

INVITATION FOR BIDS



FOR CONSTRUCTING

LUTHER BURBANK HOME AND GARDENS REROOFING PROJECT

CONTRACT NUMBER
CONTRACT NO. C02454

ISSUED BY
CAPITAL PROJECTS ENGINEERING DIVISION
CITY OF SANTA ROSA, CALIFORNIA

2024

ATTENTION
Prebid Conference
See Page 1



STATE OF CALIFORNIA

INVITATION FOR BIDS

CONTAINING:

NOTICE TO BIDDERS

SPECIAL PROVISIONS

BID FORMS

CONTRACT

FOR

**LUTHER BURBANK HOME AND GARDENS
REROOFING PROJECT**

Contract No. C02454

LUTHER BURBANK HOME AND GARDENS REROOFING PROJECT

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CITY OF SANTA ROSA
STATE OF CALIFORNIA

NOTICE TO BIDDERS

➤	For technical questions regarding this project, contact Scott Wilkinson at (707) 543-3953 or swilkinson@srcity.org .
➤	For direct access to plans, specifications and planholders' lists, go to www.srcity.org/bids and click on <u>Bid/Proposal Opportunities</u> .
➤	For direct access to bid results, go to www.srcity.org/bids . Under Link to Capital Projects, click on <u>Capital Projects Contracts</u> .

IMPORTANT –

Bid Acceptance Deadline

Sealed bids will be accepted at the Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, California 95401 until 2:00 p.m., March 5, 2024, for Luther Burbank Home and Gardens Reroofing Project, Contract No. C02454. (Engineer's Estimate: \$146,408.00)

Bids tendered after this deadline will not be accepted. The official time clock for accepting bids will be an electric date and time stamping clock, located in the Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, California. In order to be accepted, bids must be received prior to 2:00 p.m. Therefore, a bid stamped in at 1:59 p.m. will be accepted, but one delivered at or after 2:00 p.m. is late and will not be accepted.

Bid Opening

Prospective bidders, subcontractors, and materials suppliers are invited to attend the Bid opening via Zoom video/teleconference or in person at 69 Stony Circle, Santa Rosa, California. The bid opening is scheduled to be held at 2:00 p.m., Tuesday, March 5, 2024.

The teleconference can be accessed at:

<https://srcity-org.zoom.us/j/8630632770?omn=82177083734>

Phone: 877-853-5257

Meeting ID: 863 063 2770

Pre-Bid Meeting

Prospective bidders are required to attend a mandatory pre-bid meeting in person at the project site, 204 Santa Rosa Ave, Santa Rosa, CA 95404. This is scheduled for 11 a.m., February 22, 2024

Subcontractor Information; Department of Industrial Relations Registration

Bidders shall provide the names, business addresses and license numbers of all subcontractors listed on bidder's List of Subcontractors. No contractor or subcontractor may be listed on a bid for this public works project unless registered with the Department of Industrial Relations (DIR) pursuant to Labor Code section 1725.5. No contractor or subcontractor may be awarded a contract for this public works project unless registered with the DIR pursuant to Labor Code section 1725.5. This public works project is subject to compliance monitoring and enforcement by the DIR.

CITY OF SANTA ROSA
C02454 LUTHER BURBANK HOME AND GARDENS REROOFING PROJECT
ESTIMATED QUANTITIES

Contract # : C02454

<u>Line #</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>
1	LUTHER BURBANK HOME AND GARDENS REROOFING PROJECT	LS	1

The foregoing quantities are approximate only, being given as a basis for the comparison of bids, and the City of Santa Rosa does not expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, as may be deemed necessary or expedient by the Engineer.

Bids shall be made in accordance with the prevailing hourly rate of per diem wages for this locality and project as determined by the Director of the DIR pursuant to Labor Code sections 1770 *et seq.*

Contractor shall be responsible for compliance with the Immigration Reform Control Act of 1986.

If the project requires the employment of workers in any apprenticeable craft or trade, once awarded, Contractor and subcontractors must apply to the Joint Apprenticeship Council unless already covered by local apprentice standards (see Labor Code section 1777.5).

All bids are to be compared on the basis of the Engineer's estimate of the quantities of work to be performed. No bid will be awarded to a contractor who is not licensed in accordance with the provisions of Chapter 9 of Division 3 of the Business and Professions Code. Contractor must hold a **Class B or C** license for this project.


Project plans, bid and contract forms for C02454 may be obtained through PlanetBids at www.srcity.org/bids. These documents can no longer be obtained at the Transportation and Public Works Department.

No bid will be accepted unless it is made on the contract bid forms furnished by the Transportation and Public Works Department through PlanetBids. The original of the completed bid forms bearing original signatures must be submitted. A bid will not be accepted unless the bidder registers as a vendor through PlanetBids at www.srcity.org/bids, downloads documents/attachments, and is added to the prospective bidders list for this project. If there is an addendum, bidders must log into PlanetBids and acknowledge the addendum to be eligible for bidding.

The successful bidder will be required to hold a current City of Santa Rosa business tax certificate issued pursuant to Chapter 6.04 of the Santa Rosa City Code before commencing work on this project. For information regarding the business tax, contact Revenue and Collections at (707) 543-3170.

For any moneys earned by Contractor and withheld by the City of Santa Rosa to ensure the performance of the Contract, Contractor may, at its request and expense, substitute securities equivalent to the amount withheld in the form and manner and subject to the conditions provided in Section 22300 of the California Public Contract Code.

The City of Santa Rosa reserves the right to reject any or all bids and the right to waive minor irregularities or informalities in any bid or bonds.



Lisa Welsh (Feb 8, 2024 11:57 PST)

LISA WELSH
Supervising Engineer

SPECIAL PROVISIONS

General Specifications

CITY OF SANTA ROSA, CALIFORNIA

LUTHER BURBANK HOME AND GARDENS REROOFING PROJECT

1 GENERAL

The work described herein shall be done in accordance with the "Contract Documents," which are the:

1. Special Provisions
2. Project Plans, consisting of 11 sheets entitled Luther Burbank Home and Gardens Reroofing Project, 2023-0023
3. City of Santa Rosa Design and Construction Standards (City Standards)
4. City of Santa Rosa Construction Specifications for Public improvements (City Specifications)
5. State of California Department of Transportation Standard Specifications 2010 (Standard Specifications), and
6. State of California Department of Transportation Standard Plans 2010 (Standard Plans).

In the event of a conflict in any of these documents, the order of precedence shall be determined by Section 5-1.02 of these Special Provisions.

Whenever the Standard Specifications use the terms State of California, Department of Transportation, Director, Engineer, or Laboratory, the following terms shall be substituted therefor, and any reference to any of the foregoing terms shall be understood and interpreted to mean and refer to such substituted terms as follows:

For State of California - the City of Santa Rosa;

For Department - the City of Santa Rosa Department of Transportation and Public Works or the City of Santa Rosa Water Department;

For Director - the City Engineer of the City of Santa Rosa;

For Engineer - the City Engineer of the City of Santa Rosa or the City Engineer's authorized agents;

For Laboratory – Materials Engineering of the City of Santa Rosa Transportation and Public Works Department, or such other laboratory as may be authorized by the City.

Unless otherwise provided, whenever in these Special Provisions attention is directed to specific provisions in the Standard Specifications, such direction shall not be interpreted as excluding other applicable provisions of the Standard Specifications.

Unless otherwise provided, when sections and subsections of the Standard Specifications are used in these Special Provisions, such use is not exclusive and shall not be interpreted as excluding other applicable provisions of said sections and subsections but is only intended to add to or modify such sections or subsections.

Unless otherwise provided, full compensation for compliance with these Special Provisions is included in the contract price and no additional allowance will be made to Contractor therefor.

The Standard Specifications are hereby modified to delete any reference or incorporation of provisions providing for or requiring arbitration of any and all claims and disputes arising under this contract.

2 BIDDING

2-1.06 Bid Documents: Prospective bidders will be furnished with an Invitation for Bids which will state the location and description of the contemplated public works project and will show the approximate estimate of the various quantities and kinds of work to be performed and materials to be furnished with a schedule of items for which unit prices are requested.

2-1.07 Approximate Estimate: The quantities given in the Contract Documents are approximate only, being given as a basis for the comparison of bids, and the City does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or part of the work or to omit parts of the work, as may be deemed necessary or advisable by the Engineer.

2-1.31 Examination of Project Plans, Specifications, City Standards, Invitation for Bids and Work Site: Prior to submitting a bid, the bidder shall carefully examine the Project Plans, Invitation for Bids, City Standards and the proposed work site. If any person contemplating submitting a bid for this public works project is in doubt as to the meaning of any part of the Contract Documents, or finds discrepancies in or omissions from the Contract Documents, he or she may submit a written request for interpretation or correction to the Engineer. The written request must be received by the Engineer a minimum of 96 hours prior to bid opening. Any interpretation or correction of the Contract Documents prior to bid opening will be made only by written addendum issued by the City. A copy of such addendum will be mailed or faxed to each Planholder. The City will not be bound by any other explanations or interpretations of the Contract Documents.

2-1.33 Bid Document Completion: Any references to Opt Out of Payment Adjustments for Price Index Fluctuations in the Standard Specifications are deleted in their entirety.

2-1.33A Bid Forms: All bids shall be made on bid forms obtained from PlanetBids at www.srcity.org/bids. The bidder shall submit its bid on the original bid forms furnished by the City. Bids submitted on forms other than the forms furnished to the bidder by the City will not be considered.

The bid forms to be submitted at the time of and with the bid are:

1. Unit Price Schedule
2. List of Subcontractors
3. List of Previous Similar Jobs
4. Noncollusion Declaration
5. Bid Guaranty Information and Bidder's Information and Signature
6. Bid Guaranty (Bid Bond or alternate security)

All bids shall give the proposed prices and must bear the original signature of the bidder. Bidders shall fill in all blanks on the bid forms where required. A bid will not be accepted unless the bidder registers as a vendor through PlanetBids at www.srcity.org/bids, downloads documents/attachments, and is added to the prospective bidders list for this project. If there is an addendum, bidders must log into PlanetBids and acknowledge the addendum to be eligible for bidding.

2-1.33B Registration with DIR: No contractor or subcontractor may be listed on a bid for this public works project unless registered with the Department of Industrial Relations (DIR) pursuant to Labor Code section 1725.5. No contractor or subcontractor may be awarded a contract for this public works project unless registered with the DIR pursuant to Labor Code section 1725.5. This public works project is subject to compliance monitoring and enforcement by the DIR.

2-1.33C Subcontractors: The Subletting and Subcontracting Fair Practices Act, Public Contract Code sections 4100-4113, inclusive (the "Act") shall apply to all subcontracts in excess of one-half of one percent of the total amount of a bid. The Act requires subcontractors, if used for such work, to be listed in the contractor's bid and prohibits the substitution of subcontractors, except as authorized by the Act. Each bidder shall, with respect to the work of any subcontractor in excess of one-half of one percent of the total amount of the bid, include as part of the bid on the bid form provided:

1. The name, business address and DIR registration number of each subcontractor who will perform work or labor or render services to the Contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the Project Plans or other Contract Documents in an amount in excess of one-half of one percent of the Contractor's total bid; and
2. The portion of the work that will be done by each subcontractor. Only one subcontractor shall be listed for each portion.

The purchase of sand, gravel, crushed rock, batched concrete, aggregate, ready-mixed concrete, and/or any other materials produced and furnished by established and recognized commercial plants, together with the delivery of such materials to the work site by the source of the materials or by recognized commercial hauling companies, is not considered as subcontracting under this section.

2-1.33E Rejection of Bids Containing Alterations, Erasures or Irregularities: Bids may be rejected if they show any alterations of forms, additions not called for, conditional bids, incomplete bids, erasures or irregularities of any kind.

2-1.34 Bid Guaranty: All bids shall be presented under sealed cover and shall be accompanied by cash, cashier's or certified check, or by a bidder's bond made payable to the City of Santa Rosa and executed as surety by a corporate surety authorized and admitted to transact a surety business in the State of California in an amount equal to ten percent of the amount of the bid. No bid shall be considered unless such cash, cashier's or certified check, or bidder's bond is enclosed with the bid. Any bidder's bond shall contain provisions for forfeiture consistent with California Public Contract Code section 20172.

2-1.40 Withdrawal of Bid: A bid may be withdrawn prior to, but not after, the hour fixed in the public notice for the opening of bids, provided that a written request to withdraw the bid, executed by the bidder or the bidder's authorized representative, is filed with the Engineer before this deadline. The withdrawal of a bid shall not prejudice the right of a bidder to submit a new bid.

2-1.43 Public Opening of Bids: Bids will be opened and read publicly at the time and place indicated in the Notice to Bidders. Bidders or their authorized agents are invited to be present.

2-1.46 Disqualification of Bidders: Serial bids from the same bidder will not be accepted. This section shall not be interpreted to mean that the same contractor may not be the contractor in one bid and listed as a subcontractor in another bid, provided that no collusion exists.

2-1.48 Competency of Bidders: No bid will be accepted from or contract awarded to a contractor that is not licensed in accordance with the law, that does not hold a license qualifying it to perform work under this contract, to whom a bid form has not been issued by the Engineer, or that has not successfully completed projects of similar character, scope and cost to the proposed project. Bidders will be required to provide a list of previous similar jobs with their bids.

3 CONTRACT AWARD AND EXECUTION

3-1.04 Contract Award: The City reserves the right to reject any or all bids. Bids are required for the entire work described herein. All bids will be compared with the Engineer's estimate of the quantities of work to be completed. Contract award, if any, will be made to the lowest responsible bidder within sixty days from the date bids are opened.

3-1.05 Contract Bonds:

The successful bidder will NOT be required to furnish a performance bond or material guaranty bond for this project. In the event that the contract award exceeds \$25,000.00, the successful bidder will be required to provide a payment bond for labor and materials within ten days after receipt of the Notice of Award in accordance with California Civil Code section 9550, executed in a sum of 100% of the Contract price. **A BID BOND IS REQUIRED. REFER TO SECTION 2-1.34 OF THESE SPECIAL PROVISIONS.**

The bond(s) shall be provided in a form acceptable to the City and issued by a corporate surety in good financial standing and authorized and admitted to transact a surety business in the state of California for the purposes and in the amount(s) stated above.

Whenever the financial or legal status of any surety on any such bond(s) is/are unacceptable to the City, it may make a demand to Contractor for further bond(s) or additional surety, not exceeding the sums originally required. Thereafter, no payment shall be made upon the Contract to Contractor or any assignees of Contractor until such bond(s) or additional surety has/have been provided to the City.

3-1.07 Indemnification and Insurance: Indemnification: Contractor shall defend, hold harmless and indemnify City, its officers, agents and employees, and each and every one of them, from and against any and all actions, damages, costs, liabilities, claims, demands, losses, judgments, penalties, costs and expenses of every type and description, including, but not limited to, any fees and/or costs reasonably incurred by City's staff attorneys or outside attorneys and any fees and expenses incurred in enforcing this provision (hereafter collectively referred to as "Liabilities"), including but not limited to Liabilities arising from personal injury or death; damage to personal, real or intellectual property or the environment; contractual or other economic damages, or regulatory penalties, arising out of or in any way connected with the performance of or the failure to perform the Contract by Contractor, any subcontractor or agent, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, whether or not such Liabilities are caused in part by a party indemnified hereunder, or such Liabilities are litigated, settled or reduced to judgment; provided, that the foregoing indemnity does not apply to liability for any damage or expense for death or bodily injury to persons or damage to property to the extent arising from (i) the sole negligence, or willful misconduct of, or defects in design furnished by City, its agents, servants, or independent contractors who are directly responsible to City (excluding Contractor), or (ii) the active negligence of City.

The existence of any of the insurance policies or coverages described in this Contract shall not affect or limit any of City's rights hereunder, nor shall the limits of such insurance limit Contractor's liability to the City hereunder. The provisions of this section shall survive any expiration or termination of the Contract.

Insurance: Contractor shall maintain in full force and effect all of the insurance coverage described in and in accordance with the insurance requirements set forth below. Maintenance of such insurance coverage during the entire performance of the Contract is a material element of the Contract. Failure by Contractor to (i) maintain or renew coverage, (ii) provide notice of any changes, modifications, or reductions in coverage, or (iii) provide evidence of renewal, if necessary, may be deemed a material breach of the Contract by Contractor, whereas the City shall be entitled to all rights and remedies at law or in equity. Notwithstanding the foregoing, any failure by Contractor to maintain required

insurance coverage shall not excuse or alleviate Contractor from any of its other duties or obligations under the Contract. In the event Contractor retains or utilizes any subcontractors or sub-consultants in performance of the work, Contractor shall assure that any such subcontractor has first obtained, and shall maintain, all of the insurance coverage requirements herein set forth below.

Insurance Requirements:

A. Insurance Policies: Contractor shall maintain and keep in full force and effect, the following policies of insurance with minimum coverage as indicated below and issued by insurers with an AM Best rating of no less than A-:VI or a rating otherwise acceptable to the City.

	Insurance	Minimum Coverage Limits	Additional Coverage Requirements
1.	Commercial general liability	\$ 3 million per occurrence \$ 3 million aggregate	Coverage must be at least as broad as ISO CG 00 01 and must include products liability and completed operations coverage which shall continue for a period of 365 days after acceptance of the work by the City. If insurance applies separately to a project/location, aggregate may be equal to per occurrence amount. Coverage may be met by a combination of primary and umbrella or excess insurance, but umbrella and excess shall provide coverage at least as broad as specified for underlying coverage. Coverage can be provided in the form of an endorsement to Contractor's insurance (at least as broad as ISO Form CG 20 10, 11 85 or both CG 20 10 and CG 23 37 forms if later revisions used). Coverage shall not exclude subsidence.
2.	Business auto coverage	\$ 1 million	ISO Form Number CA 00 01 covering any auto (Code 1). Insurance shall cover owned, non-owned and hired autos.
3.	Workers' compensation and Employer's Liability	\$ 1 million	As required by the State of California, with Statutory Limits and Employer's Liability Insurance with limit of no less than \$1 million per accident for bodily injury or disease. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Contractor, its employees, agents and subcontractors.

B. Endorsements:

1. All policies shall provide or be endorsed to provide that coverage shall not be canceled by either party, except after prior written notice has been provided to the City in accordance with the policy provisions.
2. Liability policies shall provide or be endorsed to provide the following:
 - a. For all claims related to this Contract, Contractor's insurance coverage shall be primary, and any insurance or self-insurance maintained by City shall be in excess of Contractor's insurance and shall not contribute with it. Endorsements at least as broad as 20 01 04 13 or evidence of policy language will be required in non-ISO CGL policies.

- b. The City of Santa Rosa, its officers, agents and employees are to be covered as additional insureds on the CGL policy. Additional Insured Endorsements at least as broad as 20 10 04 13 or 20 38 04 13 are required.

C. Verification of Coverage and Certificates of Insurance: Contractor shall furnish City with original certificates and endorsements effecting coverage required above. Certificates and endorsements shall make reference to policy numbers. All certificates and endorsements are to be received and approved by the City before work commences and must be in effect for the duration of the Contract. The City reserves the right to require complete copies of all required policies and endorsements during the duration of the Contract and for a period of 365 days following City's acceptance of the work.

D. Other Insurance Provisions:

1. No policy required by this Contract shall prohibit Contractor from waiving any right of recovery prior to loss. Contractor hereby waives such right with regard to the indemnitees.
2. All insurance coverage amounts provided by Contractor and available or applicable to this Agreement are intended to apply to the full extent of the policies. Nothing contained in this Agreement limits the application of such insurance coverage. Coverage for an additional insured shall NOT be limited to the insured's vicarious liability. Defense costs must be paid in addition to coverage amounts.
3. Self-insured retentions above \$10,000 must be approved by the City. At the City's option, Contractor may be required to provide financial guarantees.
4. City reserves the right to modify these insurance requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

3-1.18 Contract Execution: The fully executed Contract, original bonds and insurance certificates and endorsements required under the Contract shall be delivered to the City within ten calendar days of Contractor's receipt of the Notice of Award.

The Engineer will supply Contractor with up to ten sets of the Invitation for Bids and Project Plans. At least one complete set of the Invitation for Bids and Project Plans shall be kept at the construction site in good condition and made available to the Engineer at all times. Additional copies of the Invitation for Bids and Project Plans will be provided by the Engineer at Contractor's cost.

3-1.20 Failure to Execute Contract: Contractor's failure to deliver to the City the fully executed Contract within ten calendar days of Contractor's receipt of the Notice of Award shall be cause for the cancellation of the award and the forfeiture of the bid guaranty to the City. If the successful bidder refuses or fails to execute the Contract, the City may award the Contract to the second lowest responsible bidder. If the second lowest responsible bidder refuses or fails to execute the Contract, the City may award the Contract to the third lowest responsible bidder. The refusal or failure by the second or third lowest responsible bidder to deliver to the City the fully executed Contract within ten calendar days of receipt of the Notice of Award to the respective bidder shall likewise be cause for the cancellation of the award and the forfeiture of the bid guaranty of the respective bidder. In its discretion, the City may then re-advertise the project or construct it by day labor.

3-1.21 Return of Bid Guarantees: Within ten days after the opening of bids, the City will return the bid guarantees to all bidders except the three lowest responsible bidders. The bid guarantees of the three lowest responsible bidders will be retained until the Contract has been fully executed. In the event all bids are rejected, all bid guarantees will be returned to the respective bidders.

3-1.22 Subcontractors: The successful bidder shall furnish a list of all subcontractors as required under Sections 2-1.33C. The list shall include the name, business address, DIR registration number and the state contractor's license number of each subcontractor on the list and the names of the responsible managing employees whose names appear on the subcontractors' licenses.

4 SCOPE OF WORK

4-1.05 Changes and Extra Work: All changes to the Contract shall be made by written change order only.

All extra work shall be recorded by Contractor on a daily report signed by both the City and Contractor. The “daily reports” shall thereafter be considered the true record of extra work performed. A copy of the daily reports will be furnished to Contractor. Contractor is directed to Section 9-1.04 of this Invitation for Bids.

4-1.05C Compensation for Altered Quantities: Payment and compensation for altered quantities shall conform to the provisions of Section 9-1.06 of the Standard Specifications, except as modified herein.

5 CONTROL OF WORK

5-1.02 Contractor's Copies of Contract Documents: In the event of a conflict in any of the Contract Documents, the order of precedence from highest to lowest shall be as follows:

1. Special Provisions
2. Project Plans, consisting of 11 sheets entitled Luther Burbank Home and Gardens Reroofing Project, City File No. 2023-0023.
3. City Standards
4. City Specifications
5. Standard Specifications
6. Standard Plans

5-1.05 Order of Work: The work as shown on the Project Plans and as specified in the Invitation for Bids shall be constructed in a sequence that is satisfactory to and approved by the Engineer.

Contractor shall prepare a work schedule per Section 8-1.02 of the Standard Specifications.

With the exception of trenching, all existing street, street light base, curb and gutter, storm drain, water line, and sewer line work shall be completed before any existing street paving is removed.

Full compensation for the conformance to the requirements of this section is included in the Contract price and no additional allowance will be made to Contractor for this work.

5-1.17 Character of Workers: Contractor is directed to Section 5-1.17 of the Standard Specifications which states:

"If any subcontractor or person employed by the Contractor shall appear to the Engineer to be incompetent or to act in a disorderly or improper manner, he shall be discharged immediately on the request of the Engineer, and such person shall not again be employed on the work."

No additional compensation shall be granted to Contractor in the event City exercises any part of its rights under this section and any and all costs related to such exercise shall be borne by Contractor.

5-1.20 Cooperation with Other Entities: Attention is directed to Section 5-1.20 of the Standard Specifications.

Other construction including but not limited to utility, power, and pipe line relocation, may be in progress by other forces within and adjacent to the project area at the same time work is being performed under this Contract by Contractor.

Contractor shall cooperate with the forces performing other work, to the end that such forces may conduct their operations with as little inconvenience and delay as possible. Contractor shall grant such forces access to the project area as is reasonable and necessary to transport materials and equipment to the site of operations by the other forces.

5-1.20B(4)(a) Offsite Staging Areas and Construction Yards: Attention is directed to Santa Rosa City Code section 20-52.040, Temporary Use Permit.

A Temporary Use Permit shall be obtained for any offsite construction yard on private property to be used for any of the following:

- a. Stockpiling of equipment and/or materials;
- b. Staging of construction;

- c. Placement of work trailers or mobile offices;
- d. Storage of trench spoils; or
- e. Other construction related activities not specifically enumerated above.

5-1.26 Lines and Grades: Contractor shall carefully preserve all bench marks, grade stakes, and all other survey markers. In the case of willful or careless destruction, Contractor shall bear the cost of replacing the markers.

Contractor shall contact the Engineer directly for coordination of survey staking. Written staking requests must be submitted at least two working days in advance of the date and time stakes are needed.

5-1.27B Examination and Audit: Pursuant to California Government Code section 8546.7, any contract with the City involving expenditures in excess of \$10,000 shall be subject to the examination and audit of the California State Auditor for a period of three years after final payment is made to Contractor by City under this Contract. Any such examination and audit will be confined to those matters connected with the performance of this Contract.

5-1.30A Inspection: Contractor shall bear all costs associated with the re-inspection of any defective, rejected or unauthorized work as determined by the Engineer in Engineer's sole discretion. Such costs of re-inspection, including any costs incurred by the City for additional staff time or fees for third-party consultant inspectors, will be deducted from one or more progress payments hereunder.

5-1.36A Property and Facility Preservation: Attention is directed to Section 5-1.36 of the Standard Specifications.

At Contractor's sole expense, all fences, gates, landscaping, drainage ditches, sidewalks, irrigation systems, and any other improvements that are damaged, removed or destroyed because of Contractor's operations, shall be replaced in accordance with City Standards at a minimum and restored to the same or better condition. Concrete surface treatment and score marks shall match adjacent existing concrete improvements.

5-1.36E Obstructions: Attention is directed to Section 5-1.36 of the Standard Specifications and to the possible existence of underground gas mains, high voltage lines, telephone ducts, storm drains and water and sewers systems, the locations of which are not shown on the Project Plans. The determination of the location of these facilities and the cost of repair or replacement in the event of damage to such facilities are the sole responsibility of Contractor.

Should Contractor alter any public utility or private improvements to facilitate its operations or for its sole benefit, which alteration would not be otherwise required, Contractor shall make whatever arrangements are necessary with the owner or controlling authorities and shall bear all expenses in connection therewith. Any damages to any public utility or private improvement caused by Contractor shall be repaired by Contractor at its sole expense and to the full satisfaction of the Engineer or the controlling authority.

Any subsurface information and data furnished under any part of this Contract are not intended as a representation or warranty but are furnished for information only. It is expressly understood that the City will not be responsible for the accuracy thereof or for any deduction, interpretation or conclusion drawn therefrom by Contractor. The information is made available so that Contractor may have ready access to the same information available to the City and is not part of this Contract.

PRIOR TO STARTING ANY EXCAVATION, CONTRACTOR SHALL (AT LEAST TWO WORKING DAYS IN ADVANCE) CALL UNDERGROUND SERVICE ALERT (USA) toll free at (800) 227-2600 and provide USA with all necessary data relative to the proposed excavation. USA will accept calls and process information to participating agencies who have underground facilities in the area between the hours of 7:30 a.m. and 5:00 p.m. daily, except Saturdays, Sundays, and holidays.

Between the hours of 5:00 p.m. and 7:30 a.m., calls will be recorded and then processed after 7:30 a.m. For emergency situations, after hours, and on Saturdays, Sundays and holidays, Contractor shall contact the owner of the affected facility.

Contractor shall coordinate all work with the appropriate City field personnel. When City work forces are required at the job site to perform Contract items of work, Contractor shall give a minimum of two working days advanced notification to the appropriate field office:

Water Division:	(707) 543-4200
Sewer Division:	(707) 543-4200
Street Division:	(707) 543-3880
Survey Division:	(707) 543-3834

5-1.43 Potential Claims and Dispute Resolution: “Claim” means a separate demand by Contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following: (A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by the City under the Contract; (B) Payment by the City of money or damages arising from work done by, or on behalf of, Contractor pursuant to the Contract and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled; or (C) Payment of an amount that is disputed by the City.

Upon receipt of a Claim, the City shall conduct a reasonable review of the Claim and, within a period not to exceed 45 days, shall provide Contractor a written statement identifying what portion of the Claim is disputed and what portion is undisputed, provided, the parties may extend the 45 day time period by mutual agreement.

If the City needs approval from the City Council to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the Claim, and the Council does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a Claim, the City shall have up to three days following the next duly publicly noticed meeting of the City Council after the 45-day period, or extension expires to provide Contractor a written statement identifying the disputed portion and the undisputed portion.

Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the City issues its written statement. If the City fails to issue a written statement, the Claim shall be deemed rejected in its entirety.

If a Contractor disputes the City's written response, or if the City fails to respond to a Claim within the time prescribed, the Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the City shall conduct a meet and confer conference within 30 days for settlement of the dispute. Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the City shall provide the Contractor a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the City issues its written statement. Any disputed portion of the Claim, as identified by Contractor in writing, shall be submitted to nonbinding mediation, with the City and the Contractor sharing the associated costs equally. The City and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

6 CONTROL OF MATERIALS

6-2.01 Source of Supply and Quality of Materials: All materials required to complete the work under the Contract shall be furnished by Contractor and shall be free of hazardous substances.

6-3.01 General: Statistical means will not be used by the City for determination of Standard Specification compliance. Whenever both operating range test results and Contract compliance requirements are specified in these special provisions, the operating range requirements shall apply to the individual test results.

6-3.01A Material Submittals: Upon award of the Contract by City, Contractor shall submit to the Engineer a list of all materials proposed to be used on this project and any supporting documentation and/or samples required and source of supply.

For material listed on the "Engineer's List of Approved Items" which is located in the Sewer and Water sections only of the City Standards, the Engineer shall be provided with the name of the manufacturer and model/part number for all material proposed for this project, unless that item has been replaced as shown on the Project Plans or in the Invitation for Bids.

For all other materials used on this project, regardless of the type of work, Contractor shall provide to the Engineer the name of the manufacturer and model/part number along with supporting documentation and/or samples that will allow the Engineer to determine the material's acceptability.

The Engineer reserves the right to reject any proposed material, whether on the City's "Engineer's List of Approved Items" or not. If the City obtains information indicating that a listed item is not performing satisfactorily or is found to be defective, that item will be rejected and Contractor shall submit a replacement for review at no additional cost to the City.

6-3.01B Material Guarantee: Before any contract is awarded, the bidder may be required to furnish samples of materials and detailed descriptions of equipment to be used in the construction of the project. The materials samples may be subjected to the tests provided for in the Standard Specifications or in this Invitation for Bids to determine their quality and fitness for the project. The successful bidder shall unconditionally guarantee project materials and workmanship for a period of one year from the date of recording of the Notice of Completion. The guarantee shall cover 100% of all costs of repairs within the one year period, including all costs of labor, materials, equipment, and incidentals. Except as may be otherwise provided in Section 3-1.05, the successful bidder shall provide a surety bond executed by a corporate surety authorized and admitted to transact a surety business in the state of California in the minimum amount of one-half of the Contract price to cover this guarantee.

6-3.05 Quality Assurance: California Test 216 (Relative Compaction) testing will be modified as follows: A mechanical compactor (Ploog Engineering Co. Model M 100 or equivalent) with 10-pound hammer and split compaction molds shall be used in lieu of the specified manual compaction equipment.

California Test 231 (Nuclear Gage Determination of In-Place Density) will be modified as follows: In-place density and relative compaction may be determined on the basis of individual test sites in lieu of the area concept, at the discretion of the Engineer.

6-4 Water Utility

6-4.01A Construction Water: All water required for the performance of the work shall be provided by Contractor. Prior to obtaining water from the City's water system, Contractor shall obtain a Water Use Permit from the City of Santa Rosa Water Department and rent a hydrant or bridge meter. Contractor is responsible for the cost of all water and the cost of all deposits, permits and fees.

Contractor is prohibited from operating gate valves or fire hydrants on the City system.

The acquisition of water from the City's water system through un-metered hydrants or other facilities is a violation of City ordinance and State law. The use of water from sources other than the City's water system must be approved by the Engineer in advance of the use.

Citations and fines will be levied for violation of these and other utility regulations and deductions will be made from payments consistent with Section 7-1.02A(1) of the Standard Specifications.

6-4.01B Water Utility Notification: Contractors or parties requiring work of any kind by the City of Santa Rosa Water Department forces shall request such services a minimum of 48 hours in advance of the time such services are desired. Work requests which will involve the City of Santa Rosa Water Department forces for more than eight hours or an extensive number of City parts shall be requested a minimum of seven calendar days in advance.

If it is necessary to terminate or disrupt utility service to any customer, Contractor shall make the request for such work by City forces an additional 72 hours (three additional working days for a total of five working days advance notice) in advance of the time such services are desired to allow affected customers a minimum of 72 hours' notice. Contractors who fail to keep field appointments will be billed for scheduled City of Santa Rosa Water Department crew standby time which was used and the Contractor shall bear the costs incurred by the City of Santa Rosa's Water Department for re-notification of customers.

City of Santa Rosa Water Department crews work a 9/80 schedule. This schedule may prohibit shutdowns for tie-ins on alternating Fridays. After hours work or weekend work may be performed if prior authorization from the Engineer is obtained.

Other than the hours specified in this Invitation for Bids, requests by Contractor for after hours or weekend work is to be avoided whenever possible. Any overtime costs incurred by City for such work shall be borne by Contractor.

Interruption of utilities service to commercial customers shall be coordinated with the customer to minimize disruption to the enterprise to the greatest extent practicable. After notification by the Contractor of the need, the City of Santa Rosa Water Department will contact all commercial customers and inform Contractor accordingly.

6-4.01C Water Facility Damage: All damage caused to the City's water system shall be immediately reported to the Engineer.

Damage caused to the City's water system by Contractor's operations shall be repaired by the Contractor at Contractor's sole expense in a manner satisfactory to the City of Santa Rosa Water Department. Such repairs shall not be charged to the City or any City project. All repair work shall be witnessed and approved by the City of Santa Rosa Water Department prior to backfilling the excavation. The City will require re-excavation if backfilling occurs prior to inspection, which costs shall be borne by Contractor.

Contractor is responsible for, at its sole cost and expense, the repair and remediation of damage to property and facilities caused by any of the following circumstances:

- a. Contractor fails to make a written request for a markout or begins excavation without providing the City of Santa Rosa Water Department a reasonable opportunity to mark facilities;
- b. Contractor destroys markouts;
- c. Contractor fails to perform hand digging or probing for utilities near markouts; or
- d. Contractor fails to use reasonable caution, regardless of whether markouts are present or clear. Reasonable caution includes any efforts to avoid damaging existing facilities, such as when excavating in the vicinity of water mains.

City may, in its discretion, opt to make the repairs for which Contractor is responsible with its own forces. In such cases, the repairs will be made at Contractor's expense in accordance with the emergency repair rate schedule of the City of Santa Rosa Water Department. The City may make repairs whenever restoration of service requires extraordinary speed or special equipment. Contractor will be billed accordingly and City shall have the right and option to withhold payment hereunder, or a portion thereof, for any such costs billed but not promptly paid by Contractor.

6-4.02 Salvage: All valves, hydrants, and other appurtenances of the water system that are the property of City and removed by Contractor shall be delivered to the City's Municipal Services Center (55 Stony Point Road) unless Contractor has obtained specific written approval from the City of Santa Rosa Water Department to otherwise dispose of the materials.

6-4.03 Trade Names and Alternatives: Unless otherwise specified, material and equipment specifications that identify a particular patent, trade name or manufacturer, may be satisfied through substitute materials and equipment accepted by the City. Contractor may offer substitute materials and equipment of equal or better quality to the City. Any such offer shall be made in writing to the Engineer at least four weeks in advance of the time Contractor wishes to order the materials or equipment. Contractor shall include sufficient data which, together with any other information the Engineer may require, will enable the Engineer to determine the acceptability of the materials and equipment. When the substitute materials or equipment necessitate changes to any part of the work, the information shall include drawings and details showing all such changes and Contractor shall perform these changes as a part of any acceptance of substitute materials or equipment. The use of substituted materials and equipment will be permitted only after written acceptance of the materials and equipment by the Engineer. Such acceptance shall not relieve the Contractor from full responsibility for the sufficiency, quality and performance of the substitute materials and equipment.

The City will not, under any circumstances, acknowledge or consider any offers to accept substitute materials or equipment between the dates of public notice of advertisement and the bid opening.

7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-1.02A(1) Forfeitures for Health and Safety Violations: Contractor shall comply with all applicable provisions of the Santa Rosa City Code and any failure to do so shall constitute a breach of the Contract. In the event of any violation of the Santa Rosa City Code that may impact public health and safety, including, but not limited to Chapter 17-12, "Storm Water" and Chapter 13-04, "Street Encroachments," City shall have the right to impose a charge against Contractor in an amount equal to \$500.00 per violation per day. Prior to the imposition of any charge hereunder, City shall first provide a written notice to Contractor of the violation and setting forth a reasonable period of time for Contractor to cure the violation(s). In the event Contractor fails to cure any such violation within the time provided, City shall have the right, in addition to all other rights and remedies available to City, to deduct and withhold as a permanent forfeiture by Contractor the appropriate amounts from any payment otherwise due Contractor under this Contract.

7-1.02K(2) Wages: Pursuant to Labor Code sections 1770 *et seq.*, each laborer or mechanic of Contractor or any subcontractor engaged in work on the project under this contract shall be paid not less than the hourly wage rate of per diem wages set forth in the prevailing wage rate schedule published by the Director of Industrial Relations, regardless of any contractual relationship which may be alleged to exist between Contractor or any subcontractor and such laborers and mechanics. A copy of the schedule of prevailing wage rates can be obtained online at www.dir.ca.gov or from the Department of Transportation and Public Works at 69 Stony Circle, Santa Rosa.

Any laborer or mechanic employed to perform work on the public works project under this Contract, which work is not covered by any of the foregoing classifications, shall be paid not less than the prevailing wage rate of per diem wages specified herein for the classification which most nearly corresponds to the work to be performed by the worker.

The foregoing specified prevailing wage rates are minimum rates only, and Contractor may pay any wage rate in excess of the applicable rate.

Pursuant to Labor Code Section 1775, Contractor as a penalty to the owner shall forfeit not more than \$200.00 for each calendar day, or a portion thereof, for each worker paid less than the prevailing wage rate established by the Department of Industrial Relations for such work or craft in which such worker is employed. The difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which the worker was paid less than the prevailing wage rate shall be paid to each worker by Contractor.

Contractor shall only provide prevailing wage reports upon written request from City. When requested, these prevailing wage reports must be redacted by the Contractor prior to providing them to City.

7-1.02K(4) Apprentices: Contractor agrees to comply with Chapter 1, Part 7, Division 2, sections 1777.5 *et seq.* of the California Labor Code. These sections require contractors and subcontractors to employ apprentices in apprenticeable occupations in a ratio of not less than one hour of apprentice work for each five hours of journeyman work (unless an exception is granted in accordance with Section 1777.5), and the contractors and subcontractors shall not discriminate among otherwise qualified employees as apprentices solely on the ground of sex, race, religion, creed, national origin, ancestry, or color. Only apprentices as defined in Labor Code section 3077, who are in training under apprenticeship standards and who have written apprentice agreements will be employed on public works in apprenticeable occupations. The responsibility for compliance with these provisions is fixed with the prime contractor for all apprenticeable occupations.

7-1.02K(6)(a)(1) Notice to Vendors: Attention is directed to the current OSHA Standards. All equipment, tools and materials which are furnished and/or installed as part of this Contract shall meet or exceed the aforementioned standards in order to be considered acceptable.

7-1.02K(6)(b) Excavation Safety: When the digging or excavation occurs during project construction, Contractor shall:

- a. Promptly notify City in writing of the following conditions before any such conditions are disturbed:
 1. Material that the Contractor believes may be hazardous waste as defined in Health and Safety Code section 25117 that is required to be removed to a Class I, Class II or Class III disposal site in accordance with provisions of existing law;
 2. Subsurface or latent physical conditions at the site differing from those indicated in the Invitation for Bids; and
 3. Physical conditions at the site of any unusual nature, materially different from those ordinarily encountered and generally recognized as inherent in the type of work under the Contract.
- b. The City will investigate the conditions and will issue a change order under the terms of the Contract if it finds that the conditions warrant it.
- c. If a dispute arises between City and Contractor as to whether a change order is warranted, Contractor shall not be excused from any scheduled completion date provided for in the Contract but shall proceed with all work to be performed under the Contract.

7-1.02K(6)(b)(1) Trench Excavation Safety Plans: When the estimated cost for the excavation of any trench or trenches five feet or more in depth will exceed \$25,000.00, Contractor shall submit to the Engineer in advance of excavation a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards established by the construction safety orders, or if the trench is anticipated to be greater than 20 feet, the plan shall be prepared by a registered civil or structural engineer.

A permit to do the above described work shall be obtained from the State of California, Division of Industrial Safety. Proof of such permit shall be submitted to the Engineer prior to starting the trench work.

Full compensation for complying with the provisions of this section shall be considered as included in the Contract price and no additional allowance will be made for the work.

7-1.02K(6)(d) Confined Space Safety: Any confined space entry for this project, including but not limited to manhole or water storage tank entry, will require a confined space entry permit pursuant to Cal/OSHA regulations as set forth in title 8 California Code of Regulations (CCR) sections 5157 or 5158. Confined space entry shall have the meaning ascribed in title 8 CCR sections 5157 and 5158. For any confined space entry for construction operations regulated by title 8 CCR section 1502, Contractor shall comply with title 8 CCR section 5158, "Other Confined Space Operations." For any other confined space operations, Contractor shall comply with title 8 CCR section 5157, "Permit-Required Confined Spaces."

Attention is directed to the technical specifications in the Special Provisions for information regarding entry to any City maintained confined space. Pursuant to title 8 CCR section 5157, Contractor is required to obtain any available information regarding hazards and operations for any City maintained confined spaces. The City maintained Confined Space Entry Manual is available for viewing at the City

of Santa Rosa Water Department or Transportation and Public Works Department office at 69 Stony Circle, Santa Rosa.

Contractor shall immediately inform the Engineer of any previously unidentified hazards confronted or created during confined space entry.

7-1.02L(2)(a) Patents and Royalties: All fees, royalties, or claims for any patented invention, article, process or method that may be used upon or in any manner connected with the work under this Contract shall be paid by Contractor. Contractor and its sureties shall protect and hold harmless City and its officers, agents, and employees from any and all demands made for such fees royalties or claims brought or made by any third party, and before the final payment is made on the account of the Contract, Contractor shall, if requested by City, furnish acceptable proof of a proper release from all such claims and liabilities.

Should Contractor, its officers, agents, or employees, or any one of them be enjoined from furnishing or using any invention, article, material, or plans supplied or required to be supplied or used under the Contract, Contractor shall promptly substitute other articles, materials, or appliances in lieu thereof of equal efficiency, quality, finish, suitability, and market value, and satisfactory in all respects to the Engineer. In the event that the Engineer elects, in lieu of such substitution, to have supplied and to retain and use any such invention, article, materials, or plans as may be required to be supplied by the Contract, Contractor shall pay such royalties and secure such valid licenses as may be requisite and necessary for City, its officers, agents, and employees, or any one of them to use such invention, article, materials, or appliance without being disturbed or in any way interfered with by any proceeding in law of equity on account thereof. Should Contractor neglect or refuse to make the substitution promptly or to pay such royalties and secure such licenses as may be necessary, then in that event the Engineer shall have the right to make such substitutions or City may pay such royalties and secure such licenses and charge Contractor even though final payment under the Contract may have been made.

7-1.02M(3) Mined Materials: California Public Contract Code section 20676 prohibits surface mining operators which are subject to the Surface Mining and Reclamation Act of 1975 (SMARA) from selling California mined construction material to the City unless the operator is identified in a list referred as the **3098 List**. The List, which is maintained by the Department of Conservation's Office of Mine Reclamation (OMR), changes throughout the year and can be viewed at the OMR website: http://www.consrv.ca.gov/OMR/ab_3098_list/index.htm. To confirm whether or not a specific operator is on the List at any given time, Contractor shall call the OMR at (916)323-9198.

7-1.03A Maintaining Traffic: Attention is directed to Sections 7-1.04 of the Standard Specifications and to the following modifications thereof.

If construction is within City owned right-of-way, provisions shall be made for the safe passage of public traffic through the work site at all times consistent with the requirements of Santa Rosa City Code Chapter 13-04.

Except for projects to be performed under a minor contract, Contractor shall install and maintain project identification signs at each end of the project or as directed by the Engineer two weeks prior to any construction activity. City shall furnish the appropriate sign panels upon request from Contractor. To mount the sign panels, Contractor shall furnish and install 4" X 4" posts or mount by other appropriate methods as approved by the Engineer. These sign panels shall be returned to the City Corporation Yard at 55 Stony Point Road after completion of the project.

Two weeks prior to any construction activity, advance notice signs for road closures shall be furnished and installed by Contractor at each end of the project and shall remain in place throughout the duration of the subject closure. Details of panel construction and lettering shall be approved by the Engineer. Contractor shall furnish, install, and maintain at its expense all barricades, signs, lights, and other devices necessary to adequately warn of any obstructions to the traveled and pedestrian way and

provide flaggers as necessary for the safety of public traffic and pedestrians and to provide access to property adjacent to the work site and Contractor shall comply with the Americans with Disabilities Act of 1990 (42 U.S.C. 12101, *et seq.*) (ADA) and any regulations and guidelines issued pursuant to the ADA.

Contractor shall comply with the current edition of the California Manual of Uniform Traffic Control Devices (CA MUTCD) for all items related to traffic within the work site.

Rain and other occurrences that may cause the suspension or delay of the work shall in no way relieve Contractor of its responsibility to provide traffic control and public access through the work site as specified herein. At all times, Contractor shall keep at the work site such materials, forces and equipment as may be necessary to keep roads, streets, and driveways within the work site open to traffic and in good repair and shall expedite the passage of such traffic, using such forces and equipment as may be necessary.

Should Contractor fail, in the opinion of the Engineer, to provide all the materials, forces and equipment necessary to maintain traffic through the work site as set forth herein, City may take steps necessary to remedy any such failure, including but not limited to causing such work to be performed and/or suspending any further work under the Contract. Any such remedial cost and expense incurred by the City, plus an administrative charge of 15%, shall be immediately due and payable by Contractor and may be deducted from any amounts owed to Contractor hereunder. In the event there are insufficient sums owed to Contractor hereunder to cover the foregoing costs and charges, City shall have the right to pursue any other remedy to recover the same, including but not limited to, proceeding against any surety or bond in favor of City. City's rights under Section 7-1.02 are intended to be in addition to and not in lieu of any charges imposed by City against Contractor under Section 7-1.02A(1) above for violations of the Santa Rosa City Code.

Contractor shall be responsible for informing emergency response agencies operating within the area of the work of obstructions to either public or private roads caused by reason of Contractor's operations hereunder.

Contractor shall make provisions for the safe passage of pedestrians around the project work site at all times.

8 PROSECUTION AND PROGRESS

8-1.01A Assignments: Once awarded, this Contract shall not be transferred, assigned, or sub-contracted, except as herein expressly provided without the prior written consent of the City in the City's sole and absolute discretion. See Section 5-1.12 of the Standard Specifications.

8-1.04B Standard Start: Contractor shall begin work within ten calendar days after the date authorized in the Notice to Proceed and shall diligently prosecute the Contract to completion before the expiration of:

35 WORKING DAYS

8-1.05 Time: Working days will be counted beginning with the day the Contractor begins work or with the tenth day after the date authorized in the Notice to Proceed, whichever occurs first.

Unless otherwise directed by Engineer, Contractor shall not conduct any activities that generate noise earlier than 8:00 a.m. or later than 5:00 p.m.

8-1.10 Liquidated Damages: Contractor hereby agrees that Contractor shall pay to the City liquidated damages for each and every calendar day delay over and above the number of working days prescribed above for finishing the work in the amount shown in Section 8-1.10 of the Standard Specifications.

9 MEASUREMENT AND PAYMENT

9-1.04 Force Account Work: All work done on a force account basis shall be recorded daily on report sheets prepared by Contractor and signed by both the Engineer and Contractor. Such reports shall thereafter be considered the true record of force account work performed during the project. Such reports shall be furnished to the Engineer and a copy retained by Contractor.

All extensions of labor, equipment, and material costs shall be completed by Contractor and submitted to the Engineer within 30 days of the completion of the extra work. Completed and extended extra work reports received later than the times herein prescribed may be deemed invalid and rejected without payment at the discretion of the Engineer.

9-1.07 Payment Adjustments For Price Index Fluctuations: Any references to Opt Out of Payment Adjustments for Price Index Fluctuations in the Standard Specifications are deleted in their entirety.

9-1.16 Progress Payments: Once each month for progress pay purposes, the City will prepare a written estimate of the total amount of completed work and accepted materials purchased by Contractor but not installed. The City shall retain five percent of such estimated value of the completed work and the unused materials and pay Contractor the balance after deducting all previous payments and all sums to be retained under the provisions of the Contract. No such estimate or payment shall be required to be made when, in the judgment of the Engineer, the work is not proceeding in accordance with the provisions of the Contract or when, in the Engineer's judgment, the total value of the completed work since the last estimate is less than \$500.00. No such estimate or payment shall be construed to be an acceptance of any defective work or improper materials.

After Contract acceptance, the Engineer will prepare a written proposed final estimate of the proposed final quantities of work completed under the Contract and the value of such work and will submit such estimate to Contractor. The City shall retain five percent of such estimated value of the work done and shall pay to Contractor the balance after deducting all amounts to be retained under the provisions of the Contract.

The City may, at its option and at any time, retain out of any amounts due Contractor sums sufficient to cover any unpaid claims of City or others, provided that sworn statements of all non-City claims shall have been filed with the Director of Finance.

9-1.16E(6) Substitution of Securities for Withheld Amounts: Pursuant to Public Contract Code section 22300, securities may be substituted for any moneys withheld by City to ensure performance under this Contract, provided that substitution of securities provisions shall not be required in contracts in which there will be financing provided by the Farmer's Home Administration of the United States Department of Agriculture pursuant to the Consolidated Farm and Rural Development Act (7 USC sections 1921 *et seq.*), and where federal regulations or policies or both do not allow the substitution of securities. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with the City, or with a state or federally chartered bank as the escrow agent, which shall then pay such moneys to Contractor. The Director of Finance is authorized to execute substitution of securities agreements on behalf of the City. The City will return the securities to Contractor upon satisfactory completion of the Contract as determined by City in its sole discretion and the resolution of all outstanding claims against the securities. Contractor shall be the beneficial owner of any securities substituted for moneys withheld and shall receive any interest thereon.

Securities eligible for investment under this section shall include those listed in Government Code section 16430, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit or any other security mutually agreed to by Contractor and the City, provided that the substituted security is equal to or not less than five percent of the Contract amount.

Security substitutions must be submitted by Contractor and approved by City prior to the time of the first progress payment to be made under the Contract. No other method of substituting securities for retention will be accepted. The security substitution shall be done only upon execution of an agreement satisfactory to City which includes the following provisions:

- a. The amount of securities to be deposited;
- b. The terms and conditions of conversion to cash in case of the default of Contractor; and
- c. The procedure for return of securities upon completion of the Contract.

9-1.17D Final Payment and Claims: The processing of payment of the final estimate shall not be commenced less than 35 days after the date of recording of the Notice of Completion with the County Recorder's Office. Contractor is advised that it takes approximately ten days for a check to be issued following a request for payment.

Contractor shall submit its written statement of all claims for additional compensation under the Contract to the Engineer within 15 days after submission to Contractor of the proposed final estimate.

If Contractor does not file a claim within the 15 day period, or upon Contractor's approval, the Engineer will issue a final written estimate and the City shall pay to Contractor the entire sum due after deducting all previous payments, if any, and all amounts to be retained under the provisions of the Contract.

If Contractor files a claim within the 15 day period, the Engineer will furnish a semi-final estimate and pay the amount due under the semi-final estimate within 30 days. The semi-final estimate is conclusive as to the amount payable except as may be affected by claims and any amount retained. The Engineer shall then consider and investigate such claim and shall make such revision in the final quantities as the Engineer may find to be due and shall then make and issue a final written estimate. The City will pay the amount due, after deducting all previous payments, if any, and amounts to be retained under the provisions of the Contract.

Any and all prior partial estimates and payments shall be subject to correction in the final estimate and payment.

The final estimate shall be conclusive and binding against both parties to the Contract on all questions relating to the performance of the Contract and the amount of work done thereunder and compensation therefor, except in the case of gross error.

9-1.17D(3) Final Determination of Claims: Claims filed by Contractor shall be in sufficient detail to enable the Engineer to determine the basis and amount of the Claims. Contractor shall also furnish reasonable documentation to the City to support Claims. If additional information is required by the Engineer, Contractor shall provide such information to the Engineer no later than the 15th day after receipt of the written request from the Engineer. If the 15th day falls on a weekend, holiday, or day City offices are closed, then the information shall be provided to the Engineer no later than close of the next business day. Failure to submit the requested information to the Engineer within the time specified will be sufficient cause for denying the Claim.

Contractor shall keep full and complete records of the costs and additional time incurred for any work for which a claim for additional compensation is made. The Engineer or any designated Claim investigator or auditor shall have access to those records and any other records as may be reasonably required by the Engineer to determine the facts or contentions in each Claim. Failure to grant access to such records shall be sufficient cause for denying the Claims.

9-1.22 Arbitration: Any references to Arbitration in the Standard Specifications are deleted in their entirety.

Claims submitted by Contractor shall be accompanied by a notarized certificate containing the following language:

Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code sections 12650 *et seq.*, the undersigned,

_____,
(Name)

_____ of
(Title)

(Contractor)

hereby certifies that the claim for additional compensation made herein is supported by a true statement of the actual costs incurred and time expended on this project and is fully documented by records maintained by Contractor.

Dated _____

/s/ _____

Subscribed and sworn before me this _____ day of

Notary Public

My Commission Expires _____

Failure to submit the notarized certificate will be sufficient cause for denying the claim.

Any claim for overhead expenses, in addition to being certified as stated above, shall be supported by an audit report of an independent Certified Public Accountant. Any such overhead claim shall also be subject to audit by the City at its discretion.

Any costs or expenses incurred by the City in reviewing or auditing any claims that are not supported by Contractor's cost accounting or other records shall be deemed to be damages incurred by the City within the meaning of the California False Claims Act.



TECHNICAL SPECIFICATIONS

FOR

**LUTHER BURBANK HOME AND GARDENS
REROOFING PROJECT**

CONTRACT NO. C02381



2023

SECTION 01 01 00

SUMMARY

PART 1 - GENERAL

1.01 PROJECT

- A. Project Name: Luther Burbank Home and Garden Reroofing
- B. Owner's Name: City of Santa Rosa Recreation and Parks Department

1.02 DESCRIPTION OF ALTERATIONS WORK

- A. Remove existing asphalt shingles at Main House and Carriage House.
- B. If wood shingles are uncovered beneath the asphalt shingles, document prior to removal, as described in drawings.
- C. Assess roof sheathing for damage or deterioration on the main House, Carriage House and Seed House, and identify areas requiring repair or replacement.
- D. Review existing wood gutters, currently shingled over, on the Main House at three locations, as described in drawings.
- E. Replace existing metal downspouts at wood gutters with galvanized metal downspouts, painted.
- F. Remove portion of roof connecting upper roof with porch roof on west elevation. Restore or replace wood trim at eave fascia of upper roof.
- G. Review condition of flashings at roof intersections. Replace flashings where damaged by demolition activities or deterioration. Salvage, catalog and reinstall wood siding after flashing installation or repair.
- H. Install waterproof membrane and asphalt shingles on Main House, Carriage House and Seed House.
- I. Install new metal gutter and downspout at one location on the north elevation.
- J. and Lighting: Alter existing system and add new construction, keeping existing in operation.

1.03 OWNER OCCUPANCY

- A. Owner intends to occupy the Project upon Substantial Completion.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

1.04 CONTRACTOR USE OF SITE AND PREMISES

- A. Provide access to and from site as required by law and by Owner:
 - 1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
 - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.
- B. Time Restrictions:
 - 1. Construction Hours: 8:00 a.m. to 6:00 p.m., Monday through Friday.
 - 2. work may not occur on days listed as Holidays on the City of Santa Rosa's Calendar.
 - 3. Special permission can be asked for extended construction hours but needs approval from the Owner before any work is able to proceed outside of these hours.
 - 4. Any work done before or after the allowed hours must not exceed the noise level of five decibels at the nearest lot line unless a special permit has been granted to allow this. Five decibels is similar to the sound of a screw gun installing screws in drywall.

1.05 DRAWINGS

- A. The location, extent, and design of the required construction and improvements are indicated on the drawings accompanying these specifications, which drawings are hereby made a part of

these specifications and this contract. A complete list of drawings and titles is given on the title sheet Coversheet of the drawings.

- B. Interpretation of Contract Requirements
1. Correlation: The contract documents shall be interpreted as being complementary in requiring complete work ready for use and occupancy or, if not to be occupied, operation. Any requirement occurring in any one of the documents is as binding as though occurring in all.
 2. Conflicts in the Contract Documents: In the event of conflict in the contract documents, priorities stated in subdivisions a, b, c, and d below shall govern:
 - a. Addenda shall govern over all other contract documents. Subsequent addenda shall govern over prior addenda only to the extent specified.
 - b. In case of conflict between plans and specifications, the plans shall govern.
 - c. Conflict within the Plans:
 - 1) Specific Notes shall govern over all other portions of the plans except for schedules.
 - 2) Larger scale drawings shall govern over smaller scale drawings.
 - 3) Detail drawings shall govern over standard plates bound within the specifications.
 - 4) Figured or numerical dimensions shall govern over dimensions obtained by scaling.
 - d. In the event where provisions of codes, safety orders, contract documents, referenced manufacturers specifications or industry standards are in conflict, the more restrictive and higher quality shall govern.
- C. Any part of the work not specified in the specifications but indicated on the drawings, or any part of the work not indicated on the drawings but specified in the specifications, shall be constructed and completed by the Contractor as if fully specified in the specifications and indicated on the drawings.
- D. Where "as shown," "as indicated," "as noted," "as detailed," "as scheduled," or words of like meaning are used in the Contract or Documents, it shall be understood that the reference to the foregoing drawings is being made, unless otherwise specified.
- E. When reference to the work "plans" is made anywhere in the contract documents, it shall be understood that such reference refers to the drawings.

1.06 SUPPLEMENTARY CONDITIONS

- A. The Contractor shall be responsible for verifying field measurements before ordering materials and prefabricated items. Any necessary adjustments between field measurements and drawings or specifications shall be made in accordance with the Architect.
- B. The Contractor shall be responsible for protection of all existing facilities on or adjacent to the premises, including sensitive riparian or wetland areas adjacent to the project site, whether shown on drawings or not. In the event of damage, such items shall be immediately repaired or replaced by the Contractor, at his expense, to the satisfaction of the Architect.
- C. The Contractor shall provide all items not specified or shown on the drawings for a complete and finished job.
- D. Contractor shall coordinate use of and access to the construction area with the project site boundaries, including scheduling time and locations for deliveries and storage of materials. During all phases of work minimum disturbance of site functions is essential.
- E. The Contractor will be required to assume sole responsibility for the job site conditions during the course of demolition and construction of the project including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours, and Contractor further agrees to defend, indemnify, and hold the Association, and the Architect harmless from any and all liability, real or alleged, in connection with the performance of work on this project. Inasmuch as addition to, remodeling and/or rehabilitation

of an existing building requires certain assumptions to be made regarding existing conditions, and because some of these assumptions may not be verifiable without expending additional sums of money, or destroying otherwise adequate or serviceable portions of the building, the Contractor and the Association agree that the Contractor and the Association will hold harmless, indemnify, and defend the Architect from any and all claims arising out of the professional services in this circumstance and under this agreement.

1.07 COORDINATION

- A. Coordinate work of the various sections of the specifications to assure efficient and orderly sequence of installation of construction elements.
- B. Verify that characteristics of elements of interrelated constructions and operating equipment are compatible; coordinate work of various sections having interdependent responsibilities for construction, installation, connection to and placing such items in service.
- C. The organization of the specifications into divisions, sections and articles, and the arrangement of the Drawings shall not control the Contractor in dividing the Work among the Subcontractors or in establishing the extent of Work to be performed by any trade.

1.08 WEATHER PROTECTION

- A. Provide continuous weather protection for all work in place and for all items delivered to site. Repair, replace or refinish any items damaged by weather to Project Representative's satisfaction.

1.09 ADJACENT SITE CONDITION SURVEY

- A. Prior to commencement of work, jointly survey the site, paving, plant life, and other items with the Project Representative, noting and recording existing damage such as cracks, sags, unhealthy plant life, and other damage.
- B. This record shall serve as a basis for determination of subsequent damage to these items due to settlement, movement, or Contractor's operations.
- C. Existing damage observed shall be marked and the official record of existing damage shall be signed by the parties making the survey.
- D. Cracks, sags, and damage to the site, paving, plant life, and other items not noted in the original survey but subsequently observed shall be reported immediately to the Architect.

1.10 PROTECTION OF EXISTING UTILITIES

- A. Contractor shall locate known existing utility installations before proceeding with excavation, trenching, or other operations which may cause damage; shall maintain them in service where appropriate, and shall repair any damage to them caused by the Work, at no increase in Contract Sum.
- B. Additional utilities whose locations are unknown to the Agency may exist. Contractor shall be alert to their existence. If they are encountered, immediately notify the Architect.
- C. In addition to notification, if a utility is damaged, Contractor shall take appropriate action as provided in the General Conditions.
- D. Additional compensation or extension of time on account of utilities not shown or otherwise brought to the Contractor's attention including reasonable action taken to protect or repair damage shall be determined as provided in the General Conditions.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

SECTION 01 04 00
COORDINATION

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section specifies administrative and supervisory requirements necessary for Project coordination including, but not necessarily limited to:
1. Coordination.
 2. Administrative and supervisory personnel.
 3. General installation provisions.
 4. Cleaning and protection.

1.02 PROJECT COORDINATION

- A. Coordination: Coordinate construction activities included under various Sections of these Specifications to assure efficient and orderly installation of each part of the work. Coordinate construction operations included under different Sections of the Specifications that are dependent upon each other for proper installation, connection, and operation.
1. Where installation of one part of the work is dependent on installation of other components, either before or after its own installation, schedule construction activities in the sequence required to obtain the best results.
 2. Where availability of space is limited, coordinate installation of different components to assure maximum accessibility for required maintenance, service and repair.
 3. Make adequate provisions to accommodate items scheduled for later installation.
 4. Coordinate the work; do not delegate the responsibility for coordination to a Subcontractor.
 5. Resolve differences or disputes concerning coordination, interference, or extent of work of the various Sections before presenting solution(s) to the Project Representative for timely resolution. The Contractor's decisions, if consistent with the requirements of the Contract Documents, shall be final.
 6. Coordinate the efforts of all individuals connected with this work; review all dimensions for accuracy and adequacy to receive products, equipment and assemblies as specified and as indicated on reviewed shop drawings and product data.
 7. Drawings showing location of building components are diagrammatic. When indicated locations are not possible due to obstructions, notify the Project Representative for a determination of necessary relocation. Do not relocate items until Architect or the Project Representative has approved the location.
 8. Coordinate with Project Representative for simultaneous work under separate Contracts, if any.
 9. Take special precautions in placement of utilities, fixtures, hangers, piping and the like in exposed structures; coordinate placement to prevent "false starts" with subsequent damage to structure.
 10. Schedule subcontractors work to allow the timely execution of the Project. Identify uncertainties in the coordination and indicate contingency plans in the construction schedule.
- B. Where necessary, prepare memoranda for distribution to each party involved outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
1. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and ensure orderly progress of the work. Such administrative activities include, but are not limited to, the following:
 - a. Preparation of schedules.
 - b. Installation and removal of temporary facilities.
 - c. Delivery and processing of submittals.
 - d. Progress meetings.
 - e. Project Close-out activities.

1.03 COORDINATION OF WORK AND INSPECTIONS

- A. Welding, reinforcing bar placement and splices, and other work for which inspection is required shall not be carried out without such inspection and likewise work for which sampling is required, whether the work is performed during regular work hours or off times.
- B. Coordinate with the Project Representative to provide inspections and sampling at times required and notify Testing Labs if required.

PART 2 - PRODUCTS

NOT USED.

PART 3 - EXECUTION

3.01 GENERAL INSTALLATION PROVISIONS

- A. General: The provisions in this Article are in addition to and are intended to supplement specific installation requirements specified in other Sections.
- B. Inspection of Conditions: Require the installer of each major component to inspect both the substrate and conditions under which work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
- C. Manufacturers' Instructions: Comply with manufacturers' installation instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in Contract Documents.
- D. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.
- E. Provide attachment and connection devices and methods necessary for securing work. Secure work true to line and level where allowable. Allow for expansion and building movement.
- F. Visual Effects: Provide uniform joint widths in exposed work. Arrange joints in exposed work to obtain the best visual effect. Refer questionable choices to the Architect or Project representative for final decision.
- G. Recheck measurements and dimensions, before starting each installation.
- H. Install each component during weather conditions and Project status that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.
- I. Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.
- J. Mounting Heights: Where mounting heights are not indicated or historic location cannot be ascertained, install individual components at standard mounting heights recognized within the industry for the particular application indicated. Refer questionable mounting height decisions to the Architect or Project Representative for final decision.

3.02 CLEANING AND PROTECTION

- A. During handling and installation, clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- B. Clean and maintain completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- C. Limiting Exposures: Supervise construction activities to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

END OF SECTION

COORDINATION
01 04 00 - 2

SECTION 01 04 50
CUTTING AND PATCHING

PART 1 - GENERAL

1.01 GENERAL REQUIREMENTS

- A. Perform all cutting and patching as required to perform and complete the work of this project.
- B. Perform cutting and patching for all trades as required.
- C. Contractor shall be responsible for coordination and interface of all cutting and patching work.
- D. Patching shall achieve security, strength, and weather protection, as applicable and required.
- E. Patching shall successfully duplicate undisturbed adjacent finishes, colors, textures, and profiles. Where there is dispute as to whether duplication is successful or has been achieved to a reasonable degree, the Architects judgment shall be final.

PART 2 - PRODUCTS

2.01 NOT USED.

PART 3 - EXECUTION

3.01 REQUIREMENTS

- A. Perform all cutting, associated structural reinforcing, and patching in a manner to prevent damage to other work and to provide proper surfaces for the installation of materials, equipment, and repairs.
- B. Adjust and fit products to provide a clean and professional installation.
- C. Cutting work shall be neatly and accurately performed with proper tools and equipment. Cuts shall be of minimum size required for the work.
- D. Cutting work shall be accurately located and shall be closely coordinated with the individual trades requiring such cutting work.
- E. Work to remain shall be properly protected to prevent damage.
- F. When items such as woodwork, moldings, gutters, decorative metals, windows, or other decorative elements must be disturbed, these items shall be removed carefully by the Contractor and preserved for reuse. Before removal, the items and their original installations will be documented to the fullest extent necessary to re-install the items with the best possible results.

3.02 CLEAN UP

- A. Dispose of waste, trash, and debris in a safe, acceptable manner, in accordance with applicable laws and ordinances and as prescribed by authorities having jurisdiction. Burying of trash and debris on the site will not be permitted.
- B. All milled lumber, moldings, stone, bricks, landscape materials, metals, and other salvaged items are the property of the Owner. Any items not desired by the Owner become the property of the Contractor and are to be removed from the site at the Contractor's expense. Coordinate with the final disposition of materials with the Architect

END OF SECTION

SECTION 01 21 00

ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
 - 1. Unit-cost allowances.
 - 2. Quantity allowances.
- C. Related Requirements:
 - 1. Section 01 22 00 "Unit Prices" for procedures for using unit prices, including adjustment of quantity allowances when applicable.

1.2 DEFINITIONS

- A. Allowance: A quantity of work or dollar amount included in the Contract, established in lieu of additional requirements, used to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.

1.3 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection, or purchase and delivery, of each product or system described by an allowance must be completed by the Owner to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

1.4 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

1.5 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.6 UNIT-COST ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
 - 1. If requested by Architect, retain and prepare unused material for storage by Owner. Deliver unused material to Owner's storage space as directed.

1.7 QUANTITY ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
 - 1. If requested by Architect, retain and prepare unused material for storage by Owner. Deliver unused material to Owner's storage space as directed.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. THIS SCHEDULE STILL IN PROGRESS
- B. Allowance No. 1: Quantity Allowance: Include 32 linear feet aluminum metal flashing at wood gutter specified in SECTION 07 62 00 "SHEET METAL FLASHING."

- C. Allowance No. 2: Quantity Allowance: Include 20 linear feet of replacement wood and 5 square feet of wood repair specified in SECTION 06 25 00 "GENERAL WOOD RESTORATION."
- D. Allowance No. 3: Quantity Allowance: Include 40 square feet of wood sheathing replacement as specified in SECTION 06 10 00 "ROUGH CARPENTRY."

END OF SECTION

SECTION 01 22 00

UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.
- B. Related Requirements:
 - 1. Section 01 21 00 "Allowances" for procedures for using unit prices to adjust quantity allowances.

1.2 DEFINITIONS

- A. Unit price is an amount incorporated into the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the Part 3 "Schedule of Unit Prices" Article contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

- A. Unit Price No. 1: Sheet Metal Flashing at roofs
 - 1. Description: Replacement of deteriorated roof flashing.
 - 2. Unit of Measurement: Lineal feet
 - 3. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 01 21 00 "Allowances."
- B. Unit Price No. 2 - Wood Repair
 - 1. Description: in accordance with Section 06 25 00 General Wood Repair.

2. Unit of Measurement: Lineal feet for replacement and square feet for repairs.
 3. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 01 21 00 "Allowances."
- C. Unit Price No. 3: – Sheathing Replacement
1. Description: In accordance with Section 06 10 00 - Rough Carpentry.
 2. Unit of Measurement - Square feet
 3. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 01 21 00 "Allowances."

END OF SECTION

SECTION 01 25 00

CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications. The terms "Change Order", "Contract Modification", and "Amendment" are synonymous.

1.02 MINOR CHANGES IN THE WORK

- A. Architect will issue Bulletins, defined as supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time.

1.03 PROPOSED CHANGE ORDER (PCO)

- A. Owner -Initiated Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. PCOs issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 15 days after receipt of a PCO, submit a change proposal indicating all cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity durations, start and finish times, and activity relationships. Use available total float before requesting an extension of the Contract Time.
- B. Contractor - Change Order Request (COR): Contractor may propose changes by submitting a Change Order Request (COR).
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

1.04 ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, base each Change Order proposal on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.

3. Submit substantiation of a change in scope of work, if any, claimed in Change Order proposals related to unit-cost allowances.
 4. The Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit requests for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the Purchase Order amount or Contractor's handling, labor, installation, overhead, and profit. Submit request within 10 days of receipt of the Architect authorizing work to proceed on the allowance. The Architect has the option to reject requests submitted later than 10 days after such authorization.
1. Do not include Contractor's or subcontractor's indirect expense in the Change Order proposal cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
 2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

1.05 CONTRACT FIELD ORDER (CFO)

- A. Contract Field Order: The Architect may issue a Contract Field Order (CFO). A CFO instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Contract Amendment.
1. A CFO contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.

1.06 CHANGE ORDER (CONTRACT AMENDMENT)

- A. Submit a letter of authority indicating the Contractor's authorized representative for negotiation of cost and time adjustments, and the limits of their authority. On the Owner's approval of a Contractor's Change Proposal, the Architect will issue a Contract Amendment for signatures from the Owner and Contractor.

PART 2 – PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Preconstruction meeting.
- B. Site mobilization meeting.
- C. Progress meetings.
- D. Construction progress schedule.
- E. Progress photographs.
- F. Submittals for review, information, and project closeout.
- G. Number of copies of submittals.
- H. Submittal procedures.

1.02 RELATED REQUIREMENTS

- A. Section 01 01 00 - Summary

PART 2 – PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 PRECONSTRUCTION MEETING

- A. Attendance Required:
 - 1. Owner.
 - 2. Architect.
 - 3. Contractor.
- B. Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractors, list of Products, schedule of values, and progress schedule.
 - 5. Designation of personnel representing the parties to Contract.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 7. Scheduling.
- C. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.02 SITE MOBILIZATION MEETING

- A. Attendance Required:
 - 1. Contractor.
 - 2. Owner.
 - 3. Architect.
 - 4. Contractor's Superintendent.
 - 5. Major Subcontractors.
- B. Agenda:
 - 1. Use of premises by Owner and Contractor.
 - 2. Owner's requirements and occupancy prior to completion.
 - 3. Construction facilities and controls provided by Owner.
 - 4. Temporary utilities provided by Owner.

5. Survey and building layout.
 6. Security and housekeeping procedures.
 7. Schedules.
 8. Application for payment procedures.
 9. Procedures for testing.
 10. Procedures for maintaining record documents.
 11. Requirements for start-up of equipment.
 12. Inspection and acceptance of equipment put into service during construction period.
- C. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.03 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum monthly intervals.
- B. Attendance Required: Job superintendent, major Subcontractors and suppliers, Owner, Architect, as appropriate to agenda topics for each meeting.
- C. Agenda:
1. Review minutes of previous meetings.
 2. Review of Work progress.
 3. Field observations, problems, and decisions.
 4. Identification of problems that impede, or will impede, planned progress.
 5. Review of submittals schedule and status of submittals.
 6. Maintenance of progress schedule.
 7. Corrective measures to regain projected schedules.
 8. Planned progress during succeeding work period.
 9. Maintenance of quality and work standards.
 10. Effect of proposed changes on progress schedule and coordination.
 11. Other business relating to Work.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.04 CONSTRUCTION PROGRESS SCHEDULE

- A. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- B. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
1. Include written certification that major contractors have reviewed and accepted proposed schedule.
- C. Within 10 days after joint review, submit complete schedule.
- D. Submit updated schedule with each Application for Payment.

3.05 PROGRESS PHOTOGRAPHS

3.06 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
1. Product data.
 2. Shop drawings.
 3. Samples for selection.
 4. Samples for verification.
- B. Submit to Architect for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- C. Samples will be reviewed only for aesthetic, color, or finish selection.

- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents.

3.07 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
1. Design data.
 2. Certificates.
 3. Test reports.
 4. Inspection reports.
 5. Manufacturer's instructions.
 6. Manufacturer's field reports.
 7. Other types indicated.
- B. Submit for Architect's knowledge as contract administrator or for Owner. No action will be taken.

3.08 SUBMITTALS FOR PROJECT CLOSEOUT

- A. When the following are specified in individual sections, submit them at project closeout:
1. Project record documents.
 2. Operation and maintenance data.
 3. Warranties.
 4. Bonds.
 5. Other types as indicated.
- B. Submit for Owner's benefit during and after project completion.

3.09 NUMBER OF COPIES OF SUBMITTALS

- A. Documents for Review:
1. Small Size Sheets, Not Larger Than 8-1/2 x 11 inches (215 x 280 mm): Submit the number of copies that Contractor requires, plus two copies that will be retained by Architect.
- B. Documents for Information: Submit two copies.
- C. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect.
1. After review, produce duplicates.
 2. Retained samples will not be returned to Contractor unless specifically so stated.

3.10 SUBMITTAL PROCEDURES

- A. Transmit each submittal with approved form.
- B. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- C. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- D. Apply Contractor's stamp, signed or initialed certifying that review, approval, 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. Schedule submittals to expedite the Project, and coordinate submission of related items.
- F. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
- G. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- H. Provide space for Contractor and Architect review stamps.
- I. When revised for resubmission, identify all changes made since previous submission.

- J. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- K. Submittals not requested will not be recognized or processed.

END OF SECTION

SECTION 01 40 00

QUALITY CONTROL

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Quality assurance and control of installation.
- B. Reference standards.
- C. Field samples.
- D. Manufacturers' field services and reports.

1.02 RELATED SECTIONS

- A. Section 01 30 00 Administration Requirements - Submittals: Submission of manufacturers' instructions and certificates.
- B. Section 01 60 00 Materials and Equipment
- C. Testing and inspection as required by various sections.

1.03 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control of suppliers, manufacturers, products, services, site conditions, and workmanship to produce work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from the Architect before proceeding.
- D. 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.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.04 REFERENCE STANDARDS

- A. Conform to reference standard by date of issue current on date for receiving bids.
- B. Obtain copies of standards and maintain at site 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.

1.05 FIELD SAMPLES

- A. Install field samples at the site as required by individual specification 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 the Architect.

1.06 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, and quality of workmanship, as applicable, and to initiate instructions when necessary.

- B. Submit qualifications of observer to the Architect 30 days in advance of required observations.
- C. Individuals are to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- D. Submit report in duplicate within 15 days of observation to Architect for review.

PART 2 – PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 53 20

TREE AND SHRUB PROTECTION

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes protection and welfare of all existing trees and shrubs within the project scope, including documentation, trimming, cabling, and repair of such trees as necessary.

1.02 DEFINITIONS

- A. Injury is defined, without limitation, as any bruising, scarring, tearing, or breaking of roots, branches, or trunk.
- B. Drip line is defined as the outermost limits of the tree canopy.

1.03 QUALITY ASSURANCE

- A. General Responsibility: The Contractor shall be directly responsible for protection and welfare of existing trees and shrubs. This responsibility shall continue throughout the full construction period until the entire Project is completed and accepted by the City Representative and through completion of the guarantee period.
- B. Qualifications of Workmen: Trimming shall be performed only by a licensed arborist. Provide at least one person approved by the City Representative who shall be present at all times during tree protection and trimming operations, who shall be thoroughly familiar with the type of work involved, and who shall direct all protection and trimming work.
- C. Reference Standards: Published specifications, standards, tests, or recommended methods of trade, industry, or governmental organizations apply to work of this Section:
 - 1. International Society of Arboriculture (ISA) A Guide for Plant Appraisal, @ prepared by the Council of Tree and Landscape Appraisers (CTLA).
 - 2. ANSI A300 Support Systems Standard and ANSI A300 Pruning Standard

1.04 JOB CONDITIONS

- A. Prior to performing any work, Contractor shall call for a site meeting with the City Representative. This meeting shall occur prior to construction of any nature on site. The purpose of the meeting shall be to establish the conditions of all existing trees to be preserved upon receipt of the site by the Contractor. Failure to call for said meeting implies acceptance by the Contractor of trees to be preserved in their existing condition.
- B. Photographic documentation of existing conditions is required prior to commencement of work.
- C. Sequencing schedule: Coordinate and cooperate with other trades to enable the work to proceed as rapidly and efficiently as possible.

1.05 WARRANTY

- A. Contractor shall warrant that all trees and bushes covered by the provisions of this section will be healthy and in flourishing condition of active growth one year from the date of substantial completion.
- B. During the warranty period the Contractor shall be liable for damages to all trees covered by the provisions of this section and shall pay compensation to the City.
- C. Contractor will not be held responsible for failures due to neglect by the City, vandalism, etc., during the warranty period. Report such conditions to the City Representative.

PART 2 - PRODUCTS

2.01 EQUIPMENT

- A. Tree protection fence: 8-foot high cyclone fence or fabric-type fence; sturdy and capable of acting as a barrier against objects, vehicles, etc., on site during the construction process. It shall be constructed and designed so as to allow for relocations as required and shall have gate access to inside for care of tree. It shall be continuously maintained and repaired as necessary.
- B. Water: Provide ample water supply of potable quality and sufficient quantity for all operations required under this section.

PART 3 - EXECUTION

3.1 TREE PROTECTION FENCING

- A. Install tree protection fencing around trees to be preserved at a distance required from the base of the trunk to the drip line of the tree. Fencing shall remain until landscape work has commenced, and it shall then be removed as directed by the City Representative.
- B. During the course of construction, relocation of the fence may be required to facilitate construction. The Contractor shall do so as directed by City Representative at no additional expense to the City.

3.2 PROTECTION OF TREES AND SHRUBS

- A. The existing trees and shrubs to be preserved presently are in excellent condition. Trees shall not be allowed to deteriorate and shall be maintained in a healthy and vigorous condition during the course of construction and maintenance period.
- B. During the course of construction the Contractor shall take all necessary precautions, as outlined herein, to protect the existing trees and shrubs to be preserved from injury or death. Protection shall be given to the roots, trunk, and foliage of all existing trees to remain.
- C. Trees, subject to the provisions of this section, which have been injured shall be repaired immediately by an approved, certified arborist. Repair shall include removal of rough edges and sprung bark, severely injured branches and/or aeration of the root zone of trees where compaction has occurred as directed by the City Representative.
- D. Tree protection fencing shall be installed for the protection of existing trees to be preserved. No construction, demolition, or work of any nature will be allowed within the fenced area without prior written approval by City Representative.
 - 1. Approval by City Representative for work within the fenced area shall not release the Contractor from any of the provisions specified herein for the protection of existing trees to be preserved.
 - 2. During the course of construction of approved work within the fenced area, no roots larger than two inches in diameter shall be cut without prior written approval by City Representative.
- E. During construction the existing site surface drainage patterns shall not be altered within the area of drip line.
- F. Contractor shall not alter the existing water table within area of drip line.
- G. Take necessary measures to maintain healthy living conditions for existing trees and shrubs to be preserved. Such measures shall include but not be limited to periodic washing of leaves for the removal of dust, irrigation, etc.
- H. Do not permit the following within drip line of any existing tree to be preserved:
 - 1. Storage or parking of automobiles or other vehicles.
 - 2. Stockpiling of building materials or refuse of excavated materials.
 - 3. Skimming or bruising of bark.
 - 4. Use of trees as support posts, power poles, or signposts; anchorage for ropes, guy wires, or power lines; or other similar functions.
 - 5. Dumping of poisonous materials on or around trees and roots. Such materials include but are not limited to paint, petroleum products, dirty water, or other deleterious materials.

6. Cutting of tree roots by utility trenching, foundation digging, placement of curbs and trenches, and other miscellaneous excavation without prior written approval by City Representative.
 7. Damage to trunk, limbs, or foliage caused by maneuvering vehicles or stacking material or equipment too close to the tree.
 8. Compaction of the root area by movement of trucks or grading machines; storage of equipment, gravel, earth fill, or construction supplies; etc.
 9. Excessive water or heat from equipment, utility line construction, or burning of trash under or near bushes or trees.
 10. Damage to root system from flooding, erosion, and excessive wetting and drying resulting from dewatering and other operations.
- I. Excavation around trees and shrubs:
1. Excavation within drip lines of trees shall be done only where absolutely necessary.
 2. Where trenching for utilities is required within drip lines, tunneling under and around roots shall be by hand digging. Main lateral roots and taproots shall not be cut. Smaller roots that interfere with installation of new work may be cut with prior approval.
 3. Where excavation for new construction is required within drip line of trees, hand excavation shall be employed to minimize damage to root system. Mark existing grade of tree at crown with non-toxic paint. Roots shall be relocated in back-fill areas wherever possible. If large, main lateral roots are encountered, they shall be exposed beyond excavation limits as required to bend and relocate without breaking. If encountered immediately adjacent to location of new construction and relocation is not practical, roots shall be cut approximately 6 inches back from new construction.
 4. Exposed roots shall not be allowed to dry out before permanent back-fill is placed. Temporary earth cover shall be provided, or roots shall be packed with wet peat moss or four layers of wet, untreated burlap and temporarily supported and protected from damage until permanently relocated and covered with back-fill. The cover over the roots shall be wetted to the point of runoff daily.
 5. Branching structure shall be thinned in accordance with National Arborist Association pruning standards and practices to balance loss to root system caused by damage or cutting of root system. Thinning shall not exceed 30 percent of existing branching structure.

3.03 MAINTENANCE

- A. Contractor shall be responsible to perform periodic inspections of existing trees to be preserved and submit written proposals to the City Representative for additional maintenance work as may be required to ensure the health and general well-being of the trees. Contractor shall retain, at the direction of the City Representative additional specialists as may be required to perform this work.
- B. Irrigation: During construction the existing trees to be preserved shall, at the direction of City Representative, be given deep watering (be irrigated). Quantities and lengths of time are variable and shall depend upon seasonal rainfall.

END OF SECTION

SECTION 01 60 00

MATERIALS AND EQUIPMENT

PART 1 - GENERAL

1.01 RELATED REQUIREMENTS

- A. Section 013000; Submittal of manufacturer's certificates.
- B. Section 017700; Project Closeout including operation and maintenance data; warranties and bonds.

1.02 PRODUCTS

- A. Products include material, equipment and systems.
- B. Comply with Specifications and referenced standards as minimum requirements.
- C. Components required to be supplied in quantity within a Specification section shall be the same, and shall be interchangeable.

1.03 WORKMANSHIP

- A. Comply with industry standards except when more restrictive tolerance or requirements indicate more rigid standards or precise workmanship.
- B. Perform work by persons qualified to produce workmanship of specified quality.
- C. Secure products in place with positive anchorage devices designed to withstand stresses, vibration and racking.

1.04 MANUFACTURER'S INSTRUCTIONS

- A. When work is specified to comply with manufacturer's instructions, submit copies as specified in Section 013000, distribute copies to persons involved, and maintain one set in field office or on site.
- B. Perform work in accordance with details of instructions and specified requirements. Should a conflict exist between Specifications and instructions, consult with Project representative or Architect.

1.05 TRANSPORTATION AND HANDLING

- A. Coordinate deliveries to avoid conflict with work and conditions at the site. Deliver materials and equipment on time to assure uninterrupted progress of the work.
- B. Transport products by methods that avoid damage to products, worksite, state property adjacent to worksite, or other state property en route to and from worksite. Deliver to site in undamaged condition in manufacturer's unopened containers or packaging.
- C. Provide equipment and personnel to handle products by methods to prevent soiling or damage.
- D. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

1.06 STORAGE AND PROTECTION

- A. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.
- B. For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering, provide ventilation to avoid condensation.
- C. Store loose granular materials on solid surfaces in a well-drained area; prevent mixing with foreign matter.
- D. Arrange storage to provide access for inspection. Inspect to assure products are undamaged and are maintained under required conditions.

- E. After installation, provide coverings to protect products from traffic and construction operations damage, remove when not needed.
- F. Do not allow stored products to be damaged by floodwaters or storm surge.

PART 2 – PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 63 00

SUBSTITUTIONS

PART 1 - GENERAL

1.01 SPECIFIED PRODUCTS

- A. For products specified only by reference standard, select any product meeting that standard.
- B. For products specified by naming one or more manufacturers, select products of any named manufacturer meeting specifications.

1.02 SUBSTITUTIONS

- A. Formal requests for substitutions will be considered submitted with the attached "Material/Product Substitution Request" form.
- B. Substitute products shall not be ordered without written acceptance by the Architect.
- C. Requests for substitution constitute a representation that:
 - 1. The product meets or exceeds, in all respects, the specified product.
 - 2. A warranty, equal to, or better than, the specified product, will be provided.
 - 3. Installation and any changes required for the work to be complete, in all aspects, will be provided.
 - 4. Claims by the Contractor for additional costs as a result of the Substitution which may subsequently become apparent will be waived.
- D. Data Requirements: The following information shall be submitted by the Contractor with each proposal:
 - 1. A description of the difference between the existing contract requirements and the proposed change; the comparative advantages and disadvantages of each; justification where function of a work item is being reduced.
 - 2. Separate detailed cost estimate comparing the existing contract requirement and the proposed change.
- E. Requests shall be submitted to the Architect in a timely manner. The Architect shall have 10 working days to review.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 70 00

CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Project Record Documents.
 - 3. Operation and maintenance manuals.
 - 4. Warranties.
 - 5. Instruction of the Owner's personnel.
 - 6. Final cleaning.

1.02 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Make final changeover of permanent locks and deliver keys to the Architect. Advise the Architect of changeover in security provisions.
 - 3. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, the Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. The Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by the Architect, that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for Final Completion.

1.03 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
 - 1. Submit a final Application for Payment according to Division 1 Section 01290 "Payment Procedures."
 - 2. Submit one copy of the Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by the Architect. The copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
 - 5. Deliver tools, spare parts, extra materials, and similar items to location designated by the Owner. Label with manufacturer's name and model number where applicable.
 - 6. Submit pest-control final inspection report and warranty.
 - 7. Instruct the Architect in operation, adjustment, and maintenance of products, equipment, and systems.
 - 8. Complete final cleaning requirements, including touchup painting.
 - 9. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

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

1.04 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit one copy of punch list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 - 1. Organize list of spaces in sequential order.
 - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.

1.05 PROJECT RECORD DOCUMENTS (AS-BUILTS)

- A. General: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for the Architect's reference during normal working hours.
- B. Provide Project Record Documents in accordance with the General Conditions.

1.06 OPERATION AND MAINTENANCE MANUALS

- A. Assemble two (2) complete sets of operation and maintenance data indicating the operation and maintenance of each system, subsystem, building component, or piece of equipment not part of a system. Include operation and maintenance data required in individual Specification Sections and as follows:
 - 1. Operation Data: Include emergency instructions and procedures, system and equipment descriptions, operating procedures, and sequence of operations.
 - 2. Maintenance Data: Include manufacturer's information, list of spare parts, maintenance procedures, maintenance and service schedules for preventive and routine maintenance, and copies of warranties and bonds.
- B. Organize operation and maintenance manuals into suitable sets of manageable size. Bind and index data in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, with pocket inside the covers to receive folded oversized sheets. Identify each binder on front and spine with the printed title "OPERATION AND MAINTENANCE MANUAL," Project name, and subject matter of contents.

1.07 WARRANTIES

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

PART 2 - PRODUCTS

201 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.01 DEMONSTRATION AND TRAINING

- A. Instruction: Instruct the Owner to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
 - 1. Provide instructors experienced in operation and maintenance procedures.
 - 2. Provide instruction at mutually agreed-on times. For equipment that requires seasonal operation, provide similar instruction at the start of each season.
 - 3. Schedule training with the Architect, with at least seven days' advance notice.
 - 4. Coordinate instructors, including providing notification of dates, times, length of instruction, and course content.
- B. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections. For each training module, develop a learning objective and teaching outline.
 - 1. Include instruction for system design and operational philosophy, review of documentation, operations, adjustments, troubleshooting, maintenance, and repair.

3.02 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - f. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - g. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - h. Remove labels that are not permanent.
 - i. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - j. Leave Project clean and ready for the next phase of work.

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

END OF SECTION

SECTION 02 42 91

PROTECTION AND SALVAGE OF HISTORIC ELEMENTS

PART 1 - GENERAL

1.01 SUMMARY

- A. Identify and protect all Historic Elements, Materials and Assemblies from damage.
- B. Coordinate work to prioritize documentation and protection of Historic Elements, Materials and Assemblies.
- C. Document, label, store and protect all Historic Elements, Materials and Assemblies designated to be removed, stored and re-installed.
- D. Historic Elements, Materials and Assemblies include but are not limited to:
 - 1. Wood building siding and trim.
 - 2. Wood gutters.
 - 3. Copper gutters.
 - 4. Wood window sash, stools, skirts, jambs and trims.
 - 5. Original doors, frames, trim elements, hardware and glass.

1.02 RELATED SECTIONS

- A. Section 06 20 00 - Finish Carpentry
- B. Section 06 25 00 – General Wood Restoration

1.03 REFERENCES

- A. Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, National Park Service, U.S. Department of the Interior, Federal Register 48 FR 44716 (1983 with updates) <http://www.nps.gov/history/local-law/arch_stnds_0.htm>.
- B. National Park Service Preservation Tech Note: Temporary Protection Number 2. "Specifying Temporary Protection of Historic Interiors During Construction and Repair." National Park Service, Preservation Assistance Division, P. O. Box 37127, Washington D.C. 20013. <<http://www.nps.gov/history/hps/tps/technotes/PTN38/introduction.htm>>.
- C. National Park Service Preservation Brief 17: Identifying Visual Aspects of Historic Buildings as an Aide to Preserving Their Character. National Park Service, Preservation Assistance Division, P. O. Box 37127, Washington D.C. 20013. <<http://www.nps.gov/history/hps/tps/briefs/brief17.htm>>.

1.04 DEFINITIONS

- A. "Historic Elements" and "Historic Assemblies" are shown on the drawings and may also be identified in the field by the Owner's Representative and brought to the attention of the Contractor. Contractor shall verify any questionable items with the Owner's Representative prior to commencement of protection, demolition, salvage, storage or construction procedures.
- B. "Protection" as specified herein refers to protection from all construction damage, including fire damage. Maintaining adequate protection remains the responsibility of the Contractor.
- C. Categories of treatment as defined by the Secretary of the Interiors Standards for the Treatment of Historic Properties. National Park Service, Preservation Assistance Division, P. O. Box 37127, Washington D.C. 20013. <http://www.nps.gov/history/hps/tps/standards_guidelines.htm>.
 - 1. "Preservation": To apply measures necessary to sustain the existing form, integrity, and materials of a historic property. Work may include preliminary measures to protect and stabilize the property.

2. "Rehabilitation": To make possible a compatible use for a property through repair, alterations and additions while preserving those portions or features that convey its historical, cultural, or architectural values.
3. "Restoration": To accurately depict the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and the reconstruction of missing features from the restoration period.
4. "Reconstruction": To reproduce in the exact form and detail a building, structure, or artifact as it appeared at a specific period in time.
5. "Stabilize": To apply measures designed to reestablish a weather-resistant enclosure and the structural reinforcement of an item or portion of the building while maintaining the essential form as it exists at present.
6. "Protect and Maintain": To remove deteriorating corrosion, reapply protective coatings, and install protective measures such as temporary guards; to provide the least degree of intervention.
7. "Repair": To stabilize, consolidate, or conserve; to retain existing materials and features while employing as little new material as possible. Repair includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials. Within restoration, repair also includes limited replacement in kind, rehabilitation, and reconstruction, with compatible substitute materials for deteriorated or missing parts of features when there are surviving prototypes.

1.05 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of work in this section.
- B. The Contractor is hereby directed to recognize the historic value and significance of the building, and exercise special care during all phases of the work to ensure that the existing building, its details, materials and finishes which are to remain or to be salvaged are not damaged by the work being performed.
- C. The Contractor shall be responsible for protection of all existing materials, assemblies and components to remain or to be salvaged. The minimum amount of protection required is indicated on the drawings. In the event of damage, such items shall be immediately repaired or replaced by the Contractor, at his expense, to the satisfaction of the Owner's Representative.
- D. The contractor shall be responsible for coordinating with the Owner's Representative the documentation (including photographic documentation) of all elements to be protected, salvaged, demolished, removed or temporarily stored. This coordination will also include provisions for storage, insurance and reinstallation.

1.06 PRECONSTRUCTION

- A. The Contractor and Owner's Representative shall conduct a walkthrough of the building prior to construction to determine the course of action for each historic element.
- B. The Contractor shall coordinate with Owner's Representative.

1.07 SUBMITTALS

- A. General: Submittals to be made according to Conditions of the Contract and Division 1 Specification Sections.
- B. Shop Drawing of Protection Work: Submit written and graphic description of protection procedures for Historic Materials and Assemblies to remain in place. Include: details of method, materials, staging and other pertinent information about protection operations required.
- C. List of Elements to be Salvaged: Submit a written list of all items that are to be salvaged. Include the following information:
 1. Element type and catalog number
 2. Location from which item is to be salvaged

3. Proposed temporary storage location
 4. Proposed permanent location where element is to be located or relocated.
- D. Shop Drawing of Salvage Work: Submit written and graphic description of demolition, salvage and removal operations related to the full scope of the project. Submittal to incorporate and coordinate all disciplines.
1. Include: details of methods, equipment, materials, typical shoring and bracing (if required), temporary enclosure, temporary weather protection, storage locations, provision for protection and security and other pertinent information about demolition, removal and salvage operations required to describe the full scope of demolition.
- E. Shop Drawings: Removal/Salvage Numbering System: Before beginning removal and salvage operations, submit set of plan drawings at ¼ inch scale which assign separate numbers to each item to be disassembled, stored and reinstalled. Assign a different number to each element to be removed. Label items in field prior to removal to storage. Place labels where not visible after installation.
- F. Historic Elements Log
1. Prior to start of project, submit design of Elements Log. Include element type, catalog number, original location, date removed, and location in storage, and date reinstalled.
 2. During project, submit up-do-date log weekly to Owner's Representative.
- G. Fire Prevention: Submit written fire prevention plan to minimize risk of fire throughout the construction period.

1.08 SITE CONDITIONS

- A. Coordinate the performance of work in this section with related or adjacent work. Protection of items should be complete prior to commencement of new construction and demolition.
- B. At the end of working day or during inclement weather cover work exposed to weather with securely anchored waterproof coverings.
- C. Protection for Historic Materials and Assemblies to remain in place for the duration of the project unless determined otherwise by the Owner's Representative.
- D. Damages: Promptly repair damage caused to adjacent historic elements to remain or to be re-used if through Contractor's negligence. Repair or replace any such damaged item to the satisfaction of and at no expense to the Owner. All repairs shall be approved prior to implementation.

PART 2 - PRODUCTS

2.01 PROTECTION MATERIALS

- A. General: Provide new materials; if acceptable to the Owner, provide undamaged, previously used materials in serviceable condition. Provide materials suitable for the use intended.
- B. Polyethylene sheets - 4 mil.
- C. Lumber: Species to be selected by Contractor, sizes to fit field conditions. Fire retardant treated.
- D. Plywood: 1/2-inch or 3/4-inch thick. Fire retardant treated.
- E. Soft Fiberboard: 1/2-inch fire resistive fiberboard; Homasote Co., P. O. Box 7240, West Trenton, N.J. 08628, (609) 883-3300, or approved equal.
- F. Polyurethane foam sheets: 4-inch thick.
- G. Plastic film tape: 3M Scotch brand no. 472, or approved equal.
- H. Kraft Paper, or approved equal.
- I. Accessories: Provide necessary and related parts, devices and anchors required for complete installation.

PART 3 - EXECUTION

3.01 GENERAL

- A. Historic Materials and Assemblies to remain in place:
 - 1. Protect all Historic Materials and Assemblies to remain in place which may be damaged by construction activities. In the event of new damage, inform the Owner's Representative immediately as to the nature and extent of damage and the proposed method of repair. Contractor is responsible for repairs and replacement of newly damaged items to the satisfaction of the Owner's Representative at no additional cost to the Owner.
 - 2. Do not attach protection materials directly to Historic Materials or Assemblies. Do not use duct tape or mechanical fasteners on historic materials or assemblies unless so directed by Owner's Representative.
 - 3. Protection to be secured adequately so as to maintain a safe environment for workers and other individuals using the building throughout the duration of the project.
- B. Salvage Elements to be removed:
 - 1. Protect, carefully handle, transport, and store Historic Materials and Assemblies identified for removal. Contractor is responsible for handling and storing these items, in addition to being responsible for repairs and replacement of newly damaged items to Owner Representative's satisfaction at no additional cost to the Owner.
 - 2. Catalog removed Salvage Elements in Historic Elements Log.
 - 3. Store Salvage Elements in neat, orderly fashion to allow for access and retrieval. Store like type elements together in groups. Store particularly fragile elements in manner that prevents damage while in storage.
- C. Fire Prevention during Construction:
 - 1. Implement fire protection plan approved by Owner's Representative.

3.02 PROTECTION AND SALVAGE PREPARATION

- A. Remove all attachments and debris to allow for full access as required to perform protection of Historic Materials and Assemblies.

3.03 INSTALLATION OF PROTECTION, GENERAL

- A. General:
 - 1. Alternative methods to specified protection may be acceptable if equal or greater protection is provided. Submit alternative methods to Owner's Representative for review as specified. Do not proceed with alternative methods until specified approvals are secured.
 - 2. Protection may be required to remain in place for the duration of the project. As such, materials should be installed to provide adequate protection throughout the full extent of construction activities. Repair or reinstall damaged protection throughout the duration of construction as required.
 - 3. Extent of protection is to cover all Historic Materials and Assemblies to remain which are in the vicinity of construction activities. All questionable protection requirements should be identified for the Owner Representative's review.
 - 4. All protection assemblies should be self-supporting and self bracing, secured to the base to the floor protection unless otherwise noted.

3.05 REMOVAL OF SALVAGE ELEMENTS

- A. General:
 - 1. Remove specialty items under Owner Representative's supervision.
 - 2. Exercise care in removing salvage elements and materials attached to Historic Materials and Assemblies which are to remain.
 - a. Unbolt bolted connections.
 - b. Unscrew screwed connections.
 - c. Do not pry apart members whose finish will be damaged by chipping, crazing, or cracking, or whose structural integrity will be impaired.

- d. Do not remove nails from woodwork from exposed side. Drive nails through or pull from back so head does not splinter finished face.
 - e. Remove items whole wherever possible. Where cuts are required, make cuts cleanly with proper tools and at logical break points. Verify unusual or ambiguous configurations with Architect prior to removal.
- B. Millwork: Remove full lengths of millwork. Unless required for reinstallation at same location, salvage of components less than 18 inches in length not required.

3.06 CATALOGING OF HISTORIC SALVAGE ELEMENTS

- A. General: Historic fabric removed from its original location shall be labeled to permit reinstallation to its original location and configuration. Contractor may propose alternative methods for cataloguing Salvage Elements. Variations may be required for specific element types. Submit alternative methods and variations for Owner Representative's review as specified.
- B. Numbering and cataloguing: Each item to be removed shall be given a unique catalogue number which is to be permanently marked on the element and listed on a Removed Historic Element Log. Numbers are to be created as follows:

xyz/N/ab.c

Where:

xyz = building name,

N = elevation,

ab = component type abbreviation, and

c = component number

1. Wood siding and trim: Numbers to be stamped on underside, 3" from left end.
- C. Wood elements: Stamp using a metal punch. All other items shall be numbered with a black, permanent marker unless otherwise noted, in area hidden from view when element is installed.
- D. Historic Elements Log: As items are removed and labeled, they shall be recorded on a log. The log shall list the item number, a brief description of the item and location in the building, a minimum of (1) photo and a reference to the storage location. If required to pinpoint the exact location of an object, the number shall also be placed on an elevation, plan, or sketch which shall be appended to the Historic Elements Log.

3.07 REINSTALLATION

- A. Return Salvage elements to their original locations and configurations, unless otherwise indicated. When items cannot be returned to their original location and/or configuration due to modifications, they may be re-used in other locations as determined by Owner's Representative. Where salvage Elements are not to be re-used, they will remain the Owner's property and are to be turned over to the Owner upon completion of construction. Contractor is responsible to load, handle, transport, unload and stack such items at a location to be determined by the Owner's Representative.
- B. Contractor shall be responsible for proper inventorying and distribution to appropriate subcontractors of salvaged material for reinstallation. A cost will be assessed for any lost, misplaced or damaged items unable to be replaced in kind, for which Contractor will be back-charged.

3.08 CLEANING

- A. All residue, debris and repairs resulting from protection work are to be removed from existing construction leaving the premises clean and neat.

END OF SECTION

SECTION 06 10 00

ROUGH CARPENTRY

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Sheathing.
- B. Underlayment.
- C. Concealed wood blocking, nailers, and supports.
- D. Miscellaneous wood nailers, furring, and grounds.

1.03 REFERENCE STANDARDS

- A. AWC (WFCM) - Wood Frame Construction Manual for One- and Two-Family Dwellings; 2015.
- B. AFPA (WFCM) - Wood Frame Construction Manual for One- and Two-Family Dwellings; American Forest and Paper Association; 2012.
- C. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.
- D. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2014.
- E. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.
- F. AWPA U1 - Use Category System: User Specification for Treated Wood; 2012.
- G. PS 1 - Structural Plywood; 2009.
- H. PS 2 - Performance Standard for Wood-Based Structural-Use Panels; 2010.
- I. PS 20 - American Softwood Lumber Standard; 2010.
- J. WWPA G-5 - Western Lumber Grading Rules; 2011.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide technical data on application instructions.
- C. Manufacturer's Certificate: Certify that wood products supplied for rough carpentry meet or exceed specified requirements.
- D. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.
- B. Fire Retardant Treated Wood: Prevent exposure to precipitation during shipping, storage, or installation.

1.06 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.

PART 2 - PRODUCTS

2.01 GENERAL REQUIREMENTS

- A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
 - 1. Species: Douglas Fir-Larch, unless otherwise indicated.

2. If no species is specified, provide any species graded by the agency specified; if no grading agency is specified, provide lumber graded by any grading agency meeting the specified requirements.
3. Grading Agency: Any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee (www.alsc.org) and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.
4. Lumber of other species or grades is acceptable provided structural and appearance characteristics are equivalent to or better than products specified.

B. Lumber fabricated from old growth timber is not permitted.

2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

- A. Grading Agency: Western Wood Products Association; WWPA G-5.
- B. Sizes: Nominal sizes as indicated on drawings, S4S.
- C. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
 1. Lumber: S4S, No. 2 or Standard Grade.
 2. Boards: Standard or No. 3.

2.03 EXPOSED BOARDS

- A. Submit manufacturer's certificate that products meet or exceed specified requirements, in lieu of grade stamping.
- B. Moisture Content: Kiln-dry (15 percent maximum).
- C. Surfacing: S4S.
- D. Species: Douglas Fir.
- E. Grade: No. 2, 2 Common, or Construction.

2.04 CONSTRUCTION PANELS

- A. Underlayment Combination: Any PS 2 type, rated Single Floor.
 1. Bond Classification: Exposure 1.
 2. Span Rating: 48.
 3. Performance Category: 1-1/8 PERF CAT.

2.05 ACCESSORIES

- A. Fasteners and Anchors:
 1. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
 2. Drywall Screws: Bugle head, hardened steel, power driven type, length to achieve full penetration of sheathing substrate.
- B. Subfloor Glue: Waterproof, air cure type, cartridge dispensed.

2.06 FACTORY WOOD TREATMENT

- A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
 1. Fire-Retardant Treated Wood: Mark each piece of wood with producer's stamp indicating compliance with specified requirements.
- B. Fire Retardant Treatment:
 1. Interior Type A: AWPA U1, Use Category UCFA, Commodity Specification H, low temperature (low hygroscopic) type, chemically treated and pressure impregnated; capable of providing a maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes.

- a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
- b. Treat rough carpentry items as indicated .
- c. Do not use treated wood in applications exposed to weather or where the wood may become wet.

PART 3 - EXECUTION

3.01 INSTALLATION - GENERAL

- A. Select material sizes to minimize waste.
- B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.
- C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

3.02 FRAMING INSTALLATION

- A. Set structural members level, plumb, and true to line. Discard pieces with defects that would lower required strength .
- B. Make provisions for temporary construction loads, and provide temporary bracing sufficient to maintain structure in true alignment and safe condition until completion of erection and installation of permanent bracing.
- C. Install structural members full length without splices unless otherwise specifically detailed.
- D. Comply with member sizes, spacing, and configurations indicated, and fastener size and spacing indicated, but not less than required by applicable codes and AWI (WFCM) Wood Frame Construction Manual.
- E. Construct double joist headers at floor and ceiling openings and under wall stud partitions that are parallel to floor joists; use metal joist hangers unless otherwise detailed.
- F. Frame wall openings with two or more studs at each jamb; support headers on cripple studs.

3.03 BLOCKING, NAILERS, AND SUPPORTS

- A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.
- B. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.
- C. Provide the following specific non-structural framing and blocking:
 1. Cabinets and shelf supports.
 2. Wall brackets.
 3. Handrails.
 4. Grab bars.
 5. Towel and bath accessories.
 6. Wall-mounted door stops.
 7. Wall paneling and trim.
 8. Joints of rigid wall coverings that occur between studs.

3.04 INSTALLATION OF CONSTRUCTION PANELS

- A. Subflooring/Underlayment Combination: Glue and nail to framing; staples are not permitted.
- B. Wall Sheathing: Secure with long dimension perpendicular to wall studs, with ends over firm bearing and staggered, using nails, screws, or staples.
- C. Communications and Electrical Room Mounting Boards: Secure with screws to studs with edges over firm bearing; space fasteners at maximum 24 inches on center on all edges and into studs in field of board.

1. At fire-rated walls, install board over wall board indicated as part of the fire-rated assembly.
2. Where boards are indicated as full floor-to-ceiling height, install with long edge of board parallel to studs.
3. Install adjacent boards without gaps.
4. Size and Location: As indicated on drawings.

3.05 TOLERANCES

- A. Framing Members: 1/4 inch from true position, maximum.
- B. Variation from Plane (Other than Floors): 1/4 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

3.06 CLEANING

- A. Waste Disposal: Comply with the requirements of Section 01 74 19 - Construction Waste Management and Disposal.
 1. Comply with applicable regulations.
 2. Do not burn scrap on project site.
 3. Do not burn scraps that have been pressure treated.
 4. Do not send materials treated with pentachlorophenol, CCA, or ACA to co-generation facilities or "waste-to-energy" facilities.
- B. Do not leave any wood, shavings, sawdust, etc. on the ground or buried in fill.
- C. Prevent sawdust and wood shavings from entering the storm drainage system.

END OF SECTION

SECTION 06 20 00

FINISH CARPENTRY

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Finish carpentry items.
- B. Wood trims.

1.02 RELATED REQUIREMENTS

- A. Section 09 90 00 - Painting: Painting and finishing of finish carpentry items.

1.03 REFERENCE STANDARDS

- A. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2014.
- B. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards, U.S. Version 3.0; 2016.
- C. PS 1 - Structural Plywood; 2009.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate the work with plumbing rough-in, electrical rough-in, and installation of associated and adjacent components.
- B. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.

1.05 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Product Data:
 - 1. Provide data on fire retardant treatment materials and application instructions.
 - 2. Provide instructions for attachment hardware and finish hardware.
- C. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.
 - 1. Provide the information required by AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS).

1.06 QUALITY ASSURANCE

- A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Protect work from moisture damage.

PART 2 - PRODUCTS

2.01 FINISH CARPENTRY ITEMS

- A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.
- B. Exterior Woodwork Items:
 - 1. Soffits and Fascias: Prepare for paint finish.

2.02 WOOD-BASED COMPONENTS

- A. Wood fabricated from old growth timber is not permitted.

2.03 SHEET MATERIALS

- B. Softwood Plywood Exposed to View: Face species Douglas Fir, plain sawn, veneer core; PS 1 Grade A-B; glue type as recommended for application.

2.04 FASTENINGS

- A. Adhesive for Purposes Other Than Laminate Installation: Suitable for the purpose; not containing formaldehyde or other volatile organic compounds.
- B. Fasteners: Of size and type to suit application; galvanized or chrome-plated finish in concealed locations and stainless steel finish in exposed locations.
- C. Concealed Joint Fasteners: Threaded steel.

2.05 FABRICATION

- A. Shop assemble work for delivery to site, permitting passage through building openings.
- B. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.

PART 3 - EXECUTION

3.01 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.

3.02 INSTALLATION

- A. Install work in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade indicated.
- 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.

3.03 PREPARATION FOR SITE FINISHING

- A. Set exposed fasteners. Apply wood filler in exposed fastener indentations. Sand work smooth.
- B. Site Finishing: See Section 09 91 23.
- C. Before installation, prime paint surfaces of items or assemblies to be in contact with cementitious materials.

3.04 TOLERANCES

- A. Maximum Variation from True Position: 1/16 inch.
- B. Maximum Offset from True Alignment with Abutting Materials: 1/32 inch.

END OF SECTION

SECTION 06 25 00

GENERAL WOOD RESTORATION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Restore existing wood elements as indicated on Drawings.

1.02 RELATED SECTIONS:

- A. Section 01 30 00 – Administrative Requirements
- B. Section 02 42 91 – Protection and Salvage of Historic Elements
- C. Section 06 20 00 - Finish Carpentry
- D. Section 09 90 00 – Painting

1.03 REFERENCES

- A. ANSI - American National Standards Institute, A156.18 - BHMA 1301 Standards for Materials and Finishes.
- B. Architectural Woodwork Institute (AWI) & Woodwork Institute (WI): Architectural Woodwork Quality Standards (most recent edition).

1.04 SUBMITTALS

- A. Product Data: Wood epoxy consolidant, epoxy fill, and adhesive.
- B. Shop Drawings: Full-size profiles of all components to be restored.
- C. Samples: 6" lengths of all components to be restored.
- D. Field Samples
 - 1. Epoxy consolidation.
 - 2. Epoxy fills.
 - 3. Adhesive repair.
- E. Cut sheets indicating the bonding agents used for each composite wood and agrifiber product used in the project, demonstrating that no added urea formaldehyde resins are used.
- F. A copy of the chain-of-custody certificate that was awarded to the wood supplier by the forest stewardship council.

1.07 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Protect wood from exposure to weather at all times.
 - 1. Stack wood sufficiently above the ground to avoid exposure to wet or damp surfaces.
 - 2. Cover wood with waterproof sheeting to protect against inclement weather.
- B. Store wood in a manner that allows air circulation within and around stacks.
- C. Deliver materials to the site in the original and unopened containers, bearing packing labels describing the material type, name, and any catalogue numbers. Delivered materials must be identical to approved samples.

1.08 QUALITY ASSURANCE

- A. The Contractor for work of this section must have a minimum of 10 years experience in the satisfactory completion of projects involving wood restoration including consolidation, fill, and replication of new elements.

PART 2 - PRODUCTS

2.01 CONSOLIDATION MATERIALS

- A. Liquid Epoxy Consolidant for consolidation of decayed wood trim:

1. Use a low strength, low viscosity, moisture insensitive epoxy with a low modulus of elasticity specifically designed and marketed for wood restoration.
2. Subject to compliance with requirements, provide one of the following, or approved equal:
 - a. LiquidWood, Abatron Inc., 5501 - 95th Avenue, Kenosha, WI 53144 Tel: (414) 653-2000
 - b. Flexible Epoxy Consolidant 100, ConServ Epoxies, Housecraft Associates, 7 Goodale Rd., Newton, NJ 07860 Tel: (201) 579-1112
 - c. West System 105 Epoxy Resin with 207 Hardener, Gougeon Brothers Inc., P.O. Box 908, Bay City, MI 48707 (517) 684-7286
- B. Epoxy Fill for patching and resurfacing voids in wooden members:
 1. Use a moisture insensitive, putty consistency epoxy compound with a low modulus of elasticity and inert filler that is specifically designed and marketed for wood restoration, and which may be cut and worked with wood-working tools after curing.
 2. Subject to compliance with requirements, provide one of the following, or approved equal.
 - a. WoodEpoxy, Abatron Inc., 5501 - 95th Avenue, Kenosha, WI 53144, (414) 653-2000
 - b. Flexible Epoxy Patch 200, ConServ Epoxies, Housecraft Associates, 7 Goodale Rd., Newton, NJ 07860, (201) 579-1112
 - c. West System 105 Epoxy Resin with 407, Gougeon Brothers Inc., P.O. Box 908, Bay City, MI 48707, (517) 684-7286
- C. Adhesives for patching and repair
- D. Refer to VOC limit tables in Section 01353 – Air Quality Management for VOC limits for adhesive, sealant, or topcoat products in this section.

2.02 REPLACEMENT LUMBER

- A. General Requirements:
 1. Wood to bear the grade and trademark of the association under whose rules it is produced and a mark of mill identification.
 2. Lumber and finished woodwork throughout to be of sound stock thoroughly seasoned, kiln-dried to a moisture content not exceeding 12% for finish.
 3. Work shall be free from defects or blemishes that will show on surfaces exposed after the finish coat is applied. Any material which is in any way defective or fails to meet specifications for quality and grade, or is otherwise not in proper condition, will be rejected.
 4. Intent is to match existing material in species, size, pattern and dimension.
- B. Species: To match historic element or assembly being restored
- C. Grade: Grade, cut and quantity of knots & blemishes shall match historic element or assembly being restored. Unless otherwise noted, material to be kiln-dried and surfaced.
- D. Adhesives: Aliphatic resin, non-staining, heat and water resistant, glue for sash repair.
- E. Fasteners: Of size and type to suit application. Finish nails for exposed locations.

2.03 OTHER MATERIALS

- A. Water-Repellent Preservative: NWWDA tested and accepted preservative and water-repellent formulation containing 3-iodo-2-propenyl butyl carbamate (IPBC) as its active ingredient.
 1. Product: Subject to compliance with requirements, provide the following, or approved equal:
 - a. Wood Protector-Clear Wood Preservative; Thompson & Formby.
 - b. Woodlife Classic Wood Preservative; DAP, Inc.
- B. All other materials required for work of this Section shall be selected by the Contractor subject to the approval of the Architect.

2.04 FINISHES

- A. Refer to Section 09 91 23 - Interior Painting.

2.05 FABRICATION

- A. Design and construction features: Comply with details shown for profile and construction of architectural woodwork. Where not otherwise shown, match existing and comply with applicable quality standards. Submit shop drawings of alternate details for review and approval by the Owner's Representative.
- B. Match original wood species and grade. Fabricate architectural woodwork to match original profiles.
- C. Fabricate architectural woodwork with pre-cut openings, where possible, to receive hardware and similar items. Locate openings accurately and use templates or roughing-in diagrams for proper size and shape.
- D. Before proceeding with fabrication of woodwork required to be fitted to other construction, obtain measurements and verify dimensions.
- E. Preservative Treatment: Apply wood preservative following manufacturer's directions. Allow recommended drying time before priming. Dip treat surfaces and ends of wood that are cut after treatment of base stock.

PART 3 - EXECUTION

3.01 VERIFICATION OF CONDITIONS

- A. Prepare all existing painted surfaces, using methods described in Section 09 91 23 Interior Painting, for the following:
 - 1. Salvaged and in-place woodwork with decorative profiles (woodwork having non-rectangular cross-sections).
- B. Prior to beginning work, examine all surfaces to be repaired by epoxy consolidation or resurfacing. Correct any defects in the substrate that will affect the proper execution, stability, or longevity of the epoxy repair work. Epoxy repairs with defects that mar the appearance of finished work or which is otherwise defective will be rejected.

3.02 INSTALLATION OF SALVAGE AND REPLICATED WOODWORK

- A. Dress and sand machine-finished woodwork to ensure it is free from machine milling marks, abrasions, raised grain or other defects on surfaces exposed to view. For construction and workmanship of millwork items, conform to or exceed the requirements of "Premium Grade" as established by Quality Standards of the Woodwork Institute of California, current edition. Where conflicts occur between these standards and this specification, the more stringent requirements govern in each case.
- B. Make joints tight and form joints to conceal shrinkage. Construct all exterior millwork so that water cannot pass through joints.
- C. Cope molded work at returns and interior angles. Miter molded work at exterior corners.
- D. Where woodwork has to be cut to fit adjoining work, repair damaged finish at cuts. Joints greater than 1/4" wide are not permitted between woodwork and adjoining existing masonry.
- E. Standing and running trim: Install with minimum number of joints possible using full-length pieces (from maximum length of salvage lumber available) to the greatest extent possible. Stagger joints in adjacent and related members. Use all salvaged trim. If inadequate lengths of salvage trim are available to complete required work, install new trim to match. Use splayed heading joints where new or existing running trim abut.
- F. Install the work plumb, level, true, and straight in relation to existing pitches of adjacent walls and floors with no distortions. Shim as required using concealed shims. Install to a tolerance of 1/8" in 8'-0" for plumb and level except where existing assembly is not plumb and level; and with 1/16" maximum offset in flush adjoining surfaces. Where existing assembly is not plumb and level, install work as close as possible to plumb and level.
- G. Before proceeding with the work, notify Owner's Representative where woodwork cannot be set plumb and/or level due to exist-ing field conditions.

- H. Anchor woodwork to anchors or wood blocking built into substrates. Secure stripping and blocking with coun-ter-sunk, concealed fasteners and blind nailing as required for a complete installation. Use galvanized finishing nails for exposed nailing. Sink exposed nails 1/16" and fill flush with woodwork.
- I. Do all cutting and fitting required and install all hardware required for the work. Make all templates, etc., required for the fitting and adjustment of other mechanics' work to the woodwork. Do all cutting, patching, and fitting for the installation of work by other trades.
- J. Contractor is responsible for materials and workmanship and is required to replace any work that may shrink, crack, or warp. required for painting and finishing. Protect all finished hardware against damage until final acceptance of the work.

3.03 APPLICATION OF EPOXY

- A. Protection and Preparation
 - 1. Protect all surrounding areas prior to start of work.
 - 2. Wear protective clothing, goggles, gloves and barrier creams as recommended by the manufacturer and as may be required by governmental regulations.
 - 3. Do not begin epoxy consolidation and repair prior to approval of all submittals required by this section.
 - 4. Do not begin epoxy consolidation and repair prior to placement of all protective barriers.
- B. Epoxy Consolidation for decayed wood trim:
 - 1. Mixing: Use extreme care and follow manufacturer's written mixing and storage instructions for each product. If written instructions are not avail-able or do not apply to the project conditions, consult the manufacturer's technical representative for specific written recommendations before proceeding with the work. Do not use products that have passed the manufacturer's shelf life.
 - 2. Prepare surface to be consolidated by removing all visible dirt and debris. To prevent leakage, temporarily plug large holes or cracks with modeling clay or wax. Surfaces should be dry before consolidation begins to achieve optimum results.
 - 3. Drill 1/8" diameter holes across the end grain at an oblique angle, staggered at approximately 2" intervals, in areas of wood deterioration.
 - 4. Pour epoxy resin into each area to be consolidated until the void has been filled. Top off voids as required as epoxy is absorbed into the wood. To avoid trapping air within the wood, work from one end of the piece to the other.
 - 5. Cure time will vary according to ambient conditions. Follow manufacturer's instructions for curing. Protect consolidated areas from damage until fully cured.
- C. Epoxy Fill for patching and resurfacing deteriorated areas.
 - 1. Use extreme care and follow manufacturer's written mixing and storage instructions for each product. If written instructions are not available or do not apply to the project conditions, consult the manufacturer's technical representative for specific written recommendations before proceeding with the work.
 - 2. Prepare surface by removing all dirt and debris. Surfaces must be clean and dry prior to repair.
 - 3. Fill voids, cracks, gouges and depressions with layers of epoxy at the locations indicated on the drawings or the specifications. Slightly overfill holes to allow for sanding or planing of surface. Where surface build-up is required to achieve positive drainage, apply additional layers of epoxy as necessary.
 - 4. After appropriate cure time, hand sand or plane surface until smooth to achieve original profile.
 - 5. Allow adequate curing time for consolidant before applying resurfacing compound.
 - 6. Protect resurfaced areas from damage until fully cured.
 - 7. Prime and paint as specified in Section 09 91 23.

3.04 ADJUSTMENT, CLEANING, FINISHING, AND PROTECTION

- A. Where possible, repair damaged and defective existing woodwork to eliminate functional and visual defects. Where not possible to properly repair existing woodwork, replace it with new wood to match original. Adjust joinery for uniform appearance.
- B. Cover completed woodwork with protective paper to protect all vulnerable finishes from damage. Remove cover immediately before time of final acceptance.

END OF SECTION

SECTION 07 25 00

WEATHER BARRIERS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Water-Resistive Barrier: Under exterior wall cladding, over sheathing or other substrate; not air tight or vapor retardant.

1.02 RELATED REQUIREMENTS

- A. Section 06 10 00 - Rough Carpentry: Water-resistive barrier under exterior cladding.
- B. Section 07 62 00 - Sheet Metal Flashing: Metal flashings installed in conjunction with weather barriers.

1.03 DEFINITIONS

- A. Weather Barrier: Assemblies that form either water-resistive barriers, air barriers, or vapor retarders.
- B. Water-Resistive Barrier: Water-shedding barrier made of material that is moisture resistant, to the degree specified, intended to be installed to shed water without sealed seams.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on material characteristics.
- C. Manufacturer's Installation Instructions: Indicate preparation.
- D. Installer's Qualification Statement: Submit ABAA QAP accreditation documents.

1.05 QUALITY ASSURANCE

- A. Installer Qualifications: Company accredited and certified under the Air Barrier Association of America (ABAA) Quality Assurance Program (QAP).

1.06 FIELD CONDITIONS

- A. Maintain temperature and humidity recommended by the materials manufacturers before, during and after installation.

PART 2 PRODUCTS

2.01 WEATHER BARRIER ASSEMBLIES

- A. Water-Resistive Barrier: Provide on exterior walls under exterior cladding.
 - 1. Use building paper unless otherwise indicated.

2.02 WATER-RESISTIVE BARRIER MATERIALS (NEITHER AIR BARRIER NOR VAPOR RETARDER)

- A. Building Paper: Asphalt-saturated Kraft building paper complying with requirements of ICC-ES AC308 Grade D.
 - 1. Water Penetration Resistance: Withstand a water head of 21 inches, minimum, for minimum of 5 hours, when tested in accordance with AATCC Test Method 127.

2.03 ACCESSORIES

- A. Sealants, Tapes, and Accessories for Sealing Weather Barrier and Sealing Weather Barrier to Adjacent Substrates: As specified or as recommended by weather barrier manufacturer.
- B. Flexible Flashing: Self-adhesive sheet flashing complying with ASTM D1970/D1970M, except slip resistance requirement is waived if not installed on a roof.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces and conditions are ready to accept the work of this section.

3.02 PREPARATION

- A. Remove projections, protruding fasteners, and loose or foreign matter that might interfere with proper installation.

3.03 INSTALLATION

- A. Install materials in accordance with manufacturer's instructions.
- B. Water-Resistive Barriers: Install continuous barrier over surfaces indicated, with sheets lapped to shed water but with seams not sealed.
- C. Mechanically Fastened Sheets - On Exterior:
1. Install sheets shingle-fashion to shed water, with seams generally horizontal.
 2. Overlap seams as recommended by manufacturer but at least 6 inches.
 3. Overlap at outside and inside corners as recommended by manufacturer but at least 12 inches.
 4. Install water-resistive barrier over jamb flashings.
 5. Install air barrier and vapor retarder UNDER jamb flashings.
 6. Install head flashings under weather barrier.
 7. At openings to be filled with frames having nailing flanges, wrap excess sheet into opening; at head, seal sheet over flange and flashing.
- D. Openings and Penetrations in Exterior Weather Barriers:
1. Install flashing over sills, covering entire sill frame member, extending at least 5 inches onto weather barrier and at least 6 inches up jambs; mechanically fasten stretched edges.
 2. At openings to be filled with frames having nailing flanges, seal head and jamb flanges using a continuous bead of sealant compressed by flange and cover flanges with at least 4 inches wide; do not seal sill flange.
 3. At openings to be filled with non-flanged frames, seal weather barrier to all sides of opening framing, using flashing at least 9 inches wide, covering entire depth of framing.
 4. At head of openings, install flashing under weather barrier extending at least 2 inches beyond face of jambs; seal weather barrier to flashing.
 5. At interior face of openings, seal gap between window/door frame and rough framing, using joint sealant over backer rod.
 6. Service and Other Penetrations: Form flashing around penetrating item and seal to weather barrier surface.

END OF SECTION

SECTION 07 31 13

ASPHALT SHINGLES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Asphalt shingle roofing.
- B. Flexible sheet membranes for underlayment, and valley protection.

1.02 RELATED REQUIREMENTS

- A. Section 06 10 00 - Rough Carpentry: Roof sheathing.
- B. Section 07 71 23 - Manufactured Gutters and Downspouts.

1.03 REFERENCE STANDARDS

- A. ASTM D226/D226M - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing; 2009.
- B. ASTM D3161/D3161M - Standard Test Method for Wind-Resistance of Steep Slope Roofing Products (Fan-Induced Method); 2016.
- C. ASTM D3462/D3462M - Standard Specification for Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules; 2010a.
- D. NRCA (RM) - The NRCA Roofing Manual; 2017.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data indicating material characteristics.
- C. Samples: Submit two samples of each shingle color indicating color range and finish texture/pattern; for color selection.
- D. Manufacturer's Installation Instructions: Indicate installation criteria and procedures.
- E. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.05 MOCK-UP

- A. Provide mock-up of 36 sq ft, including underlayment.
- B. Approved mock-up may remain as part of the Work.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Asphalt Shingles:
 - 1. CertainTeed: www.certainteed.com
 - 2. Or Approved Equal.

2.02 ASPHALT SHINGLES

- A. CertainTeed Landmark Pro Max Def: Conforming to ASTM D 3018 Type I – Self-Sealing; UL Certification of ASTM D 3462, ASTM D 3161/UL997 80-mph Wind Resistance and UL Class A Fire Resistance; glass fiber mat base; ceramically colored algae resistant granules across entire face of the shingle; two-piece laminated shingle.
 - 1. Weight: 270 pounds West Cost per 100 square feet.
 - 2. Color: Heather Blend.

2.03 SHEET MATERIALS

- A. Underlayment: Underlayment: CertainTeed "Roofers' Select", ASTM D 6757; asphalt-impregnated fiberglass-reinforced organic felt designed for use on roof decks as a water-resistant layer beneath roofing shingles.

2.04 ACCESSORIES

- A. Nails: Standard round wire shingle type, of stainless steel, 12 wire gage, 0.0808 inch shank diameter, 3/8 inch head diameter, of sufficient length to penetrate through roof sheathing or 1/2 inch into roof sheathing or decking.

2.05 METAL FLASHINGS

- A. Metal Flashings: Provide sheet metal eave edge, gable edge, ridge, open valley flashing, chimney flashing, dormer flashing, and other flashing indicated.
 - 1. Form sections square and accurate to profile, in maximum possible lengths, free from distortion or defects detrimental to appearance or performance.
 - 2. Hem exposed edges of flashings minimum 1/4 inch on underside.
- B. Steel Sheet Metal: Prefinished and galvanized steel sheet, 26 gage, 0.0179 inch minimum thickness, G90/Z275 hot-dipped galvanized; PVC coated, color as selected.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions prior to beginning work.
- B. Verify that roof penetrations and plumbing stacks are in place and flashed to deck surface.
- C. Verify deck surfaces are dry, free of ridges, warps, or voids.

3.02 INSTALLATION - EAVE PROTECTION MEMBRANE

- A. Install eave protection membrane from eave edge to minimum 4 ft up-slope beyond interior face of exterior wall.

3.03 INSTALLATION - UNDERLAYMENT

- A. Items projecting through or mounted on roof: Weather lap and seal watertight with plastic cement.

3.04 INSTALLATION - VALLEY PROTECTION

- A. Install flexible flashing in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.

3.05 INSTALLATION - SHINGLES

- A. Install shingles in accordance with manufacturer's instructions manufacturer's instructions and NRCA (RM) applicable requirements.
 - 1. Fasten individual shingles using 2 nails per shingle, or as required by code, whichever is greater.
 - 2. Fasten strip shingles using 4 nails per strip, or as required by code, whichever is greater.
- B. Place shingles in straight coursing pattern with 5 inch weather exposure to produce double thickness over full roof area. Provide double course of shingles at eaves.
- C. Project first course of shingles 3/4 inch beyond fascia boards.
- D. Extend shingles 1/2 inch beyond face of gable edge fascia boards.
- E. Complete installation to provide weather tight service.

3.06 PROTECTION

- A. Do not permit traffic over finished roof surface.

END OF SECTION

SECTION 07 62 00
SHEET METAL FLASHING

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. Roof flashing at ridges, valleys, roof edges, chimney stacks and roof penetrations

1.02 RELATED SECTIONS

- A. Section 07 31 13 – Asphalt Shingles

1.03 REFERENCES

- A. Comply with the latest applicable standards and recommendations of the following:
1. Architectural Sheet Metal, Fourth Edition (1987), published by Sheet Metal and Air Conditioning Contractors National Association, Inc.

1.04 QUALITY ASSURANCE

- A. The work of this section shall be performed by a contractor with a minimum of five (5) years documented experience in sheet metal roofing. Submit qualifications of all personnel scheduled for work on this project. All work to be performed by persons whose qualifications have been submitted.

1.05 SUBMITTALS

- A. Qualification data for firms and persons specified in the "Quality Assurance" article to demonstrate their capabilities and experience. Include a list of completed projects with project name, addresses, names of architects and owners, and other information specified.
1. Within five (5) business days after bid opening submit qualifications and experience of all lead personnel scheduled for work on this Project. List project manager or foreman's name and experience relative to this Project.
- B. Product Data: Manufacturer's technical product data, installation instructions and general recommendations for each specified sheet material and accessories.
- C. Shop Drawings: Show methods of forming, jointing, nailing, and securing metal to form units, including joint details and waterproof connections.
- D. Samples:
1. Two 12-inch-square samples of specified sheet materials to be exposed as finished surfaces.
 2. Anchoring devices and fasteners: 2 pieces of each kind.
 3. All seam types required in each metal (including all junctions of two different seam types): 2-12 inch long pieces.
- E. Installation procedures: Submit proposed methods and operations for installation prior to start of work. Include detailed description of method, sequence, and any other pertinent information about installation as required for this work.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver all materials to job site in manufacturer's unopened containers, clearly labeled as to manufacturer and product.
1. Store and handle all products to prevent damage or deterioration before incorporation into the Work.

PART 2 - PRODUCTS

201 FLASHING MATERIALS

- A. Sheet Flashing: Galvanized, ASTM B370; cold rolled, 24 oz/sq ft, 0.68 mm thick; natural finish.
1. Flashing Nails: Standard round wire roofing type, hot dipped zinc coated steel; of sufficient length to penetrate through roof sheathing.

- B. Screws and Bolts: Hard galvanized, round heads, sizes to fit field conditions. Use neoprene collars where exposed.
- C. Fastener or clips: Galvanized, gauge to match sheet metal gauge.
- D. Galvanized wire, screws and nails: Stronghold type, large flat head.
- E. Bituminous Paint: Acid and alkali resistant type; black color.

202 FLASHING FABRICATION

- A. Flashings are to be formed to profiles indicated on Drawings, must protect materials from physical damage and must shed water.
- B. Form sections square and accurate to profile, in maximum possible lengths, free from distortion or defects detrimental to appearance or performance.
- C. Hem exposed edges of flashing minimum 1/4 inch on underside.
- D. Apply bituminous paint on concealed surfaces of flashing.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine the areas and conditions under which work of this section will be performed. Correct conditions detrimental to timely and proper completion of work. Do not proceed until unsatisfactory conditions are corrected.

3.02 FLASHING INSTALLATION

- A. Install flashing in accordance with SMACNA Architectural Sheet Metal Manual requirements.
- B. Secure flashings in place using concealed fasteners.
- C. Soldering and open flame joining procedures are forbidden.

3.03 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces, removing substances that might cause corrosion of metal or deterioration of finishes.
- B. Protection: Advise contractor of required procedures for surveillance and protection of flashings and sheet metal work during construction to ensure that work will be without damage or deterioration other than natural weathering at time of Substantial Completion.

3.04 CLEAN-UP

- A. After completion of sheet metal operation, remove all equipment, tools, and debris and leave project site neat and clean.
- B. Remove and legally dispose off-site all debris, rubbish, and materials resulting from sheet metal roofing operations.

END OF SECTION

SECTION 07 71 23

MANUFACTURED GUTTERS AND DOWNSPOUTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Pre-finished aluminum gutters and downspouts where indicated on the drawings.
- B. Copper gutter and downspout where indicated on the drawings.

1.02 RELATED REQUIREMENTS

- A. Section 07 62 00 - Sheet Metal Flashing and Trim.

1.03 REFERENCE STANDARDS

- A. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2014.
- B. ASTM B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate [Metric]; 2014.
- C. ASTM B370 - Standard Specification for Copper Sheet and Strip for Building Construction; 2012.
- D. CDA A4050 - Copper in Architecture - Handbook; current edition.
- E. SMACNA (ASMM) - Architectural Sheet Metal Manual; 2012.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Conform to SMACNA (ASMM) for sizing components for rainfall intensity determined by a storm occurrence of 1 in 5 years.

1.05 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate locations, configurations, jointing methods, fastening methods, locations, and installation details.
- C. Product Data: Provide data on prefabricated components.
- D. Samples: Submit two samples, 12 inch long illustrating component design, finish, color, and configuration for each component type.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Stack material to prevent twisting, bending, or abrasion, and to provide ventilation. Slope to drain.
- B. Prevent contact with materials that could cause discoloration, staining, or damage.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Pre-Finished Aluminum Sheet: ASTM B209 (ASTM B209M); 0.032 inch thick.
 - 1. Finish: Plain, shop pre-coated with modified silicone coating.
 - 2. Color: As scheduled.
- B. Copper: ASTM B 370; minimum temper H00 (cold rolled) except where temper 060 is required for forming.
 - 1. Downspouts: 16 oz. per sq. ft. (0.0216-inch thick) (0.55-mm) except as otherwise indicated.
 - 2. Bronze wire ball downspout strainer meeting the corner Development Association Inc. details.
- C. Manufactured downspouts and gutter by CopperCraft or equal. Provide all required components and accessories for a complete installation.

2.02 COMPONENTS

- A. Gutters: K style profile.
- B. Downspouts: Round profile.
- C. Anchors and Supports: Profiled to suit gutters and downspouts.
 - 1. Anchoring Devices: In accordance with CDA requirements.
 - 2. Gutter Supports: Brackets.
 - 3. Downspout Supports: Brackets.
- D. Fasteners: Same material and finish as gutters and downspouts, with soft neoprene washers.

2.04 FABRICATION

- A. Form gutters and downspouts of profiles and size indicated.
- B. Fabricate with required connection pieces.
- C. Form sections square, true, and accurate in size, in maximum possible lengths, free of distortion or defects detrimental to appearance or performance. Allow for expansion at joints.
- D. Hem exposed edges of metal.
- E. Fabricate gutter and downspout accessories; seal watertight.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install gutters, downspouts, and accessories in accordance with manufacturer's instructions.
- B. Slope gutters 1/8 inch per foot minimum.
- C. Solder metal joints for full metal surface contact. After soldering, wash metal clean with neutralizing solution and rinse with water.
- D. Set splash pans under downspouts.

END OF SECTION

SECTION 07 91 00

JOINT SEALANTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Preparation of substrate surfaces to receive sealants.
- B. Furnish and install joint sealants and backing for the following locations:
 - 1. Perimeter joints of exterior openings where indicated.
 - 2. Exterior intersections of dissimilar materials.
 - 3. Other locations as shown on drawings.

1.02 RELATED SECTIONS

- A. 09 90 00 – Painting

1.03 REFERENCES

- A. ASTM C834 - Latex Sealing Compounds
- B. ASTM C92- - Elastomeric Joint Sealants
- C. ASTM D1056 - Flexible Cellular Materials - Sponge of Expanded Rubber.
- D. ASTM D2000 - Rubber Products in Automotive Applications.
- E. ASTM - E814 - Standard Method of Fire Testing Through-Penetration Fire Stops.
- F. FS TT-S-00277 - Sealing Compound, Elastomeric Type, Multi Component.
- G. UL 1479 - Fire Test of Through-Penetration Fire Stop.

1.04 SYSTEM PERFORMANCE REQUIREMENTS

- A. Provide specified joint sealants that have been produced and installed to establish and to maintain watertight and airtight continuous seals without causing staining or deterioration of joint substrates.

1.05 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
- B. Qualification data for firms and persons specified in the "Quality Assurance" article to demonstrate their capabilities and experience. Include a list of completed projects with project name, addresses, names of architects and owners, and other information specified.
- C. Product data from manufacturers for each joint sealant product required, including sealant chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.
 - 1. Certification by joint sealant manufacturer that sealants plus the primers and cleaners required for sealant installation comply with local regulations controlling use of volatile organic compounds.
- D. Samples for initial selection purposes in form of manufacturer's standard bead samples, consisting of strips of actual products showing full range of colors available, for each product exposed to view.
- E. Certificates from manufacturers of joint sealants attesting that their products comply with specification requirements and are suitable for the use indicated.
- F. Manufacturer's Installation Instructions: Indicate special procedures, surface preparation, and perimeter conditions requiring special attention.

1.06 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed joint sealant applications similar in material, design, and extent to that indicated for Project that have resulted in construction with a record of successful in-service performance.

- B. Perform work in accordance with SWRI requirements for materials and installation, and with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- C. Single Source Responsibility for Joint Sealant Materials: Obtain joint sealant materials from a single manufacturer for each different product required.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project site in original unopened containers or bundles with labels indicating manufacturer, product name and designation, color, expiration period for use, pot life, curing time, and mixing instructions for multi component materials.
- B. Store and handle materials in compliance with manufacturer's recommendations to prevent their deterioration or damage due to moisture, high or low temperatures, contaminants, or other causes.

1.08 PROJECT CONDITIONS

- A. Environmental Conditions: Do not proceed with installation of joint sealants under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside the limits permitted by joint sealant manufacturer.
 - 2. When joint substrates are wet.
- B. Joint Width Conditions: Do not proceed with installation of joint sealants where joint widths are less than allowed by joint sealant manufacturer for application indicated.
- C. Joint Substrate Conditions: Do not proceed with installation of joint sealants until contaminants capable of interfering with their adhesion are removed from joint substrates.

PART 2 - PRODUCTS

2.01 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
- B. Colors: Provide color of exposed joint sealants to comply with the following:
 - 1. Match colors indicated by reference to manufacturer's standard designations.
- C. SEALANT MATERIALS Exterior Sealant: Sealant: Sikaflex 1a, premium-grade, high performance, moisture cured, 1 component, polyurethane base, non sag, elastomeric sealant. FS TT-S-0023OC, type 2, Class
 - A. Or approved equal – see requirements for submittals and substitutions.

2.02 JOINT SEALANT BACKING

- A. General: Provide sealant backings of material and type that are non-staining; are compatible with joint substrates, sealants, primers and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Plastic Foam Joint Fillers: Preformed, compressible, resilient, non-staining, non-waxing, non-extruding strips of flexible plastic foam of material indicated below and of size, shape, and density to control sealant depth and otherwise contribute to producing optimum sealant performance:
 - 1. Closed-cell polyethylene foam, nonabsorbent to liquid water and gas, non-outgassing in unruptured state.
- C. Bond-Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

2.03 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint sealant-substrate

tests and field tests.

- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming in any way joint substrates and adjacent nonporous surfaces, and formulated to promote optimum adhesion of sealants with joint substrates.
- C. Masking Tape: Non-staining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Verify joint dimensions, physical, and environmental conditions are acceptable to receive work of this section.
- B. Beginning of installation means acceptance of substrate.

3.02 PREPARATION

- A. Clean out joints immediately before installing sealants.
- B. Remove any loose materials and other foreign matter which might impair adhesion of sealant.
- C. Verify proper surface and ambient temperatures.
- D. Verify that joint backing and release tapes are compatible with sealant.
- E. Protect elements surrounding the work of this section from damage or disfiguration. Use masking tape where required to prevent contact of sealant with adjoining surfaces.
- F. Prime joint surfaces where recommended by joint sealant manufacturers. Apply primer to comply with joint sealant manufacturer's recommendations.

3.03 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 neck dimensions no greater than 1/3 the joint width.
- D. Apply sealant within recommended temperature ranges. Consult manufacturer when sealant cannot be applied within recommended temperature ranges.
- E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- F. Tool joints concave.
- G. Remove masking tape immediately after tooling joints without disturbing joint seal.

3.04 CLEANING AND REPAIRING

- A. Clean adjacent soiled surfaces.
- B. Repair or replace defaced or disfigured finishes caused by work of this section.

3.05 PROTECTION OF FINISHED WORK

- A. Protect finished installation.
- B. Protect sealants until cured.

END OF SECTION

SECTION 09 90 00

PAINTING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section includes surface preparation, painting, and finishing of areas requiring wood repair or replacement at, exterior surfaces including the following:
 - 1. Exterior woodwork: wood siding and trim elements, and wood gutters..

1.02 REFERENCES

- A. ASTM D16 - Definitions of Terms.
- B. ASTM D2016 - Test Method for Moisture Content of Wood.
- C. NPCA (National Paint and Coatings Association) - Guide to U.S. Government Paint Specifications.
- D. PDCA (Painting and Decorating Contractors of America) - Painting - Architectural Specifications Manual.

1.03 SUBMITTALS

- A. General: Submit the following according to Conditions of the Contract
- B. Product data for each paint system specified, including primers and sealers.
 - 1. Provide the manufacturer's technical information including label analysis and instructions for handling, storage, and application of each material proposed for use.
 - 2. Certification by the manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs).
- C. Qualification data for firms and persons specified in the "Quality Assurance" article to demonstrate their capabilities and experience. Include a list of completed projects with project name, addresses, names of Architects and Owners.
- D. Samples for Verification Purposes: Submit four 8-1/2 x 11 inch samples of each color to be applied, with texture to simulate actual conditions, on representative samples of the actual substrate.

1.04 QUALITY ASSURANCE

- A. Applicator Qualifications: Work must be performed by a firm having not less than five (5) years successful experience in painting work comparable to work of this Section, and employing personnel skilled in the painting processes and operations indicated.
 - 1. Only skilled journeymen painters who are familiar and experienced with the materials and methods specified and are familiar with the design requirements shall be employed for work of this Section.
 - 2. One skilled journeyman painter shall be present at all times during execution of the work and shall personally direct the work.
- B. Single-Source Responsibility: Provide primers and undercoat paint produced by the same manufacturer as the finish coats.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the job site in the manufacturer's original, unopened packages and containers bearing manufacturer's name and label, and the following information:
 - 1. Product name or title of material.
 - 2. Product description (generic classification or binder type).
 - 3. Manufacturer's stock number and date of manufacture.
 - 4. Contents by volume, for pigment and vehicle constituents.
 - 5. Thinning instructions.

6. Application instructions.
 7. Color name and number.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain containers used in storage in a clean condition, free of foreign materials and residue.
- C. Safety: Use all means necessary to protect all persons, whether engaged in the work of this Section or not, from any harm caused by work of this Section.

1.06 JOB CONDITIONS

- A. Do not use torches, heat guns, or any other heat-generating equipment to remove paint or coatings.
- B. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 45 deg F (7 deg C) and 95 deg F (35 deg C).
- C. Do not apply paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or any other conditions detrimental to formation of a durable paint film.
- D. Lead: Remaining existing paint may contain lead. Take all necessary precautions to ensure the safety of all persons engaged in removing lead-based paint and dispose of all residues generated from lead-based paint stripping in legal manner.

1.07 EXTRA MATERIALS

- A. Provide 1 gallon of each color to City Representative.
- B. Label each container with date, color and type, in addition to the manufacturer's label.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Paint and finish products: Highest quality standard brand, produced by a nationally known manufacturer. Provide primers and other undercoat paint produced by same manufacturer as finish coats. Paint products shall be fresh and well ground; shall not settle readily, cake, or thicken in the container; shall be broken up readily with paddle to a smooth consistency; and shall have easy application properties. Other materials such as boiled linseed oil, turpentine, mineral spirits, miscellaneous thinners, varnish, and shellac, and wax shall be the highest quality of an approved manufacturer.
- B. Filling compounds: Use only high quality, nonshrink materials which have been approved.
- C. Colors: Match approved color samples listed by product manufacturers name and product number.

2.02 PAINT MANUFACTURERS

- A. Manufacturer: Unless otherwise designated, listed materials are the product of the following manufacturer and require no further approval.
1. Dunn Edwards / Benjamin Moore - Pigmented paint
 2. Behlen - Clear finishing products / paste wood fillers
 3. Jasco - Strippers
- B. Equivalent products to the above manufacturers may be used subject to compliance with requirements and approval by the Project Representative.

2.03 PAINT SYSTEMS

- A. Exterior Coating Systems: Products listed below are by Dunn Edwards. Equal products as stated above.
1. Exterior Wood:
 - a. Primer- E-Z prime (W708)
 - b. Top Coats: Two coats Permasheen, W901, acrylic semi-gloss enamel. Color: to match existing.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrates and conditions under which painting will be performed for compliance with paint application requirements. Surfaces receiving paint must be thoroughly dry before paint is applied.
- B. Applicator shall notify Contractor in writing of conditions detrimental to proper and timely completion of work.
 - 1. Do not begin to apply paint until unsatisfactory conditions have been corrected.
 - 2. Start of painting and finishing work will be construed as the Applicator's acceptance of surfaces and conditions.
- C. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content is below the recommended maximum.

3.02 CLEANING & PROTECTION

- A. Before applying paint or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings.
- B. Protect wet, newly painted surfaces from dust and other debris.

3.03 SURFACE PREPARATION - EXTERIOR WOOD

- A. General:
 - 1. Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required.
 - 2. Sand smooth all finished surfaces exposed to view. Remove sanding dust.
- B. Wood Surfaces:
 - 1. Scrape and wire brush all loose paint, taking care not to damage existing wood surfaces.
 - 2. Do not proceed with further work until all missing, rotted or otherwise deteriorated wood is repaired following the requirements of Section 06250 - "General Wood Restoration".
 - 3. Set all raised nails.
 - 4. Prime all bare wood at exposed surfaces prior to application of finish coat; lightly sand; remove sanding dust.
 - 5. After priming fill any remaining surface imperfections; spot prime over fill areas; lightly sand with fine sandpaper.
 - 6. Seal all new wood immediately upon delivery, if required. Scrape and clean small, dry, seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer where resin has exuded from wood.

3.04 APPLICATION OF PAINT

- A. General: Apply paint according to manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.
- B. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
 - 1. The number of coats and the film thickness required are the same regardless of the application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. Sand between applications where sanding is required to produce a smooth even surface according to the manufacturer's directions.
 - 2. Apply additional coats if undercoats, stains, or other conditions show through final coat of paint until paint film is of uniform finish, color, and appearance. Give special attention to ensure that all exposed surfaces, including edges, corners, and crevices, receive a dry film thickness equivalent to that of flat surfaces.
 - 3. Sand lightly between each succeeding coat.
- C. Application Procedures: Use brushes or rollers according to manufacturer's directions. Do not use spray equipment.

- D. Minimum Coating Thickness: Apply materials no thinner than the manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.

3.05 CLEANING

- A. Cleanup: At the end of each work day, remove empty cans, rags, rubbish, and other discarded paint materials from the site.
- B. Upon completion of work, remove tools, equipment, and other unnecessary materials from site. Return adjacent area to the condition which existed prior to the start of work.
- C. Remove and legally dispose off-site all debris, rubbish, and other materials resulting from this work.

3.06 PROTECTION

- A. Protect work of other trades and surrounding area against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to State Representative.
 - 1. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

END OF SECTION

BID FORMS

CITY OF SANTA ROSA

STATE OF CALIFORNIA

LUTHER BURBANK HOME AND GARDENS REROOFING PROJECT

The work to be performed and referred to herein is in the City of Santa Rosa, California and consists of improvements to be constructed in accordance with the provisions of the Invitation for Bids, containing the Notice to Bidders, the Special Provisions, the Project Plan(s), the Bid Forms and the Contract, all of which are by reference incorporated herein, and each Addendum, if any is issued, to any of the above which is also incorporated by reference herein.

TO THE AWARD AUTHORITY OF THE CITY OF SANTA ROSA

The undersigned, as bidder, declares that the only person or parties interested in this bid as principals are those named herein; that this bid is made without collusion with any other person, firm, or corporation; that Contractor has carefully examined the Project Plans, Invitation for Bids and conditions therefor, and is familiar with all bid requirements, that Contractor has examined this Contract and the provisions incorporated by reference herein, and Contractor hereby proposes, and agrees that if its bid is accepted by the City, Contractor will provide all necessary machinery, tools, apparatuses, and other means of construction, and to do all the work and furnish all the materials and services required to complete the construction in accordance with the Contract, the Special Provisions, the Project Plan(s), and Addenda to any of the above as incorporated by reference, in the time stated herein, for the unit prices and/or lump sum prices as follows:

CITY OF SANTA ROSA

C02454 LUTHER BURBANK HOME AND GARDENS REROOFING PROJECT

UNIT PRICE SCHEDULE

NAME OF BIDDER: _____

<u>Line #</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
1	LUTHER BURBANK HOME AND GARDENS REROOFING PROJECT	LS	1	\$ _____	\$ _____

In the case of any discrepancy between the unit price and the total set forth for the item, the unit price shall prevail; provided, however, that if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any reason, or is omitted, or in the case of lump sum items, is not the same amount as the entry in the "Total" column, then the amount set forth in the "Total" column for the item shall prevail in accordance with the following:

1. As to lump sum items, the amount set forth in the "Total" column shall be the unit price;
2. As to unit basis items, the amount set forth in the "Total" column shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price.

The Total Base Bid shall be the sum of the "Total" column. In case of discrepancy between the sum of the "Total" column and the amount entered as Total Base Bid, the sum of the "Total" column shall prevail. The bid comparison will be based on the sum of the "Total" column for each bidder.

If this Contract Bid is accepted by the City and the undersigned fails to execute the Contract and to give all the bonds required under the Contract, with a surety satisfactory to the Award Authority of the City of Santa Rosa, within ten calendar days after bidder has received the Notice of Award from the Engineer, then the Award Authority may, at its option, determine that the bidder has abandoned the Contract, and thereupon this bid and the acceptance thereof shall be null and void, and the forfeiture of the security accompanying this bid shall be in accordance with California Public Contract Code section 20172.

The undersigned understands and agrees that the City is not responsible for any error or omissions on the part of the undersigned in making this bid.

The bidder to whom the Contract is awarded agrees to execute the Contract in favor of the City, in the form attached, and to deliver any and all required bond(s) and insurance certificates within ten calendar days from the date of Contractor's receipt of the Notice of Award. Following the award of the Contract, Contractor shall commence work within ten calendar days from the day authorized in the Notice to Proceed and diligently prosecute the same to completion in accordance with Section 8-1.04.

LIST OF SUBCONTRACTORS

NAME OF BIDDER: _____

The following is a list of each subcontractor who will perform work or labor or render services to the undersigned for the construction of the project in an amount in excess of ½ of 1% of the total amount of this bid.

The undersigned agrees that any portion of the work in excess of ½ of 1% of the total amount of this bid and for which no subcontractor is designated herein will be performed by the undersigned.

SUBCONTRACTOR NAME	SUBCONTRACTOR LICENSE NUMBER	SUBCONTRACTOR DIR REGISTRATION NUMBER	SUBCONTRACTOR BUSINESS ADDRESS	DESCRIPTION OF WORK (ITEM NO.)

NONCOLLUSION DECLARATION
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid. The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

NOTE: The above Noncollusion Declaration is part of the Contract Bid. Signing this Bid on the signature portion thereof shall also constitute signature of this Noncollusion Declaration.

BID BOND AFFIDAVIT AND BIDDER'S SIGNATURE PAGE

Accompanying this bid is a guaranty in the form of (Notice: Insert the words "cash \$," "Cashier's Check," "Certified Check," or "Bidder's Bond" as the case may be):

in an amount equal to at least ten percent of the total of this bid.

The undersigned further agrees that if Contractor does not execute the Contract and deliver the necessary bonds to the City within the period of time specified in this Invitation for Bids, the proceeds of the security accompanying this bid shall become the property of the City of Santa Rosa, California, and this bid and the acceptance thereof may, at the option of the City, be considered null and void.

The undersigned is licensed in accordance with an act providing for the registration of Contractors, License No. _____, Class _____, expiration date _____.

The undersigned in registered with the Department of Industrial Relations, Registration No. _____.

IMPORTANT NOTICE: If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager of the corporation; if a partnership, state true name of partnership, also the names of all partners in the partnership; if the bidder is a sole proprietor, state the business name and the proprietor's name in full.

Secretary of State Business Entity Number: _____.

Business Address

Telephone Number

I declare under penalty of perjury that the foregoing is true and correct.

BIDDER'S SIGNATURE: _____
TITLE: _____
DATE: _____

CONTRACT

CITY OF SANTA ROSA

CALIFORNIA

CONTRACT NO. C02454

Luther Burbank Home and Gardens Reroofing Project

This Contract is made and entered into as of date to be added upon award at Santa Rosa, California, between the City of Santa Rosa ("City") and _____ of _____ ("Contractor").

ARTICLE I - For and in consideration of the payment and agreement hereinafter mentioned, to be made and performed by City, and under the conditions expressed in the required bonds hereunto annexed, Contractor agrees that for the benefit of City, at its own cost and expense, to do all the work and furnish all the materials, except such as are mentioned in the Special Provisions to be furnished by City, necessary to construct and complete the work herein described in a good, workmanlike, and substantial manner. The work embraced herein shall be done in accordance with the Standard Specifications of the State of California Department of Transportation, dated 2010, insofar as the same may apply (Standard Specifications); in accordance with the City of Santa Rosa Construction Specifications for Public Improvements (City Specifications); in accordance with the City of Santa Rosa Design and Construction Standards, (City Standards); in accordance with the State of California Department of Transportation Standard Plans, dated 2010 (Standard Plans), (collectively, "Contract Documents") and in accordance with the Special Provisions hereinabove set forth, all of which are hereby incorporated into and made part of this Contract.

The work to be performed is further shown upon a plan consisting of 11 sheets entitled, Luther Burbank Home and Gardens Reroofing Project, File Number 2023-0023, approved by the Deputy Director of Transportation and Public Works, hereinafter referred to as the Project Plan(s).

ARTICLE II - Contractor agrees to receive and accept the following prices as full compensation for furnishing all materials and doing all the work contemplated and embraced in this Contract; also for all loss or damages arising out of the nature of the work aforesaid, or from the acts of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its acceptance by City and for all expenses incurred by or in consequence of the suspension or discontinuance of work, and for well and faithfully completing the work, and the whole thereof in the manner and according to the Project Plans and Invitation for Bids therefor, and the requirements of the Engineer under them to wit:

ITEM NUMBER	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
			\$ _____	\$ _____
TOTAL BASE BID (SUM OF "TOTAL" COLUMN)			\$ _____	

**BID ITEMS IN THIS SECTION WILL BE INSERTED UPON
AWARD OF THE CONTRACT AND SHALL BE THE SAME
AS THOSE BID UPON.**

ARTICLE III - City and Contractor hereby promise and agree that Contractor shall provide the materials and do the work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and City hereby agrees to pay for the same at the time, in the manner, and upon the conditions set forth; and the parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to full performance of the covenants herein stated.

ARTICLE IV - By execution of this Contract, Contractor hereby represents and certifies that Contractor is aware of the provisions of Labor Code section 3700 which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor hereby agrees to comply with such provisions before commencing the performance of the work of this Contract.

ARTICLE V - It is further expressly agreed by and between the parties hereto that the Invitation for Bids, containing the Notice to Bidders including any required Bonds, the Contract Documents, and any Addenda are all essential parts of this Contract and are specially referred to and by such reference made a part hereof. In the event of any conflict in the provisions thereof, the terms of said documents shall control each over the other, in the following order:

1. Special Provisions
2. Project Plans
3. City Standards
4. City Specifications
5. Standard Specifications
6. Standard Plans

ARTICLE VI - Contractor agrees to commence work pursuant to this Contract within ten calendar days from the date authorized in the Notice to Proceed and to diligently prosecute the same to completion in accordance with Section 8-1.04C of the Special Provisions.

This Contract shall not be transferred or assigned without the prior written consent of City, which may be withheld by City in its sole and absolute discretion.

If Contractor is a corporation, two corporate officers of Contractor, one from each of the following two groups shall execute this Contract: a) the chairman of the board, president or any vice-president; b) the secretary, any assistant secretary, chief financial officer, or any assistant treasurer. The name and title of the corporate officers shall be printed under the signature.

In witness whereof, the parties hereto have executed this Contract as of the date first written above.

City:

City of Santa Rosa,
a Municipal corporation

By: _____

Title: _____

ATTEST:

By: _____

Title: _____

Approved as to form:

By: _____

Office of City Attorney

Contractor:

Name of Contractor,
Type of entity

By: _____

Name: _____

Title: _____

By: _____

Name: _____

Title: _____







C02454 Luther Burbank Home and Gardens Reroofing Project

Final Audit Report

2024-02-08

Created:	2024-02-08
By:	Kimberly Hopwood (khopwood@srcity.org)
Status:	Signed
Transaction ID:	CBJCHBCAABAAj1I4vWVp2h14XAglI-zq3858XxK3zGmd

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-  Document created by Kimberly Hopwood (khopwood@srcity.org)
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-  Signer lwelsh@srcity.org entered name at signing as Lisa Welsh
2024-02-08 - 7:57:00 PM GMT
-  Document e-signed by Lisa Welsh (lwelsh@srcity.org)
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