO PROTECT ADJACENT SURFACES AND AREAS NOT PART OF THE WORK OF THIS PROJECT FROM DAMAGE OR DISRUPTION. ANY DAMAGE OR DISRUPTION TO EXISTING SURFACES AND AREAS SHALL BE REPLACED, PATCHED, REPAIRED, REFINISHED, OR OTHERWISE RESTORED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER, TO A CONDITION EQUAL TO OR BETTER THAN EXISTED PRIOR TO COMMENCEMENT OF WORK OF THIS PROJECT.

DRAWN BY: AK
CHECKED: RSB
APPROVED: RSB

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310 NORTHEAST KIRBY STREET REMODEL



REVISIONS

A PROFESSIONAL CORPORATION

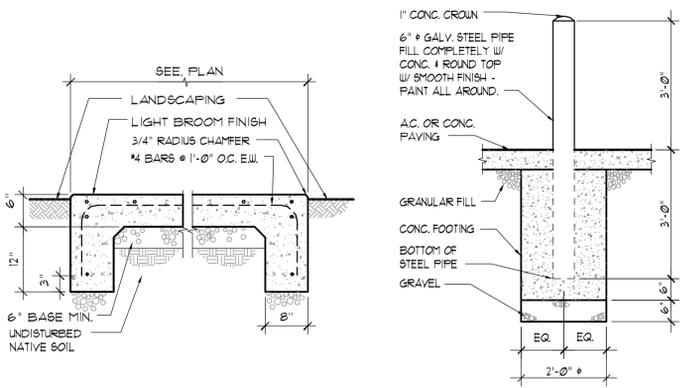
2225 COUNTRY CLUB ROAD WOODBURN, OREGON 97071 (503) 982-1211

PROJECT NO.: 23.05
DATE: MARCH 2023
DRAWING NO.: A1.0

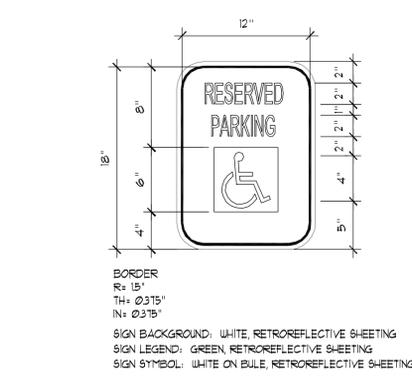
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FOR YAMHILL COUNTY

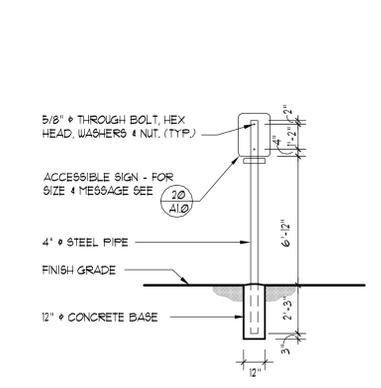
535 NORTHEAST 5TH STREET



28 GENERATOR PAD
3/4" = 1'-0"

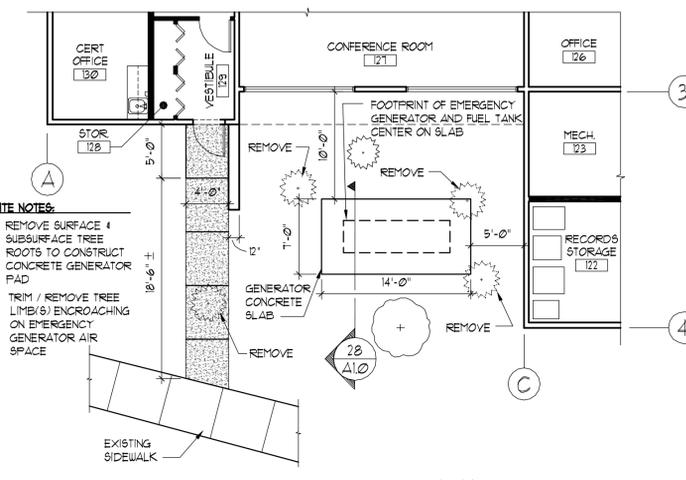


24 BOLLARD DETAIL
1/2" = 1'-0"

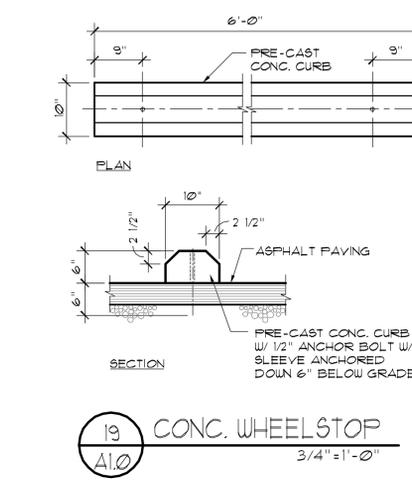


20 ACCESSIBLE SIGN
1 1/2" = 1'-0"

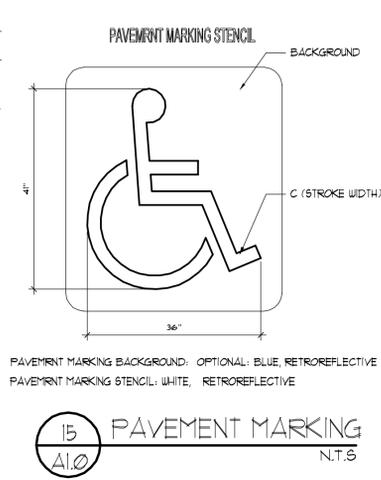
16 PARKING SIGN ACCESSIBLE
1/4" = 1'-0"



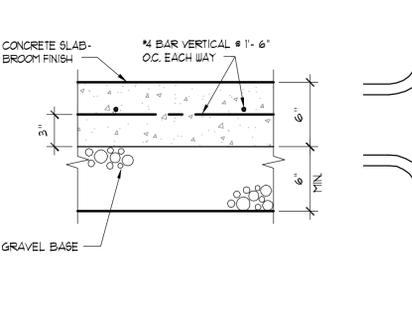
27 PARTIAL SITE PLAN
1/8" = 1'-0"



19 CONC. WHEELSTOP
3/4" = 1'-0"



15 PAVEMENT MARKING
N.T.S.

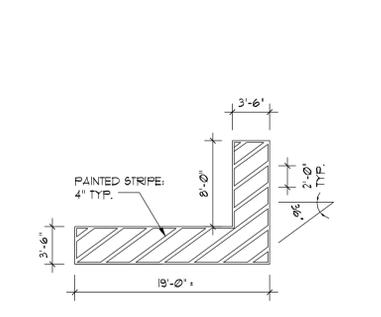


26 TRASH ENCL. SLAB
1 1/2" = 1'-0"

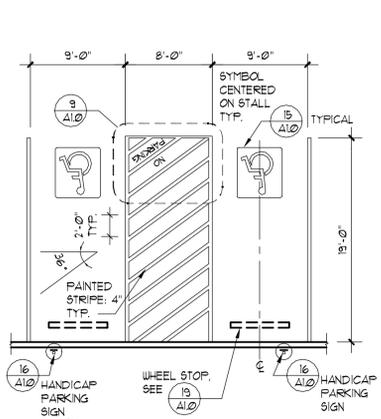


25 ASPHALT DETAIL
3/4" = 1'-0"

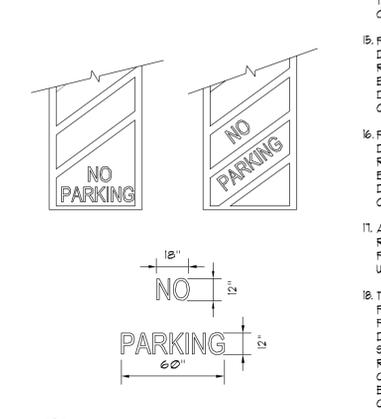
21 SITE PLAN
1" = 40'-0"



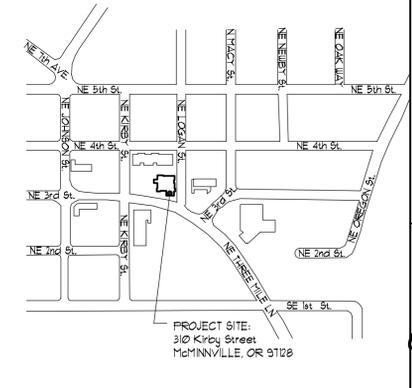
14 PAINTED STRIPE ACCESSIBLE
N.T.S.



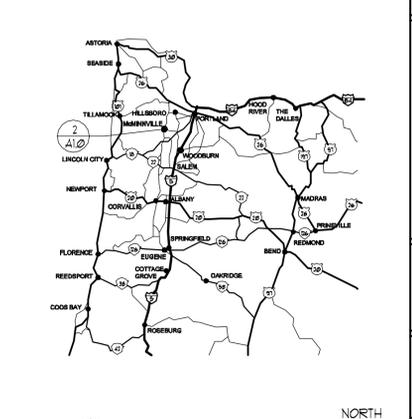
13 HANDICAP PARKING SIGN ACCESSIBLE
N.T.S.



9 PAVEMENT MARKING
N.T.S.



2 VICINITY MAP
N.T.S.



1 AREA MAP
N.T.S.

PLOT DATE/TIME: DATE 02/22/2023 TIME 15:32 FILE SITE PLAN PROJECT INFORMATION

DRAWN BY : AK
 CHECKED : RSB
 APPROVED : RSB

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FOR
 YAMHILL COUNTY
 310 NORTHEAST KIRBY STREET REMODEL
 535 NORTHEAST 5TH STREET
 McMinnville, Oregon 97128



REVISIONS

NO.	DESCRIPTION

A PROFESSIONAL CORPORATION

2225 COUNTRY CLUB ROAD
 WOODBURN, OREGON 97071
 (503) 982-1211

PROJECT NO.: 23.05
 DATE: MARCH 2023
 DRAWING NO.: A.1.1

DOOR SCHEDULE

LOCATION	DOOR										FRAME			REMARKS		
	NO.	SIZE		TYPE	CORE	MATERIAL	FINISH	GLASS	RATG	MATERIAL	FINISH	DETAIL				
		WIDTH	HEIGHT									THICK	HEAD		JAMB	SILL
ENTRY 100	1					EXISTING	NO WORK	REQUIRED	SEE	REMARKS						
CORRIDOR 104	2	3'-0"	6'-8"	1 3/4"	A	SC	WD.	SGE	T	HM	SGE	8/A12	12/A12			
EXAM 102	3					EXISTING										
EXAM 103	4															
MEN 105	5															
WOMEN 106	6															
STORAGE 107	7															
LAB 109	8															
OFFICE 110	9															
OFFICE 111	10															
OFFICE 112	11															
CORRIDOR 113	12					EXISTING										
OFFICE 114	13	3'-0"	6'-8"	1 3/4"	A	SC	WD.	T	HM	SGE	8/A12	12/A12				
OFFICE 115	14	3'-0"	6'-8"	1 3/4"	A	SC	WD.	T	HM	SGE	8/A12	12/A12				
OFFICE 116	15					EXISTING										
OFFICE 117	16															
MEN 118	17															
WOMEN 119	18															
BREAK ROOM 120	19															
CLOSET 121	20					EXISTING										
RECORDS 122	21	3'-0"	6'-8"	1 3/4"	B	SC	WD.	T	HM	SGE	8/A12	12/A12				
MECH 123	22					EXISTING										
OFFICE 125	23															
OFFICE 126	24															
CONFERENCE 126	25					EXISTING										
	26							NOT USED								
CERT OFFICE 130	27	3'-0"	6'-8"	1 3/4"	A	SC	WD.	SGE	T	HM	SGE	8/A12	12/A12			
OFFICE 131	28															
CERT OFFICE 135	29															
RECEPTIONIST 136	30	3'-0"	6'-8"	1 3/4"	A	SC	WD.	SGE	T	HM	SGE	8/A12	12/A12			
	31							NOT USED								
	32							NOT USED								
CERT OFFICE 137	33	3'-0"	6'-8"	1 3/4"	A	SC	WD.	SGE	T	HM	SGE	8/A12	12/A12			
CLOSET 134	34															
CERT OFFICE 133	35															
CORRIDOR 132	36															
STORAGE 129	37															
STORAGE 129	38															
VISITABLE 128	39	3'-0"	6'-8"	1 3/4"	B	SC	MTC	SGE	T	HM	SGE	4/A12	3/A12	2/A12		

FINISH SCHEDULE

NO.	ROOM NAME	FLOOR	WALLS						CEILING			REMARKS			
			NORTH		EAST		SOUTH		WEST		MATERIAL		SLF	HT	
			MATL	FIN	MATL	FIN	MATL	FIN	MATL	FIN					
100	ENTRY	VP	ME			XGB	SLP	XGB	SLP	(E)	SLP	(E)	SLP	(E)	1
101	LOBBY	VP	ME			XGB	SLP	XGB	SLP	(E)	SLP	(E)	SLP	(E)	1 3
102	EXAM	SV		(E)		(E)		(E)		SLP	(E)	SLP	(E)	SLP	1 2
103	EXAM	SV		(E)		(E)		(E)		SLP	(E)	SLP	(E)	SLP	1 2
104	CORRIDOR	CPT	ME			SLP	SLP	XGB	SLP	XGB	SLP	SLP	SLP	SLP	1 3
105	MEN	(E)	(E)			SGE	SGE	SGE	(E)	SGE	(E)	SGE	SGE	SGE	1 3
106	WOMEN	(E)	(E)			SGE	SGE	(E)	SGE	(E)	SGE	SGE	SGE	SGE	1 3
107	STORAGE	(E)	(E)			SLP	SLP	(E)	SLP	SLP	SLP	SLP	SLP	SLP	1 3
108	CORRIDOR	CPT	ME												1
109	LAB	SV				(E)	SLP	(E)	SLP	(E)	SLP	(E)	SLP	(E)	1 2
110	OFFICE	CPT	ME												1
111	OFFICE														1
112	OFFICE					(E)		(E)		SLP					1
113	CORRIDOR			(E)				XGB							1 3
114	OFFICE			XGB		(E)		(E)		XGB	SLP				1 3
115	OFFICE			XGB		GB		XGB		XGB					1 3
116	OFFICE			(E)		(E)		(E)		(E)					1
117	OFFICE	CPT	ME			SLP	SLP	SLP	SLP	SLP	SLP	SLP	SLP	SLP	1
118	WOMEN	(E)	(E)			SGE	SGE	SGE	SGE	SGE	SGE	SGE	SGE	SGE	1
119	MEN	(E)	(E)			SGE	SGE	SGE	SGE	SGE	SGE	SGE	SGE	SGE	1
120	BREAK ROOM			SLP		SLP	SLP	SLP	SLP	SLP	SLP	SLP	SLP	SLP	1
121	CLOSET			(E)											1
122	RECORDS/STOR			XGB											(E)
123	MECH.	(E)	(E)			SLP		XGB							(E)
124	CORRIDOR	CPT	ME					(E)		(E)					SLP
125	OFFICE			(E)		SLP	(E)			XGB					1 3
126	OFFICE			(E)		(E)		(E)		(E)					1 3
127	CONF. ROOM			XGB		XGB				(E)					1 3
128	VISITABLE					(E)				XGB					1 3
129	STORAGE					XGB		XGB		XGB					1
130	CERT OFFICE					XGB		(E)		(E)					1 3
131	OFFICE	CPT	ME	XGB	SLP	XGB		(E)	SLP	(E)	SLP	(E)	SLP	(E)	1 3
132						NOT USED									
133	CERT OFFICE	CPT	ME	XGB	SLP	XGB		XGB	SLP	XGB	SLP	(E)	SLP	(E)	1
134	CLOSET									XGB					1
135	CERT OFFICE									(E)					1
136	RECEPTIONIST					XGB				(E)					1 3
137	CERT OFFICE					(E)		XGB		XGB					1 3
138	OFFICE OPEN SPACE					(E)	SLP	(E)	XGB	(E)	XGB	(E)	SLP	(E)	1 3
139	HEALTH RECEPTION	CPT	ME	XGB	SLP	XGB		(E)	SLP	(E)	SLP	(E)	SLP	(E)	1 3

DOOR SCHEDULE ABBREVIATIONS

HM: HOLLOW METAL (E) EXISTING
 MTL: METAL RBR: RUBBER
 PT: PAINT WD: WOOD
 SC: SOLID CORE
 ST: STAIN & SEAL
 CON: CONCRETE

DOOR SCHEDULE KEY NOTES

1 MATCH DOOR FINISH WITH THAT OF EXISTING ADJACENT DOORS.
 2 FOR DOOR TYPE SEE (25/A1.1)

FINISH SCHEDULE ABBREVIATIONS

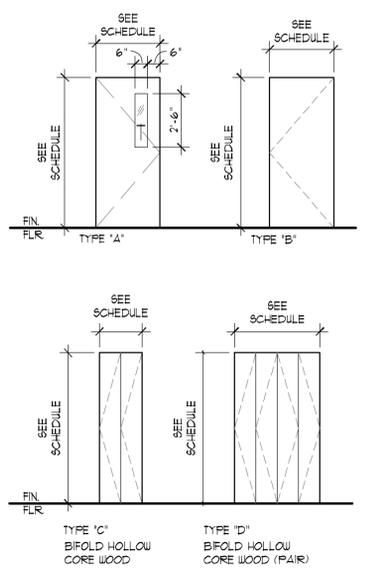
CPT CARPET
 (E) EXISTING
 ME REPLICATE/ MATCH EXISTING BASE
 SLP SATN LATEX PAINT
 SGE SEMI-GLOSS ENAMEL PAINT
 SV SHEET VINYL
 VP VINYL PLANK
 XGB 5/8" TYPE X GYPSUM BOARD

FINISH SCHEDULE GENERAL NOTES

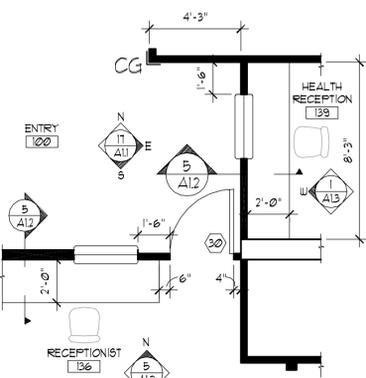
1 REMOVE EXISTING FLOOR FINISH.
 2 PATCH, REPAIR, AND REFINISH EXISTING WALL TO A CONDITION EQUAL TO OR BETTER THAN EXISTED PRIOR TO WORK OF THIS PROJECT.
 3 MATCH EXISTING ADJACENT WALL TEXTURE.

WALL TYPES:

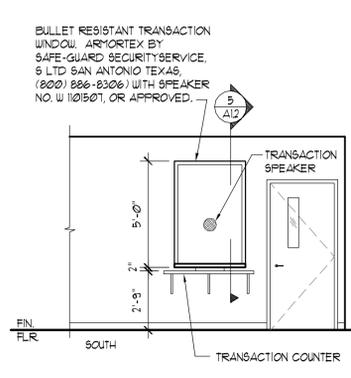
(A) 2x4 WOOD STUDS AT 1'-4" ON CENTER / SOUND BATT IN STUD SPACES / 5/8" TYPE 'X' GYPSUM BOARD ON BOTH SIDES (FROM FINISH FLOOR TO 3" ABOVE FINISH CEILING)
 (B) 2x6 WOOD STUDS AT 1'-4" ON CENTER WITH SOUND BATT INSULATION IN STUD SPACES / 5/8" TYPE 'X' WATER RESISTANT GYPSUM BOARD ON PLUMBING SIDE / 5/8" TYPE 'X' GYPSUM BOARD ON OTHER SIDE (FROM FINISH FLOOR TO 3" ABOVE FINISH CEILING)



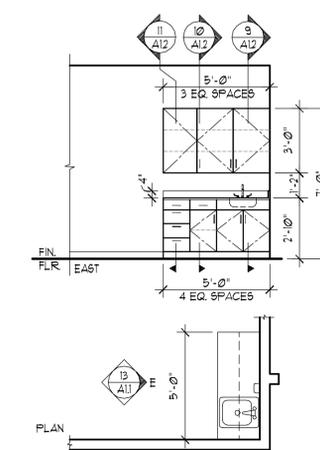
25 DOOR TYPES
 1/4" = 1'-0"



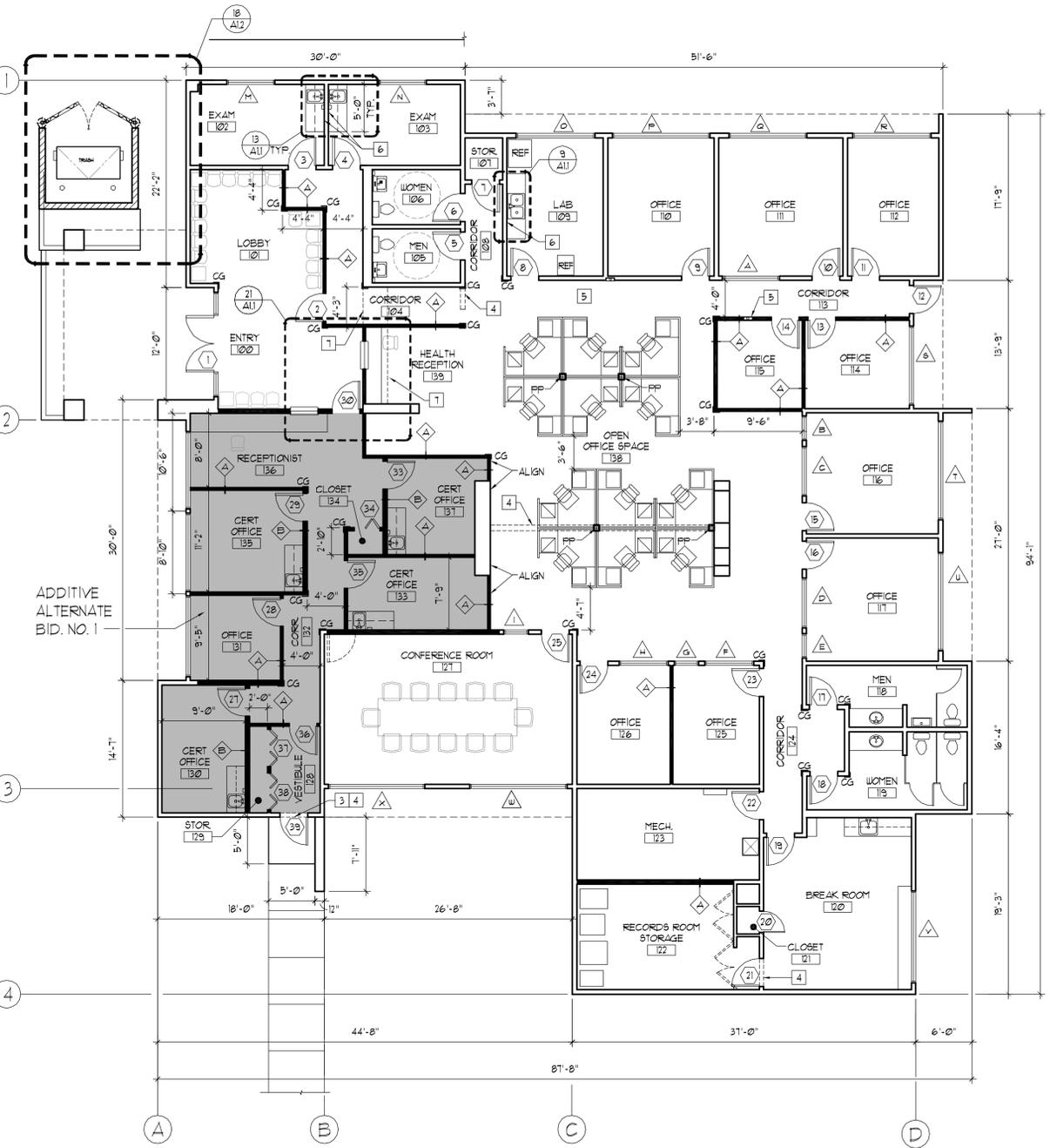
21 RECEPTION PLAN
 1/4" = 1'-0"



17 RECEPTION
 1/4" = 1'-0"



13 EXAM ROOM ELEV.
 1/4" = 1'-0"



6 FLOOR PLAN
 1/8" = 1'-0"

FLOOR PLAN GENERAL NOTES:

- DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. WHERE DIMENSION ARE NOT PROVIDED, NOTIFY ARCHITECT.
- NOTIFY THE ARCHITECT IMMEDIATELY OF DISCREPANCIES IN DRAWINGS AND/OR SPECIFICATIONS.
- VERIFY LOCATION OF UTILITIES PRIOR TO DEMOLITION.
- ITEMS TO BE REMOVED INDICATED WITH DASHED LINE.
- FOR TYPICAL WALL TO FLOOR CONNECTION SEE (25/A1.1)
- PROVIDE SOLID BLOCKING IN WALLS FOR ALL KITCHEN CABINETS AND ANY OTHER FIXTURES THAT REQUIRE SUPPORT FROM FRAMING.

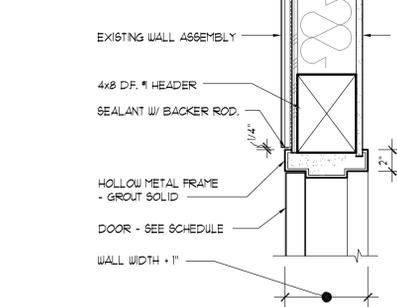
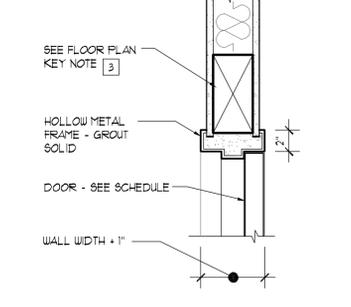
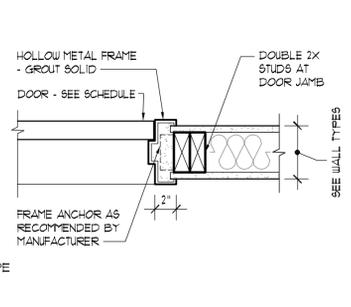
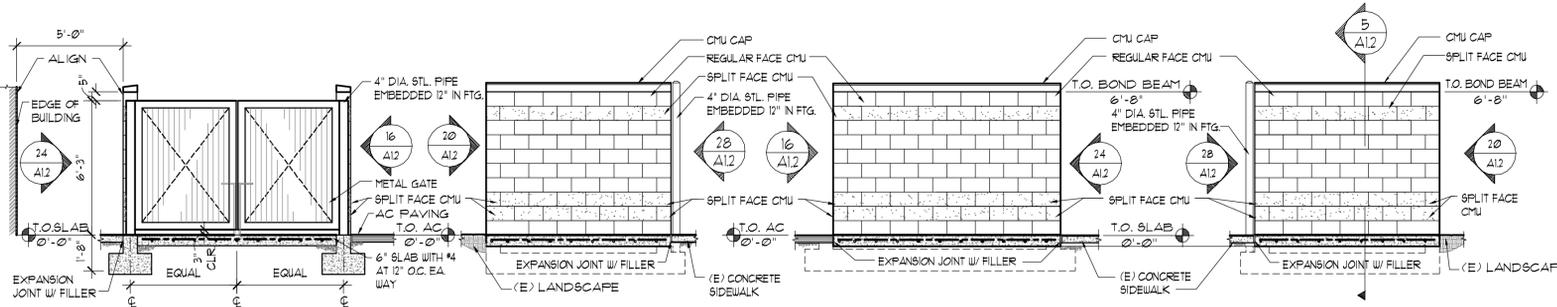
FLOOR PLAN KEY NOTES:

- NOT USED
- NOT USED
- 4x8 D.F.#1 OR BETTER WOOD HEADER AT DOOR OPENING WITH (2) WOOD STUDS ON EACH SIDE OF OPENING.
- REMOVE INDICATED SECTION OF EXISTING WALL FOR NEW OPENING.
- FIRE EXTINGUISHER CABINET - SEE (1/A1.2)
- PATCH, REPAIR, AND REFINISH WALL TO A CONDITION EQUAL TO OR BETTER THAN EXISTED PRIOR TO START OF WORK OF THIS PROJECT.
- REMOVE EXISTING TRANSACTION COUNTER

LEGEND

	NEW WALL
	EXISTING WALL TO REMAIN
	EXISTING WALL TO BE REMOVED
	EXISTING DOOR AND FRAME TO REMAIN
	EXISTING DOOR AND FRAME TO BE REMOVED
	CORNER GUARD (CG)
	ROOM NAME / NUMBER
	DOOR REFERENCE NUMBER
	WALL TYPE INDICATOR
	SEE WINDOW SCHEDULE, SHEET A1.3
	KEY NOTE
	INTERIOR ELEVATION REFERENCE
	POWER POLE - SEE ELECTRICAL DRAWINGS

PLOT DATE/TIME: DATE: 02/22/2023 TIME: 15:38 FILE DETAILS: SCHEDULES: RCP



28 TRASH ENCL. ELEV. 1/4" = 1'-0"

24 TRASH ENCL. ELEV. 1/4" = 1'-0"

20 TRASH ENCL. ELEV. 1/4" = 1'-0"

16 TRASH ENCL. ELEV. 1/4" = 1'-0"

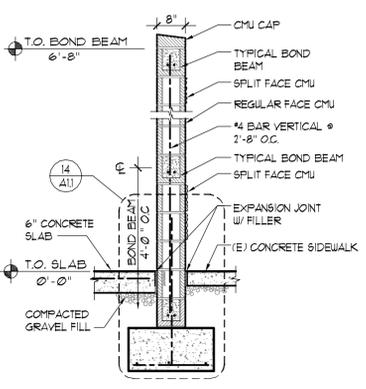
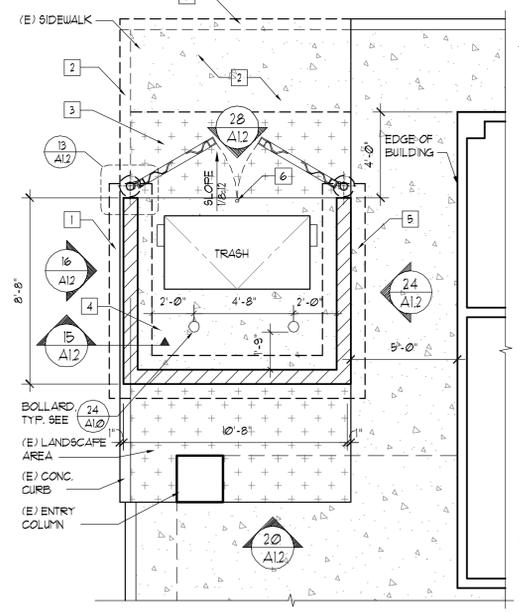
12 INT. DOOR JAMB 1 1/2" = 1'-0"

8 INT. DOOR HEAD 1 1/2" = 1'-0"

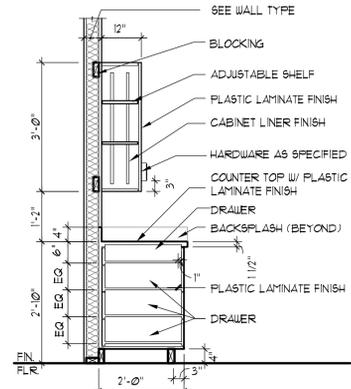
4 EXT. DOOR HEAD 1 1/2" = 1'-0"

CMU GENERAL NOTES
 ALL CMU WALLS SHALL BE GROUTED SOLID.
 PROVIDE ONE #4 VERTICAL BARS IN GROUTED CELLS FOR FULL WALL HEIGHT AT EACH EDGE OF ALL OPENINGS, AT ENDS OF WALLS, AND AT WALL INTERSECTIONS.
 PROVIDE A CONTINUOUS BOND BEAM AT TOP AND BOTTOM AT 4'-0" ON CENTER VERTICALLY IN WALL HEIGHT.
 BOND BEAM: TWO #4 HORIZONTAL REINFORCING BARS CONTINUE AT EACH BOND BEAM.
 ALL VERTICAL CMU REINFORCING AT SHALL BE LAPPED WITH MATCHING DOVELS AT FOUNDATION, UNLESS NOTED/ DETAILED OTHERWISE.
 LAP ALL HORIZONTAL BARS 50 BAR DIAMETERS AND VERTICAL BARS 40 BAR DIAMETERS UNLESS INDICATED OTHERWISE.
 ALL HORIZONTAL BARS SHALL BE CONTINUOUS AROUND CORNERS. REINFORCING SHALL BE EXTENDED THROUGH AND LAPPED ON THE OPPOSITE FACE OF THE CONTINUOUS WALL.

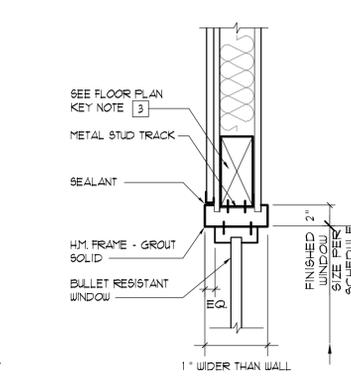
- TRASH ENCLOSURE KEY NOTES**
- PATCH REPAIR & RETURN ASPHALT TO A CONDITION EQUAL TO OR BETTER THAN EXISTED PRIOR TO WORK OF THIS PROJECT.
 - REMOVE EXISTING CURB AND SIDEWALK, PROVIDE/ INSTALL ASPHALT - SEE (25) A1.2
 - REMOVE EXISTING LANDSCAPING AND CURB, PROVIDE/ INSTALL ASPHALT - SEE (25) A1.2 9M.
 - NEW CONCRETE PAD INSIDE TRASH ENCLOSURE WALLS. - SEE (26) A1.2
 - PATCH REPAIR & RETURN CONCRETE SIDEWALK TO A CONDITION EQUAL TO OR BETTER THAN EXISTED PRIOR TO WORK OF THIS PROJECT.
 - 1" DIA x 6" LONG GALVANITE PIPE EMBEDDED IN CONCRETE FOR CANEBOLT



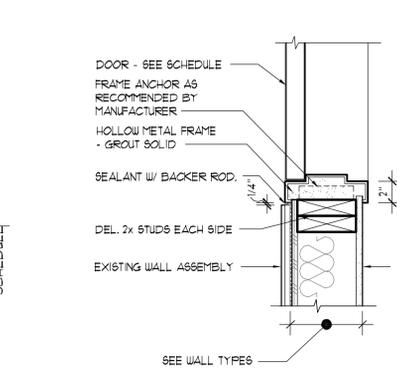
15 TRASH ENCL. WALL 1/2" = 1'-0"



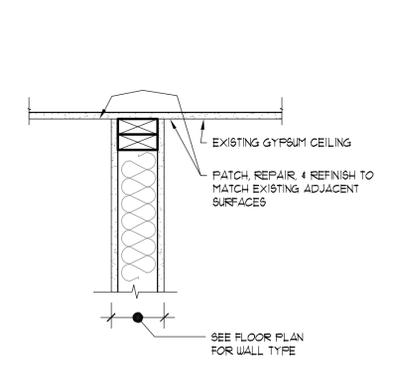
11 CABINET SECTION 1/2" = 1'-0"



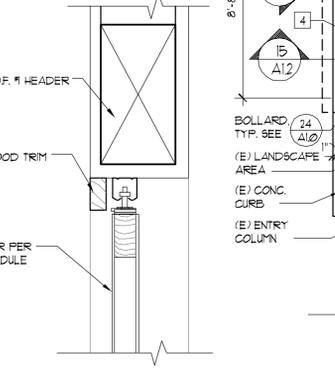
7 HEAD DETAIL 1 1/2" = 1'-0"



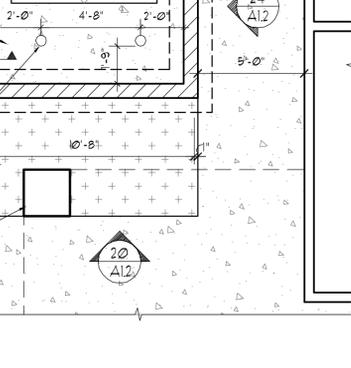
3 EXT. DOOR JAMB 1 1/2" = 1'-0"



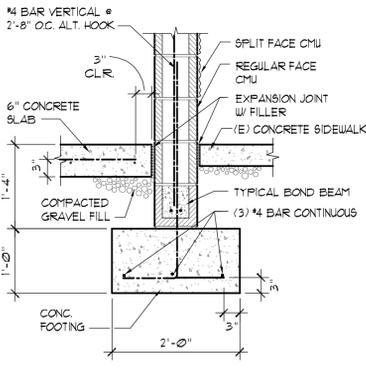
26 WALL HEAD 1 1/2" = 1'-0"



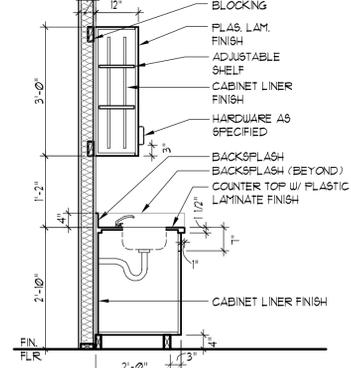
22 BIFOLD DOOR HEAD 3 1/2" = 1'-0"



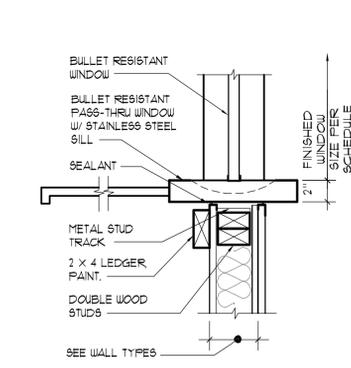
14 TRASH ENCL. FTG. 3/4" = 1'-0"



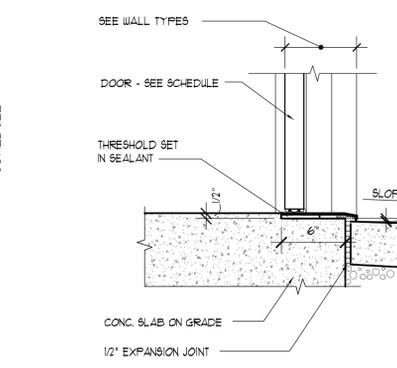
14 TRASH ENCL. FTG. 3/4" = 1'-0"



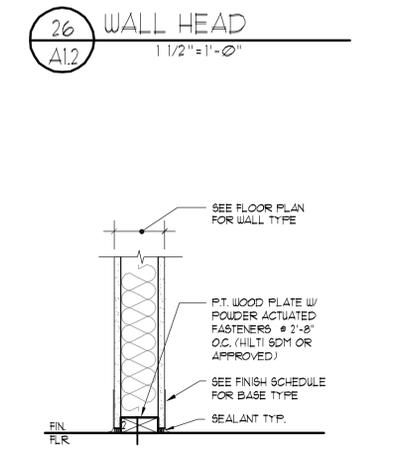
10 CABINET SECTION 1/2" = 1'-0"



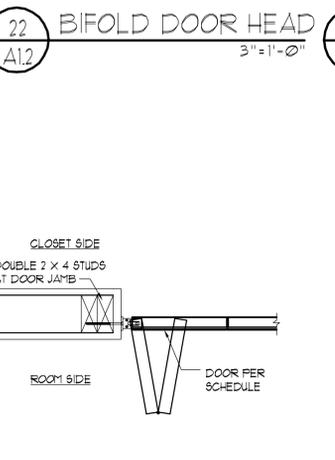
6 SILL DETAIL 1 1/2" = 1'-0"



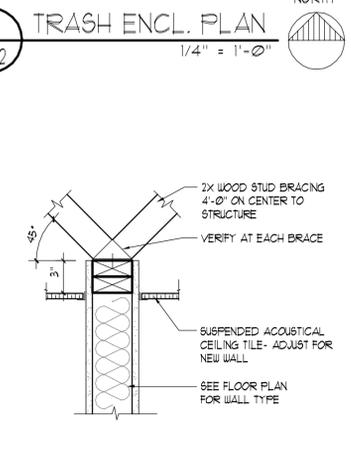
2 EXT. THRESHOLD 1 1/2" = 1'-0"



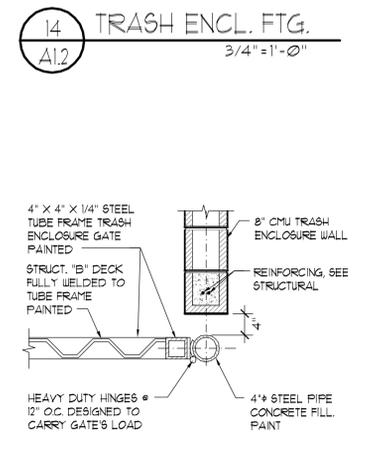
25 WALL FLR. CONN. 1 1/2" = 1'-0"



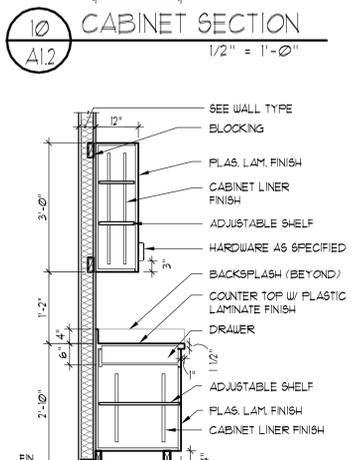
21 BIFOLD DOOR JAMB 1 1/2" = 1'-0"



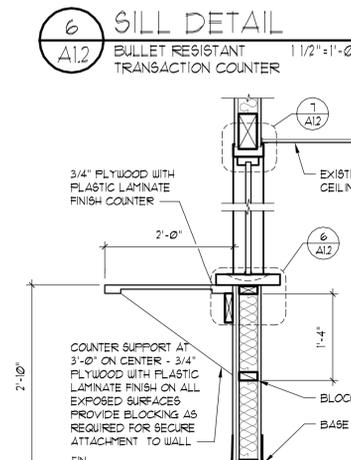
17 WALL BRACING 1 1/2" = 1'-0"



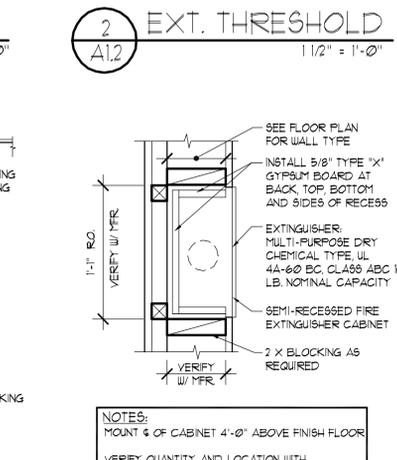
13 TRASH ENCL. JAMB 3/4" = 1'-0"



9 CABINET SECTION 1/2" = 1'-0"



5 RECEPTION DETAIL 3/4" = 1'-0"



1 FIRE EXTINGUISHER 1 1/2" = 1'-0"

NOTES:
 MOUNT # OF CABINET 4'-0" ABOVE FINISH FLOOR
 VERIFY QUANTITY AND LOCATION WITH JURISDICTION HAVING AUTHORITY

310 NORTHEAST KIRBY STREET REMODEL
 FOR
 YAMHILL COUNTY
 535 NORTHEAST 5TH STREET
 McMinnville, Oregon 97128



REVISIONS

A PROFESSIONAL CORPORATION

2225 COUNTRY CLUB ROAD
 WOODBURN, OREGON 97071
 (503) 982-1211

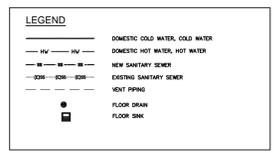
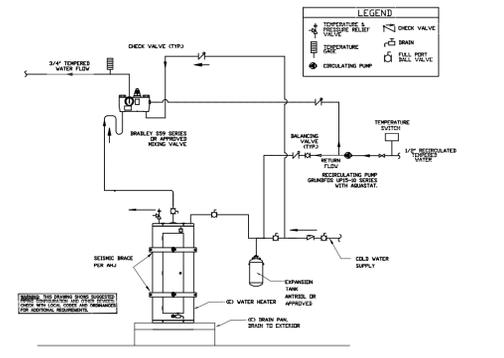
PROJECT NO.: 23.05
 DATE: MARCH 2023
 DRAWING NO.: A1.2

PLOT DATE/TIME: DATE: 02/22/2023 TIME: 15:38 FILE: DETAILS_SCHEDULES_RCP

DESIGNATION	FIXTURE TYPE	C.W.	H.W.	SAN/WASTE	VENT	MANUFACTURER	MODEL	HARDWARE	NOTES:
S-1	SINK	1/2"	1/2"	1 1/2"	1 1/2"	ELKAY	LRAD151755	CHICAGO 2302-ABCP	1,2,3
S-2	SINK	1/2"	1/2"	1 1/2"	1 1/2"	ELKAY	DLR332210	ELKAY LKGT1041	1,2,3

1. FIXTURE INSTALLATION TO COMPLY WITH THE LATEST ADA REQUIREMENTS.
 2. PROVIDE WITH INTEGRAL SHUT OFF STOP.
 3. PROVIDE WITH PROFLO TWO PIECE P-TRAP AND SUPPLY COVERS.

GENERAL NOTE:
 A. PROVIDE ANGLE STOPS OR SHUT OFF VALVES AT ALL FIXTURES
 B. VERIFY ALL REQUIREMENTS WITH AHJ PRIOR TO ORDERING AND ROUGH IN.
 C. ALL FIXTURES TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS
 D. INSTALL UNDER COUNTER WALL CLEAN OUTS AT ALL SINKS

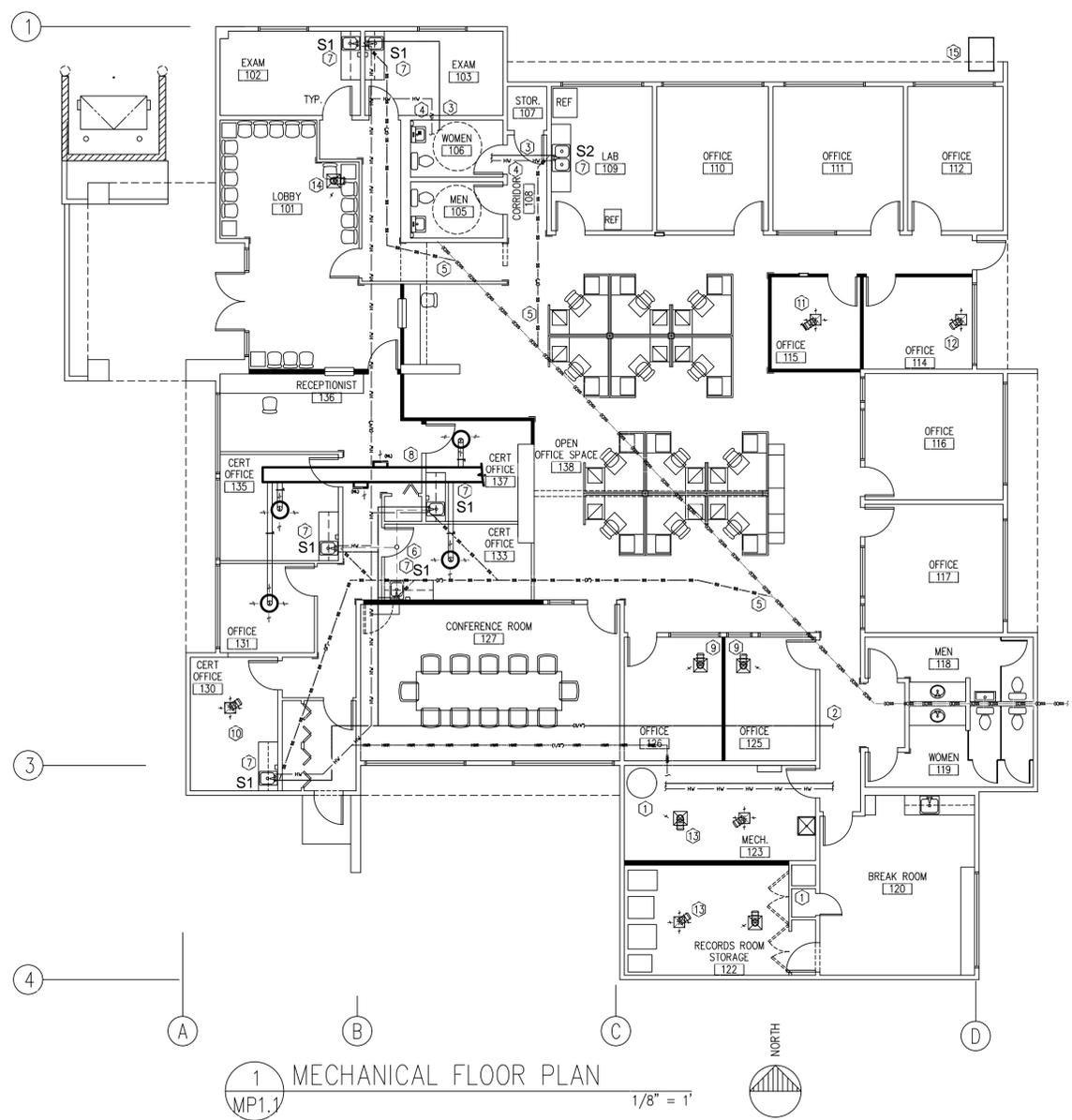


GENERAL NOTES

- THE LOCATION AND SIZES OF EXISTING WATER, SEWER AND ELECTRICAL DEVICES ARE SHOWN IN ACCORDANCE WITH DATA SECURED FROM THE SITE AND AS BUILT DRAWINGS. DATA SHOWN IS OFFERED AS AN ESTIMATING GUIDE WITHOUT GUARANTEE OF ACCURACY; CONTRACTOR SHALL CHECK AND VERIFY ALL DATA GIVEN. THIS CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THE EXACT LOCATION OF ALL SYSTEM COMPONENTS PERTAINING TO THEIR WORK.
- CONTRACTOR TO INSTALL ALL FIXTURES PER MANUFACTURER'S REQUIREMENTS. PROVIDE ALL NECESSARY COMPONENTS FOR A COMPLETE AND OPERATING SYSTEM. INSTALL FIXTURES PER LATEST ADA REQUIREMENTS WHERE APPLICABLE AND AUTHORITY HAVING JURISDICTION.
- CONTRACTOR TO VERIFY ALL WATER PIPING TO BE LOCATED ON WARM SIDE OF BUILDING INSULATION. ALL WATER PIPING TO BE INSULATED PER SPECIFICATIONS, OPSC AND OREGON ENERGY CODE.
- CONTRACTOR IS NOT TO CUT, DRILL OR NOTCH ANY BEAMS PRIOR TO WRITTEN APPROVAL FROM ARCHITECT.
- CONTRACTOR RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF ALL CEILING TILES TO PERFORM WORK. CONTRACTOR RESPONSIBLE FOR REPLACEMENT OF ANY CEILING TILES MARRED OR DAMAGED DURING COURSE OF WORK.
- CONTRACTOR RESPONSIBLE FOR OPENING UP WALLS TO INSTALL NEW PLUMBING AND ELECTRICAL. CONTRACTOR RESPONSIBLE FOR REPLACEMENT OF WALLS BACK TO CONDITION OF WALL PRIOR TO WORK.

1/MP1.1 PLAN NOTES

- CONTRACTOR TO RELOCATE EXISTING WATER HEATER, REINSTALL IN NEW LOCATION PER DETAIL 3 THIS SHEET. PROVIDE MIXING VALVE, EXPANSION TANK, CIRCULATION PUMP PER DETAIL, COORDINATE WITH ELECTRICAL CONTRACTOR FOR RELOCATION OF CIRCUIT AND CIRCUIT FOR CIRCULATION PUMP. EXTEND 3/4" HOT AND COLD WATER FROM EXISTING LOCATION TO NEW LOCATION. ROUTE 3/4" PAN DRAIN OUT TO EXTERIOR OF BUILDING. TERMINATE 12" ABOVE GRADE IN FLOWER BED. PROVIDE SUPPORT FOR WATER HEATER AS REQUIRED TO INSTALL PAN DRAIN.
- CONTRACTOR TO CONNECT NEW 3/4" COLD WATER SUPPLY TO 3/4" OR LARGER COLD WATER SUPPLY EXTEND TO NEW SINKS AS SHOWN.
- CONTRACTOR TO CONNECT 3/4" COLD WATER SUPPLY TO 3/4" OR LARGER COLD WATER SUPPLY, EXTEND TO NEW SINKS AS SHOWN.
- CONTRACTOR TO CONNECT 3/4" HOT WATER SUPPLY TO 3/4" OR LARGER HOT WATER SUPPLY, EXTEND TO NEW SINKS AS SHOWN. CONTRACTOR TO PROVIDE 3/4" HOT WATER RETURN PIPING BACK TO RELOCATED WATER HEATER.
- CONTRACTOR TO SAW CUT FLOOR TO INSTALL SANITARY DRAIN BELOW GRADE TO NEW SINKS, INSTALL DRAIN AT 1/4" PER FOOT FALL IN DIRECTION OF FLOW. CONTRACTOR TO FIELD VERIFY DEPTH AND CONNECTION POINT TO EXISTING 4" SANITARY SEWER MAIN. NOTIFY ARCHITECT OF ANY MODIFICATIONS TO THE PLANS PRIOR TO PERFORMING WORK. CONTRACTOR RESPONSIBLE FOR PATCH AND REPAIR OF ALL WALLS AND FLOORS.
- CONTRACTOR TO CONNECT NEW SINK VENTS INTO COMMON 2" VENT THROUGH ROOF. MAINTAIN 10' FROM ANY OSA INTAKE.
- CONTRACTOR TO INSTALL NEW SINK PER SCHEDULE THIS SHEET, PROVIDE HOT WATER, COLD WATER, SANITARY SEWER AND VENT FOR A COMPLETE AND OPERABLE SYSTEM, ALL SINKS TO BE INSTALLED TO MEET CURRENT ADA REQUIREMENTS.
- CONTRACTOR TO EXTEND EXISTING 16" (FIELD VERIFY) EXPOSED ROUND DUCT INTO NEW OFFICE, RELOCATE EXISTING DIFFUSERS INTO EXISTING OPEN OFFICE SPACE. PROVIDE NEW 6" SPIRAL DUCT WITH BALANCING DAMPER TO NEW TITUS 6" TMR DIFFUSER OR APPROVED, FOR OFFICES 131, 133 AND 137 (SET TO 100 CFM). PROVIDE NEW 8" SPIRAL DUCT WITH BALANCING DAMPER TO NEW TITUS 8" TMR DIFFUSER OR APPROVED, FOR OFFICE 15 (SET TO 150 CFM). CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR TO UNDER CUT DOORS FOR RETURN AIR TRANSFER.
- CONTRACTOR TO REMOVE EXISTING RETURN GRILLE, SPLIT RETURN INTO TWO SEPARATE 8" DUCTS, EXTEND ONE DUCT ON EITHER SIDE OF NEW WALL, INSTALL WITH BALANCING DAMPER, BALANCE EACH TO MATCH EXISTING SUPPLY TO THE ROOM.
- CONTRACTOR TO RELOCATE EXISTING SUPPLY GRILLE INTO NEW OFFICE AREA, MAINTAIN EXISTING BALANCE. COORDINATE WITH GENERAL CONTRACTOR TO UNDER CUT DOOR FOR RETURN AIR TRANSFER.
- CONTRACTOR TO LOCATE EXISTING SUPPLY DUCT SERVING EXTERIOR REGISTER, PROVIDE NEW 6" SUPPLY TO NEW SUPPLY TO OFFICE MATCHING EXISTING 6x9" SUPPLY REGISTER, PROVIDE WITH BALANCING DAMPER SET TO 100 CFM. COORDINATE WITH GENERAL CONTRACTOR TO UNDER CUT DOOR FOR RETURN AIR TRANSFER.
- CONTRACTOR TO SET EXISTING REGISTER TO 100 CFM, COORDINATE WITH GENERAL CONTRACTOR TO UNDERCUT DOOR FOR RETURN AIR TRANSFER.
- CONTRACTOR TO RELOCATE EXISTING RETURN AND SUPPLY IN MECHANICAL ROOM TO PROVIDE A SINGLE SUPPLY AND SINGLE RETURN IN MECHANICAL ROOM AND STORAGE ROOM.
- CONTRACTOR TO RELOCATE EXISTING RETURN GRILLE FROM NEW HALLWAY TO LOBBY, MAINTAIN EXISTING BALANCING.
- CONTRACTOR TO PROVIDE WATTS OR APPROVED 2" REDUCED PRESSURE BACKFLOW DEVICE ON THE INCOMING DOMESTIC WATER SERVICE. INSTALL ABOVE GROUND PER LOCAL AHJ REQUIREMENTS. PROVIDE DRAIN TO DAYLIGHT ABOVE AN APPROVED DRY WELL, OR APPROVED AHJ LOCATION. PROVIDE MANUFACTURER'S INSULATED LOCKABLE PROTECTIVE COVER. CONTRACTOR TO FIELD VERIFY LOCATION OF DOMESTIC WATER SERVICE, CONTRACTOR TO LOCATE REDUCE PRESSURE BACKFLOW DEVICE IN A LOCATION APPROVED BY OWNER AND ARCHITECT PRIOR TO INSTALLATION.



PLOT DATE/TIME: DATE: 02/22/2023 TIME: 15:38 FILE: DETAILS, SCHEDULES, RCP

DRAWN BY : AK
 CHECKED : RSS
 APPROVED : RSS

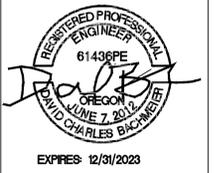
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310 NORTHEAST KIRBY STREET REMODEL

FOR YAMHILL COUNTY

MCMINNVILLE, OREGON 97128

535 NORTHEAST 5TH STREET

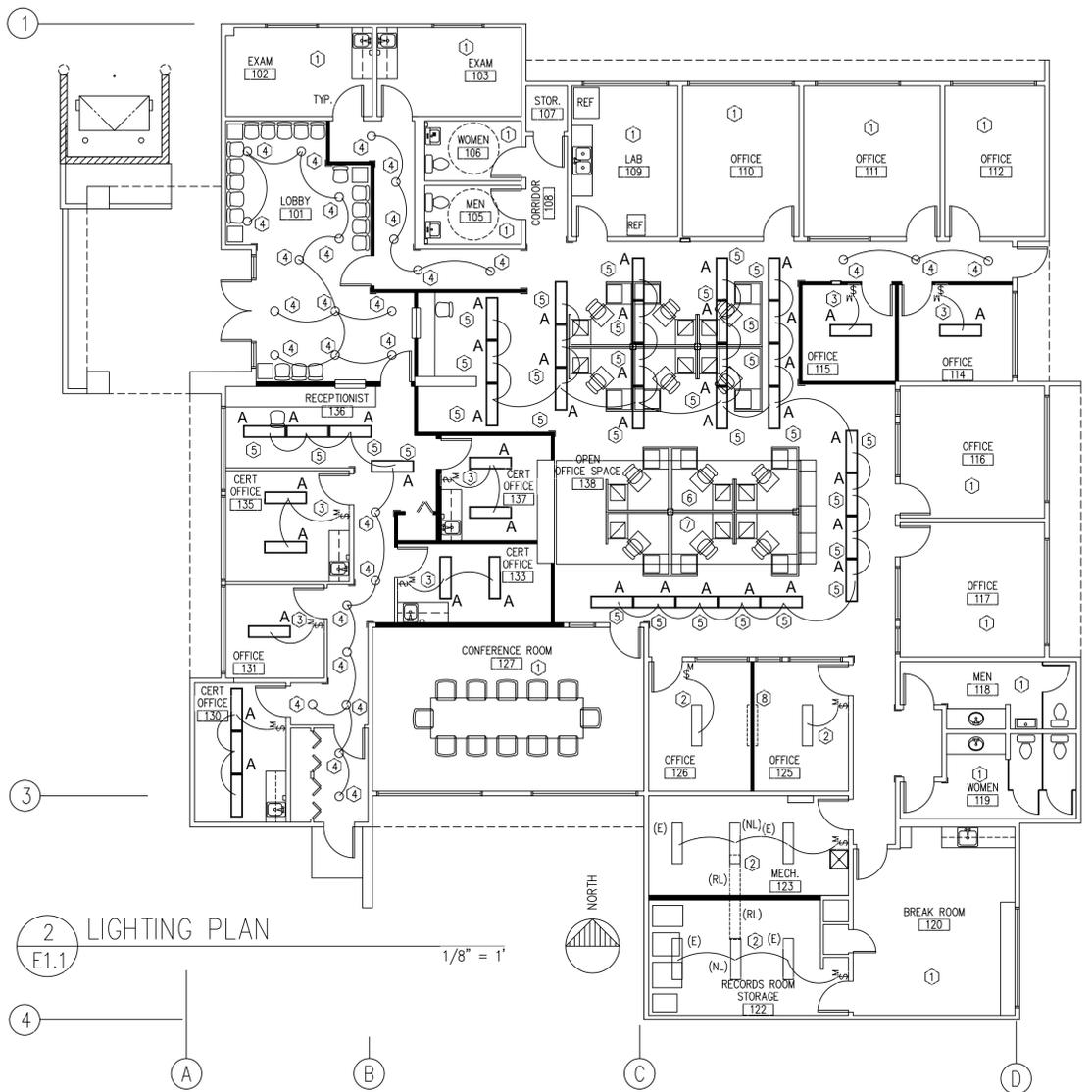
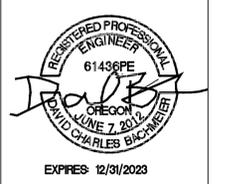


REVISIONS

A PROFESSIONAL CORPORATION

2225 COUNTRY CLUB ROAD
 WOODBURN, OREGON 97071
 (503) 982-1211

PROJECT NO.: 23.05
 DATE: MARCH 2023
 DRAWING NO.: MP1.1



2 LIGHTING PLAN
 E1.1
 1/8" = 1'

- 2/E1.1 LIGHTING PLAN NOTES**
- MAINTAIN EXISTING LIGHTING FIXTURES, SWITCHING AND CIRCUITING IN THIS AREA, NO LIGHTING WORK UNDER THIS CONTRACT.
 - CONTRACTOR TO RELOCATE (RL) EXISTING LIGHT FIXTURE TO NEW LOCATION (NL), PROVIDE NEW ACQUITY BRANDS WSX PDT OR APPROVED WALL DUAL TECHNOLOGY OCCUPANCY SENSOR. MODIFY EXISTING LIGHTING CIRCUIT TO SWITCH ROOM LIGHTING FIXTURES THROUGH OCCUPANCY SENSOR.
 - CONTRACTOR TO PROVIDE NEW LIGHT FIXTURE PER SCHEDULE. PROVIDE NEW ACQUITY BRANDS WSX PDT OR APPROVED WALL DUAL TECHNOLOGY OCCUPANCY SENSOR. MODIFY EXISTING LIGHTING CIRCUIT TO SWITCH ROOM LIGHTING FIXTURES THROUGH OCCUPANCY SENSOR.
 - CONTRACTOR TO RELOCATE EXISTING CAN LIGHTING FROM OPEN OFFICE AREA TO NEW HALL, CIRCUIT THROUGH AREA LIGHTING CIRCUIT, SWITCH THROUGH WATSTOPPER LP6S-6-115 PEANUT PANEL FOR AUTOMATIC LIGHTING CONTROL. LOCATE PEANUT PANEL IN MECHANICAL ROOM NEAR PANEL. PROVIDE SWITCH LOCATED BY RECEPTION FOR 2 HOUR OVERRIDE OF LIGHTING TIME CLOCK.
 - CONTRACTOR TO PROVIDE NEW FIXTURE PER SCHEDULE THIS SHEET, CIRCUIT THROUGH AREA LIGHTING CIRCUIT, SWITCH THROUGH WATSTOPPER LP6S-6-115 PEANUT PANEL FOR AUTOMATIC LIGHTING CONTROL. LOCATE PEANUT PANEL IN MECHANICAL ROOM NEAR PANEL. PROVIDE SWITCH LOCATED BY RECEPTION FOR 2 HOUR OVERRIDE OF LIGHTING TIME CLOCK.
 - CONTRACTOR TO CONNECT EXISTING LIGHTING FIXTURES IN COMMON AREAS TO NEW PEANUT PANEL, SET SCHEDULE PER OWNER'S REPRESENTATIVE.
 - CAN LIGHTING TO REMAIN IN LOWER CEILING, MODIFY CIRCUIT TO FEED THROUGH PEANUT PANEL IN MECHANICAL ROOM.
 - REMOVE EXISTING FIXTURE LOCATED IN AREA OF NEW WALL.

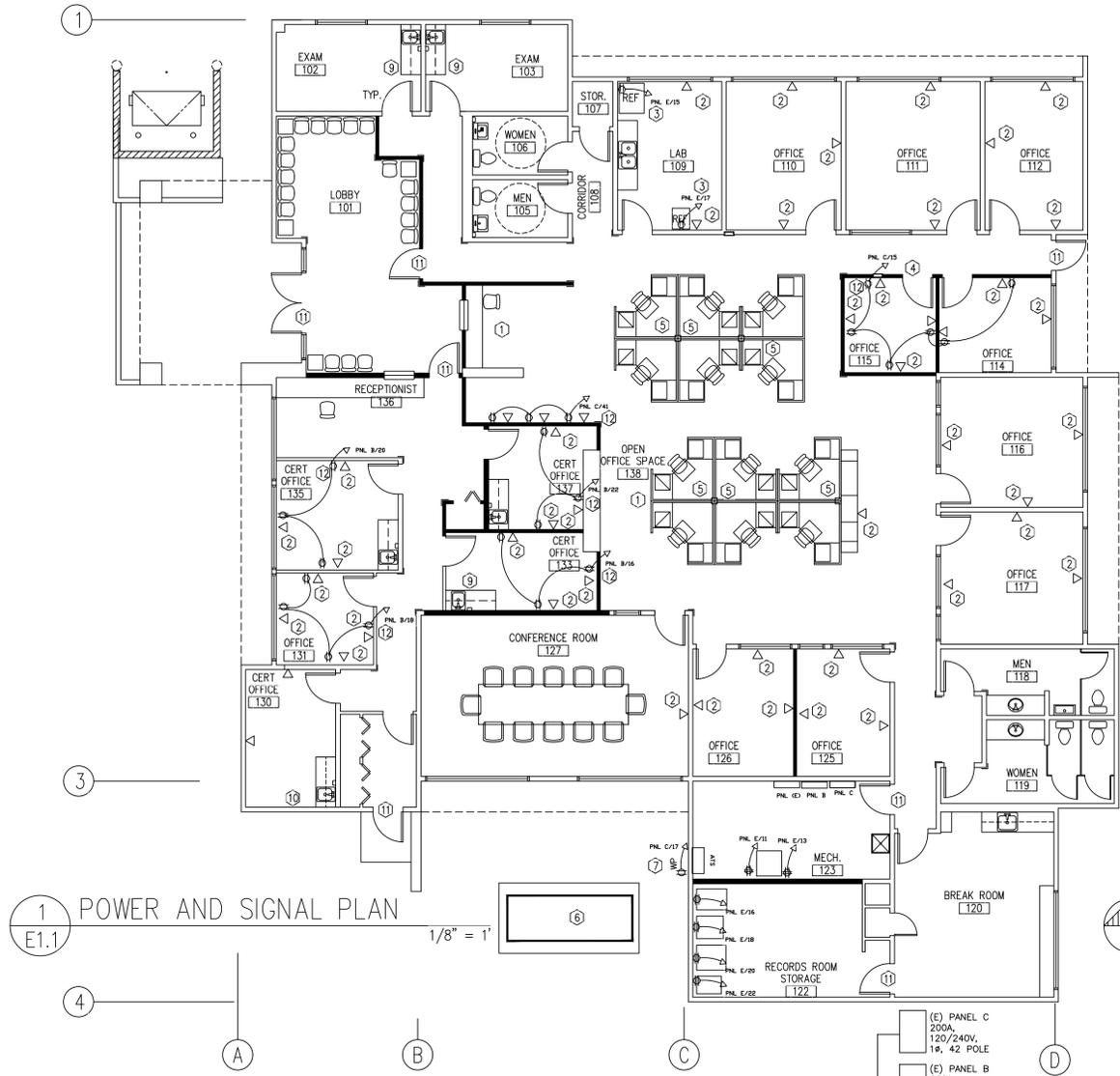
Luminaire Schedule

Label	Manufacturer	Catalog Number	Description	Lamp	Wattage
A	PEERLESS	100RML LLP 80CRI SBL 35K L700LMF 1000LMF MINI MVOLT SCT C210	CERRA 10 INDIRECT/DIRECT LED	LED	15/FT
G	Lithonia Lighting	ECB LED (AIMED DOWN)	EXIT UNIT COMBO WITH INTEGRATED LIGHT BAR (LIGHT BAR ON ONLY)	LED	2.32

GENERAL NOTES

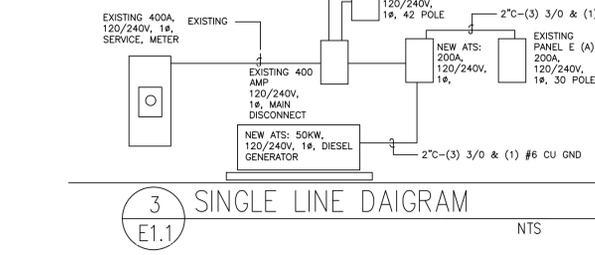
- THE LOCATION AND SIZES OF EXISTING WATER, SEWER AND ELECTRICAL DEVICES ARE SHOWN IN ACCORDANCE WITH DATA SECURED FROM THE SITE AND AS BUILT DRAWINGS. DATA SHOWN IS OFFERED AS AN ESTIMATING GUIDE WITHOUT GUARANTEE OF ACCURACY. CONTRACTOR SHALL CHECK AND VERIFY ALL DATA GIVEN. THIS CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THE EXACT LOCATION OF ALL SYSTEM COMPONENTS PERTAINING TO THEIR WORK.
- CONTRACTOR TO INSTALL ALL FIXTURES PER MANUFACTURER'S REQUIREMENTS, PROVIDE ALL NECESSARY COMPONENTS FOR A COMPLETE AND OPERATING SYSTEM. INSTALL FIXTURES PER LATEST ADA REQUIREMENTS WHERE APPLICABLE AND AUTHORITY HAVING JURISDICTION.
- CONTRACTOR IS NOT TO CUT, DRILL OR NOTCH ANY BEAMS PRIOR TO WRITTEN APPROVAL FROM ARCHITECT.
- CONTRACTOR RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF ALL CEILING TILES TO PERFORM WORK. CONTRACTOR RESPONSIBLE FOR REPLACEMENT OF ANY CEILING TILES MARRED OR DAMAGED DURING COURSE OF WORK.
- CONTRACTOR RESPONSIBLE FOR OPENING UP WALLS TO INSTALL NEW ELECTRICAL. CONTRACTOR RESPONSIBLE FOR REPLACEMENT OF WALLS BACK TO CONDITION OF WALL PRIOR TO WORK.
- CONTRACTOR TO REMOVE EXISTING LIGHTING FIXTURES IN AREAS WHERE NEW FIXTURES ARE INSTALLED. CONTRACTOR TO PATCH CEILING TO MATCH ADJACENT CEILING.
- CONTRACTOR TO CERTIFY ALL EXISTING AND NEW DATA DROPS, PROVIDE LABELING AT EACH CABLE END.
- CONTRACTOR TO LABEL EACH RECEPTACLE WITH PANEL AND CIRCUIT NUMBER, TYPICAL NEW AND EXISTING.

- ELECTRICAL/MECHANICAL KEY**
- DUPLX RECEPTACLE OUTLET @ 18" A.F.F. U.N.D.
 - DUAL TECHNOLOGY OCCUPANCY SENSOR WALL MOUNTED
 - DUPLX RECEPTACLE OUTLET W/ GROUND FAULT CIRCUIT INTERRUPTER
 - WEATHER PRDF DUPLX RECEPTACLE OUTLET (GFI PROTECTED PER NEC210-8(a)(3))
 - 2 PORT DATA JACK, LABEL PER OWNER.
 - 4-PLEX RECEPTACLE OUTLET
 - HOME RUN, PANEL /BREAKERS



1 POWER AND SIGNAL PLAN
 E1.1
 1/8" = 1'

- 1/E1.1 POWER AND SIGNAL PLAN NOTES**
- CONTRACTOR TO REMOVE EXISTING POWER AND DATA FROM REMOVED WALL, REMOVE ALL CABLING/CONDUCTORS BACK TO SOURCE. PROVIDE NEW CONDUCTORS ON CIRCUITS THAT CONTINUE THROUGH TO ADDITIONAL RECEPTACLES. REFER TO ARCHITECTURAL PLANS FOR REMOVED WALLS.
 - CONTRACTOR TO PROVIDE NEW 2 PORT DATA JACK, PROVIDE CAT6 CABLING BACK TO SERVER RACK RELOCATED TO MECHANICAL ROOM 123. CONTRACTOR RESPONSIBLE TO OPEN UP WALL TO INSTALL CABLING, PATCH WALL TO A CONDITION EQUAL TO OR BETTER THEN CONDITION PRIOR TO PERFORMING WORK.
 - CONTRACTOR TO PROVIDE NEW DEDICATED RECEPTACLE, CIRCUIT AS CALLED OUT ON PLAN.
 - CONTRACTOR TO PROVIDE NEW RECEPTACLES, CIRCUIT THROUGH EXISTING PANEL C SPARE CIRCUIT.
 - CONTRACTOR TO PROVIDE LEGRAND 250TP SERIES OR APPROVED POWER POLE WITH (3) DUPLX RECEPTACLES AND 4 DATA PORTS, PROVIDE (1) POWER POLE PER EVERY (2) WORKSTATIONS SHOWN. (TYPICAL OF (3) POWER POLES PER WORKSTATION GROUP. CIRCUIT THROUGH PANEL B CIRCUITS 31,33,35,37,39 AND 41.
 - CONTRACTOR TO PROVIDE 50KW 240 VOLT 1 PHASE 200 AMP DIESEL GENERATOR, PETERSON CAT C4.4 GC OR APPROVED, WITH MINIMUM 72 HOUR CAPACITY BELLY TANK AND WEATHERPROOF SOUND ATTENUATING ENCLOSURE. INSTALL IN STRICT CONFORMANCE TO NFPA 37, NEC 70 AND LOCAL BUILDING CODES. CONTRACTOR TO PROVIDE 6" REINFORCED CONCRETE PAD FOR GENERATOR, PAD TO BE 6" LARGER IN EACH DIRECTION THEN THE GENERATOR MOUNTING SUPPORTS. CONTRACTOR TO LOCATE 200 AMP AUTOMATIC TRANSFER SWITCH (ATS) IN MECHANICAL ROOM. PROVIDE CIRCUITING FROM ATS TO NEW GENERATOR AND EXISTING PANEL A (RE-LABEL AS PANEL E) PER ONE LINE DIAGRAM THIS SHEET. FIELD VERIFY AVAILABLE WIDTH WITH 5 FEET FROM BUILDING AND 5 FEET FROM PROPERTY LINE PRIOR TO ORDERING EQUIPMENT AND POURING PAD. REMOVE CORE LIGHTING CIRCUITS FROM PANELS B AND C TO PANEL E.
 - CONTRACTOR TO PROVIDE WEATHERPROOF RECEPTACLE ON EXTERIOR OF BUILDING FOR GENERATOR SERVICE. CIRCUIT THROUGH PANEL C SPARE CIRCUIT.
 - CONTRACTOR TO RELOCATE EXISTING SERVER RACK AND VENDOR DMARC FROM SOUTHEAST AREA OF EXISTING ROOM TO SOUTH WALL OF NEW MECHANICAL ROOM 123. CONTRACTOR TO RELOCATE EXISTING CABLING TO NEW LOCATION, REPLACE CABLING THAT IS NOT LONG ENOUGH, DO NOT SPLICE CABLING.
 - CONTRACTOR TO RELOCATE EXISTING RECEPTACLE ABOVE COUNTER, REPLACE RECEPTACLE WITH GFCI RECEPTACLE.
 - CONTRACTOR TO REPLACE RECEPTACLE WITH GFCI RECEPTACLE.
 - CONTRACTOR TO COORDINATE WITH ACCESS CONTROL CONTRACTOR TO PROVIDE, 22/4 UNSHIELDED SOLID CONDUCTOR CABLE FOR DOOR CONTACT SWITCH IN HEADER, 16/2 UNSHIELDED SOLID CONDUCTOR CABLE FOR ELECTRIC STRIKE/MAG POWER, 22/6 SHIELDED TWISTED PAIR FOR CREDENTIAL READER (LOCATED AT ADA COMPLIANCE HEIGHT), 22/4 UNSHIELDED TWISTED PAIR FOR REQUEST TO EXIT MOTION (INGRESS/EGRESS DOORS ONLY), ROUTE ALL CABLES (BANANA CABLE) BACK TO THE HEAD END MOUNTED IN MECHANICAL ROOM 123.
 - CONTRACTOR TO PROVIDE LEGRAND PLT26351W TIMER RECEPTACLE OR APPROVED, EXTEND SWITCHED CIRCUIT TO BOTTOM PLUG OF EACH ROOM DUPLX RECEPTACLE. PROVIDE RECEPTACLES LABELED PER NEC "CONTROLLED" ON BOTTOM HALF OF RECEPTACLE, SET SCHEDULE PER OWNER. TYPICAL OF NEW RECEPTACLE CIRCUITS SERVING NEW OFFICES.



3 SINGLE LINE DAIGRAM
 E1.1
 NTS

Panel Name (E) (EXISTING PANEL A)	Panel Amperage	200
Voltage & Phase 120/240-1Ø		
Mounting / Surface	Panel A.I.C. Rating: 10K/AC	
Designation	Other: MCB /	Description
HEAT PUMP#1	602 2 2	602 HEAT PUMPS
HEAT PUMP#1	5 4 4	HEAT PUMPS
HEAT PUMP#2	602 5 A 6	201 ENTRY LIGHTS
HEAT PUMP#2	7 8 8	201 OPEN OFFICE LIGHTING
HEAT PUMP#2	9 A 10	201 OPEN OFFICE LIGHTING
SERVER RACK RECEPTACLE	201 11 B 12	201 BREAK ROOM LIGHTING
SERVER RACK RECEPTACLE	201 13 A 14	
LAB 100 DEDICATED RECEPTACLE	201 15 B 16	201 RECORDS ROOM DED. RECEPTACLE
LAB 100 DEDICATED RECEPTACLE	201 17 A 18	201 RECORDS ROOM DED. RECEPTACLE
	19 B 20	201 RECORDS ROOM DED. RECEPTACLE
	21 A 22	201 RECORDS ROOM DED. RECEPTACLE
	23 B 24	
	25 A 26	
	27 B 28	
	29 A 30	

Load Codes	VA Load per Phase	Calculations
	A B C	Totd VA Multiplier VA Load
C = Ceiling Only	0 0 0	0 0 0 0
E = Existing Only	0 0 0	0 0 0 0
H = Heating Only	17200 17200 0	34400 1.00 34400
M = Motors	0 0 0	0 0 0 0
L = Lighting	1000 1000 0	2000 1.25 2500
N = Neutral	0 0 0	0 0 0 0
O = Other Load	0 0 0	0 0 0 0
R = Receptacles	800 800 0	1600 1.00 1600
Sub Totals	19100 19100 0	38200 1.01 38800
Total VA Loads	18830 18830 0	37660 1.01 38300
Load Balance	100.0% 100.0% 0.0%	
Total VA of Largest Motor on this Panel VA Load This Panel		
Amperage This Panel Per Largest Phase VA		

ROSS
BUILDERS
NORTHWEST

3155 SE Century Blvd, Ste B
Hillsboro, OR 97123

RECEIVED

AUG 24 2023

Yamhill County Public Health

@ 1:58
Su

Yamhill County Public Health
310 NE Kirby St Remodel

EXHIBIT A

EXHIBIT A

Project No. 23.05
Division 0 - Bid Form
Section 00300
page 1

SECTION 00300

BID FORM

Bid: Yamhill County Public Health
310 Northeast Kirby Street Remodel
McMinnville, Oregon

Time & Date: 2:00 p.m. local time, Thursday August 24, 2023
(BIDS ARE DUE)
4:00 p.m. local time, Thursday August 24, 2023
(BIDS WILL BE OPENED)

Mail To: Yamhill County Public Health
412 Northeast Ford Street
McMinnville, Oregon 97128
Attention: Bill Michielsen, MPH, CPH

Hand Delivery: Yamhill County Public Health
412 Northeast Ford Street
McMinnville, Oregon 97128

The undersigned Bidder declares they have carefully examined the drawings and the specifications, HAVE MADE AN EXAMINATION OF THE SITE OF THE PROPOSED WORK AND HAVE MADE SUCH INVESTIGATIONS NECESSARY TO DETERMINE THE CHARACTER OF MATERIAL AND THE CONDITIONS TO BE ENCOUNTERED. The undersigned hereby proposes to furnish all material and labor and perform all work to complete the Yamhill County Public Health 310 Kirby Street Remodel project in strict compliance with the Contract Documents as prepared by **RSS ARCHITECTURE, P.C.** and to be bound by the following:

Invitation to Bid
Instructions to Bidders
Bid Form
Contract Forms
General Conditions
Supplementary General Conditions
Prevailing Wage Rates for Public Works Contracts in Oregon
Referenced Oregon Revised Statutes
Specifications and Drawings
Addenda (if any)

BASIC BID

Five hundred ninety two thousand _____ Dollars
and two hundred forty two ^{cents} Cents (\$ 592,242.00)

ALLOWANCES

The undersigned acknowledges including within the base bid sum shown above the cash allowance amount specified in section 01200, paragraph 1.2.F.1. FAILURE TO INCLUDE THE CASH ALLOWANCE AMOUNT SPECIFIED WITHIN THE BASE BID SUM SHALL BE GROUNDS FOR REJECTION OF THIS BID PROPOSAL.

EXHIBIT A

Project No. 23.05
Division 0 - Bid Form
Section 00300
page 2

ALTERNATES

The undersigned proposes to furnish all labor and materials, to perform all work relating to the following additive construction alternates as described in specification section 01030 ALTERNATES:

ADDITIVE ALTERNATE BID NO. 1. ADD all work to complete remodel work for the southwest corner of the building as shown on the drawings and specified herein.

one hundred sixty six thousand two hundred eighty eight ⁰⁰/₁₀₀
ADD _____ Dollars and _____ Cents (\$ 166,288.00)

ADD 0 Calendar days to the Project Completion Date listed below.

ADDENDA

The following Addenda have been received and their costs are included in this Bid Proposal:

- Addendum No. 1 Date August 21, 2023
- Addendum No. _____ Date _____
- Addendum No. _____ Date _____
- Addendum No. _____ Date _____

COMPLETION DATE

IT IS UNDERSTOOD TIME IS OF THE ESSENCE AND THE COMPLETION DATE INDICATED BELOW WILL BE A CONSIDERATION IN AWARDING THE BID.

Basic Bid Completion Date: the undersigned agrees to complete the project, in total, and be ready to depart the site, punch list and project paperwork completed, no later than buildout 140 days calendar days after receiving formal written notice to proceed. It is understood the completion date listed above takes into account the average climatic range and usual industrial conditions prevailing in this locality.

generator TBD

The undersigned agrees, if awarded the Contract, to execute and deliver to the Owner, through the Architect, within ten (10) days after receiving the Contract Form an Agreement and a satisfactory Performance and Payment bond in an amount equal to one hundred percent (100%) of the Contract Sum using forms called for by the Owner. The undersigned further agrees to prepare and deliver to the Owner, through the Architect, a schedule of values, subcontractor list, products list, and project schedule within the time period specified for each item indicated in the project specifications.

LIQUIDATED DAMAGES

It is further agreed unless extended in accordance with "The General Conditions of the Contract for Construction" the undersigned will pay, as liquidated damages to the Owner for any delay beyond the completion date named above the sum of one thousand dollars and no cents (\$1,000.00) per calendar day for each day required beyond that date.

EXHIBIT A

Project No. 23.05
Division 0 - Bid Form
Section 00300
page 3

GUARANTEE OF BID

The undersigned agrees to guarantee all bids for a period of forty-five (45) calendar days.

BID BOND

The undersigned agrees the bid security accompanying this proposal is the measure of liquidated damages which the Owner will sustain by the failure of the undersigned to execute and deliver the above named Agreement and surety; and that if the undersigned defaults in executing that agreement within ten (10) days of written notification of the award of the contract to them or in furnishing the surety, then the check or bid bond shall become the property of the Owner; but if this proposal is not accepted within forty-five calendar (45) days of the time set for the submission of the bids, or if the undersigned executes and delivers said contract and bond, the check or bid bond shall be returned.

PREVAILING WAGE RATES

It is agreed the undersigned shall comply with the requirements of ORS 279C.800 to 279C.870 if the cost of the project exceeds \$50,000.00. Reference PREVAILING WAGE RATE specification section included in the project manual. It is agreed the Owner shall pay a fee to the Bureau of Labor and Industries pursuant to the provisions of ORS 279C-825(1). The fee is one-tenth of one percent of the price of the Contract, but not less than \$250.00 or more than \$7,500.00, regardless of the Contract price.

WORKERS' COMPENSATION REQUIREMENTS

It is agreed the undersigned shall comply with the requirements of ORS 656.017, Oregon Workers' Compensation Law.

OWNER'S RIGHTS

It is the intent of Yamhill County to award a Contract to the lowest responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. Yamhill County shall have the right to waive informalities or irregularities in a Bid received and to accept the Bid which, in Yamhill County's judgement, is in Yamhill County's own best interests.

NON-COLLUSION AFFIDAVIT

The undersigned certifies the bid has been arrived at by the bidder independently and has been submitted without any collusion designed to limit independent bidding or competition. The undersigned further certifies that no official or employee of Yamhill County shall have any interest, direct or indirect, in work to be performed in connection with this contract. All contractors shall incorporate, or cause to be incorporated, in all subcontracts a provision prohibiting such interest.

EXHIBIT A

Project No. 23.05
Division 0 - Bid Form
Section 00300
page 4

CERTIFICATE OF REGISTRATION

The undersigned certifies that the Bidder is certified/registered with the Oregon Contractors Board in accordance with ORS Chapter 700.

By (name): Eric Ross

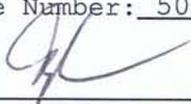
Title: Owner

Date: 8/24/2023

Name of Firm: Ross Builders Northwest, LLC

Address: 3155 SE Century Blvd, Ste B Hillsboro Oregon 97123
(City) (State) (Zip)

Telephone Number: 503.523.6868

By: 
(Signature of Authorized Official. If bid is a partnership, one of the partners must sign bid.)

Official Capacity: Owner

If corporation, attest: N/A
(Secretary of Corporation)

SEAL (if Corporate)

Corporation
 Partnership
 Individual

Oregon Contractors Board Registration Number: 205841

EQUAL OPPORTUNITY EMPLOYMENT CERTIFICATION

I, Eric Ross (name of bidder) certify:

1. All applicable Federal and Oregon State laws and regulations and all City policies and regulations pertaining to equal employment opportunities and employment discrimination on the basis of race, religion, age, mental or physical handicap, national origin, or sex will be complied with.
2. Affirmative steps must be taken to assure small, minority, and women-owned business and firms located in labor surplus areas are used when possible as sources of supplies, equipment, construction, and services. Affirmative steps shall include the following:
 - a. Include any such qualified firms on solicitation lists.

EXHIBIT A

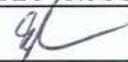
Project No. 23.05
Division 0 - Bid Form
Section 00300
page 5

EQUAL OPPORTUNITY EMPLOYMENT CERTIFICATION (CONTINUED)

2. (continued)
- b. Assure such firms are solicited whenever they are potential sources.
 - c. When economically feasible, divide total requirements into smaller tasks or quantities to permit such firms maximum opportunities for participation through subcontracting.
 - d. Where possible, establish delivery schedules which will encourage such participation.
 - e. Use the services and assistance of the Small Business Administration, the Office of Minority Business Enterprise (Department of Commerce), the Community Services Administration and other sources when appropriate.
3. During performance of the proposed Contract:
- a. Bidder intends to use the following listed trades in performing the work:

(Subcontractors, material supplier and manufacturers list shall be submitted to the Architect within twenty-four (24) hours after official bid opening).
4. During performance of the proposed Contract, Bidder shall not discriminate against any subcontractor, employee, applicant for employment, or application for subcontract because of race, color, religion, sex, handicap, or national origin. Bidder shall take positive steps to achieve the goals of utilizing applicants for subcontracts and employment in the Work without regard to their race, color, religion, sex, handicap, or national origin.
- Positive steps shall include:
- a. Avoidance of unlawful discrimination.
 - b. Efforts in recruitment to fill openings without discrimination.
 - c. Training for advancement, and
 - d. Refusing to make, renew or use collective bargaining agreements which are known to result in discrimination excluding minority individuals.
5. The successful Bidder shall provide Yamhill County all information needed to complete any Minority, Women and Emerging Small Business Activity Report. Report form may be received by the successful Bidder from Yamhill County. Required information shall be provided prior to disbursement of final payment to the successful Bidder by Yamhill County.

Name of Bidder: Eric Ross

By (signature): 

Title: Owner

Date: 8/24/2023

EXHIBIT A

Project No. 23.05
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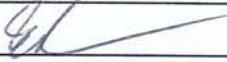
RESIDENT BIDDER CERTIFICATION

(Place a check in the appropriate box)

The undersigned is considered [X]
The undersigned is not considered []

a resident bidder as defined in ORS 279A.120.

Name of Bidder: Eric Ross

By (signature): 

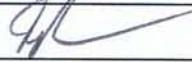
Title: Owner

Date: 8/24/2023

ACCESS TO RECORDS

The grantee or any of their authorized representatives, shall have access to any books, documents, papers, and records of the successful bidder for three years after Yamhill County makes final payments and all other pending matters are closed.

Name of Bidder: Eric Ross

By (signature): 

Title: Owner

Date: 8/24/2023

EXHIBIT A

AIA® Document A310™ – 2010

Bid Bond

CONTRACTOR: *(Name, legal status and address)* Ross Builders Northwest, LLC
 3155 SE Century Blvd., Ste. B
 Hillsboro, OR 97123

SURETY: *(Name, legal status and principal place of business)* Swiss Re Corporate Solutions America Insurance Corporation
 475 North Martingale Rd, Ste 850
 Schaumburg, IL 50173

OWNER:
(Name, legal status and address)
 Yamhill County Public Health
 412 Northeast Ford Street
 McMinnville, OR 97128

BOND AMOUNT: \$
 Ten Percent of the Total Amount Bid---- (10%)

PROJECT:
(Name, location or address, and Project number, if any)
 310 Northeast Kirby Street Remodel Project #23.05

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

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

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 21st day of August

, 2023



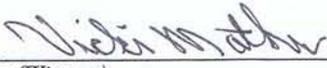
 (Witness)

Ross Builders Northwest, LLC

 (Contractor as Principal) (Seal)



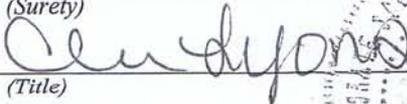
 (Title)



 (Witness)

Swiss Re Corporate Solutions America Insurance Corporation

 (Surety) (Seal)



 (Title)

Chloe Lyons
 Attorney-in-Fact



EXHIBIT A

SWISS RE CORPORATE SOLUTIONS

SWISS RE CORPORATE SOLUTIONS AMERICA INSURANCE CORPORATION ("SRCSAIC")
SWISS RE CORPORATE SOLUTIONS PREMIER INSURANCE CORPORATION ("SRCSPIC")
WESTPORT INSURANCE CORPORATION ("WIC")

GENERAL POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, THAT SRCSAIC, a corporation duly organized and existing under laws of the State of Missouri, and having its principal office in the City of Kansas City, Missouri, and SRCSPIC, a corporation organized and existing under the laws of the State of Missouri and having its principal office in the City of Kansas City, Missouri, and WIC, organized under the laws of the State of Missouri, and having its principal office in the City of Kansas City, Missouri, each does hereby make, constitute and appoint:

GLORIA BRUNING, GAIL A. PRICE, VICKI MATHER, LETICIA ROMANO, PHILIP O. FORKER, RICHARD KOWALSKI, JOEL DIETZMAN, BRENT OLSON,
CHRISTOPHER A. REBURN, PATRICK DOONEY, JUSTIN CUMNOCK, ANDREW CHORUBY, CASEY GESKE, STERLING DREW RODDAN, AND CHLOE LYONS

JOINTLY OR SEVERALLY

Its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver, for and on its behalf and as its act and deed, bonds or other writings obligatory in the nature of a bond on behalf of each of said Companies, as surety, on contracts of suretyship as are or may be required or permitted by law, regulation, contract or otherwise, provided that no bond or undertaking or contract or suretyship executed under this authority shall exceed the amount of:

FIFTY MILLION (\$50,000,000.00) DOLLARS

This Power of Attorney is granted and is signed by facsimile under and by the authority of the following Resolutions adopted by the Boards of Directors of both SRCSAIC and SRCSPIC at meetings duly called and held on the 18th of November 2021 and WIC by written consent of its Executive Committee dated July 18, 2011.

"RESOLVED, that any two of the President, any Managing Director, any Senior Vice President, any Vice President, the Secretary or any Ass. Secretary be, and each or any of them hereby is, authorized to execute a Power of Attorney qualifying the attorney named in the given Power of Attorney to execute on behalf of the Corporation bonds, undertakings and all contracts of surety, and that each or any of them hereby is authorized to attest to the execution of any such Power of Attorney and to attach therein the seal of the Corporation; and it is

FURTHER RESOLVED, that the signature of such officers and the seal of the Corporation may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be binding upon the Corporation when so affixed and in the future with regard to any bond, undertaking or contract of surety to which it is attached."



By Erik Janssens
Erik Janssens, Senior Vice President of SRCSAIC & Senior Vice President
of SRCSPIC & Senior Vice President of WIC

By Gerald Jagrowski
Gerald Jagrowski, Vice President of SRCSAIC & Vice President of SRCSPIC
& Vice President of WIC

IN WITNESS WHEREOF, SRCSAIC, SRCSPIC, and WIC have caused their official seals to be hereunto affixed, and these presents to be signed by their authorized officers

this 10 day of NOVEMBER, 20 22

State of Illinois
County of Cook

SS

Swiss Re Corporate Solutions America Insurance Corporation
Swiss Re Corporate Solutions Premier Insurance Corporation
Westport Insurance Corporation

On this 10 day of NOVEMBER, 20 22, before me, a Notary Public personally appeared Erik Janssens, Senior Vice President of SRCSAIC and Senior Vice President of SRCSPIC and Senior Vice President of WIC and Gerald Jagrowski, Vice President of SRCSAIC and Vice President of SRCSPIC and Vice President of WIC, personally known to me, who being by me duly sworn, acknowledged that they signed the above Power of Attorney as officers of and acknowledged said instrument to be the voluntary act and deed of their respective companies.



Christina Manisco
Christina Manisco, Notary

I, Jeffrey Goldberg, the duly elected Senior Vice President and Assistant Secretary of SRCSAIC and SRCSPIC and WIC, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney given by said SRCSAIC and SRCSPIC and WIC, which is still in full force and effect.

IN WITNESS WHEREOF, I have set my hand and affixed the seals of the Companies this 21st day of August, 20 23

Jeffrey Goldberg
Jeffrey Goldberg, Senior Vice President &
Assistant Secretary of SRCSAIC and
SRCSPIC and WIC

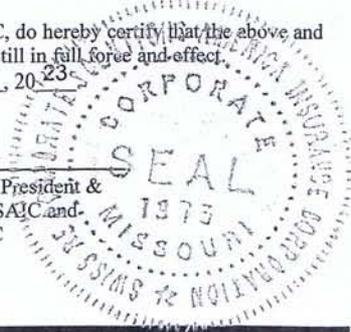


EXHIBIT A

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM (OAR 137-049-360)

PROJECT NAME: **YAMHILL COUNTY PUBLIC HEALTH 310 NORTHEAST KIRBY STREET REMODEL**

BID # 23.05 BID CLOSING: Date: 8/24/23 Time: 2:00 AM PM

DISCLOSURE DEADLINE: Date: 8/24/23 Time: 4:00 AM PM

This form must be submitted within two (2) working hours of the advertised bid closing date and time, no later than the **DISCLOSURE DEADLINE** stated above.

List below the Name, Address, Dollar Value, Construction Contractor Board (CCB) number, if required, Contact Name and Telephone Number of each subcontractor that will be furnishing labor or materials that are required to be disclosed. Enter "NONE" if there are no subcontractors that need to be disclosed. (IF NEEDED, ATTACH ADDITIONAL SHEETS).

NAME/ADDRESS	DOLLAR VALUE/CCB#	CONTACT NAME/PHONE #
1) <u>Five Star Electric</u> <u>750 SW Bailey St</u> <u>Husbon, OR 97123</u>	<u>\$116,375</u> <u>CCB# 158231</u>	<u>Caleb Coleman</u> <u>503.324.0948</u>
2) <u>Rubenstein's Contract</u> <u>Carpet</u> <u>100 N. Hayden St</u> <u>Portland, OR 97217</u>	<u>\$31,739</u> <u>CCB# 85976</u>	<u>Les Dennis</u> <u>503.224.1007</u>
3) <u>Gormley Plumbing</u> <u>715 NE Lafayette St</u> <u>McMinnville, OR 97128</u>	<u>\$50,423</u> <u>CCB# 048494</u>	<u>Doug Mero</u> <u>503.472.4101</u>

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

- 5% of the total Contract Price, but at least \$15,000 (including all alternates). If the Dollar Value is less than \$15,000, do not list the subcontractor above, or
- \$350,000 regardless of the percentage of the total Contract Price.

Bids which are submitted by Bid Closing, but for which the separate and sealed disclosure submittal has not been submitted by the specified deadline, are not Responsive and shall not be considered for Contract Award!

Form Submitted By (Bidder Name): Ross Builders Northwest, LLC

Contact Name: Eric Ross Phone # 503.523.6868

Provide Form to: Yamhill County Public Health
412 Northeast Ford Street
McMinnville, Oregon 97128
Attention: Bill Michielsen, MPH, CPH