

# INVITATION FOR BIDS



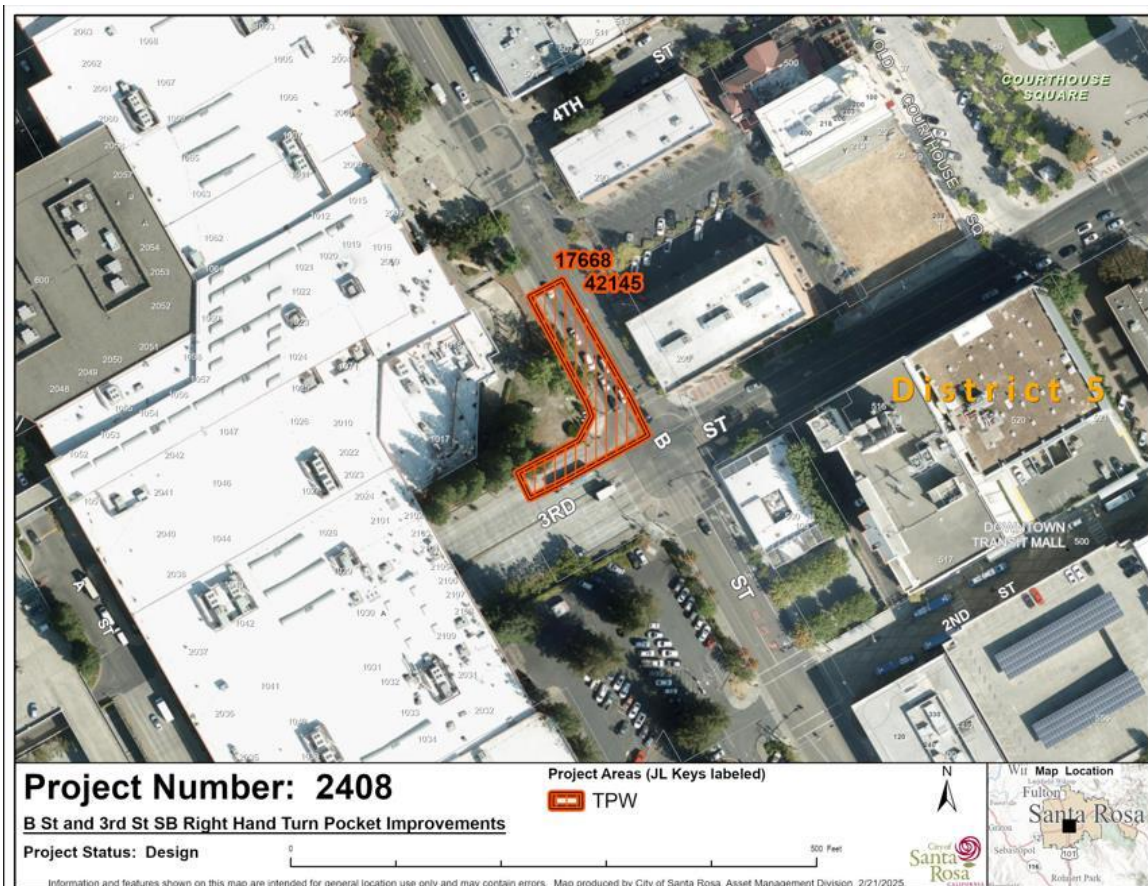
FOR CONSTRUCTION OF

## B STREET AND 3<sup>RD</sup> STREET RIGHT TURN POCKET IMPROVEMENTS

**CITY CONTRACT NUMBER**  
C02408

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

2025



## LOCATION MAP

City of Santa Rosa

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## Notice Inviting Bids

1. **Bid Submission.** City of Santa Rosa ("City") will accept sealed bids for its B Street and 3<sup>rd</sup> Street Right Turn Pocket Improvements Project ("Project"), before **April 2, 2025, at 2:00 p.m.**, at its Transportation and Public Works office, located at 69 Stony Circle, Santa Rosa, California, at which time the bids will be publicly opened and read aloud. Bidders may attend the public opening in person or via Zoom, using the following link and credentials:

<https://srcity-org.zoom.us/j/82588285107?pwd=OWKKZxXNrfVhrDAf7JEuabFJyvaLoj.1>

Phone: +1 669 219 2599

Meeting ID: 825 8828 5107

Passcode: 256017

Find your local number: <https://srcity-org.zoom.us/j/82588285107?pwd=OWKKZxXNrfVhrDAf7JEuabFJyvaLoj.1>

2. **Project Information.**

- 2.1 **Location and Description.** The Project is located at the intersection of B Street and 3<sup>rd</sup> Street in Santa Rosa, California, 95401. and is described as follows: This project is slated to construct a right hand turn pocket lane in the south bound direction of B Street approaching the 3<sup>rd</sup> Street intersection. The project will include grading and relocation of utilities within the pocket area, relocation of a traffic pole, and relocation of the curb/gutter, sidewalk, and curb ramp.
- 2.2 **Time for Final Completion.** The Project must be fully completed within 60 Working Days from the start date set forth in the Notice to Proceed. City anticipates that the Work will begin on or about June 2025, but the anticipated start date is provided solely for convenience and is neither certain nor binding. Following issuance of the Notice to Proceed, approximately three weeks will be provided for Submittal Review followed by a suspension of the project to allow for traffic signal poles to arrive.

3. **License and Registration Requirements.**

- 3.1 **License.** This Project requires a valid California contractor's license for the following classification(s): A.
- 3.2 **DIR Registration.** City may not accept a Bid Proposal from or enter into the Contract with a bidder, without proof that the bidder is registered with the California Department of Industrial Relations ("DIR") to perform public work pursuant to Labor Code § 1725.5, subject to limited legal exceptions.

4. **Contract Documents.** The plans, specifications, bid forms and contract documents for the Project, and any addenda thereto ("Contract Documents") may be downloaded from the City's PlanetBids portal, which may be accessed by selecting the "Bid/Proposal Opportunities" link on the City's website at <https://www.srcity.org/165/Bids-Proposals>. A printed copy of the Contract Documents is not available.

5. **Bid Security.** The Bid Proposal must be accompanied by bid security of ten percent of the maximum bid amount, in the form of a cashier's or certified check made payable to City, or a bid bond executed by a surety licensed to do business in the State of California on the Bid Bond form included with the Contract Documents. The bid security must guarantee that within ten days following receipt of the City's Notice of Award, the successful bidder will execute the Contract and submit the payment and performance bonds, insurance certificates and endorsements, valid Certificates of Reported Compliance as required under

the California Air Resources Board's In-Use Off-Road Diesel-Fueled Fleets Regulation (13 CCR § 2449 et seq.) ("Off-Road Regulation"), if applicable, and any other submittals required by the Contract Documents and as specified in the Notice of Award.

**6. Prevailing Wage Requirements.**

**6.1 General.** Pursuant to California Labor Code § 1720 et seq., this Project is subject to the prevailing wage requirements applicable to the locality in which the Work is to be performed for each craft, classification or type of worker needed to perform the Work, including employer payments for health and welfare, pension, vacation, apprenticeship and similar purposes.

**6.2 Rates.** The prevailing rates are on file with the City and are available online at <http://www.dir.ca.gov/DLSR>. Each Contractor and Subcontractor must pay no less than the specified rates to all workers employed to work on the Project. The schedule of per diem wages is based upon a working day of eight hours. The rate for holiday and overtime work must be at least time and one-half.

**6.3 Compliance.** The Contract will be subject to compliance monitoring and enforcement by the DIR, under Labor Code § 1771.4.

**7. Performance and Payment Bonds.** The successful bidder will be required to provide performance and payment bonds, each for 100% of the Contract Price, as further specified in the Contract Documents.

**8. Substitution of Securities.** Substitution of appropriate securities in lieu of retention amounts from progress payments is permitted under Public Contract Code § 22300.

**9. Subcontractor List.** Each Subcontractor must be registered with the DIR to perform work on public projects. Each bidder must submit a completed Subcontractor List form with its Bid Proposal, including the name, location of the place of business, California contractor license number, DIR registration number, and percentage of the Work to be performed (based on the base bid price) for each Subcontractor that will perform Work or service or fabricate or install Work for the prime contractor in excess of one-half of 1% of the bid price, using the Subcontractor List form included with the Contract Documents.

**10. Instructions to Bidders.** All bidders should carefully review the Instructions to Bidders for more detailed information before submitting a Bid Proposal. The definitions provided in Article 1 of the General Conditions apply to all of the Contract Documents, as defined therein, including this Notice Inviting Bids.

**11. Bidders' Conference.** A mandatory in person bidders' conference will be held on **March 19, 2025 at 2:00 p.m.**, at the following location: Transportation and Public Works office located at 69 Stony Circle, Santa Rosa, CA 95401, to acquaint all prospective bidders with the Contract Documents and the Worksite. The bidders' conference is mandatory. A bidder who fails to attend a mandatory bidders' conference may be disqualified from bidding.

By: Gregory Mariscal  
Gregory Mariscal (Feb 27, 2025 15:25 PST)  
Gregory Mariscal, Supervising Engineer

Date: Feb 27, 2025

Publication Date: February 28, 2025

END OF NOTICE INVITING BIDS

## Instructions to Bidders

Each Bid Proposal submitted to the City of Santa Rosa ("City") for its B Street and 3<sup>rd</sup> Street Right Turn Pocket Improvements Project ("Project") must be submitted in accordance with the following instructions and requirements:

### 1. Bid Submission.

**1.1 General.** Each Bid Proposal must be completed, using the form provided in the Contract Documents, signed, and submitted to City in a sealed envelope, with all required forms and attachments, before the date and time set forth in Section 1 of the Notice Inviting Bids, or as amended by subsequent addendum. Faxed or emailed Bid Proposals will not be accepted, unless otherwise specified. Late submissions (i.e., submissions at or after the exact hour of bid opening) will be returned unopened. City reserves the right to postpone the date or time for receiving or opening bids. Each bidder is solely responsible for all of its costs to prepare and submit its bid and by submitting a bid waives any right to recover those costs from City. The bid price(s) must include all costs to perform the Work as specified, including all labor, material, supplies, and equipment and all other direct or indirect costs such as applicable taxes, insurance and overhead.

**1.2 Vendor Registration.** To participate in the bidding process, each bidder must register as a vendor on PlanetBids, download the Contract Documents, and add itself to the "Prospective Bidders" list for the Project. If City issues an addendum, each bidder must log in to PlanetBids and acknowledge the addendum. (See Section 8, below.)

**1.3 Bid Envelope.** The sealed envelope containing the Bid Proposal and all required forms and attachments must be clearly labeled and addressed as follows:

**BID PROPOSAL:**

B Street and 3<sup>rd</sup> Street Right Turn Pocket Improvements Project  
Contract No. C02408

Transportation and Public Works Department  
69 Stony Circle  
Santa Rosa, California 95401  
Attn: Peter Porata

The envelope must also be clearly labeled, as follows, with the bidder's name, address, and its registration number with the California Department of Industrial Relations ("DIR") for bidding on public works contracts (Labor Code §§ 1725.5 and 1771.1):

*[Contractor company name]*  
*[street address]*  
*[city, state, zip code]*  
DIR Registration No: \_\_\_\_\_

**1.4 DIR Registration.** Subject to limited legal exceptions for joint venture bids and federally-funded projects, City may not accept a Bid Proposal from a bidder without proof that the bidder is registered with the DIR to perform public work under Labor Code § 1725.5. If City is unable to confirm that the bidder is currently registered

with the DIR, City may disqualify the bidder and return its bid unopened. (Labor Code §§ 1725.5 and 1771.1(a).)

**1.5 Bid Tabulation.** To access the bid tabulation when available, visit [www.srcity.org/bids](http://www.srcity.org/bids). Click the link to “Capital Projects Bid Results” under the Capital Projects heading.

- 2. Bid Proposal Form and Enclosures.** Each Bid Proposal must be completed legibly using the Bid Proposal form included with the Contract Documents. The Bid Proposal form must be fully completed without interlineations, alterations, or erasures. Any necessary corrections must be clear and legible, and must be initialed by the bidder’s authorized representative. A Bid Proposal submitted with exceptions or terms such as “negotiable,” “will negotiate,” or similar, will be considered nonresponsive. Each Bid Proposal must be accompanied by bid security, as set forth in Section 4 below, and by a completed Subcontractor List and Non-Collusion Declaration using the forms included with the Contract Documents, and any additional forms required by the Notice Inviting Bids or Instructions to Bidders, such as the Contractor Agreement to be Bound by the CWA, executed by bidder, using the form included in the Contract Documents, if applicable.
- 3. Authorization and Execution.** Each Bid Proposal must be signed by the bidder’s authorized representative. A Bid Proposal submitted by a partnership must be signed in the partnership name by a general partner with authority to bind the partnership. A Bid Proposal submitted by a corporation must be signed with the legal name of the corporation, followed by the signature and title of two officers of the corporation with full authority to bind the corporation to the terms of the Bid Proposal, under California Corporations Code § 313.
- 4. Bid Security.** Each Bid Proposal must be accompanied by bid security of ten percent of the maximum bid amount, in the form of a cashier’s check or certified check, made payable to the City, or bid bond using the form included in the Contract Documents and executed by a surety licensed to do business in the State of California. The bid security must guarantee that, within ten days following receipt of the City’s Notice of Award, the bidder will: execute and submit the enclosed Contract for the bid price; submit payment and performance bonds for 100% of the maximum Contract Price; submit the insurance certificates and endorsements; and submit valid Certificates of Reported Compliance as required by the Off-Road Regulation, if applicable, and any other submittals, if any, required by the Contract Documents or the Notice of Award. A Bid Proposal may not be withdrawn for a period of 60 days after the bid opening without forfeiture of the bid security, except as authorized for material error under Public Contract Code § 5100 et seq.
- 5. Requests for Information.** Questions or requests for clarifications regarding the Project, the bid procedures, or any of the Contract Documents must be submitted in writing to City via the PlanetBids platform. Oral responses are not authorized and are not binding on the City. Bidders should submit any such written inquiries at least five Working Days before the scheduled bid opening. Questions received any later might not be addressed before the bid deadline. An interpretation or clarification by City in response to a written inquiry will be issued in an addendum.
- 6. Pre-Bid Investigation.**
  - 6.1 General.** Each bidder is solely responsible at its sole expense for diligent and thorough review of the Contract Documents, examination of the Project site, and reasonable and prudent inquiry concerning known and potential site and area conditions prior to submitting a Bid Proposal. Each bidder is responsible for knowledge of conditions and requirements which reasonable review and

investigation would have disclosed. However, except for any areas that are open to the public at large, bidders may not enter property owned or leased by the City or the Project site without prior written authorization from City.

**6.2 Document Review.** Each bidder is responsible for review of the Contract Documents and any informational documents provided “For Reference Only,” e.g., as-builts, technical reports, test data, and the like. A bidder is responsible for notifying City of any errors, omissions, inconsistencies, or conflicts it discovers in the Contract Documents, acting solely in its capacity as a contractor and subject to the limitations of Public Contract Code § 1104. Notification of any such errors, omissions, inconsistencies, or conflicts must be submitted in writing to the City no later than five Working Days before the scheduled bid opening. (See Section 5, above.) City expressly disclaims responsibility for assumptions a bidder might draw from the presence or absence of information provided by City.

**6.3 Project Site.** Questions regarding the availability of soil test data, water table elevations, and the like should be submitted to the City in writing, as specified in Section 5, above. Any subsurface exploration at the Project site must be done at the bidder’s expense, but only with prior written authorization from City. All soil data and analyses available for inspection or provided in the Contract Documents apply only to the test hole locations. Any water table elevation indicated by a soil test report existed on the date the test hole was drilled. The bidder is responsible for determining and allowing for any differing soil or water table conditions during construction. Because groundwater levels may fluctuate, difference(s) in elevation between ground water shown in soil boring logs and ground water actually encountered during construction will not be considered changed Project site conditions. Actual locations and depths must be determined by bidder’s field investigation. The bidder may request access to underlying or background information on the Project site in City’s possession that is necessary for the bidder to form its own conclusions, including, if available, record drawings or other documents indicating the location of subsurface lines, utilities, or other structures.

**6.4 Utility Company Standards.** The Project must be completed in a manner that satisfies the standards and requirements of any affected utility companies or agencies (collectively, “utility owners”). The successful bidder may be required by the third party utility owners to provide detailed plans prepared by a California registered civil engineer showing the necessary temporary support of the utilities during coordinated construction work. Bidders are directed to contact the affected third party utility owners about their requirements before submitting a Bid Proposal.

**7. Bidders Interested in More Than One Bid.** No person, firm, or corporation may submit or be a party to more than one Bid Proposal unless alternate bids are specifically called for. However, a person, firm, or corporation that has submitted a subcontract proposal or quote to a bidder may submit subcontract proposals or quotes to other bidders.

**8. Addenda.** Subject to the limitations of Public Contract Code § 4104.5, City reserves the right to issue addenda prior to bid time. Any addenda issued prior to the bid opening are part of the Contract Documents. Bidders should check City’s PlanetBids portal periodically for any addenda or updates on the Project, which may be accessed via City’s website at: <https://www.srcity.org/165/Bids-Proposals>. Each bidder is solely responsible for ensuring it has received and reviewed all addenda prior to submitting its bid and must acknowledge each addendum in the PlanetBids portal.

9. **Brand Designations and “Or Equal” Substitutions.** Any specification designating a material, product, thing, or service by specific brand or trade name, followed by the words “or equal,” is intended only to indicate quality and type of item desired, and bidders may request use of any equal material, product, thing, or service. All data substantiating the proposed substitute as an equal item must be submitted with the written request for substitution. A request for substitution must be submitted within 35 days after Notice of Award unless otherwise provided in the Contract Documents. This provision does not apply to materials, products, things, or services that may lawfully be designated by a specific brand or trade name under Public Contract Code § 3400(c).
10. **Bid Protest.** Any bid protest against another bidder must be submitted in writing and received by City at 69 Stony Circle, Santa Rosa, CA 95401 or sent via email at [pporata@srcity.org](mailto:pporata@srcity.org) before 5:00 p.m. no later than two Working Days following bid opening (“Bid Protest Deadline”) and must comply with the following requirements:
- 10.1 **General.** Only a bidder who has actually submitted a Bid Proposal is eligible to submit a bid protest against another bidder. Subcontractors are not eligible to submit bid protests. A bidder may not rely on the bid protest submitted by another bidder, but must timely pursue its own protest. For purposes of this Section 10, a “Working Day” means a day that City is open for normal business, and excludes weekends and holidays observed by City. Pursuant to Public Contract Code § 4104, inadvertent omission of a Subcontractor’s DIR registration number on the Subcontractor List form is not grounds for a bid protest, provided it is corrected within 24 hours of the bid opening or as otherwise provided under Labor Code § 1771.1(b).
- 10.2 **Protest Contents.** The bid protest must contain a complete statement of the basis for the protest and must include all supporting documentation. Material submitted after the Bid Protest Deadline will not be considered. The protest must refer to the *specific* portion or portions of the Contract Documents upon which the protest is based. The protest must include the name, address, email address, and telephone number of the protesting bidder and any person submitting the protest on behalf of or as an authorized representative of the protesting bidder.
- 10.3 **Copy to Protested Bidder.** Upon submission of its bid protest to City, the protesting bidder must also concurrently transmit the protest and all supporting documents to the protested bidder, and to any other bidder who has a reasonable prospect of receiving an award depending upon the outcome of the protest, by email or hand delivery to ensure delivery before the Bid Protest Deadline.
- 10.4 **Response to Protest.** The protested bidder may submit a written response to the protest, provided the response is received by City before 5:00 p.m., within two Working Days after the Bid Protest Deadline or after actual receipt of the bid protest, whichever is sooner (the “Response Deadline”). The response must attach all supporting documentation. Material submitted after the Response Deadline will not be considered. The response must include the name, address, email address, and telephone number of the person responding on behalf of or representing the protested bidder if different from the protested bidder.
- 10.5 **Copy to Protesting Bidder.** Upon submission of its response to the bid protest to the City, the protested bidder must also concurrently transmit by email or hand delivery, by or before the Response Deadline, a copy of its response and all supporting documents to the protesting bidder and to any other bidder who has a

reasonable prospect of receiving an award depending upon the outcome of the protest.

- 10.6 Exclusive Remedy.** The procedure and time limits set forth in this Section are mandatory and are the bidder's sole and exclusive remedy in the event of a bid protest. A bidder's failure to comply with these procedures will constitute a waiver of any right to further pursue a bid protest, including filing a Government Code Claim or initiation of legal proceedings.
- 10.7 Right to Award.** City reserves the right, acting in its sole discretion, to reject any bid protest that it determines lacks merit, to award the Contract to the bidder it has determined to be the responsible bidder submitting the lowest responsive bid, and to issue a Notice to Proceed with the Work notwithstanding any pending or continuing challenge to its determination.
- 11. Reservation of Rights.** Subject to the provisions of its charter and the Santa Rosa City Code ("City Code"), City reserves the unfettered right, acting in its sole discretion, to waive or to decline to waive any immaterial bid irregularities; to accept or reject any or all bids; to cancel or reschedule the bid; to postpone or abandon the Project entirely; or to perform all or part of the Work with its own forces. The Contract will be awarded, if at all, within 60 days after opening of bids or as otherwise specified in the Special Conditions, to the responsible bidder that submitted the lowest responsive bid. Any planned start date for the Project represents the City's expectations at the time the Notice Inviting Bids was first issued. City is not bound to issue a Notice to Proceed by or before such planned start date, and it reserves the right to issue the Notice to Proceed when the City determines, in its sole discretion, the appropriate time for commencing the Work. The City expressly disclaims responsibility for any assumptions a bidder might draw from the presence or absence of information provided by the City in any form. Each bidder is solely responsible for its costs to prepare and submit a bid, including site investigation costs.
- 12. Bonds.** Within ten calendar days following receipt of the Notice of Award, the successful bidder must submit payment and performance bonds to City as specified in the Contract Documents using the bond forms included in the Contract Documents. All required bonds must be calculated on the maximum total Contract Price as awarded, including additive alternates, if applicable.
- 13. License(s) and Certificate(s).** The successful bidder and its Subcontractor(s) must possess the California contractor's license(s) in the classification(s) required by law to perform the Work. The successful bidder must also obtain a City business tax certificate, issued pursuant to Chapter 6.04 of the City Code before performing any Work on the Project. Subcontractors must also obtain a City business tax certificate before performing any Work.
- 14. Ineligible Subcontractor.** Any Subcontractor who is ineligible to perform work on a public works project under Labor Code §§ 1777.1 or 1777.7 is prohibited from performing work on the Project.
- 15. Safety Orders.** If the Project includes construction of a pipeline, sewer, sewage disposal system, boring and jacking pits, or similar trenches or open excavations, which are five feet or deeper, each bid must include a bid item for adequate sheeting, shoring, and bracing, or equivalent method, for the protection of life or limb, which comply with safety orders as required by Labor Code § 6707.



- 16. In-Use Off-Road Diesel-Fueled Fleets.** If the Project involves the use of vehicles subject to the California Air Resources Board's In-Use Off-Road Diesel-Fueled Fleets Regulation (13 CCR § 2449 et seq.) ("Off-Road Regulation"), then within ten calendar days following receipt of the Notice of Award, the successful bidder must submit to City valid Certificates of Reported Compliance for its fleet and its listed Subcontractors, if applicable, in accordance with the Off-Road Regulation, unless exempt under the Off-Road Regulation.
- 17. Community Workforce Agreement (If Applicable).** If the Project is subject to the City's Community Workforce Agreement ("CWA"), then within three Working Days following a request from City, the apparent low bidder must submit to City an executed Contractor Agreement to be Bound by the CWA, using the form attached to the CWA as Appendix A. The CWA is attached to the Contract Documents and incorporated herein by reference. Each bidder must provide a copy of the CWA to its Subcontractors, and the successful bidder and its Subcontractors must comply with the CWA. Entering into the CWA is a condition of award of the Contract for the Project.
- ☒ This Project is subject to the City's CWA. Submit an executed Contractor Agreement to be Bound, using the form attached to the CWA as Appendix A, within three Working Days following a request from City.
- ☐ This Project is not subject to the City's CWA.
- 18. Bid Schedule.** Each bidder must complete the Bid Schedule form with unit prices as indicated, and submit the completed Bid Schedule with its Bid Proposal.
- 18.1 Incorrect Totals.** In the event a computational error for any bid item (base bid or alternate) results in an incorrect extended total for that item, the submitted base bid or bid alternate total will be adjusted to reflect the corrected amount as the product of the estimated quantity and the unit cost. In the event of a discrepancy between the actual total of the itemized or unit prices shown on the Bid Schedule for the base bid, and the amount entered as the base bid on the Bid Proposal form, the actual total of the itemized or unit prices shown on the Bid Schedule for the base bid will be deemed the base bid price. Likewise, in the event of a discrepancy between the actual total of the itemized or unit prices shown on the Bid Schedule for any bid alternate, and the amount entered for the alternate on the Bid Proposal form, the actual total of the itemized prices shown on the Bid Schedule for that alternate will be deemed the alternate price. Nothing in this provision is intended to prevent a bidder from requesting to withdraw its bid for material error under Public Contract Code § 5100 et seq.
- 18.2 Estimated Quantities.** Unless identified as a "Final Pay Quantity," the quantities shown on the Bid Schedule are estimated and the actual quantities required to perform the Work may be greater or less than the estimated amount. The Contract Price will be adjusted to reflect the actual quantities required for the Work based on the itemized or unit prices provided in the Bid Schedule, with no allowance for anticipated profit for quantities that are deleted or decreased, and no increase in the unit price, and without regard to the percentage increase or decrease of the estimated quantity and the actual quantity.
- 18.3 Bid Item Description.** The descriptions of bid items in the Specifications are not intended as exclusive descriptions of the Work. Each bidder must determine, and include in its unit pricing, all things necessary and incidental for the timely performance and completion of the Work as specified in the Contract Documents,

including, but not limited to, all necessary labor, materials, supplies, tools, equipment, transportation, facilities, and utilities, unless otherwise specified.

**19. For Reference Only.** The following documents are provided “For Reference Only,” as defined in Section 3.4 of the General Conditions:

- Pre-Construction Hazardous Materials Assessment (PCHMA) for the B Street Right Turn Lane Pocket Project

END OF INSTRUCTIONS TO BIDDERS

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## Bid Proposal

### B Street and 3<sup>rd</sup> Street Right Turn Pocket Improvements Project

\_\_\_\_\_ (“Bidder”) hereby submits this Bid Proposal to the City of Santa Rosa (“City”) for the above-referenced project (“Project”) in response to the Notice Inviting Bids and in accordance with the Contract Documents referenced in the Notice.

1. **Base Bid.** Bidder proposes to perform and fully complete the Work for the Project as specified in the Contract Documents, within the time required for full completion of the Work, including all labor, materials, supplies, and equipment and all other direct or indirect costs including, but not limited to, taxes, insurance and all overhead, for the following price (“Base Bid”):  
\$ \_\_\_\_\_.
2. **Addenda.** Bidder agrees that it has confirmed receipt of or access to, and reviewed, all addenda issued for this bid, as evidenced by its acknowledgement of each addendum on the City’s PlanetBids portal. Bidder waives any claims it might have against the City based on its failure to receive, access, or review any addenda for any reason.
3. **Bidder’s Certifications and Warranties.** By signing and submitting this Bid Proposal, Bidder certifies and warrants the following:
  - 3.1 **Examination of Contract Documents.** Bidder has thoroughly examined the Contract Documents and represents that, to the best of Bidder’s knowledge, there are no errors, omissions, or discrepancies in the Contract Documents, subject to the limitations of Public Contract Code § 1104.
  - 3.2 **Examination of Worksite.** Bidder has had the opportunity to examine the Worksite and local conditions at the Project location.
  - 3.3 **Bidder Responsibility.** Bidder is a responsible bidder, with the necessary ability, capacity, experience, skill, qualifications, workforce, equipment, and resources to perform or cause the Work to be performed in accordance with the Contract Documents and within the Contract Time.
  - 3.4 **Responsibility for Bid.** Bidder has carefully reviewed this Bid Proposal and is solely responsible for any errors or omissions contained in its completed bid. All statements and information provided in this Bid Proposal and enclosures are true and correct to the best of Bidder’s knowledge.
  - 3.5 **Nondiscrimination.** In preparing this bid, the Bidder has not engaged in discrimination against any prospective or present employee or Subcontractor on grounds of race, color, ancestry, national origin, ethnicity, religion, sex, sexual orientation, age, disability, or marital status.
  - 3.6 **Iran Contracting Act.** If the Contract Price exceeds \$1,000,000, Bidder is not identified on a list created under the Iran Contracting Act, Public Contract Code § 2200 et seq. (the “Act”), as a person engaging in investment activities in Iran, as defined in the Act, or is otherwise expressly exempt under the Act.
4. **Award of Contract.** By signing and submitting this Bid Proposal, Bidder agrees that, if City issues the Notice of Award to Bidder, then within ten days following receipt of the Notice of Award, Bidder will do all of the following:

- 4.1 Execute Contract.** Enter into the Contract with City in accordance with the terms of this Bid Proposal, by signing and submitting to City the Contract prepared by City using the form included with the Contract Documents;
- 4.2 Submit Required Bonds.** Submit to City a payment bond and a performance bond, each for 100% of the Contract Price, using the bond forms provided and in accordance with the requirements of the Contract Documents;
- 4.3 Insurance Requirements.** Submit to City the insurance certificate(s) and endorsement(s) as required by the Contract Documents; and
- 4.4 Certificates of Reported Compliance.** Submit to City valid Certificates of Reported Compliance for its fleet and its listed Subcontractors, if applicable, if the Project involves the use of vehicles subject to the Off-Road Regulation.
- 5. Bid Security.** As a guarantee that, if awarded the Contract, Bidder will perform its obligations under Section 4 above, Bidder is enclosing bid security in the amount of ten percent of its maximum bid amount in one of the following forms (check one):

\_\_\_\_\_ A cashier's check or certified check payable to City and issued by  
 \_\_\_\_\_ [Bank name] in the amount of  
 \$ \_\_\_\_\_.

\_\_\_\_\_ A bid bond, using the Bid Bond form included with the Contract Documents, payable to City and executed by a surety licensed to do business in the State of California.

This Bid Proposal is hereby submitted on \_\_\_\_\_, 20\_\_.

s/ \_\_\_\_\_

\_\_\_\_\_  
 Name and Title

s/ \_\_\_\_\_  
*[See Section 3 of Instructions to Bidders]*

\_\_\_\_\_  
 Name and Title

\_\_\_\_\_  
 Company Name

\_\_\_\_\_  
 License #, Expiration Date, and Classification

\_\_\_\_\_  
 Address

\_\_\_\_\_  
 DIR Registration #

\_\_\_\_\_  
 City, State, Zip

\_\_\_\_\_  
 Phone

\_\_\_\_\_  
 Contact Name

\_\_\_\_\_  
 Contact Email

END OF BID PROPOSAL

### Bid Schedule

This Bid Schedule must be completed in ink and included with the sealed Bid Proposal. Pricing must be provided for each Bid Item as indicated. Items marked "(SW)" are Specialty Work that must be performed by a qualified Subcontractor. The lump sum or unit cost for each item must be inclusive of all costs, whether direct or indirect, including profit and overhead. The sum of all amounts entered in the "Extended Total Amount" column must be identical to the Base Bid price entered in Section 1 of the Bid Proposal form.

AL = Allowance  
LF = Linear Foot

CF = Cubic Feet  
LS = Lump Sum

CY = Cubic Yard  
SF = Square Feet

EA = Each      LB = Pounds  
TON = Ton (2000 lbs)

| BID<br>ITEM<br>NO. | ITEM DESCRIPTION                                | EST. QTY. | UNIT | UNIT<br>COST | EXTENDED<br>TOTAL AMOUNT |
|--------------------|---|-----------|------|--------------|--------------------------|
| 1                  | TRAFFIC CONTROL                                 | 1         | LS   | \$           | \$                       |
| 2                  | WATER POLLUTION CONTROL                         | 1         | LS   | \$           | \$                       |
| 3                  | CONTAMINATED SOIL<br>DISPOSAL                   | 200       | CY   | \$           | \$                       |
| 4                  | ADJUST UTILITY BOXES TO<br>GRADE                | 3         | EA   | \$           | \$                       |
| 5                  | UTILITY CLEARANCES                              | 1         | LS   | \$           | \$                       |
| 6                  | IRRIGATION MODIFICATION                         | 1         | LS   | \$           | \$                       |
| 7                  | CLEARING AND GRUBBING                           | 1         | LS   | \$           | \$                       |
| 8                  | TREE AND STUMP REMOVAL                          | 6         | EA   | \$           | \$                       |
| 9                  | SUBGRADE<br>STABILIZATION/DIGOUTS               | 10        | SY   | \$           | \$                       |
| 10                 | ROADWAY EXCAVATION *                            | 257       | CY   | \$           | \$                       |
| 11                 | SOIL STABILIZATION FABRIC<br>(HMA ROAD SECTION) | 27        | SY   | \$           | \$                       |
| 12                 | AGGREGATE BASE (HMA<br>PAVING)                  | 715       | SF   | \$           | \$                       |
| 13                 | AGGREGATE BASE (P.C.C.<br>PAVEMENT SECTION)     | 1,856     | SF   | \$           | \$                       |
| 14                 | ASPHALT CONCRETE SURFACE                        | 35        | TON  | \$           | \$                       |
| 15                 | PCC PAVEMENT (INCLUDING<br>CURB - CITY STD 222) | 1,856     | SF   | \$           | \$                       |
| 16                 | STORM DRAIN CATCH BASIN<br>(CITY STD 402)       | 1         | EA   | \$           | \$                       |
| 17                 | 48" STORM DRAIN MANHOLE<br>(CITY STD 400)       | 1         | EA   | \$           | \$                       |
| 18                 | RETAINING CURB                                  | 66        | LF   | \$           | \$                       |
| 19                 | HDPE PLASTIC STORM DRAIN<br>PIPE                | 13        | LF   | \$           | \$                       |

| BID<br>ITEM<br>NO. | ITEM DESCRIPTION                                       | EST. QTY. | UNIT | UNIT<br>COST | EXTENDED<br>TOTAL AMOUNT |
|--------------------|--|-----------|------|--------------|--------------------------|
| 20                 | CURB AND GUTTER (CITY STD 241)                         | 13        | LF   | \$           | \$                       |
| 21                 | CURB RAMP  | 265       | SF   | \$           | \$                       |
| 22                 | SIDEWALK (CITY STD 4" CONCRETE OVER 2" SAND)           | 1,127     | SF   | \$           | \$                       |
| 23                 | SIDEWALK (THICKENED VEHICULAR SECTION)                 | 386       | SF   | \$           | \$                       |
| 24                 | REMOVE OR RELOCATE ROADSIDE SIGN                       | 2         | EA   | \$           | \$                       |
| 25                 | STRIPES AND PAVEMENT MARKINGS                          | 1         | LS   | \$           | \$                       |
| 26                 | GREEN PREFORMED METHYL METHACRYLATE BIKE LANE MARKINGS | 1         | LS   | \$           | \$                       |
| 27                 | TRAFFIC SIGNAL   | 1         | LS   | \$           | \$                       |
| 28                 | STREET LIGHTING SYSTEM                                 | 1         | LS   | \$           | \$                       |
| 29                 | 6" WATER C900  | 12        | LF   | \$           | \$                       |
| 30                 | FIRE HYDRANT AND LATERAL (CITY STD 857)                | 1         | EA   | \$           | \$                       |
| 31                 | BOLLARD  | 1         | EA   | \$           | \$                       |
| 32                 | GENERAL ELECTRICAL WORK                                | 1         | LS   | \$           | \$                       |

\* Final Pay Quantity

TOTAL BASE BID: Items 1 through 32 inclusive: \$ \_\_\_\_\_

*Note: The amount entered as the "Total Base Bid" should be identical to the Base Bid amount entered in Section 1 of the Bid Proposal form.*

BIDDER NAME: \_\_\_\_\_

END OF BID SCHEDULE

### Subcontractor List

For each Subcontractor that will perform a portion of the Work in an amount in excess of one-half of 1% of the Bidder's total Base Bid,<sup>1</sup> the bidder must list a description of the Work, the name of the Subcontractor, its California contractor license number, the location of its place of business, its DIR registration number, and the portion of the Work that the Subcontractor is performing based on a percentage of the Base Bid price.

| DESCRIPTION OF WORK | SUBCONTRACTOR NAME | CALIFORNIA CONTRACTOR LICENSE NO. | LOCATION OF BUSINESS | DIR REG. NO. | PERCENT OF WORK |
|---------------------|--------------------|-----------------------------------|----------------------|--------------|-----------------|
|                     |                    |                                   |                      |              |                 |
|                     |                    |                                   |                      |              |                 |
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|                     |                    |                                   |                      |              |                 |
|                     |                    |                                   |                      |              |                 |

END OF SUBCONTRACTOR LIST

<sup>1</sup> For street or highway construction, this requirement applies to any subcontract of \$10,000 or more.

### Noncollusion Declaration

TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the \_\_\_\_\_ [title] of \_\_\_\_\_  
[business name], 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.

This declaration is intended to comply with California Public Contract Code § 7106 and Title 23 U.S.C § 112.

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].

s/ \_\_\_\_\_

\_\_\_\_\_  
Name [print]

END OF NONCOLLUSION DECLARATION



## Bid Bond

\_\_\_\_\_ ("Bidder") has submitted a bid, dated \_\_\_\_\_, 20\_\_\_\_ ("Bid"), to the City of Santa Rosa ("City") for work on the B Street and 3<sup>rd</sup> Street Right Turn Pocket Improvements Project ("Project"). Under this duly executed bid bond ("Bid Bond"), Bidder as Principal and \_\_\_\_\_, its surety ("Surety"), are bound to City as obligee in the penal sum of ten percent of the maximum amount of the Bid (the "Bond Sum"). Bidder and Surety bind themselves and their respective heirs, executors, administrators, successors and assigns, jointly and severally, as follows:

1. **General.** If Bidder is awarded the Contract for the Project, Bidder will enter into the Contract with City in accordance with the terms of the Bid.
2. **Submittals.** Within ten days following receipt of the Notice of Award, Bidder must submit to City the following:
  - 2.1 **Contract.** The executed Contract, using the form provided by City in the Project contract documents ("Contract Documents");
  - 2.2 **Payment Bond.** A payment bond for 100% of the maximum Contract Price, executed by a surety licensed to do business in the State of California using the Payment Bond form included with the Contract Documents;
  - 2.3 **Performance Bond.** A performance bond for 100% of the maximum Contract Price, executed by a surety licensed to do business in the State of California using the Performance Bond form included with the Contract Documents;
  - 2.4 **Insurance.** The insurance certificate(s) and endorsement(s) required by the Contract Documents;
  - 2.5 **Certificates of Reported Compliance.** Valid Certificates of Reported Compliance for its fleet and its listed Subcontractors, if applicable, in accordance with the In-Use Off-Road Diesel-Fueled Fleets Regulation (13 CCR § 2449 et seq.) ("Off-Road Regulation"), if the Project involves the use of vehicles subject to the Off-Road Regulation; and
  - 2.6 **Other Submittals.** Any other documents required by the Instructions to Bidders or Notice of Award.
3. **Enforcement.** If Bidder fails to execute the Contract or to submit the bonds, insurance certificates, and valid Certificates of Reported Compliance as required by the Contract Documents, Surety guarantees that Bidder forfeits the Bond Sum to City. Any notice to Surety may be given in the manner specified in the Contract and delivered or transmitted to Surety as follows:

Attn: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

- 4. Duration and Waiver.** If Bidder fulfills its obligations under Section 2, above, then this obligation will be null and void; otherwise, it will remain in full force and effect for 60 days following the bid opening or until this Bid Bond is returned to Bidder, whichever occurs first. Surety waives the provisions of Civil Code §§ 2819 and 2845.

This Bid Bond is entered into and effective on \_\_\_\_\_, 20\_\_\_\_\_.

**SURETY:**

\_\_\_\_\_  
Business Name

s/ \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name, Title

(Attach Acknowledgment with Notary Seal and Power of Attorney)

**BIDDER:**

\_\_\_\_\_  
Business Name

s/ \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name, Title

END OF BID BOND

## Contract

This public works contract ("Contract") is entered into by and between the City of Santa Rosa ("City") and \_\_\_\_\_ ("Contractor"), for work on the B Street and 3<sup>rd</sup> Street Right Turn Pocket Improvements Project ("Project").

The parties agree as follows:

1. **Award of Contract.** In response to the Notice Inviting Bids, Contractor has submitted a Bid Proposal to perform the Work to construct the Project. On \_\_\_\_\_, 20\_\_\_\_, City authorized award of this Contract to Contractor for the amount set forth in Section 4, below. City has elected to include the following Project alternate(s) in the Contract: No Alternates
2. **Contract Documents.** The Contract Documents incorporated into this Contract include and are comprised of all of the documents listed below. The definitions provided in Article 1 of the General Conditions apply to all of the Contract Documents, including this Contract.
  - 2.1 Notice Inviting Bids;
  - 2.2 Instructions to Bidders;
  - 2.3 Addenda, if any;
  - 2.4 Bid Proposal and attachments thereto;
  - 2.5 Contract;
  - 2.6 Payment and Performance Bonds;
  - 2.7 General Conditions;
  - 2.8 Special Conditions;
  - 2.9 Project Plans and Specifications;
  - 2.10 Change Orders, if any;
  - 2.11 Notice of Award;
  - 2.12 Notice to Proceed;
  - 2.13 City Standards and City Specifications, as applicable;
  - 2.14 City's CWA, if applicable; and
  - 2.15 "No other Documents"
3. **Contractor's Obligations.** Contractor will perform all of the Work required for the Project, as specified in the Contract Documents. Contractor must provide, furnish, and supply all things necessary and incidental for the timely performance and completion of the Work, including all necessary labor, materials, supplies, tools, equipment, transportation, onsite facilities, and utilities, unless otherwise specified in the Contract Documents. Contractor must use its best efforts to diligently prosecute and complete the Work in a professional and expeditious manner and to meet or exceed the performance standards required by the Contract Documents.
4. **Payment.** As full and complete compensation for Contractor's timely performance and completion of the Work in strict accordance with the terms and conditions of the Contract Documents, City will pay Contractor \$\_\_\_\_\_ ("Contract Price") for all of Contractor's direct and indirect costs to perform the Work, including all labor, materials, supplies, equipment, taxes, insurance, bonds and all overhead costs, in accordance with the payment provisions in the General Conditions.
5. **Time for Completion.** Contractor will fully complete the Work for the Project, meeting all requirements for Final Completion, within 60 Working Days from the start date set forth in the Notice to Proceed ("Contract Time"). By signing below, Contractor expressly waives any claim for delayed early completion.

6. **Liquidated Damages.** As further specified in Section 5.4 of the General Conditions, if Contractor fails to complete the Work within the Contract Time, City will assess liquidated damages in the amount of \$3,500.00 per day for each day of unexcused delay in achieving Final Completion, and such liquidated damages may be deducted from City's payments due or to become due to Contractor under this Contract.
7. **Labor Code Compliance.**
- 7.1 **General.** This Contract is subject to all applicable requirements of Chapter 1 of Part 7 of Division 2 of the Labor Code, including requirements pertaining to wages, working hours and workers' compensation insurance, as further specified in Article 9 of the General Conditions.
- 7.2 **Prevailing Wages.** This Project is subject to the prevailing wage requirements applicable to the locality in which the Work is to be performed for each craft, classification or type of worker needed to perform the Work, including employer payments for health and welfare, pension, vacation, apprenticeship and similar purposes. Copies of these prevailing rates are available online at <http://www.dir.ca.gov/DLSR>.
- 7.3 **DIR Registration.** City may not enter into the Contract with a bidder without proof that the bidder and its Subcontractors are registered with the California Department of Industrial Relations to perform public work pursuant to Labor Code § 1725.5, subject to limited legal exceptions.
8. **Workers' Compensation Certification.** Pursuant to Labor Code § 1861, by signing this Contract, Contractor certifies as follows: "I am aware of the provisions of Labor Code § 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 I will comply with such provisions before commencing the performance of the Work on this Contract."
9. **Conflicts of Interest.** Contractor, its employees, Subcontractors, and agents may not have, maintain, or acquire a conflict of interest in relation to this Contract in violation of any City ordinance or requirement, or in violation of any California law, including Government Code § 1090 et seq., or the Political Reform Act, as set forth in Government Code § 81000 et seq. and its accompanying regulations. Any violation of this Section constitutes a material breach of the Contract.
10. **Independent Contractor.** Contractor is an independent contractor under this Contract and will have control of the Work and the means and methods by which it is performed. Contractor and its Subcontractors are not employees of City and are not entitled to participate in any health, retirement, or any other employee benefits from City.
11. **Notice.** Any notice, billing, or payment required by or pursuant to the Contract Documents must be made in writing, signed, dated, and sent to the other party by personal delivery, U.S. Mail, a reliable overnight delivery service, or by email as a PDF file. Notice is deemed effective upon delivery, except that service by U.S. Mail is deemed effective on the second working day after deposit for delivery. Notice for each party must be given as follows:

**City:**

Public Works  
69 Stony Circle  
Santa Rosa, CA 95401  
(707)543-3865  
Attn: Peter Porata  
pporata@srcity.org

Copy to: Nick Lynn  
nlynn@srcity.org

**Contractor:**

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Attn: \_\_\_\_\_  
Email: \_\_\_\_\_  
Copy to: \_\_\_\_\_

**12. General Provisions.**

- 12.1 Assignment and Successors.** Contractor may not assign its rights or obligations under this Contract, in part or in whole, without City's written consent. This Contract is binding on Contractor's and City's lawful heirs, successors and permitted assigns.
- 12.2 Third Party Beneficiaries.** There are no intended third party beneficiaries to this Contract.
- 12.3 Governing Law and Venue.** This Contract will be governed by California law and venue will be in the Sonoma County Superior Court, and no other place. Contractor waives any right it may have pursuant to Code of Civil Procedure § 394, to file a motion to transfer any action arising from or relating to this Contract to a venue outside of Sonoma County, California.
- 12.4 Amendment.** No amendment or modification of this Contract will be binding unless it is in a writing duly authorized and signed by the parties to this Contract.
- 12.5 Integration.** This Contract and the Contract Documents incorporated herein, including authorized amendments or Change Orders thereto, constitute the final, complete, and exclusive terms of the agreement between City and Contractor.
- 12.6 Severability.** If any provision of the Contract Documents is determined to be illegal, invalid, or unenforceable, in whole or in part, the remaining provisions of the Contract Documents will remain in full force and effect.
- 12.7 Iran Contracting Act.** If the Contract Price exceeds \$1,000,000, Contractor certifies, by signing below, that it is not identified on a list created under the Iran Contracting Act, Public Contract Code § 2200 et seq. (the "Act"), as a person engaging in investment activities in Iran, as defined in the Act, or is otherwise expressly exempt under the Act.

**12.8 Authorization.** Each individual signing below warrants that he or she is authorized to do so by the party that he or she represents, and that this Contract is legally binding on that party. If Contractor is a corporation, signatures from two officers of the corporation are required pursuant to California Corporations Code § 313.

**12.9 Electronic Signatures.** In accordance with Government Code § 16.5 and Civil Code § 1633.1 et seq., the parties agree that this Contract may be transmitted and executed electronically and that electronic signatures will have the same force and effect as the use of manual signatures.

*[Signatures are on the following page.]*

The parties agree to this Contract as witnessed by the signatures below:

**CITY:**

Approved as to form:

s/ \_\_\_\_\_

s/ \_\_\_\_\_

\_\_\_\_\_  
Name, Title

\_\_\_\_\_  
Name, Title

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Attest:

s/ \_\_\_\_\_

\_\_\_\_\_  
Name, Title

Date: \_\_\_\_\_

**CONTRACTOR:** \_\_\_\_\_  
Business Name

s/ \_\_\_\_\_

Seal:

\_\_\_\_\_  
Name, Title

Date: \_\_\_\_\_

Second Signature (See Section 12.8):

s/ \_\_\_\_\_

\_\_\_\_\_  
Name, Title

Date: \_\_\_\_\_

\_\_\_\_\_  
Contractor's California License Number(s) and Expiration Date(s)

END OF CONTRACT

## Payment Bond

The City of Santa Rosa ("City") and \_\_\_\_\_ ("Contractor") have entered into a contract for work on the B Street and 3<sup>rd</sup> Street Right Turn Pocket Improvements Project ("Project"). The Contract is incorporated by reference into this Payment Bond ("Bond").

1. **General.** Under this Bond, Contractor as principal and \_\_\_\_\_, its surety ("Surety"), are bound to City as obligee in an amount not less than \$ \_\_\_\_\_, under California Civil Code § 9550 et seq., to ensure payment to authorized claimants. This Bond is binding on the respective successors, assigns, owners, heirs, or executors of Surety and Contractor.
2. **Surety's Obligation.** If Contractor or any of its Subcontractors fails to pay a person authorized in California Civil Code § 9100 to assert a claim against a payment bond, any amounts due under the Unemployment Insurance Code with respect to work or labor performed under the Contract, or any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of Contractor and its Subcontractors under California Unemployment Insurance Code § 13020 with respect to the work and labor, then Surety will pay the obligation.
3. **Beneficiaries.** This Bond inures to the benefit of any of the persons named in California Civil Code § 9100, so as to give a right of action to those persons or their assigns in any suit brought upon this Bond. Contractor must promptly provide a copy of this Bond upon request by any person with legal rights under this Bond.
4. **Duration.** If Contractor promptly makes payment of all sums for all labor, materials, and equipment furnished for use in the performance of the Work required by the Contract, in conformance with the time requirements set forth in the Contract and as required by California law, Surety's obligations under this Bond will be null and void. Otherwise, Surety's obligations will remain in full force and effect.
5. **Waivers.** Surety waives any requirement to be notified of alterations to the Contract or extensions of time for performance of the Work under the Contract. Surety waives the provisions of Civil Code §§ 2819 and 2845. City waives the requirement of a new bond for any supplemental contract under Civil Code § 9550. Any notice to Surety may be given in the manner specified in the Contract and sent to Surety as follows:  
  
Attn: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Email: \_\_\_\_\_
6. **Law and Venue.** This Bond will be governed by California law, and venue for any dispute pursuant to this Bond will be in the Sonoma County Superior Court, and no other place. Surety will be responsible for City's attorneys' fees and costs in any action to enforce the provisions of this Bond.

*[Signatures are on the following page.]*



7. **Effective Date; Execution.** This Bond is entered into and is effective on \_\_\_\_\_,  
20\_\_.

**SURETY:**

\_\_\_\_\_  
Business Name

s/ \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name, Title

(Attach Acknowledgment with Notary Seal and Power of Attorney)

**CONTRACTOR:**

\_\_\_\_\_  
Business Name

s/ \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name, Title

**APPROVED BY CITY:**

s/ \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name, Title

END OF PAYMENT BOND

## Performance Bond

The City of Santa Rosa ("City") and \_\_\_\_\_ ("Contractor") have entered into a contract for work on the B Street and 3<sup>rd</sup> Street Right Turn Pocket Improvements Project ("Project"). The Contract is incorporated by reference into this Performance Bond ("Bond").

1. **General.** Under this Bond, Contractor as principal and \_\_\_\_\_, its surety ("Surety"), are bound to City as obligee for an amount not less than \$\_\_\_\_\_ to ensure Contractor's faithful performance of its obligations under the Contract. This Bond is binding on the respective successors, assigns, owners, heirs, or executors of Surety and Contractor.
2. **Surety's Obligations.** Surety's obligations are co-extensive with Contractor's obligations under the Contract. If Contractor fully performs its obligations under the Contract, including its warranty obligations under the Contract, Surety's obligations under this Bond will become null and void. Otherwise, Surety's obligations will remain in full force and effect.
3. **Waiver.** Surety waives any requirement to be notified of and further consents to any alterations to the Contract made under the applicable provisions of the Contract Documents, including changes to the scope of Work or extensions of time for performance of Work under the Contract. Surety waives the provisions of Civil Code §§ 2819 and 2845.
4. **Application of Contract Balance.** Upon making a demand on this Bond for completion of the Work prior to acceptance of the Project, City will make the Contract Balance available to Surety for completion of the Work under the Contract. For purposes of this provision, the Contract Balance is defined as the total amount payable by City to Contractor as the Contract Price minus amounts already paid to Contractor, and minus any liquidated damages, credits, or backcharges to which City is entitled under the terms of the Contract.
5. **Contractor Default.** Upon written notification from City of Contractor's termination for default under Article 13 of the Contract General Conditions, time being of the essence, Surety must act within the time specified in Article 13 to remedy the default through one of the following courses of action:
  - 5.1 Arrange for completion of the Work under the Contract by Contractor, with City's consent, but only if Contractor is in default solely due to its financial inability to complete the Work;
  - 5.2 Arrange for completion of the Work under the Contract by a qualified contractor acceptable to City, and secured by performance and payment bonds issued by an admitted surety as required by the Contract Documents, at Surety's expense; or
  - 5.3 Waive its right to complete the Work under the Contract and reimburse City the amount of City's costs to have the remaining Work completed.
6. **Surety Default.** If Surety defaults on its obligations under the Bond, City will be entitled to recover all costs it incurs due to Surety's default, including legal, design professional, or delay costs.
7. **Notice.** Any notice to Surety may be given in the manner specified in the Contract and sent to Surety as follows:

Attn: \_\_\_\_\_

Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

8. **Law and Venue.** This Bond will be governed by California law, and venue for any dispute pursuant to this Bond will be in the Sonoma County Superior Court, and no other place. Surety will be responsible for City's attorneys' fees and costs in any action to enforce the provisions of this Bond.

9. **Effective Date; Execution.** This Bond is entered into and effective on \_\_\_\_\_, 20\_\_\_\_.

**SURETY:**

\_\_\_\_\_  
Business Name

s/ \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name, Title

(Attach Acknowledgment with Notary Seal and Power of Attorney)

**CONTRACTOR:**

\_\_\_\_\_  
Business Name

s/ \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name, Title

**APPROVED BY CITY:**

s/ \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name, Title

END OF PERFORMANCE BOND

## General Conditions

### Article 1 - Definitions

**Definitions.** The following definitions apply to all of the Contract Documents unless otherwise indicated, e.g., additional definitions that apply solely to the Specifications or other technical documents. Defined terms and titles of documents are capitalized in the Contract Documents, with the exception of the following (in any tense or form): “day,” “furnish,” “including,” “install,” “work day,” or “working day.”

**Allowance** means a specific amount that must be included in the Bid Proposal for a specified purpose.

**Article**, as used in these General Conditions, means a numbered Article of the General Conditions, unless otherwise indicated by the context.

**Change Order** means a written document duly approved and executed by City, which changes the scope of Work, the Contract Price, or the Contract Time.

**City** means the City of Santa Rosa, acting through its City Council, officers, employees, City Engineer, and any other authorized representatives.

**City Engineer** means the City Engineer for City and his or her authorized delegee(s).

**City Specifications** means the City’s Construction Specifications for Public Improvements, which may be accessed on the City’s website at <https://www.srcity.org/2321/Design-Construction-Standards>.

**City Standards** means the City’s Design and Construction Standards, which may be accessed on the City’s website at <https://www.srcity.org/2321/Design-Construction-Standards>.

**Claim** means a separate demand by Contractor for a change in the Contract Time or Contract Price, that has previously been submitted to City in accordance with the requirements of the Contract Documents, and which has been rejected by City, in whole or in part; a written demand by Contractor disputing a unilateral Change Order or a portion thereof; or a written demand by Contractor objecting to the amount of Final Payment.

**Contract** means the signed agreement between City and Contractor for performing the Work required for the Project, and all documents expressly incorporated therein.

**Contract Documents** means, collectively, all of the documents listed as such in Section 2 of the Contract, including the Notice Inviting Bids; the Instructions to Bidders; addenda, if any; the Bid Proposal and attachments thereto; the Contract; the Notice of Award and Notice to Proceed; the payment and performance bonds; the General Conditions; the Special Conditions; the Project Plans and Specifications; any Change Orders; and any other documents which are clearly and unambiguously made part of the Contract Documents. The Contract Documents do not include documents provided “For Reference Only,” or documents that are intended solely to provide information regarding existing conditions.

**Contract Price** means the total compensation to be paid to Contractor for performance of the Work, as set forth in the Contract and as may be amended by Change Order or adjusted for an Allowance. The Contract Price is not subject to adjustment due to inflation or due to the increased cost of labor, material, supplies, or equipment following submission of the Bid Proposal.

**Contract Time** means the time specified for complete performance of the Work, as set forth in the Contract and as may be amended by Change Order.

**Contractor** (or **You**) means the individual, partnership, corporation, or joint-venture that has signed the Contract with City to perform the Work.

**CWA** means the Community Workforce Agreement for the City.

**Day** means a calendar day unless otherwise specified.

**Design Professional** means the licensed individual(s) or firm(s) retained by City to provide architectural, engineering, or other design professional services for the Project. If no Design Professional has been retained for this Project, any reference to Design Professional is deemed to refer to the Engineer.

**DIR** means the California Department of Industrial Relations.

**Drawings** has the same meaning as Plans.

**Engineer** means the City Engineer for the City of Santa Rosa and his or her authorized delegees.

**Excusable Delay** is defined in Section 5.3(B), Excusable Delay.

**Extra Work** means new or unforeseen work added to the Project, as determined by the Engineer in his or her sole discretion, including Work that was not part of or incidental to the scope of the Work when the Contractor's bid was submitted; Work that is substantially different from the Work as described in the Contract Documents at bid time; or Work that results from a substantially differing and unforeseeable condition.

**Final Completion** means Contractor has fully completed all of the Work required by the Contract Documents to the City's satisfaction, including all punch list items and any required commissioning or training, and has provided the City with all required submittals, including the instructions and manuals, product warranties, and as-built drawings.

**Final Payment** means payment to Contractor of the unpaid Contract Price, including release of undisputed retention, less amounts withheld or deducted pursuant to the Contract Documents.

**Furnish** means to purchase and deliver for the Project.

**Government Code Claim** means a claim submitted pursuant to California Government Code § 900 et seq.

**Hazardous Materials** means any substance or material identified now or in the future as hazardous under any Laws, or any other substance or material that may be considered hazardous or otherwise subject to Laws governing handling, disposal, or cleanup.

**Including**, whether or not capitalized, means "including, but not limited to," unless the context clearly requires otherwise.

**Install** means to fix in place for materials, and to fix in place and connect for equipment.

**Laws** means all applicable local, state, and federal laws, regulations, rules, codes, ordinances, permits, orders, and the like enacted or imposed by or under the auspices of any governmental entity with jurisdiction over any of the Work or any performance of the Work, including health and safety requirements.

**Materials Lab** means City's Materials Engineering Laboratory, which may perform quality assurance functions for a Project, including inspection and/or testing of the workmanship, materials, and manner of construction of the Project. If the Materials Lab will not perform quality assurance functions for the Project, any reference to Materials Lab is deemed to mean the individual(s) or firm(s) retained by City to inspect and/or test the workmanship, materials, and manner of construction of the Project.

**Non-Excusable Delay** is defined in Section 5.3(D), Non-Excusable Delay.

**Plans** means the City-provided plans, drawings, details, or graphical depictions of the Project requirements, but does not include Shop Drawings.

**Project** means the public works project referenced in the Contract, as modified by any Project alternates elected by City, if any.

**Project Manager** means the individual designated by City to oversee and manage the Project on City's behalf and may include his or her authorized delegee(s) when the Project Manager is unavailable. If no Project Manager has been designated for this Project, any reference to Project Manager is deemed to refer to the Engineer.

**Recoverable Costs** is defined in Section 5.3(F), Recoverable Costs.

**Request for Information** or **RFI** means Contractor's written request for information about the Contract Documents, the Work or the Project, submitted to City in the manner and format specified by City.

**Section**, when capitalized in these General Conditions, means a numbered section or subsection of the General Conditions, unless the context clearly indicates otherwise.

**Shop Drawings** means drawings, plan details or other graphical depictions prepared by or on behalf of Contractor, and subject to City acceptance, which are intended to provide details for fabrication, installation, and the like, of items required by or shown in the Plans or Specifications.

**Specialty Work** means Work that must be performed by a specialized Subcontractor with the specified license or other special certification, and that the Contractor is not qualified to self-perform.

**Specifications** means the technical, text specifications describing the Project requirements, which are prepared for and incorporated into the Contract by or on behalf of City, and does not include the Contract, General Conditions or Special Conditions.

**Subcontractor** means an individual, partnership, corporation, or joint-venture retained by Contractor directly or indirectly through a subcontract to perform a specific portion of the Work. The term Subcontractor applies to subcontractors of all tiers, unless otherwise indicated by the context. A third party such as a utility performing related work on the Project is not a Subcontractor, even if Contractor must coordinate its Work with the third party.

**Technical Specifications** has the same meaning as Specifications.

**Water Department** means the City of Santa Rosa Water Department.

**Work** means all of the construction and services necessary for or incidental to completing the Project in conformance with the requirements of the Contract Documents.

**Work Day or Working Day**, whether or not capitalized, means a weekday when the City is open for business, and does not include holidays observed by the City.

**Worksite** means the place or places where the Work is performed, which includes, but may extend beyond the Project site, including separate locations for staging, storage, or fabrication.

## **Article 2 - Roles and Responsibilities**

### **2.1 City.**

- (A) **City Council.** The City Council has final authority in all matters affecting the Project, except to the extent it has delegated authority to the Engineer.
- (B) **Engineer.** The Engineer, acting within the authority conferred by the City Council, is responsible for administration of the Project on behalf of City, including authority to provide directions to the Design Professional and to Contractor to ensure proper and timely completion of the Project. The Engineer's decisions are final and conclusive within the scope of his or her authority, including interpretation of the Contract Documents.
- (C) **Project Manager.** The Project Manager assigned to the Project will be the primary point of contact for the Contractor and will serve as City's representative for daily administration of the Project on behalf of City. Unless otherwise specified, all of Contractor's communications to City (in any form) will go to or through the Project Manager. City reserves the right to reassign the Project Manager role at any time or to delegate duties to additional City representatives, without prior notice to or consent of Contractor.
- (D) **Design Professional.** The Design Professional is responsible for the overall design of the Project and, to the extent authorized by City, may act on City's behalf to ensure performance of the Work in compliance with the Plans and Specifications, including any design changes authorized by Change Order. The Design Professional's duties may include review of Contractor's submittals, visits to any Worksite, inspecting the Work, evaluating test and inspection results, and participation in Project-related meetings, including any pre-construction conference, weekly meetings, and coordination meetings. The Design Professional's interpretation of the Plans or Specifications is final and conclusive.

### **2.2 Contractor.**

- (A) **General.** Contractor must provide all labor, materials, supplies, equipment, services, and incidentals necessary to perform and timely complete the Work in strict accordance with the Contract Documents, and in an economical and efficient manner in the best interests of City, and with minimal inconvenience to the public.
- (B) **Responsibility for the Work and Risk of Loss.** Contractor is responsible for supervising and directing all aspects of the Work to facilitate the efficient and timely completion of the Work. Contractor is solely responsible for and required to exercise full control over the Work, including the construction means, methods, techniques, sequences, procedures, safety precautions and programs, and coordination of all portions of the Work with that of all other contractors and Subcontractors, except to the extent that the Contract Documents provide other specific instructions. Contractor's responsibilities extend to any plan, method or sequence suggested, but not required by City or specified in the Contract Documents. From the date of commencement of the

Work until either the date on which City formally accepts the Project or the effective date of termination of the Contract, whichever is later, Contractor bears all risks of injury or damage to the Work and the materials and equipment delivered to any Worksite, by any cause including fire, earthquake, wind, weather, vandalism, or theft, subject to the limitations of Laws.

(C) **Project Administration.** Contractor must provide sufficient and competent administration, staff, and skilled workforce necessary to perform and timely complete the Work in accordance with the Contract Documents. Before starting the Work, Contractor must designate in writing and provide complete contact information, including telephone numbers and email address, for the officer or employee in Contractor's organization who is to serve as Contractor's primary representative for the Project, and who has authority to act on Contractor's behalf. A Subcontractor may not serve as Contractor's primary representative.

(D) **On-Site Superintendent.** Contractor must, at all times during performance of the Work, provide a qualified and competent full-time superintendent acceptable to City, and assistants as necessary, who must be physically present at the Project site while any aspect of the Work is being performed. The superintendent must have full authority to act and communicate on behalf of Contractor, and Contractor will be bound by the superintendent's communications to City. City's approval of the superintendent is required before the Work commences. If City is not satisfied with the superintendent's performance, City may request a qualified replacement of the superintendent. Failure to comply may result in temporary suspension of the Work, at Contractor's sole expense and with no extension of Contract Time, until an approved superintendent is physically present to supervise the Work. Contractor must provide written notice to City, as soon as practicable, before replacing the superintendent.

(E) **Standards.** Contractor must, at all times, ensure that the Work is performed in an efficient, skillful manner following best practices and in full compliance with the Contract Documents, Laws, and applicable manufacturer's recommendations. Contractor has a material and ongoing obligation to provide true and complete information, to the best of its knowledge, with respect to all records, documents, or communications pertaining to the Project, including oral or written reports, statements, certifications, Change Order requests, or Claims.

(F) **Meetings.** Contractor, its project manager, superintendent and any primary Subcontractors requested by City, must attend a pre-construction conference, if requested by City, as well as weekly Project progress meetings scheduled with City. If applicable, Contractor may also be required to participate in coordination meetings with other parties relating to other work being performed on or near the Project site or in relation to the Project, including work or activities performed by City, other contractors, or other utility owners.

(G) **Construction Records.** Contractor will maintain up-to-date, thorough, legible, and dated daily job reports, which document all significant activity on the Project for each day that Work is performed on the Project. The daily report for each day must include the number of workers at the Project site; primary Work activities; major deliveries; problems encountered, including injuries, if any; weather and site conditions; and delays, if any. Contractor will take date and time-stamped photographs to document general progress of the Project, including site conditions prior to construction activities, before and after photographs at offset trench laterals, existing improvements and utilities, damage and restoration. Contractor will maintain copies of all subcontracts, Project-related correspondence with Subcontractors, and records of meetings with Subcontractors. Upon



request by the City, Contractor will permit review of and/or provide copies of any of these construction records.

(H) **Responsible Party.** Contractor is solely responsible to City for the acts or omissions of any Subcontractors, or any other party or parties performing portions of the Work or providing equipment, materials or services for or on behalf of Contractor or the Subcontractors. Upon City's written request, Contractor must promptly and permanently remove from the Project, at no cost to City, any employee or Subcontractor or employee of a Subcontractor who the Engineer has determined to be incompetent, intemperate or disorderly, or who has failed or refused to perform the Work as required under the Contract Documents.

(I) **Correction of Defects.** Contractor must promptly correct, at Contractor's sole expense, any Work that is determined by City to be deficient or defective in any way, including workmanship, materials, parts, or equipment. Workmanship, materials, parts, or equipment that do not conform to the requirements under the Contract Documents, as determined by City, will be considered defective and subject to rejection. Contractor must also promptly correct, at Contractor's sole expense, any Work performed beyond the lines and grades shown on the Plans or established by City, and any Extra Work performed without City's prior written approval. If Contractor fails to correct or to take reasonable steps toward correcting defective Work within five days following notice from City, or within the time specified in City's notice to correct, City may elect to have the defective Work corrected by its own forces or by a third party, in which case the cost of correction will be deducted from the Contract Price. If City elects to correct defective Work due to Contractor's failure or refusal to do so, City or its agents will have the right to take possession of and use any equipment, supplies, or materials available at the Project site or any Worksite on City property, in order to effectuate the correction, at no extra cost to City. Contractor's warranty obligations under Section 11.2, Warranty, will not be waived nor limited by City's actions to correct defective Work under these circumstances. Alternatively, City may elect to retain defective Work, and deduct the difference in value, as determined by the Engineer, from payments otherwise due to Contractor. This paragraph applies to any defective Work performed by Contractor during the one-year warranty period under Section 11.2.

(J) **Contractor's Records.** Contractor must maintain all of its records relating to the Project in any form, including paper documents, photos, videos, electronic records, approved samples, and the construction records required pursuant to paragraph (G), above. Project records subject to this provision include complete Project cost records, copies of the insurance policies and endorsements required by the Contract Documents, and records relating to preparation of Contractor's bid, including estimates, take-offs, and price quotes or bids.

(1) Contractor's cost records must include all supporting documentation, including original receipts, invoices, and payroll records, evidencing its direct costs to perform the Work, including, but not limited to, costs for labor, materials, and equipment. Each cost record should include, at a minimum, a description of the expenditure with references to the applicable requirements of the Contract Documents, the amount actually paid, the date of payment, and whether the expenditure is part of the original Contract Price, related to an executed Change Order, or otherwise categorized by Contractor as Extra Work. Contractor's failure to comply with this provision as to any claimed cost operates as a waiver of any rights to recover the claimed cost.

(2) Contractor must continue to maintain its Project-related records in an organized manner for a period of five years after City's acceptance of the Project

or following Contract termination, whichever occurs first. Subject to prior notice to Contractor, City is entitled to inspect or audit any of Contractor's records relating to the Project during Contractor's normal business hours. Contractor's records may also be subject to examination and audit by the California State Auditor, pursuant to Government Code § 8546.7. The record-keeping requirements set forth in this subsection 2.2(J) will survive expiration or termination of the Contract.

(K) **Copies of Project Documents.** Contractor and its Subcontractors must keep copies, at the Project site, of all Work-related documents, including the Contract, permit(s), Plans, Specifications, addenda, Contract amendments, Change Orders, RFIs and RFI responses, Shop Drawings, as-built drawings, schedules, daily records, testing and inspection reports or results, and any related written interpretations. These documents must be available to City for reference at all times during construction of the Project.

(L) **Quality Control.** Contractor is responsible for developing, implementing, and maintaining a quality control program that includes sampling, testing, and inspecting the Work to control material quality and to ensure that the Work satisfies the quality characteristics in the Contract Documents.

(1) *Records.* Contractor must prepare and maintain quality control records, including the names and qualifications of samplers, testers, and inspectors; testing laboratories' identification and certifications; testing equipment calibrations and certifications; inspection reports; sampling and testing records organized by date and type of material; test results with comparison of quality characteristic requirements; test results in relation to action and any suspension limits; and records of corrective actions and suspensions. Contractor must immediately notify the Engineer of any noncompliant Work identified by Contractor's quality control program. Contractor must submit 1 copy of each authorized quality control plan and make one copy available at each Worksite. Contractor will submit any quality control test data and test results to the Engineer within two Working Days following test completion.

(2) *Quality Control Manager.* Unless otherwise specified in the Special Conditions, before starting Work, Contractor will designate in writing, and provide complete contact information for, the quality control manager for the Project who will be responsible for receiving, reviewing, and approving all correspondence and submittals prior to submission to the City; signing and implementing Contractor's quality control plan; and maintaining quality control records. The quality control manager must either be an employee of Contractor, or a Subcontractor retained to provide only quality control services for the Project. The quality control manager must not be employed or compensated by a Subcontractor who will provide other Work for the Project.

## **2.3 Subcontractors.**

(A) **General.** All Work which is not performed by Contractor with its own forces must be performed by Subcontractors. City reserves the right to approve or reject any and all Subcontractors proposed to perform the Work, for reasons including the Subcontractor's poor reputation, lack of relevant experience, financial instability, and lack of technical ability or adequate trained workforce. Each Subcontractor must obtain a City business tax certificate before performing any Work.

(B) **Contractual Obligations.** Contractor must require each Subcontractor to comply with the provisions of the Contract Documents as they apply to the Subcontractor's portion(s) of the Work, including the generally applicable terms of the Contract Documents, and to likewise bind their subcontractors. Contractor will provide that the rights that each Subcontractor may have against any manufacturer or supplier for breach of warranty or guarantee relating to items provided by the Subcontractor for the Project, will be assigned to City. Nothing in these Contract Documents creates a contractual relationship between a Subcontractor and City, but City is deemed to be a third-party beneficiary of the contract between Contractor and each Subcontractor.

(C) **Termination.** If the Contract is terminated, each Subcontractor's agreement must be assigned by Contractor to City, subject to the prior rights of any surety, but only if and to the extent that City accepts, in writing, the assignment by written notification, and assumes all rights and obligations of Contractor pursuant to each such subcontract agreement.

(D) **Substitution of Subcontractor.** If Contractor requests substitution of a listed Subcontractor under Public Contract Code § 4107, Contractor is solely responsible for all costs City incurs in responding to the request, including legal fees and costs to conduct a hearing, and any increased subcontract cost to perform the Work that was to be performed by the listed Subcontractor. If City determines that a Subcontractor is unacceptable to City based on the Subcontractor's failure to satisfactorily perform its Work, or for any of the grounds for substitution listed in Public Contract Code § 4107(a), City may request removal of the Subcontractor from the Project. Upon receipt of a written request from City to remove a Subcontractor pursuant to this paragraph, Contractor will immediately remove the Subcontractor from the Project and, at no further cost to City, will either (1) self-perform the remaining Work to the extent that Contractor is duly licensed and qualified to do so, or (2) substitute a Subcontractor that is acceptable to City, in compliance with Public Contract Code § 4107, as applicable.

## 2.4 Coordination of Work.

(A) **Concurrent Work.** City reserves the right to perform, have performed, or permit performance of other work on or adjacent to the Project site while the Work is being performed for the Project. Contractor is responsible for coordinating its Work with other work being performed on or adjacent to the Project site, including by any City work forces or utility companies or agencies, and must avoid hindering, delaying, or interfering with the work of other contractors, individuals, or entities, and must ensure safe and reasonable site access and use as required or authorized by City. To the full extent permitted by law, Contractor must hold harmless and indemnify City against any and all claims arising from or related to Contractor's avoidable, negligent, or willful hindrance of, delay to, or interference with the work of any City work forces, utility company or agency, or another contractor or subcontractor.

(B) **Coordination.** If Contractor's Work will connect or interface with work performed by others, Contractor is responsible for independently measuring and visually inspecting such work to ensure a correct connection and interface. Contractor is responsible for any failure by Contractor or its Subcontractors to confirm measurements before proceeding with connecting Work. Before proceeding with any portion of the Work affected by the construction or operations of others, Contractor must give the Project Manager prompt written notification of any defects Contractor discovers which will prevent the proper execution of the Work. Failure to give notice of any known or reasonably discoverable defects will be deemed acknowledgement by Contractor that the work of others is not defective and will not prevent the proper execution of the Work. Contractor must also promptly notify City if work performed by others, including work or activities performed by

City's own forces, is operating to hinder, delay, or interfere with Contractor's timely performance of the Work. City reserves the right to backcharge Contractor for any additional costs incurred due to Contractor's failure to comply with the requirements in this Section 2.4.

**2.5 Submittals.** Unless otherwise specified, Contractor must submit to the Engineer for review and acceptance, all schedules, Shop Drawings, samples, product data, and similar submittals required by the Contract Documents, or upon request by the Engineer. Unless otherwise specified, all submittals, including Requests for Information, are subject to the general provisions of this Section, as well as specific submittal requirements that may be included elsewhere in the Contract Documents, including the Special Conditions or Specifications. The Engineer may require submission of a submittal schedule at or before a pre-construction conference, as may be specified in the Notice to Proceed.

(A) **General.** Contractor is responsible for ensuring that its submittals are accurate and conform to the Contract Documents.

(B) **Time and Manner of Submission.** Contractor must ensure that its submittals are prepared and delivered in a manner consistent with the current City-accepted schedule for the Work and within the applicable time specified in the Contract Documents, or if no time is specified, in such time and sequence so as not to delay the performance of the Work or completion of the Project.

(C) **Required Contents.** Each submittal must include the Project name and contract number, Contractor's name and address, the name and address of any Subcontractor or supplier involved with the submittal, the date, and references to applicable Specification section(s) and/or drawing and detail number(s).

(D) **Required Corrections.** If corrections are required, Contractor must promptly make and submit any required corrections as specified in full conformance with the requirements of this Section, or other requirements that apply to that submittal.

(E) **Effect of Review and Acceptance.** Review and acceptance of a submittal by City will not relieve Contractor from complying with the requirements of the Contract Documents. Contractor is responsible for any errors in any submittal, and review or acceptance of a submittal by City is not an assumption of risk or liability by City.

(F) **Enforcement.** Any Work performed or any material furnished, installed, fabricated or used without City's prior acceptance of a required submittal is performed or provided at Contractor's risk, and Contractor may be required to bear the costs incident thereto, including the cost of removing and replacing such Work, repairs to other affected portions of the Work or material, and the cost of additional time or services required of City, including costs for the Design Professional, Project Manager, and Materials Lab.

(G) **Excessive RFIs.** A RFI will be considered excessive or unnecessary if City determines that the explanation or response to the RFI is clearly and unambiguously discernable from the Contract Documents. City's costs to review and respond to excessive or unnecessary RFIs may be deducted from payments otherwise due to Contractor.

**2.6 Shop Drawings.** When Shop Drawings are required by the Specifications or requested by the Engineer, they must be prepared according to best practices at Contractor's expense. The Shop Drawings must be of a size and scale to clearly show all necessary details. Unless otherwise specified by City, Shop Drawings must be provided to the Engineer for review and acceptance at least 30 days before the Work will be performed.

If City requires changes, the corrected Shop Drawings must be resubmitted to the Engineer for review within the time specified by the Engineer. For all Project components requiring Shop Drawings, Contractor will not furnish materials or perform any Work until the Shop Drawings for those components are accepted by City. Contractor is responsible for any errors or omissions in the Shop Drawings, shop fits and field corrections; any deviations from the Contract Documents; and for the results obtained by the use of Shop Drawings. Acceptance of Shop Drawings by City does not relieve Contractor of Contractor's responsibility.

- 2.7 Material List.** Unless otherwise specified by City, Contractor must submit to the Engineer, sufficiently in advance of the start of Work, a list of all materials proposed for use in the Work and any supporting documentation and samples required by the Contract Documents and source of supply. For a material listed on the "Engineer's List of Approved Items," located in the Sewer and Water sections of the City Standards, Contractor must provide the name of the manufacturer and model and part number for each material proposed for the Work, unless the item has been replaced for the Project, as specifically set forth in the Contract Documents. For all other materials, Contractor must provide the name of the manufacturer, model and part number, and supporting documentation and samples that will enable the Engineer to evaluate the material.
- 2.8 Access to Work.** Contractor must afford prompt and safe access to any Worksite by City and its employees, agents, or consultants authorized by City; and upon request by City, Contractor must promptly arrange for City representatives to visit or inspect manufacturing sites or fabrication facilities for items to be incorporated into the Work.
- 2.9 Personnel.** Contractor and its Subcontractors must employ only competent and skillful personnel to perform the Work. Contractor and its Subcontractor's supervisors, security or safety personnel, and employees who have unescorted access to the Project site must possess proficiency in English sufficient to read, understand, receive, and implement oral or written communications or instructions relating to their respective job functions, including safety and security requirements. Upon written notification from the Engineer, Contractor and its Subcontractors must immediately discharge any personnel who are incompetent, disorderly, disruptive, threatening, abusive, or profane, or otherwise refuse or fail to comply with the requirements of the Contract Documents or Laws, including Laws pertaining to health and safety. Any such discharged personnel may not be re-employed or permitted on the Project in any capacity without City's prior written consent.

### **Article 3 - Contract Documents**

#### **3.1 Interpretation of Contract Documents.**

(A) **Plans and Specifications.** The Plans and Specifications included in the Contract Documents are complementary. If Work is shown on one but not on the other, Contractor must perform the Work as though fully described on both, consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results. The Plans and Specifications are deemed to include and require everything necessary and reasonably incidental to completion of the Work, whether or not particularly mentioned or shown. Contractor must perform all Work and services and supply all things reasonably related to and inferable from the Contract Documents. In the event of a conflict between the Plans and Specifications, the Specifications will control, unless the drawing(s) at issue are dated later than the Specification(s) at issue. Detailed drawings take precedence over general drawings, and large-scale drawings take precedence over smaller scale drawings. Any arrangement or division of the Plans and Specifications into sections is for convenience and is not intended to limit the Work

required by separate trades. A conclusion presented in the Plans or Specifications is only a recommendation. Actual locations and depths must be determined by Contractor's field investigation. Contractor may request access to underlying or background information in City's possession that is necessary for Contractor to form its own conclusions.

(B) ***Duty to Notify and Seek Direction.*** If Contractor becomes aware of a changed condition in the Project, or of any ambiguity, conflict, inconsistency, discrepancy, omission, or error in the Contract Documents, including the Plans or Specifications, Contractor must promptly submit a Request for Information to the Engineer and wait for a response from City before proceeding further with the related Work. The RFI must notify City of the issue and request clarification, interpretation or direction. The Engineer's clarification, interpretation or direction will be final and binding on Contractor. If Contractor proceeds with the related Work before obtaining City's response, Contractor will be responsible for any resulting costs, including the cost of correcting any incorrect or defective Work that results. Timely submission of a clear and complete RFI is essential to avoiding delay. Delay resulting from Contractor's failure to submit a timely and complete RFI to the Engineer is Non-Excusable Delay. If Contractor believes that City's response to an RFI justifies a change to the Contract Price or Contract Time, Contractor must perform the Work as directed, but may submit a timely Change Order request in accordance with the Contract Documents. (See Articles 5 and 6.)

(C) ***Figures and Dimensions.*** Figures control over scaled dimensions.

(D) ***Technical or Trade Terms.*** Any terms that have well-known technical or trade meanings will be interpreted in accordance with those meanings, unless otherwise specifically defined in the Contract Documents.

(E) ***Measurements.*** Contractor must verify all relevant measurements in the Contract Documents and at the Project site before ordering any material or performing any Work, and will be responsible for the correctness of those measurements or for costs that could have been avoided by independently verifying measurements.

(F) ***Compliance with Laws.*** The Contract Documents are intended to comply with Laws and will be interpreted to comply with Laws.

**3.2 Order of Precedence.** Information included in one Contract Document but not in another will not be considered a conflict or inconsistency. Unless otherwise specified in the Special Conditions, in case of any conflict or inconsistency among the Contract Documents, the following order of precedence will apply, beginning from highest to lowest, with the most recent version taking precedent over an earlier version:

- (A) Change Orders;
- (B) Addenda;
- (C) Contract;
- (D) Notice to Proceed;
- (E) Attachment B – Federal Contract Requirements (only if used);
- (F) Special Conditions;
- (G) General Conditions;
- (H) Payment and Performance Bonds;
- (I) Specifications;
- (J) Plans;
- (K) Notice of Award;
- (L) Notice Inviting Bids;
- (M) Attachment A – Federal Bidding Requirements (only if used);
- (N) Instructions to Bidders;

- (O) CWA, if applicable;
- (P) Contractor's Bid Proposal and attachments;
- (Q) City Standards and City Specifications, as applicable; and
- (R) Any generic documents prepared by and on behalf of a third party, that were not prepared specifically for this Project, such as the Caltrans Standard Specifications or Caltrans Special Provisions.

**3.3 Caltrans Standard Specifications.** Any reference to or incorporation of the Standard Specifications of the State of California, Department of Transportation ("Caltrans"), including "Standard Specifications," "Caltrans Specifications," "State Specifications," or "CSS," means the most current edition of Caltrans' Standard Specifications, unless otherwise specified ("Caltrans Standard Specifications"), including the most current amendments as of the date that Contractor's bid was submitted for this Project. The following provisions apply to use of or reference to the Caltrans Standard Specifications or Special Provisions:

(A) **Limitations.** The "General Provisions" of the Caltrans Standard Specifications, i.e., sections 1 through 9, do not apply to these Contract Documents with the exception of any specific provisions, if any, which are expressly stated to apply to these Contract Documents.

(B) **Conflicts or Inconsistencies.** If there is a conflict or inconsistency between any provision in the Caltrans Standard Specifications or Special Provisions and a provision of these Contract Documents, as determined by City, the provision in the Contract Documents will govern.

(C) **Meanings.** Terms used in the Caltrans Standard Specifications or Special Provisions are to be interpreted as follows:

- (1) Any reference to the "Engineer" or "Director" is deemed to mean the City Engineer.
- (2) Any reference to the "Special Provisions" is deemed to mean the Special Conditions, unless the Caltrans Special Provisions are expressly included in the Contract Documents listed in Section 2 of the Contract.
- (3) Any reference to the "Department" or "State" is deemed to mean City.
- (4) Any reference to "Laboratory" is deemed to mean the Materials Lab, or such other laboratory as may be authorized by City.

**3.4 For Reference Only.** Contractor is responsible for the careful review of any document, study, or report provided by City or appended to the Contract Documents solely for informational purposes and identified as "For Reference Only." Nothing in any document, study, or report so appended and identified is intended to supplement, alter, or void any provision of the Contract Documents. Contractor is advised that City or its representatives may be guided by information or recommendations included in such reference documents, particularly when making determinations as to the acceptability of proposed materials, methods, or changes in the Work. Any record drawings or similar final or accepted drawings or maps that are not part of the Contract Documents are deemed to be For Reference Only. The provisions of the Contract Documents are not modified by any perceived or actual conflict with provisions in any document that is provided For Reference Only.

- 3.5 Current Versions.** Unless otherwise specified by City, any reference to standard specifications, technical specifications, or any City or state codes or regulations means the latest specification, code, or regulation in effect on the date that bids were due.
- 3.6 Conformed Copies.** If City prepares a conformed set of the Contract Documents following award of the Contract, it will provide Contractor with two hard copy (paper) sets and one copy of the electronic file in PDF format. It is Contractor's responsibility to ensure that all Subcontractors, including fabricators, are provided with the conformed set of the Contract Documents at Contractor's sole expense.
- 3.7 Ownership.** No portion of the Contract Documents may be used for any purpose other than construction of the Project, without prior written consent from City. Contractor is deemed to have conveyed the copyright in any designs, drawings, specifications, Shop Drawings, or other documents (in paper or electronic form) developed by Contractor for the Project, and City will retain all rights to such works, including the right to possession.

#### **Article 4 - Bonds, Indemnity, and Insurance**

- 4.1 Payment and Performance Bonds.** Within ten days following receipt of the Notice of Award, Contractor is required to provide a payment bond and a performance bond, each in the penal sum of not less than 100% of the Contract Price, and each executed by Contractor and its surety using the bond forms included with the Contract Documents.
- (A) **Surety.** Each bond must be issued and executed by a surety admitted in California. If an issuing surety cancels the bond or becomes insolvent, within seven days following written notice from City, Contractor must substitute a surety acceptable to City. If Contractor fails to substitute an acceptable surety within the specified time, City may, at its sole discretion, withhold payment from Contractor until the surety is replaced to City's satisfaction, or terminate the Contract for default.
- (B) **Supplemental Bonds for Increase in Contract Price.** If the Contract Price increases during construction by five percent or more over the original Contract Price, Contractor must provide supplemental or replacement bonds within ten days of written notice from City pursuant to this Section, covering 100% of the increased Contract Price and using the bond forms included with the Contract Documents.
- 4.2 Indemnity.** To the fullest extent permitted by law, Contractor must indemnify, defend, and hold harmless City, its Council, officers, officials, employees, agents, volunteers, and consultants (individually, an "Indemnitee," and collectively the "Indemnitees") from and against any and all liability, loss, damage, claims, causes of action, demands, charges, fines, costs, and expenses (including, without limitation, attorney fees, expert witness fees, paralegal fees, fees and costs of litigation or arbitration, and fees and expenses incurred in enforcing this Section) (collectively, "Liability") of every nature arising out of or in connection with the acts or omissions of Contractor, its employees, Subcontractors, representatives, or agents, in bidding or performing the Work or in failing to comply with any obligation of Contractor under the Contract, except such Liability caused by the active negligence, sole negligence, or willful misconduct of an Indemnitee. This indemnity requirement applies to any Liability arising from alleged defects in the content or manner of submission of Contractor's bid for the Contract. Contractor's failure or refusal to timely accept a tender of defense pursuant to this Contract will be deemed a material breach of the Contract. City will timely notify Contractor upon receipt of any third-party claim relating to the Contract, as required by Public Contract Code § 9201. Contractor waives any right to express or implied indemnity against any Indemnitee. Contractor's indemnity



obligations under this Contract will survive the expiration or any early termination of the Contract.

**4.3 Insurance.** No later than ten days following receipt of the Notice of Award, Contractor must procure and provide proof of the insurance coverage required by this Section in the form of certificates and endorsements acceptable to City. The required insurance must cover the activities of Contractor and its Subcontractors relating to or arising from the performance of the Work. The required insurance must remain in full force and effect at all times during the period covered by the Contract through the date of City's acceptance of the Project, except as specified for commercial general liability insurance in subsection (A)(1), below, which requires a longer duration. All required insurance must be issued by a company licensed to do business in the State of California, and each such insurer must have an A.M. Best's financial strength rating of "A-" or better and a financial size rating of "VII" or better. If Contractor fails to provide any of the required coverage in full compliance with the requirements of the Contract Documents, City may, at its sole discretion, purchase such coverage at Contractor's expense and deduct the cost from payments due to Contractor, or terminate the Contract for default. The procurement of the required insurance, or Contractor's failure to procure and maintain the required insurance, will not be construed to limit Contractor's liability under this Contract. The procurement of the required insurance will not be construed to fulfill Contractor's indemnification obligations under this Contract.

(A) ***Policies and Limits.*** The following insurance policies and limits are required for this Contract, unless otherwise specified in the Special Conditions:

(1) ***Commercial General Liability ("CGL") Insurance:*** The CGL insurance policy must be issued on an occurrence basis, written on a comprehensive general liability form with coverage at least as broad as ISO CG 00 01, and must include coverage for liability arising from Contractor's or its Subcontractor's acts or omissions in the performance of the Work, including contractor's protective coverage, contractual liability, products liability, completed operations, and broad form property damage, with limits of at least \$5,000,000 per occurrence and at least \$5,000,000 general aggregate. If insurance applies separately to a project/location, aggregate may be equal to per occurrence amount. The CGL insurance coverage may be arranged under a single policy for the full limits required or by a combination of underlying policies with the balance provided by excess or umbrella policies, provided each such policy complies with the requirements set forth in this Section, including required endorsements. The products liability and completed operations coverage must continue for a period of three years following City's acceptance of the Project.

(2) ***Automobile Liability Insurance:*** The automobile liability insurance policy must provide coverage of at least \$3,000,000 combined single-limit per accident for bodily injury, death, or property damage, including hired, owned, and non-owned auto liability. Coverage must be at least as broad as ISO Form Number CA 00 01 covering any auto (Code 1).

(3) ***Workers' Compensation Insurance and Employer's Liability:*** The workers' compensation and employer's liability insurance policy must comply with the requirements of the California Labor Code, providing coverage of at least \$1,000,000 or as otherwise required by statute, per accident for bodily injury or disease. If Contractor is self-insured, Contractor must provide its Certificate of Permission to Self-Insure, duly authorized by the DIR.

(4) *Pollution Liability Insurance*: The pollution liability insurance policy must provide coverage of at least \$1,000,000 per occurrence and \$2,000,000 aggregate for all loss arising out of claims for bodily injury, death, property damage, or environmental damage caused by pollution conditions resulting from the Work. If the Work involves lead-based paint or asbestos identification and/or remediation, the pollution liability insurance policy must not contain lead-based paint or asbestos exclusions. If the Work involves mold identification, the pollution liability policy must not contain a mold exclusion and the definition of "pollution" in the policy must include microbial matter, including mold.

(B) **Notice**. Each certificate of insurance must state that the coverage afforded by the policy or policies will not be reduced, cancelled or allowed to expire without at least 30 days prior written notice to City, unless due to non-payment of premiums, in which case ten days prior written notice must be made to City.

(C) **Waiver of Subrogation**. Each required policy must include an endorsement providing that the carrier will waive any right of subrogation it may have against City.

(D) **Required Endorsements**. The CGL policy, automobile liability policy, pollution liability policy, and builder's risk policy must include the following specific endorsements:

(1) The City of Santa Rosa, including its Council, officials, officers, employees, agents, volunteers and consultants (collectively, "Additional Insured") must be named as an additional insured for all liability arising out of the operations by or on behalf of the named insured, and the policy must protect the Additional Insured against any and all liability for personal injury, death or property damage or destruction arising directly or indirectly in the performance of the Contract. Coverage for an Additional Insured will not be limited to the Additional Insured's vicarious liability. The additional insured endorsement must be provided using ISO forms at least as broad as CG 20 10 04 13 or 20 38 04 13 (ongoing operations) and CG 20 37 04 13 (completed operations), or equivalent form(s) approved by the City.

(2) The inclusion of more than one insured will not operate to impair the rights of one insured against another, and the coverages afforded will apply as though separate policies have been issued to each insured.

(3) The insurance provided by Contractor is primary and no insurance held or owned by any Additional Insured may be called upon to contribute to a loss. This endorsement must be provided using ISO form CG 20 01 04 13 or an equivalent form approved by the City.

(4) This policy does not exclude explosion, collapse, underground excavation hazard, or removal of lateral support.

(E) **Contractor's Responsibilities**. This Section 4.3 establishes the minimum requirements for Contractor's insurance coverage in relation to this Project, but is not intended to limit Contractor's ability to procure additional or greater coverage. Contractor is responsible for its own risk assessment and needs and is encouraged to consult its insurance provider to determine what coverage it may wish to carry beyond the minimum requirements of this Section. Contractor is solely responsible for the cost of its insurance coverage, including premium payments, deductibles, or self-insured retentions, and no Additional Insured will be responsible or liable for any of the cost of Contractor's insurance coverage. Contractor's insurance coverage applies to the full extent of the

policies, and nothing contained herein will be construed to limit the application of such coverage.

(F) **Deductibles and Self-Insured Retentions.** Any deductibles or self-insured retentions that apply to the required insurance (collectively, "deductibles") in excess of \$10,000 are subject to approval by the City's Risk Manager, acting in his or her sole discretion, and must be declared by Contractor when it submits its certificates of insurance and endorsements pursuant to this Section 4.3. If the City's Risk Manager determines that the deductibles are unacceptably high, at City's option, Contractor must either reduce or eliminate the deductibles as they apply to City and all required Additional Insured; or must provide a financial guarantee, to City's satisfaction, guaranteeing payment of losses and related investigation, claim administration, and legal expenses.

(G) **Subcontractors.** Contractor must ensure that each Subcontractor is required to maintain the same insurance coverage required under this Section 4.3, with respect to its performance of Work on the Project, including those requirements related to the Additional Insureds and waiver of subrogation, but excluding pollution liability or builder's risk insurance unless otherwise specified in the Special Conditions. A Subcontractor may be eligible for reduced insurance coverage or limits, but only to the extent approved in writing in advance by the City's Risk Manager. Contractor must confirm that each Subcontractor has complied with these insurance requirements before the Subcontractor is permitted to begin Work on the Project. Upon request by the City, Contractor must provide certificates and endorsements submitted by each Subcontractor to prove compliance with this requirement. The insurance requirements for Subcontractors do not replace or limit the Contractor's insurance obligations.

## **Article 5 - Contract Time**

**5.1 Time is of the Essence.** Time is of the essence in Contractor's performance and completion of the Work, and Contractor must diligently prosecute the Work and complete it within the Contract Time.

(A) **General.** Contractor must commence the Work on the date indicated in the Notice to Proceed and must fully complete the Work in strict compliance with all requirements of the Contract Documents and within the Contract Time. Contractor may not begin performing the Work before the date specified in the Notice to Proceed.

(B) **Authorization.** Contractor is not entitled to compensation or credit for any Work performed before the date specified in the Notice to Proceed, with the exception of any schedules, submittals, or other requirements, if any, that must be provided or performed before issuance of the Notice to Proceed.

(C) **Rate of Progress.** Contractor and its Subcontractors must, at all times, provide workers, materials, and equipment sufficient to maintain the rate of progress necessary to ensure full completion of the Work within the Contract Time. If City determines that Contractor is failing to prosecute the Work at a sufficient rate of progress, City may, in its sole discretion, direct Contractor to provide additional workers, materials, or equipment, or to work additional hours or days without additional cost to City, in order to achieve a rate of progress satisfactory to City. If Contractor fails to comply with City's directive in this regard, City may, at Contractor's expense, separately contract for additional workers, materials, or equipment or use City's own forces to achieve the necessary rate of progress. Alternatively, City may terminate the Contract based on Contractor's default.

**5.2 Schedule Requirements.** Contractor must prepare all schedules using standard, commercial scheduling software acceptable to the Engineer, and must provide the schedules in electronic and paper form as requested by the Engineer. In addition to the general scheduling requirements set forth below, Contractor must also comply with any scheduling requirements included in the Special Conditions or in the Technical Specifications.

(A) **Baseline (As-Planned) Schedule.** Within ten calendar days following City's issuance of the Notice to Proceed (or as otherwise specified in the Notice to Proceed), Contractor must submit to City for review and acceptance a baseline (as-planned) schedule using critical path methodology showing in detail how Contractor plans to perform and fully complete the Work within the Contract Time, including labor, equipment, materials, and fabricated items. The baseline schedule must show the order of the major items of Work and the dates of start and completion of each item, including when the materials and equipment will be procured. The schedule must also include the work of all trades, reflecting anticipated labor or crew hours and equipment loading for the construction activities, and must be sufficiently comprehensive and detailed to enable progress to be monitored on a day-by-day basis. For each activity, the baseline schedule must be dated, provided in the format specified in the Contract Documents or as required by City, and must include, at a minimum, a description of the activity, the start and completion dates of the activity, and the duration of the activity.

(1) *Specialized Materials Ordering.* Within five calendar days following issuance of the Notice to Proceed, Contractor must order any specialized material or equipment for the Work that is not readily available from material suppliers. Contractor must also retain documentation of the purchase order date(s).

(B) **City's Review of Schedules.** City will review and may note exceptions to the baseline schedule, and to the progress schedules submitted as required below, to assure completion of the Work within the Contract Time. Contractor is solely responsible for resolving any exceptions noted in a schedule and, within seven days, must correct the schedule to address the exceptions. City's review or acceptance of Contractor's schedules will not operate to waive or limit Contractor's duty to complete the Project within the Contract Time, nor to waive or limit City's right to assess liquidated damages for Contractor's unexcused failure to do so.

(C) **Progress Schedules.** After City accepts the final baseline schedule with no exceptions, Contractor must submit an updated progress schedule and three-week look-ahead schedule, in the format specified by City, for review and acceptance with each application for a progress payment, or when otherwise specified by City, until completion of the Work. The updated progress schedule must: show how the actual progress of the Work as constructed to date compares to the baseline schedule; reflect any proposed changes in the construction schedule or method of operations, including to achieve Project milestones within the Contract Time; and identify any actual or potential impacts to the critical path. Contractor must also submit periodic reports to City of any changes in the projected material or equipment delivery dates for the Project.

(1) *Float.* The progress schedule must show early and late completion dates for each task. The number of days between those dates will be designated as the "float." Any float belongs to the Project and may be allocated by the Engineer to best serve timely completion of the Project.

(2) *Failure to Submit Schedule.* Reliable, up-to-date schedules are essential to efficient and cost-effective administration of the Project and timely completion. If Contractor fails to submit a schedule within the time periods specified in this

Section, or submits a schedule to which City has noted exceptions that are not corrected, City may withhold up to five percent from payment(s) otherwise due to Contractor until the exceptions are resolved, the schedule is corrected and resubmitted, and City has accepted the schedule. In addition, Contractor's failure to comply with the schedule requirements in this Section 5.2 will be deemed a material default and a waiver of any claims for Excusable Delay or loss of productivity arising during any period when Contractor is out of compliance, subject only to the limits of Public Contract Code § 7102.

(D) **Recovery Schedule.** If City determines that the Work is more than one week behind schedule, within seven days following written notice of such determination, Contractor must submit a recovery schedule, showing how Contractor intends to perform and complete the Work within the Contract Time, based on actual progress to date.

(E) **Effect of Acceptance.** Contractor and its Subcontractors must perform the Work in accordance with the most current City-accepted schedule unless otherwise directed by City. City's acceptance of a schedule does not operate to extend the time for completion of the Work or any component of the Work, and will not affect City's right to assess liquidated damages for Contractor's unexcused delay in completing the Work within the Contract Time.

(F) **Posting.** Contractor must at all times prominently post a copy of the most current City-accepted progress or recovery schedule in its on-site office.

(G) **Reservation of Rights.** City reserves the right to direct the sequence in which the Work must be performed or to make changes in the sequence of the Work in order to facilitate the performance of work by City or others, or to facilitate City's use of its property. The Contract Time or Contract Price may be adjusted to the extent such changes in sequence actually increase or decrease Contractor's time or cost to perform the Work.

(H) **Authorized Working Days and Times.** Contractor is limited to working Monday through Friday, excluding holidays, during City's normal business hours, except as provided in the Special Conditions or as authorized in writing by City. City reserves the right to charge Contractor for additional costs incurred by City due to Work performed on days or during hours not expressly authorized in the Contract Documents, including reimbursement of costs incurred for inspection, testing, and construction management services.

### 5.3 Delay and Extensions of Contract Time.

(A) **Notice of Delay.** If Contractor becomes aware of any actual or potential delay affecting the critical path, Contractor must promptly notify the Engineer in writing, regardless of the nature or cause of the delay, so that City has a reasonable opportunity to mitigate or avoid the delay.

(B) **Excusable Delay.** The Contract Time may be extended if Contractor encounters "Excusable Delay," which is an unavoidable delay in completing the Work within the Contract Time due to causes completely beyond Contractor's control, and which Contractor could not have avoided or mitigated through reasonable care, planning, foresight, or diligence, provided that Contractor is otherwise fully performing its obligations under the Contract Documents. Grounds for Excusable Delay may include fire, natural disasters including earthquake or unusually severe weather, acts of terror or vandalism, epidemic, unforeseeable adverse government actions, unforeseeable actions of third parties, encountering unforeseeable hazardous materials, unforeseeable site

conditions, or suspension for convenience under Article 13. The Contract Time will not be extended based on circumstances which will not unavoidably delay completing the Work within the Contract Time based on critical path analysis.

(C) **Weather Delays.** A "Weather Delay Day" is a Working Day during which Contractor and its forces, including Subcontractors, are unable to perform more than 40% of the critical path Work scheduled for that day due to adverse weather conditions which impair the ability to safely or effectively perform the scheduled critical path Work that day. Adverse weather conditions may include rain, saturated soil, and Project site clean-up required due to adverse weather. Determination of what constitutes critical path Work scheduled for that day will be based on the most current, City-approved schedule. Contractor will be entitled to a non-compensable extension of the Contract Time for each Weather Delay Day in excess of the normal Weather Delay Days within a given month as determined by reliable records, including monthly rainfall averages, for the preceding ten years (or as otherwise specified in the Special Conditions or Specifications).

(1) Contractor must fully comply with the applicable procedures in Articles 5 and 6 of the General Conditions regarding requests to modify the Contract Time.

(2) Contractor will not be entitled to an extension of time for a Weather Delay Day to the extent Contractor is responsible for concurrent delay on that day.

(3) Contractor must take reasonable steps to mitigate the consequences of Weather Delay Days, including prudent workforce management and protecting the Work, Project Site, materials, and equipment.

(D) **Non-Excusable Delay.** Delay which Contractor could have avoided or mitigated through reasonable care, planning, foresight, or diligence is "Non-Excusable Delay." Contractor is not entitled to an extension of Contract Time or any compensation for Non-Excusable Delay, or for Excusable Delay that is concurrent with Non-Excusable Delay. Non-Excusable Delay includes delay caused by:

(1) weather conditions which are normal for the location of the Project, as determined by reliable records, including monthly rainfall averages, for the preceding ten years;

(2) Contractor's failure to order equipment and materials sufficiently in advance of the time needed for completion of the Work within the Contract Time;

(3) Contractor's failure to provide adequate notification to utility companies or agencies for connections or services necessary for completion of the Work within the Contract Time;

(4) foreseeable conditions which Contractor could have ascertained from reasonably diligent inspection of the Project site or review of the Contract Documents or other information provided or available to Contractor;

(5) Contractor's failure, refusal, or financial inability to perform the Work within the Contract Time, including insufficient funds to pay its Subcontractors or suppliers;

(6) performance or non-performance by Contractor's Subcontractors or suppliers;

- (7) the time required to respond to excessive RFIs (see Section 2.5(G));
- (8) delayed submission of required submittals, or the time required for correction and resubmission of defective submittals;
- (9) time required for repair of, re-testing, or re-inspection of defective Work;
- (10) enforcement of Laws by City, or outside agencies with jurisdiction over the Work; or
- (11) City's exercise or enforcement of any of its rights or Contractor's duties pursuant to the Contract Documents, including correction of defective Work, extra inspections or testing due to non-compliance with Contract requirements, safety compliance, environmental compliance, or rejection and return of defective or deficient submittals.

(E) **Compensable Delay.** Pursuant to Public Contract Code § 7102, in addition to entitlement to an extension of Contract Time, Contractor is entitled to compensation for costs incurred due to delay caused solely by City, when that delay is unreasonable under the circumstances involved and not within the contemplation of the parties ("Compensable Delay"). Contractor is not entitled to an extension of Contract Time or recovery of costs for Compensable Delay that is concurrent with Non-Excusable Delay. Delay due to Weather Delay Days in excess of normal for a given month, as set forth in Section 5.3(C), is not Compensable Delay, and will only entitle Contractor to an extension of time commensurate with the time lost due to such delay.

(F) **Recoverable Costs.** Contractor is not entitled to compensation for Excusable Delay unless it is Compensable Delay, as defined above. Contractor is entitled to recover only the actual, direct, reasonable, and substantiated costs ("Recoverable Costs") for each working day that the Compensable Delay prevents Contractor from proceeding with more than 50% of the critical path Work scheduled for that day, based on the most recent progress schedule accepted by City. Recoverable Costs will not include home office overhead or lost profit.

(G) **Request for Extension of Contract Time or Recoverable Costs.** A request for an extension of Contract Time or any associated Recoverable Costs must be submitted in writing to City within 14 calendar days of the date the delay is first encountered, even if the duration of the delay is not yet known at that time, or any entitlement to the Contract Time extension or to the Recoverable Costs will be deemed waived. In addition to complying with the requirements of this Article 5, the request must be submitted in compliance with the Change Order request procedures in Article 6 below. Strict compliance with these requirements is necessary to ensure that any delay or consequences of delay may be mitigated as soon as possible, and to facilitate cost-efficient administration of the Project and timely performance of the Work. Any request for an extension of Contract Time or Recoverable Costs that does not strictly comply with all of the requirements of Article 5 and Article 6 will be deemed waived.

(1) **Required Contents.** The request must include a detailed description of the cause(s) of the delay and must also describe the measures that Contractor has taken to mitigate the delay and/or its effects, including efforts to mitigate the cost impact of the delay, such as by workforce management or by a change in sequencing. If the delay is still ongoing at the time the request is submitted, the request should also include Contractor's plan for continued mitigation of the delay or its effects.

(2) *Delay Days and Costs.* The request must specify the number of days of Excusable Delay claimed or provide a realistic estimate if the duration of the delay is not yet known. If Contractor believes it is entitled to Recoverable Costs for Compensable Delay, the request must specify the amount and basis for the Recoverable Costs that are claimed or provide a realistic estimate if the amount is not yet known. Any estimate of delay duration or cost must be updated in writing and submitted with all required supporting documentation as soon as the actual time and cost is known. The maximum extension of Contract Time will be the number of days, if any, by which an Excusable Delay or a Compensable Delay exceeds any concurrent Non-Excusable Delay. Contractor is entitled to an extension of Contract Time, or compensation for Recoverable Costs, only if, and only to the extent that, such delay will unavoidably delay Final Completion.

(3) *Supporting Documentation.* The request must also include any and all supporting documentation necessary to evidence the delay and its actual impacts, including scheduling and cost impacts with a time impact analysis using critical path methodology and demonstrating the unavoidable delay to Final Completion. The time impact analysis must be submitted in a form or format acceptable to City.

(4) *Burden of Proof.* Contractor has the burden of proving that: the delay was an Excusable Delay or Compensable Delay, as defined above; Contractor has fully complied with its scheduling obligations in Section 5.2, Schedule Requirements; Contractor has made reasonable efforts to mitigate the delay and its schedule and cost impacts; the delay will unavoidably result in delaying Final Completion; and any Recoverable Costs claimed by Contractor were actually incurred and were reasonable under the circumstances.

(5) *Legal Compliance.* Nothing in this Section 5.3 is intended to require the waiver, alteration, or limitation of the applicability of Public Contract Code § 7102.

(6) *No Waiver.* Any grant of an extension of Contract Time, or compensation for Recoverable Costs due to Compensable Delay, will not operate as a waiver of City's right to assess liquidated damages for Non-Excusable Delay.

(7) *Dispute Resolution.* In the event of a dispute over entitlement to an extension of Contract Time or compensation for Recoverable Costs, Contractor may not stop Work pending resolution of the dispute, but must continue to comply with its duty to diligently prosecute the performance and timely completion of the Work. Contractor's sole recourse for an unresolved dispute based on City's rejection of a Change Order request for an extension of Contract Time or compensation for Recoverable Costs is to comply with the dispute resolution provisions set forth in Article 12 below.

**5.4 Liquidated Damages.** It is expressly understood that if Final Completion is not achieved within the Contract Time, City will suffer damages from the delay that are difficult to determine and accurately specify. Pursuant to Public Contract Code § 7203, if Contractor fails to achieve Final Completion within the Contract Time due to Contractor's Non-Excusable Delay, City will charge Contractor in the amount specified in the Contract for each calendar day that Final Completion is delayed beyond the Contract Time, as liquidated damages and not as a penalty. Any waiver of accrued liquidated damages, in whole or in part, is subject to approval of the City Council or its authorized delegee.

(A) **Liquidated Damages.** Liquidated damages will not be assessed for any Excusable Delay or Compensable Delay, as set forth above.



(B) **Milestones.** Liquidated damages may also be separately assessed for failure to meet milestones specified elsewhere in the Contract Documents.

(C) **Setoff.** City is entitled to deduct the amount of liquidated damages assessed against any payments otherwise due to Contractor, including progress payments, Final Payment, or unreleased retention. If there are insufficient Contract funds remaining to cover the full amount of liquidated damages assessed, City is entitled to recover the balance from Contractor or its performance bond surety.

(D) **Occupancy or Use.** Occupancy or use of the Project in whole or in part prior to Final Completion does not constitute City's acceptance of the Project and will not operate as a waiver of City's right to assess liquidated damages for Contractor's Non-Excusable Delay in achieving Final Completion.

(E) **Other Remedies.** City's right to liquidated damages under this Section applies only to damages arising from Contractor's Non-Excusable Delay or failure to complete the Work within the Contract Time. City retains its right to pursue all other remedies under the Contract for other types of damage, including damage to property or persons, costs or diminution in value from defective materials or workmanship, costs to repair or complete the Work, or other liability caused by Contractor.

## Article 6 - Contract Modification

**6.1 Contract Modification.** Subject to the limited exception set forth in subsection (D) below, any change in the Work or the Contract Documents, including the Contract Price or Contract Time, will not be a valid and binding change to the Contract unless it is formalized in a Change Order, including a "no-cost" Change Order or a unilateral Change Order. Changes in the Work pursuant to this Article 6 will not operate to release, limit, or abridge Contractor's warranty obligations pursuant to Article 11 or any obligations of Contractor's bond sureties.

(A) **City-Directed Changes.** City may direct changes in the scope or sequence of Work or the requirements of the Contract Documents, without invalidating the Contract. Such changes may include Extra Work as set forth in subsection (C) below, or deletion or modification of portions of the Work. Contractor must promptly comply with City-directed changes in the Work in accordance with the original Contract Documents, even if Contractor and City have not yet reached agreement as to adjustments to the Contract Price or Contract Time for the change in the Work or for the Extra Work. Contractor is not entitled to extra compensation for cost savings resulting from "value engineering" pursuant to Public Contract Code § 7101, except to the extent authorized in advance by City in writing, and subject to any applicable procedural requirements for submitting a proposal for value engineering cost savings.

(B) **Disputes.** In the event of a dispute over entitlement to or the amount of a change in Contract Time or a change in Contract Price related to a City-directed change in the Work, Contractor must perform the Work as directed and may not delay its Work or cease Work pending resolution of the dispute, but must continue to comply with its duty to diligently prosecute the performance and timely completion of the Work, including the Work in dispute. Likewise, in the event that City and Contractor dispute whether a portion or portions of the Work are already required by the Contract Documents or constitute Extra Work, or otherwise dispute the interpretation of any portion(s) of the Contract Documents, Contractor must perform the Work as directed and may not delay its Work or cease Work pending resolution of the dispute, but must continue to comply with its duty

to diligently prosecute the performance and timely completion of the Work, including the Work in dispute, as directed by City. If Contractor refuses to perform the Work in dispute, City may, acting in its sole discretion, elect to delete the Work from the Contract and reduce the Contract Price accordingly, and self-perform the Work or direct that the Work be performed by others. Alternatively, City may elect to terminate the Contract for convenience or for cause. Contractor's sole recourse for an unresolved dispute related to changes in the Work or performance of any Extra Work is to comply with the dispute resolution provisions set forth in Article 12, below.

(C) **Extra Work.** City may direct Contractor to perform Extra Work related to the Project. Contractor must promptly perform any Extra Work as directed or authorized by City in accordance with the original Contract Documents, even if Contractor and City have not yet reached agreement on adjustments to the Contract Price or Contract Time for such Extra Work. If Contractor believes it is necessary to perform Extra Work due to changed conditions, Contractor must promptly notify the Engineer in writing, specifically identifying the Extra Work and the reason(s) the Contractor believes it is Extra Work. This notification requirement does not constitute a Change Order pursuant to Section 6.2, below. Contractor must maintain detailed daily records that itemize the cost of each element of Extra Work, and sufficiently distinguish the direct cost of the Extra Work from the cost of other Work performed. For each day that Contractor performs Extra Work, or Work that Contractor contends is Extra Work, Contractor must submit no later than the following Working Day, a daily report of the Extra Work performed that day and the related costs, together with copies of certified payroll, invoices, and other documentation substantiating the costs ("Extra Work Report"). The Engineer will make any adjustments to Contractor's Extra Work Report(s) based on the Engineer's records of the Work. When an Extra Work Report(s) is agreed on and signed by both City and Contractor, the Extra Work Report(s) will become the basis for payment under a duly authorized and signed Change Order. Failure to submit the required documentation by close of business on the next Working Day is deemed a full and complete waiver for any change in the Contract Price or Contract Time for any Extra Work performed that day.

(D) **Minor Changes and RFIs.** Minor field changes, including RFI replies from City, that do not affect the Contract Price or Contract Time and that are approved by the Engineer acting within his or her scope of authority, do not require a Change Order. By executing an RFI reply from City, Contractor agrees that it will perform the Work as clarified therein, with no change to the Contract Price or Contract Time.

(E) **Remedy for Non-Compliance.** Contractor's failure to promptly comply with a City-directed change is deemed a material breach of the Contract, and in addition to all other remedies available to it, City may, at its sole discretion, hire another contractor or use its own forces to complete the disputed Work at Contractor's sole expense, and may deduct the cost from the Contract Price.

**6.2 Contractor Change Order Requests.** Contractor must submit a request or proposal for a change in the Work, compensation for Extra Work, or a change in the Contract Price or Contract Time as a written Change Order request or proposal.

(A) **Time for Submission.** Any request for a change in the Contract Price or the Contract Time must be submitted in writing to the Engineer within 14 calendar days of the date that Contractor first encounters the circumstances, information or conditions giving rise to the Change Order request, even if the total amount of the requested change in the Contract Price or impact on the Contract Time is not yet known at that time. If City requests that Contractor propose the terms of a Change Order, unless otherwise specified in City's request, Contractor must provide the Engineer with a written proposal

for the change in the Contract Price or Contract Time within five working days of receiving City's request, in a form satisfactory to the Engineer.

(B) **Required Contents.** Any Change Order request or proposal submitted by Contractor must include a complete breakdown of actual or estimated costs and credits, and must itemize labor, materials, equipment, taxes, insurance, subcontract amounts, and, if applicable, Extra Work Reports. Any estimated cost must be updated in writing as soon as the actual amount is known.

(C) **Required Documentation.** All claimed costs must be fully documented, and any related request for an extension of time or delay-related costs must be included at that time and in compliance with the requirements of Article 5 of the General Conditions. Upon request, Contractor must permit City to inspect its original and unaltered bidding records, subcontract agreements, subcontract change orders, purchase orders, invoices, or receipts associated with the claimed costs.

(D) **Required Form.** Contractor must use City's form(s) for submitting all Change Order requests or proposals, unless otherwise specified by City.

(E) **Certification.** All Change Order requests must be signed by Contractor and must include the following certification:

"The undersigned Contractor certifies under penalty of perjury that its statements and representations in this Change Order request are true and correct. Contractor warrants that this Change Order request is comprehensive and complete as to the Work or changes referenced herein, and agrees that any known or foreseeable costs, expenses, or time extension requests not included herein, are deemed waived."

**6.3 Adjustments to Contract Price.** The amount of any increase or decrease in the Contract Price will be determined based on one of the following methods listed below, in the order listed with unit pricing taking precedence over the other methods. Markup applies only to City-authorized time and material Work, and does not apply to any other payments to Contractor. For Work items or components that are deleted in their entirety, Contractor will only be entitled to compensation for those direct, actual, and documented costs (including restocking fees), reasonably incurred before Contractor was notified of the City's intent to delete the Work, with no markup for overhead, profit, or other indirect costs.

(A) **Unit Pricing.** Amounts previously provided by Contractor in the form of unit prices, either in a bid schedule or in a post-award schedule of values pursuant to Section 8.1, Schedule of Values, will apply to determine the price for the affected Work, to the extent applicable unit prices have been provided for that type of Work. No additional markup for overhead, profit, or other indirect costs will be added to the calculation.

(B) **Lump Sum.** A mutually agreed upon, all-inclusive lump sum price for the affected Work with no additional markup for overhead, profit, or other indirect costs.

(C) **Time and Materials.** On a time and materials basis, if and only to the extent compensation on a time and materials basis is expressly authorized by City in advance of Contractor's performance of the Work and subject to any not-to-exceed limit. Time and materials compensation for increased costs or Extra Work (but not decreased costs or deleted Work), will include allowed markup for overhead, profit, and other indirect costs, calculated as the total of the following sums, the cumulative total of which may not exceed the maximum markup rate of 15%:

- (1) All direct labor costs provided by the Contractor, excluding superintendence, project management, or administrative costs, plus 15% markup;
- (2) All direct material costs provided by the Contractor, including sales tax, plus 15% markup;
- (3) All direct plant and equipment rental costs provided by the Contractor, plus 15% markup;
- (4) All direct additional subcontract costs plus 10% markup for Work performed by Subcontractors; and
- (5) Increased bond or insurance premium costs computed at 1.5% of total of the previous four sums.

**6.4 Unilateral Change Order.** If the parties dispute the terms of a proposed Change Order, including disputes over the amount of compensation or extension of time that Contractor has requested, the value of deleted or changed Work, what constitutes Extra Work, or quantities used, City may elect to issue a unilateral Change Order, directing performance of the Work, and authorizing a change in the Contract Price or Contract Time for the adjustment to compensation or time that the City believes is merited. Contractor's sole recourse to dispute the terms of a unilateral Change Order is to submit a timely Claim pursuant to Article 12, below.

**6.5 Non-Compliance Deemed Waiver.** Contractor waives its entitlement to any increase in the Contract Price or Contract Time if Contractor fails to fully comply with the provisions of this Article. Contractor will not be paid for unauthorized Extra Work.

## **Article 7 - General Construction Provisions**

### **7.1 Permits, Fees, Licenses, Certificates, and Taxes.**

(A) ***Permits, Fees, Licenses, and Certificates.*** Contractor must obtain and pay for all permits, fees, licenses, and certificates required to perform the Work, including a City business tax certificate. Contractor must cooperate with and provide notifications to all government agencies with jurisdiction over the Project, as may be required. Contractor must provide City with copies of all records of permits and permit applications, payment of required fees, and any licenses and certificates required for the Work.

(B) ***Taxes.*** Contractor must pay for all taxes on labor, material, and equipment, except Federal Excise Tax to the extent that City is exempt from Federal Excise Tax.

**7.2 Temporary Facilities.** Contractor must provide, at Contractor's sole expense, any and all temporary facilities for the Project, including an onsite staging area for materials and equipment, a field office, sanitary facilities, utilities, storage, scaffolds, barricades, walkways, and any other temporary structure required to safely perform the Work along with any incidental utility services. The location of all temporary facilities must be approved by the City prior to installation. Temporary facilities must be safe and adequate for the intended use and installed and maintained in accordance with Laws and the Contract Documents. Contractor must fence and screen the Project site and, if applicable, any separate Worksites, including the staging area, and its operation must minimize inconvenience to neighboring properties. Additional provisions pertaining to

temporary facilities are set forth in this Article 7 and may also be included in the Specifications or Special Conditions.

(A) **Utilities.** Contractor must install and maintain the power, water, sewer, and all other utilities required for the Project site and performance of the Work, including the piping, wiring, internet and wifi connections, and any related equipment necessary to maintain the temporary facilities. Contractor may obtain water from the City's water system or from a source other than City's water system, if approved in advance by the Engineer. Before obtaining water from the City's water system, Contractor must obtain a Water Use Permit from the Water Department and rent a hydrant or bridge meter. Contractor is responsible for the cost of all water and all related deposits, permits, and fees. Contractor is prohibited from operating gate valves or fire hydrants on the City's water system. The acquisition of water from the City's water system through un-metered hydrants or other facilities is a violation of Laws. Citations and fines may be levied for violation of these and other utility regulations and may be deducted from payment otherwise due Contractor.

(B) **Removal and Repair.** Contractor must promptly remove all such temporary facilities when they are no longer needed or upon completion of the Work, whichever comes first. Contractor must promptly repair any damage to City's property or to other property caused by the installation, use, or removal of the temporary facilities, and must promptly restore the property to its original or intended condition.

**7.3 Noninterference and Site Management.** Contractor must avoid interfering with City's use of its property at or adjacent to the Project site, including use of roadways, entrances, parking areas, walkways, and structures. Contractor must also minimize disruption of access to private property in the Project vicinity. Contractor must coordinate with affected property owners, tenants, and businesses, and maintain some vehicle and pedestrian access to their residences or properties at all times. Temporary access ramps, fencing or other measures must be provided as needed. Before blocking access to a private driveway or parking lot, Contractor must provide effective notice to the affected parties at least 48 hours in advance of the pending closure and allow them to remove vehicles. Private driveways, residences and parking lots must have access to a roadway during non-Work hours.

(A) **Offsite Acquisition.** Unless otherwise provided by City, Contractor must acquire, use, and dispose of, at its sole expense, any Worksites, licenses, easements, and temporary facilities necessary to access and perform the Work.

(B) **Offsite Staging Area and Field Office.** If additional space beyond the Project site is needed, such as for the staging area or the field office, Contractor may need to make arrangements with the nearby property owner(s) to secure the space and obtain a temporary use permit, in accordance with City Code § 20-52.040. Before using or occupying any property owned by a third party, Contractor must provide City with a copy of the necessary license agreement, easement, or other written authorization from the property owner, together with a written release from the property owner holding City harmless from any related liability, in a form acceptable to the City Attorney.

(C) **Traffic Management.** Contractor must provide traffic management and traffic controls as specified in the Contract Documents, as required by Laws, and as otherwise required to ensure public and worker safety, and to avoid interference with public or private operations or the normal flow of vehicular, bicycle, or pedestrian traffic.

**7.4 Signs.** No signs may be displayed on or about City's property, except signage which is required by Laws or by the Contract Documents, without City's prior written approval as to size, design, and location.

**7.5 Project Site and Nearby Property Protections.**

(A) **General.** Contractor is responsible at all times, on a 24-hour basis and at its sole cost, for protecting the Work, the Project site, and the materials and equipment to be incorporated into the Work, until the City has accepted the Project, excluding any exceptions to acceptance, if any. Except as specifically authorized by City, Contractor must confine its operations to the area of the Project site indicated in the Plans and Specifications. Contractor is liable for any damage caused by Contractor or its Subcontractors to the Work, City's property, the property of adjacent or nearby property owners and the work or personal property of other contractors working for City, including damage related to Contractor's failure to adequately secure the Work or any Worksite.

(1) Subject to City's approval, Contractor will provide and install safeguards to protect the Work; any Worksite, including the Project site; City's real or personal property and the real or personal property of adjacent or nearby property owners, including plant and tree protections.

(2) City wastewater systems may not be interrupted. If the Work disrupts existing sewer facilities, Contractor must immediately notify City and establish a plan, subject to City's approval, to convey the sewage in closed conduits back into the sanitary sewer system. Sewage must not be permitted to flow in trenches or be covered by backfill.

(3) Contractor must remove with due care, and store at City's request, any objects or material from the Project site that City will salvage or reuse at another location.

(4) If directed by Engineer, Contractor must promptly repair or replace any property damage, as specified by the Engineer. However, acting in its sole discretion, City may elect to have the property damage remedied otherwise, and may deduct the cost to repair or replace the damaged property from payment otherwise due to Contractor.

(5) Contractor will not permit any structure or infrastructure to be loaded in a manner that will damage or endanger the integrity of the structure or infrastructure.

(6) All valves, hydrants, and other appurtenances of the City's water system that are the property of City and removed by Contractor in the performance of the Work must be delivered to City's Municipal Services Center (55 Stony Point Road) unless Contractor has obtained specific written approval from the Water Department to dispose of the items.

(B) **Securing Project Site.** After completion of Work each day, Contractor must secure the Project site and, to the extent feasible, make the area reasonably accessible to the public unless City approves otherwise. All excess materials and equipment not protected by approved traffic control devices must be relocated to the staging area or demobilized. Trench spoils must be hauled off the Project site daily and open excavations must be protected with steel plates. Contractor and Subcontractor personnel may not occupy or use the Project site for any purpose during non-Work hours, except as may be provided in the Contract Documents or pursuant to prior written authorization from City.

(C) **Unforeseen Conditions.** If Contractor encounters facilities, utilities, or other unknown conditions not shown on or reasonably inferable from the Plans or apparent from inspection of the Project site, Contractor must immediately notify the City and promptly submit a Request for Information to obtain further directions from the Engineer. Contractor must avoid taking any action which could cause damage to the facilities or utilities pending further direction from the Engineer. The Engineer's written response will be final and binding on Contractor. If the Engineer's subsequent direction to Contractor affects Contractor's cost or time to perform the Work, Contractor may submit a Change Order request as set forth in Article 6 above.

(D) **Support; Adjacent Properties.** Contractor must provide, install, and maintain all shoring, bracing, and underpinning necessary to provide support to City's property and adjacent properties and improvements thereon. Contractor must provide notifications to adjacent property owners as may be required by Laws. See also, Section 7.15, Trenching of Five Feet or More.

(E) **Notification of Property Damage.** Contractor must immediately notify the City of damage to any real or personal property resulting from Work on the Project, including damage to City's water system. Contractor must immediately provide a written report to City of any such property damage in excess of \$500 (based on estimated cost to repair or replace) within 24 hours of the occurrence. The written report must include: (1) the location and nature of the damage, and the owner of the property, if known; (2) the name and address of each employee of Contractor or any Subcontractor involved in the damage; (3) a detailed description of the incident, including precise location, time, and names and contact information for known witnesses; and (4) a police or first responder report, if applicable. If Contractor is required to file an accident report with another government agency, Contractor will provide a copy of the report to City.

(F) **Damage to City's Water System.** Contractor must promptly repair and remediate, at its sole expense, any damage caused by Contractor to the City's water system, in a manner satisfactory to the Water Department. This includes damage to property and facilities resulting from Contractor's failure to make a written request for a markout or starting Work without providing the Water Department a reasonable opportunity to mark facilities; Contractor's destruction of markouts; Contractor's failure to perform hand dinging or probing for utilities near markouts; and Contractor's failure 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. All repairs must be witnessed, inspected, and approved by the Water Department prior to backfilling the excavation. If backfilling occurs prior to inspection and approval, City may require re-excavation by Contractor, at Contractor's sole expense. Acting in its sole discretion, City may elect to have the damage remedied otherwise, including by its own forces, and may deduct the cost thereof from payment otherwise due to Contractor. If City elects to remedy damage to the water system with its own forces, the cost thereof will be in accordance with the emergency repair rate schedule of the Water Department.

## 7.6 Materials and Equipment.

(A) **General.** Unless otherwise specified, all materials and equipment required for the Work must be new, free from defects, and of the best grade for the intended purpose, and furnished in sufficient quantities to ensure the proper and expeditious performance of the Work. All materials, equipment, and tools furnished or installed by Contractor must meet or exceed applicable Occupational Safety and Health Administration ("OSHA") standards. Contractor must employ measures to preserve the specified quality and

fitness of the materials and equipment. Unless otherwise specified, all materials and equipment required for the Work are deemed to include all components required for complete installation and intended operation and must be installed in accordance with the manufacturer's recommendations or instructions. Contractor is responsible for all shipping, handling, and storage costs associated with the materials and equipment required for the Work. Contractor is responsible for providing security and protecting the Work and all of the required materials, supplies, tools and equipment at Contractor's sole cost until City has formally accepted the Project as set forth in Section 11.1, Final Completion. Contractor will not assign, sell, mortgage, or hypothecate any materials or equipment for the Project, or remove any materials or equipment that have been installed or delivered.

(B) **City-Provided.** If the Work includes installation of materials or equipment to be provided by City, Contractor is solely responsible for the proper examination, handling, storage, and installation in accordance with the Contract Documents. Contractor must notify City of any defects discovered in City-provided materials or equipment, sufficiently in advance of scheduled use or installation to afford adequate time to procure replacement materials or equipment as needed. Contractor is solely responsible for any loss of or damage to such items which occurs while the items are in Contractor's custody and control, the cost of which may be offset from the Contract Price and deducted from any payment(s) due to Contractor.

(C) **Intellectual Property Rights.** Contractor must, at its sole expense, obtain any authorization or license required for use of patented or copyright-protected materials, equipment, devices, or processes that are incorporated into the Work. Upon request, Contractor must provide proof of any such authorization or license to City. Contractor's indemnity obligations in Article 4 apply to any claimed violation of intellectual property rights.

## **7.7 Substitutions.**

(A) **"Or Equal."** Any Specification designating a material, product, or thing (collectively, "item") or service by specific brand or trade name, followed by the words "or equal," is intended only to indicate the quality and type of item or service desired, and Contractor may request use of any equal item or service. Unless otherwise stated in the Specifications, any reference to a specific brand or trade name for an item or service that is used solely for the purpose of describing the type of item or service desired, will be deemed to be followed by the words "or equal." A substitution will only be approved if it is a true "equal" item or service in every aspect of design, function, and quality, as determined by City, including dimensions, weight, maintenance requirements, durability, fit with other elements, and schedule impacts.

(B) **Request for Substitution.** A post-award request for substitution of an item or service must be submitted in writing to the Engineer for approval in advance, within the applicable time period provided in the Contract Documents. If no time period is specified, the substitution request may be submitted any time within 35 days after the date of award of the Contract, or sufficiently in advance of the time needed to avoid delay of the Work, whichever is earlier. A request for substitution must contain a description of any proposed changes to the Work required to accommodate the substitution and drawings and details showing all such changes.

(C) **Substantiation.** Any available data substantiating the proposed substitute as an equal item or service must be submitted with the written request for substitution. Contractor's failure to timely provide all necessary substantiation, including any required



test results as soon as they are available, is grounds for rejection of the proposed substitution, without further review.

(D) **Burden of Proving Equality.** Contractor has the burden of proving the equality of the proposed substitution at Contractor's sole cost. City has sole discretion to determine whether a proposed substitution is equal, and City's determination is final.

(E) **Approval or Rejection.** If the proposed substitution is approved, Contractor is solely responsible for any additional costs or time associated with the substituted item or service. If the proposed substitution is rejected, Contractor must, without delay, install the item or use the service as specified by City.

(F) **Contractor's Obligations.** City's approval of a proposed substitution will not relieve Contractor from any of its obligations under the Contract Documents. In the event Contractor makes an unauthorized substitution, Contractor will be solely responsible for all resulting cost impacts, including the cost of removal and replacement and the impact to other design elements.

## 7.8 Testing and Inspection.

(A) **General.** All materials, equipment, and workmanship used in the Work are subject to inspection and testing by City, including the Materials Lab, at all times and at all locations during construction and/or fabrication, including at any Worksite, shops, and yards. All manufacturers' application or installation instructions must be provided to the Engineer at least ten days prior to the first such application or installation. Contractor must, at all times, make the Work available for testing or inspection. Neither City's inspection or testing of Work, nor its failure to do so, operate to waive or limit Contractor's duty to complete the Work in accordance with the Contract Documents.

(B) **Scheduling and Notification.** Contractor must cooperate with City in coordinating the inspections and testing. Contractor must submit samples of materials, at Contractor's expense, and schedule all tests required by the Contract Documents in time to avoid any delay to the progress of the Work. Contractor will coordinate directly with the Engineer when scheduling inspections or tests, unless otherwise specified in the Special Conditions. Contractor must notify the Engineer no later than noon of the Working Day before any inspection or testing and must provide timely notice to the other necessary parties as specified in the Contract Documents. If Contractor schedules an inspection or test beyond regular Work hours, or on a Saturday, Sunday, or recognized City holiday, Contractor must notify the Engineer at least two Working Days in advance for approval. If approved, Contractor must reimburse City for the cost of the overtime inspection or testing. Such costs, including the City's hourly costs for required personnel, may be deducted from payments otherwise due to Contractor. Contractor will not coordinate directly with or direct the Materials Lab.

(C) **Responsibility for Costs.** City will bear the initial cost of inspection and testing to be performed by independent consultants retained by City, subject to the following exceptions:

- (1) Contractor will be responsible for the costs of any subsequent inspections or tests which are required to substantiate compliance with the Contract Documents, and any associated remediation costs.
- (2) Contractor will be responsible for inspection costs, at City's hourly rates, for inspection time lost because the Work is not ready, or Contractor fails to appear for a scheduled inspection.

(3) If any portion of the Work that is subject to inspection or testing is covered or concealed by Contractor prior to the inspection or testing, Contractor will bear the cost of making that portion of the Work available for the inspection or testing required by the Contract Documents, and any associated repair or remediation costs.

(4) Contractor is responsible for properly shoring all compaction test sites deeper than five feet below grade, as required under Section 7.15 below.

(5) Any Work or material that is defective or fails to comply with the requirements of the Contract Documents must be promptly repaired, removed, replaced, or corrected by Contractor, at Contractor's sole expense, even if that Work or material was previously inspected or included in a progress payment.

(D) **Contractor's Obligations.** Contractor is solely responsible for any delay occasioned by remediation of defective or noncompliant Work or material. Inspection or testing of the Work does not in any way relieve Contractor of its obligations to perform the Work as specified. Contractor has an independent duty to test and inspect its Work and perform quality control activities to ensure that the Work and the materials, products, and equipment incorporated into the Work comply with the Contract Documents. City is not responsible for any testing performed by Contractor or a third-party retained by Contractor. Contractor will submit its testing methodology to City for review and acceptance. Any Work done without the inspection(s) or testing required by the Contract Documents will be subject to rejection by City.

(E) **Distant Locations.** If required off-site testing or inspection must be conducted at a location more than 100 miles from the Project site, Contractor is solely responsible for the additional travel costs required for testing and/or inspection at such locations.

(F) **Final Inspection.** The provisions of this Section 7.8 also apply to final inspection under Article 11, Completion and Warranty Provisions.

**7.9 Project Site Conditions and Maintenance.** Contractor must at all times, on a 24-hour basis and at its sole cost, maintain the Project site and staging and storage areas in clean, neat, and sanitary condition and in compliance with all Laws pertaining to safety, air quality, and dust control. Adequate toilets must be provided, and properly maintained and serviced for all workers on the Project site, located in a suitably secluded area, subject to City's prior approval. Contractor must also, on a daily basis and at its sole cost, remove and properly dispose of the debris and waste materials from the Project site.

(A) **Air Emissions Control.** Contractor must not discharge smoke or other air contaminants into the atmosphere in violation of any Laws. Contractor must comply with all Laws, including the California Air Resources Board's In-Use Off-Road Diesel-Fueled Fleets Regulation (13 CCR § 2449 et seq.).

(B) **Dust and Debris.** Contractor must minimize and confine dust and debris resulting from the Work. Contractor must abate dust nuisance by cleaning, sweeping, and immediately sprinkling with water excavated areas of dirt or other materials prone to cause dust, and within one hour after the Engineer notifies Contractor that an airborne nuisance exists. The Engineer may direct that Contractor provide an approved water-spraying truck for this purpose. If water is used for dust control, Contractor will only use the minimum necessary. Contractor must take all necessary steps to keep waste water out of streets, gutters, or storm drains. See Section 7.19, Environmental Control. If City determines that the dust control is not adequate, City may have the work done by others

and deduct the cost from the Contract Price. Contractor will immediately remove any excess excavated material from the Project site and any dirt deposited on public streets.

(C) **Clean up.** Before discontinuing Work in an area, Contractor must clean the area and remove all debris and waste along with the construction equipment, tools, machinery, and surplus materials.

(1) Except as otherwise specified, all excess Project materials, and the materials removed from existing improvements on the Project site with no salvage value or intended reuse by City, will be Contractor's property.

(2) Hauling trucks and other vehicles leaving the Project site must be cleaned of exterior mud or dirt before traveling on City streets. Materials and loose debris must be delivered and loaded to prevent dropping materials or debris. Contractor must immediately remove spillage from hauling on any publicly traveled way. Streets affected by Work on the Project must be kept clean by street sweeping.

(D) **Disposal.** Contractor must dispose of all Project debris and waste materials in a safe and legal manner. Contractor may not burn or bury waste materials on the Project site. Contractor will not allow any dirt, refuse, excavated material, surplus concrete or mortar, or any associated washings, to be disposed of onto streets, into manholes or into the storm drain system.

(E) **Completion.** At the completion of the Work, Contractor must remove from the Project site all of its equipment, tools, surplus materials, waste materials and debris, presenting a clean and neat appearance. Before demobilizing from the Project site, Contractor must ensure that all surfaces are cleaned, sealed, waxed, or finished as applicable, and that all marks, stains, paint splatters, and the like have been properly removed from the completed Work and the surrounding areas. Contractor must ensure that all parts of the construction are properly joined with the previously existing and adjacent improvements and conditions. Contractor must provide all cutting, fitting and patching needed to accomplish that requirement. Contractor must also repair or replace, in accordance with City Standards, all existing improvements that are damaged or removed during the Work, both on and off the Project site, including curbs, sidewalks, driveways, fences, gates, signs, landscaping, drainage ditches, irrigation systems, utilities, street surfaces and structures. Repairs and replacements must be at least equal to the previously existing improvements, and the condition, finish and dimensions must match the previously existing improvements. Concrete surface treatment and score marks must match adjacent existing concrete improvements. Contractor must restore to original condition all property or items that are not designated for alteration under the Contract Documents and leave each Worksite clean and ready for occupancy or use by City.

(F) **Non-Compliance.** If Contractor fails to comply with its maintenance and cleanup obligations or any City clean up order, City may, acting in its sole discretion, elect to suspend the Work until the condition(s) is corrected with no increase in the Contract Time or Contract Price, or undertake appropriate cleanup measures without further notice and deduct the cost from any amounts due or to become due to Contractor.

**7.10 Instructions and Manuals.** Contractor must provide to City three copies each of all instructions and manuals required by the Contract Documents, unless otherwise specified. These must be complete as to drawings, details, parts lists, performance data, and other information that may be required for City to easily maintain and service the materials and equipment installed for this Project.

(A) **Submittal Requirements.** The instructions and manuals, along with any required guarantees, must be delivered to City for review prior to requesting final inspection pursuant to Section 11.1(A), unless otherwise specified.

(B) **Training.** Contractor or its Subcontractors must train City's personnel in the operation and maintenance of any complex equipment or systems as a condition precedent to Final Completion, if required in the Contract Documents.

**7.11 As-built Drawings.** Contractor and its Subcontractors must prepare and maintain at the Project site a detailed, complete and accurate as-built set of the Plans which will be used solely for the purpose of recording changes made in any portion of the original Plans in order to create accurate record drawings at the end of the Project.

(A) **Duty to Update.** The as-built drawings must be updated as changes occur, on a daily basis if necessary. City may withhold the estimated cost for City to have the as-built drawings prepared from payments otherwise due to Contractor, until the as-built drawings are brought up to date to the satisfaction of City. Actual locations to scale must be identified on the as-built drawings for all runs of mechanical and electrical work, including all site utilities installed underground, in walls, floors, or otherwise concealed. Deviations from the original Plans must be shown in detail. The exact location of all main runs, whether piping, conduit, ductwork or drain lines, must be shown by dimension and elevation. The location of all buried pipelines, appurtenances, or other improvements must be represented by coordinates and by the horizontal distance from visible above-ground improvements.

(B) **Final Completion.** Contractor must verify that all changes in the Work are depicted in the as-built drawings and must deliver the complete set of as-built drawings to the Engineer for review and acceptance as a condition precedent to Final Completion and Final Payment.

**7.12 Existing Utilities.**

(A) **General.** The Work may be performed in developed, urban areas with existing utilities, both above and below ground, including utilities identified in the Contract Documents or in other informational documents or records. Contractor must take due care to locate identified or reasonably identifiable utilities before proceeding with trenching, excavation, or any other activity that could damage or disrupt existing utilities. This may include excavation with small equipment, potholing, or hand excavation, and, if practical, using white paint or other suitable markings to delineate the area to be excavated. Except as otherwise provided herein, Contractor will be responsible for costs resulting from damage to identified or reasonably identifiable utilities due to Contractor's negligence or failure to comply with the Contract Documents, including the requirements in this Article 7.

(B) **Unidentified Utilities.** Pursuant to Government Code § 4215, if, during the performance of the Work, Contractor discovers utility facilities not identified by City in the Contract Documents, Contractor must immediately provide written notice to City and the utility. City assumes responsibility for the timely removal, relocation, or protection of existing main or trunkline utility facilities located on the Project site if those utilities are not identified in the Contract Documents. Contractor will be compensated in accordance with the provisions of the Contract Documents for the costs of locating, repairing damage not due to Contractor's failure to exercise reasonable care, and removing or relocating utility facilities not indicated in the Plans or Specifications with reasonable accuracy, and for equipment on the Project necessarily idled during such work. Contractor will not be

assessed liquidated damages for delay in completion of the Work, to the extent the delay was caused by City's failure to provide for removal or relocation of the utility facilities.

(C) **Alteration or Relocation of Utilities.** If Contractor wishes to alter or relocate utilities for Contractor's convenience, and not due to a conflict that requires alteration or relocation, Contractor will be solely responsible for the time and cost required for such alteration or relocation, which may not proceed except as specified by the prior written authorization of the utility owner. Any damage to utilities or improvements caused by Contractor must be repaired by Contractor at its sole expense and to the full satisfaction of the utility owner and Engineer.

**7.13 Notice of Excavation.** Contractor must comply with all applicable requirements in Government Code § 4216 et seq., which are incorporated by reference herein.

**7.14 Trenching and Excavations of Four Feet or More.** As required by Public Contract Code § 7104, if the Work includes digging trenches or other excavations that extend deeper than four feet below the surface, the provisions in this Section apply to the Work and the Project.

(A) **Duty to Notify.** Contractor must promptly, and before the following conditions are disturbed, provide written notice to City if Contractor finds any of the following conditions:

(1) Material that Contractor believes may be a hazardous waste, as defined in § 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing Laws;

(2) Subsurface or latent physical conditions at the Project site differing from those indicated by information about the Project site made available to bidders prior to the deadline for submitting bids; or

(3) Unknown physical conditions at the Project site of any unusual nature, materially different from those ordinarily encountered and generally recognized as inherent in work of the character required by the Contract Documents.

(B) **City Investigation.** City will promptly investigate the conditions and if City finds that the conditions materially differ from those indicated, apparent, or reasonably inferred from information about the Project site made available to bidders, or involve hazardous waste, and cause a decrease or increase in Contractor's cost of, or the time required for, performance of any part of the Work, City will issue a Change Order.

(C) **Disputes.** In the event that a dispute arises between City and Contractor regarding any of the conditions specified in subsection (B) above, or the terms of a Change Order issued by City, Contractor will not be excused from completing the Work within the Contract Time, but must proceed with all Work to be performed under the Contract. Contractor will retain any and all rights provided either by the Contract or by Laws which pertain to the resolution of disputes between Contractor and City.

**7.15 Trenching of Five Feet or More.** As required by Labor Code § 6705, if the Contract Price exceeds \$25,000 and the Work includes the excavation of any trench or trenches of five feet or more in depth, a detailed plan must be submitted to City for acceptance in advance of the excavation. The detailed plan must show the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving

ground during the excavation. If the plan varies from the shoring system standards, it must be prepared by a California registered civil or structural engineer. Use of a shoring, sloping, or protective system less effective than that required by the Construction Safety Orders is prohibited.

**7.16 New Utility Connections.** Except as otherwise specified, City will pay connection charges and meter costs for new permanent utilities required by the Contract Documents, if any. Contractor must notify City sufficiently in advance of the time needed to request service from each utility provider so that connections and services are initiated in accordance with the Project schedule.

**7.17 Lines and Grades.** Contractor is required to use any benchmark provided by the Engineer. Unless otherwise specified in the Contract Documents, Contractor must provide all lines and grades required to execute the Work. Contractor must also provide, preserve, and replace if necessary, all construction stakes required for the Project, unless otherwise specified in the Special Conditions. All stakes or marks must be set by a California licensed surveyor or a California registered civil engineer. Contractor must notify the Engineer of any discrepancies found between Contractor's staking and grading and information provided by the Contract Documents. Upon completion, all Work must conform to the lines, elevations, and grades shown in the Plans, including any changes directed by a Change Order.

**7.18 Historic or Archeological Items.**

(A) **Contractor's Obligations.** Contractor must ensure that all persons performing Work at the Project site are required to immediately notify the Project Manager, upon discovery of any potential historic or archeological items, including historic or prehistoric ruins, a burial ground, archaeological or vertebrate paleontological site, including fossilized footprints or other archeological, paleontological or historical feature on the Project site (collectively, "Historic or Archeological Items").

(B) **Discovery; Cessation of Work.** Upon discovery of any potential Historic or Archeological Items, Work must be stopped within an 85-foot radius of the find and may not resume until authorized in writing by City. If required by City, Contractor must assist in protecting or recovering the Historic or Archeological Items, with any such assistance to be compensated as Extra Work on a time and materials basis under Article 6, Contract Modification. At City's discretion, a suspension of Work required due to discovery of Historic or Archeological Items may be treated as Excusable Delay pursuant to Article 5, or as a suspension for convenience under Article 13.

**7.19 Environmental Control.** Contractor must not pollute any drainage course or its tributary inlets with fuels, oils, bitumens, acids, insecticides, herbicides or other harmful materials. Contractor must prevent the release of any hazardous material or hazardous waste into the soil or groundwater, and prevent the unlawful discharge of pollutants into City's storm drain system and watercourses as required below. Contractor and its Subcontractors must at all times in the performance of the Work comply with all Laws concerning pollution of waterways.

(A) **Stormwater Permit.** Contractor must comply with all applicable conditions of the State Water Resources Control Board National Pollutant Discharge Elimination System General Permit for Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction Activity ("Stormwater Permit").

(B) **Contractor's Obligations.** If required for the Work, a copy of the Stormwater Permit is on file in City's principal administrative offices, and Contractor must comply with

it without adjustment of the Contract Price or the Contract Time. Contractor must timely and completely submit required reports and monitoring information required by the conditions of the Stormwater Permit. Contractor also must comply with all other Laws governing discharge of stormwater, including applicable municipal stormwater management programs.

- 7.20 Noise Control.** Contractor must comply with all applicable noise control Laws. Noise control requirements apply to all equipment used for the Work or related to the Work, including trucks, transit mixers or transient equipment that may or may not be owned by Contractor.
- 7.21 Mined Materials.** Pursuant to Public Contract Code § 20676, Contractor will not purchase any sand, gravel, or other minerals for the Work from an operation subject to the Surface Mining and Reclamation Act of 1975 (Public Resources Code § 2710 et seq.) unless Contractor certifies, under penalty of perjury, that the minerals are from a mining operation included on the AB 3098 List, which may be accessed online at: <https://www.conservation.ca.gov/smgb/Pages/AB-3098-List.aspx>.
- 7.22 Water Department Notification.** If Contractor requires the services of the Water Department in connection with the Work, Contractor must request such services at least two Working Days in advance of the time the services are needed. If the requested services require Water Department forces for more than eight hours or an extensive number of City-provided parts, Contractor must request services at least seven calendar days in advance of the time the services are needed.
- (A) **Service Shut Down.** Contractor must minimize disruption of utility service to the greatest extent practicable. Contractor must coordinate any shut down or disruption of utility service with the Engineer, Water Department, and affected utility customers. If it is necessary to shut down or disrupt utility service to any customer of the Water Department, Contractor must request the services of the Water Department an additional three Working Days in advance of the time such services are needed, for a total of five Working Days advance notification for a standard service request, to allow affected customers a minimum of three days' advance notice. If Contractor fails to keep field appointments, Contractor will be billed for scheduled Water Department crew standby time and for costs incurred by the Water Department for re-notification of customers.
- (B) **Water Department Scheduling.** 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 authorized in advance by the Engineer. Requests by Contractor for after-hours or weekend work are to be avoided when possible. Contractor will be responsible for any overtime costs incurred by City for such work and the cost thereof may be deducted from payment otherwise due Contractor.
- 7.23 Public Safety and Traffic Control.** Contractor must undertake all required and appropriate measures to ensure public safety during construction of the Project, in accordance with Laws, including, but not limited to, the Americans with Disabilities Act of 1990 (42 U.S.C. § 12101 et seq.). Contractor will ensure the safe passage of pedestrians around the Project site at all times. If Work is within a City-owned right-of-way, Contractor will ensure the safe passage of public traffic through the Project site at all times, consistent with the requirements of City Code Chapter 13-04. Contractor is solely responsible for the costs of all public safety and traffic control measures.
- (A) **Warning Devices.** Contractor must furnish, install, and maintain, at its sole expense, all fences, barricades, signs, lights, and other devices necessary to prevent accidents, injuries, death, and property damage. All such devices must conform to the

requirements of the current edition of the California Manual on Uniform Traffic Control Devices ("CA MUTCD") and the directions of the Engineer. Contractor's warning and safety devices will not obscure the visibility of or conflict with existing signs and traffic control devices. Contractor may be required to cover certain signs which regulate or direct public traffic to roadways that are not open to traffic, as directed by the Engineer.

(B) **Flaggers.** Contractor must also furnish, at Contractor's sole expense, trained flaggers as necessary to provide adequate warning to the public of construction conditions that may impact pedestrian or vehicular traffic.

(C) **Project Signage.** Unless otherwise specified in the Special Conditions, Contractor must install and maintain Project identification signs at each boundary of the Project site or as directed by the Engineer. Contractor must install the signs two weeks prior to the start of Work at the Project site, using sign panels furnished or otherwise approved by City. To mount sign panels, Contractor must furnish and install 4" X 4" posts or mount by other appropriate methods as approved by the Engineer. Upon completion of the Project, Contractor will remove Project identification signs and return any City-furnished sign panels to the City Corporation Yard at 55 Stony Point Road.

(D) **Road Closure Signage.** If the Work requires road closures, Contractor must furnish and install advance notice signs for road closures at each boundary of the Project site. Panel construction and lettering are subject to advance approval of the Engineer. Contractor must install the signs two weeks prior to the start of Work at the Project site. The signs must remain in place for the duration of the road closure and must be removed by Contractor when no longer necessary for the Work.

(E) **Emergency Response Agencies.** Contractor is responsible for notifying emergency response agencies operating in the jurisdiction of the Worksite(s) of obstructions to roads resulting from Contractor's Work.

(F) **Additional Devices.** City reserves the right to require additional warning or safety devices for the Project at the Contractor's sole expense, but no actions by City to add to or improve signage or any other public safety requirements will waive or limit Contractor's duties under the Contract Documents.

(G) **Compliance.** If Contractor fails or refuses to comply with the requirements of this Section, the Engineer may take immediate action to protect the public, including, but not limited to, furnishing the required safety measures at Contractor's expense or suspending the Work, in addition to all other remedies available to City. Any such remedial costs incurred by City may be deducted from payment otherwise due to Contractor as specified in Section 8.3, Adjustment of Payment Application. If there are insufficient Contract funds remaining to cover the remedial costs, City is entitled to recover the balance from Contractor or its performance bond surety.

## Article 8 - Payment

- 8.1 Schedule of Values.** Prior to submitting its first application for payment, Contractor must prepare and submit to the Project Manager a schedule of values apportioned to the various divisions and phases of the Work, including mobilization and demobilization. If a Bid Schedule was submitted with Contractor's bid, the amounts in the schedule of values must be consistent with the Bid Schedule. Each line item contained in the schedule of values must be assigned a value such that the total of all items equals the Contract Price. The items must be sufficiently detailed to enable accurate evaluation of the percentage of



completion claimed in each application for payment, and the assigned value consistent with any itemized or unit pricing submitted with Contractor's bid.

(A) **Measurements for Unit Price Work.** Materials and items of Work to be paid for on the basis of unit pricing will be measured according to the methods specified in the Contract Documents.

(B) **Deleted or Reduced Work.** Contractor will not be compensated for Work that City has deleted or reduced in scope, except for any labor, material, or equipment costs for such Work that Contractor reasonably incurred before Contractor learned that the Work could be deleted or reduced. Contractor will only be compensated for those actual, direct and documented costs incurred, and will not be entitled to any mark up for overhead or lost profits.

**8.2 Progress Payments.** Following the last day of each month, or as otherwise required by the Special Conditions or Specifications, Contractor will submit to the Project Manager a monthly application for payment for Work performed during the preceding month based on the estimated value of the Work performed during that preceding month.

(A) **Application for Payment.** Each application for payment must be itemized to include labor, materials, and equipment incorporated into the Work, and materials and equipment delivered to the Project site, as well as authorized and approved Change Orders. Each payment application must be supported by the unit prices submitted with Contractor's Bid Schedule and/or schedule of values and any other substantiating data required by the Contract Documents.

(B) **Payment of Undisputed Amounts.** City will pay the undisputed amount due within 30 days after Contractor has submitted a complete and accurate payment application, subject to Public Contract Code § 20104.50. City will deduct a percentage from each progress payment as retention, as set forth in Section 8.5, below, and may deduct or withhold additional amounts as set forth in Section 8.3, below.

**8.3 Adjustment of Payment Application.** City may adjust or reject the amount requested in a payment application, including application for Final Payment, in whole or in part, if the amount requested is disputed or unsubstantiated. Contractor will be notified in writing of the basis for the modification to the amount requested. City may also deduct or withhold from payment otherwise due based upon any of the circumstances and amounts listed below. Sums withheld from payment otherwise due will be released when the basis for that withholding has been remedied and no longer exists.

(A) For Contractor's unexcused failure to perform the Work as required by the Contract Documents, including correction or completion of punch list items, City may withhold or deduct an amount based on the City's estimated cost to correct or complete the Work.

(B) For loss or damage caused by Contractor or its Subcontractors arising out of or relating to performance of the Work or any failure to protect the Project site, City may deduct an amount based on the estimated cost to repair or replace.

(C) For Contractor's failure to pay its Subcontractors and suppliers when payment is due, City may withhold an amount equal to the total of past due payments and may opt to pay that amount separately via joint check pursuant to Section 8.6(B), Joint Checks.

(D) For Contractor's failure to timely correct rejected, nonconforming, or defective Work, City may withhold or deduct an amount based on the City's estimated cost to correct or complete the Work.

(E) For any unreleased stop notice, City may withhold 125% of the amount claimed.

(F) For Contractor's failure to submit any required schedule or schedule update in the manner specified or within the time specified in the Contract Documents, City may withhold an amount equal to five percent of the total amount requested until Contractor complies with its schedule submittal obligations.

(G) For Contractor's failure to maintain or submit as-built documents in the manner specified or within the time specified in the Contract Documents, City may withhold or deduct an amount based on the City's cost to prepare the as-builts.

(H) For Work performed without Shop Drawings that have been accepted by City, when accepted Shop Drawings are required before proceeding with the Work, City may deduct an amount based on the estimated cost to correct unsatisfactory Work or diminution in value.

(I) For fines, payments, or penalties assessed under the Labor Code, City may deduct from payments due to Contractor as required by Laws and as directed by the Division of Labor Standards Enforcement.

(J) For any other fines, payments, or penalties assessed against the City relating to Contractor's acts or omissions, including violations of Laws, City may withhold or deduct such amounts from payment otherwise due to Contractor.

(K) For any other costs or charges that may be withheld or deducted from payments to Contractor, as provided in the Contract Documents, including liquidated damages, City may withhold or deduct such amounts from payment otherwise due to Contractor.

**8.4 Early Occupancy.** Neither City's payment of progress payments nor its partial or full use or occupancy of the Project constitutes acceptance of any part of the Work.

**8.5 Retention.** City will retain five percent of the full amount due on each progress payment (i.e., the amount due before any withholding or deductions pursuant to Section 8.3, Adjustment of Payment Application), or the percentage stated in the Notice Inviting Bids, whichever is greater, as retention to ensure full and satisfactory performance of the Work. Contractor is not entitled to any reduction in the rate of withholding at any time, nor to release of any retention before 35 days following City's acceptance of the Project.

(A) **Substitution of Securities.** As provided by Public Contract Code § 22300, Contractor may request in writing that it be allowed, at its sole expense, to substitute securities for the retention withheld by City. Any escrow agreement entered into pursuant to this provision must fully comply with Public Contract Code § 22300 and will be subject to approval as to form by City's legal counsel. If City exercises its right to draw upon such securities in the event of default pursuant to section (7) of the statutory Escrow Agreement for Security Deposits in Lieu of Retention, pursuant to subdivision (g) of Public Contract Code § 22300 ("Escrow Agreement"), and if Contractor disputes that it is in default, its sole remedy is to comply with the dispute resolution procedures in Article 12 and the provisions therein. It is agreed that for purposes of this paragraph, an event of default includes City's rights pursuant to these Contract Documents to withhold or deduct sums from retention, including withholding or deduction for liquidated damages, incomplete or defective Work, stop payment notices, or backcharges. It is further agreed

that if any individual authorized to give or receive written notice on behalf of a party pursuant to section (10) of the Escrow Agreement are unavailable to give or receive notice on behalf of that party due to separation from employment, retirement, death, or other circumstances, the successor or delegee of the named individual is deemed to be the individual authorized to give or receive notice pursuant to section (10) of the Escrow Agreement.

(B) **Release of Undisputed Retention.** All undisputed retention, less any amounts that may be assessed as liquidated damages, retained for stop notices, or otherwise withheld pursuant to Section 8.3, Adjustment of Payment Application, will be released as Final Payment to Contractor no sooner than 35 days following recordation of the notice of completion, and no later than 60 days following acceptance of the Project by City's governing body or authorized designee pursuant to Section 11.1(C), Acceptance, or, if the Project has not been accepted, no later than 60 days after the Project is otherwise considered complete pursuant to Public Contract Code § 7107(c).

**8.6 Payment to Subcontractors and Suppliers.** Each month, Contractor must promptly pay each Subcontractor and supplier the value of the portion of labor, materials, and equipment incorporated into the Work or delivered to the Project site by the Subcontractor or supplier during the preceding month. Such payments must be made in accordance with the requirements of Laws pertaining to such payments, and those of the Contract Documents and applicable subcontract or supplier contract.

(A) **Withholding for Stop Notice.** Pursuant to Civil Code § 9358, City will withhold 125% of the amount claimed by an unreleased stop notice, a portion of which may be retained by City for the costs incurred in handling the stop notice claim, including attorneys' fees and costs, as authorized by law.

(B) **Joint Checks.** City reserves the right, acting in its sole discretion, to issue joint checks made payable to Contractor and a Subcontractor or supplier, if City determines this is necessary to ensure fair and timely payment for a Subcontractor or supplier who has provided services or goods for the Project. As a condition to release of payment by a joint check, the joint check payees may be required to execute a joint check agreement in a form provided or approved by the City Attorney's Office. The joint check payees will be jointly and severally responsible for the allocation and disbursement of funds paid by joint check. Payment by joint check will not be construed to create a contractual relationship between City and a Subcontractor or supplier of any tier beyond the scope of the joint check agreement.

**8.7 Final Payment.** Contractor's application for Final Payment must comply with the requirements for submitting an application for a progress payment as stated in Section 8.2, above. Corrections to previous progress payments, including adjustments to estimated quantities for unit priced items, may be included in the Final Payment. If Contractor fails to submit a timely application for Final Payment, City reserves the right to unilaterally process and issue Final Payment without an application from Contractor in order to close out the Project. For the purposes of determining the deadline for Claim submission pursuant to Article 12, the date of Final Payment is deemed to be the date that City acts to release undisputed retention as final payment to Contractor, or otherwise provides written notice to Contractor of Final Payment or that no undisputed funds remain available for Final Payment due to offsetting withholdings or deductions pursuant to Section 8.3, Adjustment of Payment Application. If the amount due from Contractor to City exceeds the amount of Final Payment, City retains the right to recover the balance from Contractor or its sureties.

- 8.8 Release of Claims.** City may, at any time, require that payment of the undisputed portion of any progress payment or Final Payment be contingent upon Contractor furnishing City with a written waiver and release of all claims against City arising from or related to the portion of Work covered by those undisputed amounts subject to the limitations of Public Contract Code § 7100. Any disputed amounts may be specifically excluded from the release.
- 8.9 Warranty of Title.** Contractor warrants that title to all work, materials, or equipment incorporated into the Work and included in a request for payment will pass over to City free of any claims, liens, or encumbrances upon payment to Contractor.

## **Article 9 - Labor Provisions**

- 9.1 Discrimination Prohibited.** Discrimination against any prospective or present employee engaged in the Work on grounds of race, color, ancestry, national origin, ethnicity, religion, sex, sexual orientation, age, disability, or marital status is strictly prohibited. Contractor and its Subcontractors are required to comply with all applicable Laws prohibiting discrimination, including the California Fair Employment and Housing Act (Govt. Code § 12900 et seq.), Government Code § 11135, and Labor Code §§ 1735, 1777.5, 1777.6, and 3077.5.
- 9.2 Labor Code Requirements.**
- (A) **Eight Hour Day.** Pursuant to Labor Code § 1810, eight hours of labor constitute a legal day's work under this Contract.
- (B) **Penalty.** Pursuant to Labor Code § 1813, Contractor will forfeit to City as a penalty, the sum of \$25.00 for each day during which a worker employed by Contractor or any Subcontractor is required or permitted to work more than eight hours in any one calendar day or more than 40 hours per calendar week, except if such workers are paid overtime under Labor Code § 1815.
- (C) **Apprentices.** Contractor is responsible for compliance with the requirements governing employment and payment of apprentices, as set forth in Labor Code § 1777.5, which is fully incorporated by reference.
- (D) **Notices.** Pursuant to Labor Code § 1771.4, Contractor is required to post all job site notices prescribed by Laws.
- 9.3 Prevailing Wages.** Each worker performing Work under this Contract that is covered under Labor Code §§ 1720, 1720.3, or 1720.9, including cleanup at the Project site, must be paid at a rate not less than the prevailing wage as defined in §§ 1771 and 1774 of the Labor Code. The prevailing wage rates are on file with the City and available online at <http://www.dir.ca.gov/dlsr>. Contractor must post a copy of the applicable prevailing rates at the Project site.
- (A) **Penalties.** Pursuant to Labor Code § 1775, Contractor and any Subcontractor will forfeit to City as a penalty up to \$200.00 for each calendar day, or portion thereof, for each worker paid less than the applicable prevailing wage rate. Contractor must also pay each worker the difference between the applicable prevailing wage rate and the amount actually paid to that worker.
- (B) **Federal Requirements.** If this Project is subject to federal prevailing wage requirements in addition to California prevailing wage requirements, Contractor and its

Subcontractors are required to pay the higher of the currently applicable state or federal prevailing wage rates.

**9.4 Payroll Records.** Contractor must comply with the provisions of Labor Code §§ 1771.4, 1776, and 1812 and all implementing regulations, which are fully incorporated by this reference, including requirements for monthly electronic submission of payroll records to the DIR.

(A) **Contractor and Subcontractor Obligations.** Contractor and each Subcontractor must keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed in connection with the Work. Each payroll record must contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

(1) The information contained in the payroll record is true and correct; and

(2) Contractor or the Subcontractor has complied with the requirements of Labor Code §§ 1771, 1811, and 1815 for any Work performed by its employees on the Project.

(B) **Certified Record.** A certified copy of an employee's payroll record must be made available for inspection or furnished to the employee or his or her authorized representative on request, to City, to the Division of Labor Standards Enforcement, to the Division of Apprenticeship Standards of the DIR, and as further required by the Labor Code.

(C) **Enforcement.** Upon notice of noncompliance with Labor Code § 1776, Contractor or Subcontractor has ten days in which to comply with the requirements of this section. If Contractor or Subcontractor fails to do so within the ten-day period, Contractor or Subcontractor will forfeit a penalty of \$100.00 per day, or portion thereof, for each worker for whom compliance is required, until strict compliance is achieved. Upon request by the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement, these penalties will be withheld from payments then due to Contractor.

**9.5 Labor Compliance.** Pursuant to Labor Code § 1771.4, the Contract for this Project is subject to compliance monitoring and enforcement by the DIR.

## **Article 10 - Safety Provisions**

**10.1 Safety Precautions and Programs.** Contractor and its Subcontractors are fully responsible for safety precautions and programs, and for the safety of persons and property in the performance of the Work. Contractor and its Subcontractors must at all times comply with all applicable health and safety Laws and seek to avoid injury, loss, or damage to persons or property by taking reasonable steps to protect its employees and other persons at any Worksite, materials and equipment stored on or off site, and property at or adjacent to any Worksite.

(A) **Reporting Requirements.** Contractor must immediately notify the City of any death, serious injury or illness resulting from Work on the Project. Contractor must immediately provide a written report to City of each recordable accident or injury occurring at any Worksite within 24 hours of the occurrence. The written report must include: (1) the name and address of the injured or deceased person; (2) the name and

address of each employee of Contractor or of any Subcontractor involved in the incident; (3) a detailed description of the incident, including precise location, time, and names and contact information for known witnesses; and (4) a police or first responder report, if applicable. If Contractor is required to file an accident report with a government agency, Contractor will provide a copy of the report to City.

(B) **Legal Compliance.** Contractor's safety program must comply with the applicable legal and regulatory requirements. Contractor must provide City with copies of all notices required by Laws.

(C) **Contractor's Obligations.** Any damage or loss caused by Contractor arising from the Work which is not insured under property insurance must be promptly remedied by Contractor.

(D) **Remedies.** If City determines, in its sole discretion, that any part of the Work or Project site is unsafe, City may, without assuming responsibility for Contractor's safety program, require Contractor or its Subcontractor to cease performance of the Work or to take corrective measures to City's satisfaction. If Contractor fails to promptly take the required corrective measures, City may perform them and deduct the cost from the Contract Price. Contractor agrees it is not entitled to submit a Claim for damages, for an increase in Contract Price, or for a change in Contract Time based on Contractor's compliance with City's request for corrective measures pursuant to this provision.

**10.2 Hazardous Materials.** Unless otherwise specified in the Contract Documents, this Contract does not include the removal, handling, or disturbance of any asbestos or other Hazardous Materials. If Contractor encounters materials on the Project site that Contractor reasonably believes to be asbestos or other Hazardous Materials, and the asbestos or other Hazardous Materials have not been rendered harmless, Contractor may continue Work in unaffected areas reasonably believed to be safe, but must immediately cease work on the area affected and report the condition to City. No asbestos, asbestos-containing products or other Hazardous Materials may be used in performance of the Work.

**10.3 Material Safety.** Contractor is solely responsible for complying with § 5194 of Title 8 of the California Code of Regulations, including by providing information to Contractor's employees about any hazardous chemicals to which they may be exposed in the course of the Work. A hazard communication program and other forms of warning and training about such exposure must be used. Contractor must also maintain Safety Data Sheets ("SDS") at the Project site, as required by Laws, for materials or substances used or consumed in the performance of the Work. The SDS will be accessible and available to Contractor's employees, Subcontractors, and City.

(A) **Contractor Obligations.** Contractor is solely responsible for the proper delivery, handling, use, storage, removal, and disposal of all materials brought to the Project site and/or used in the performance of the Work. Contractor must notify the Engineer if a specified product or material cannot be used safely.

(B) **Labeling.** Contractor must ensure proper labeling on any material brought onto the Project site so that any persons working with or in the vicinity of the material may be informed as to the identity of the material, any potential hazards, and requirements for proper handling, protections, and disposal.

**10.4 Hazardous Condition.** Contractor is solely responsible for determining whether a hazardous condition exists or is created during the course of the Work, involving a risk of bodily harm to any person or risk of damage to any property. If a hazardous condition

exists or is created, Contractor must take all precautions necessary to address the condition and ensure that the Work progresses safely under the circumstances. Hazardous conditions may result from, but are not limited to, use of specified materials or equipment, the Work location, the Project site condition, the method of construction, or the way any Work must be performed.

- 10.5 Emergencies.** In an emergency affecting the safety or protection of persons, Work, or property at or adjacent to any Worksite, Contractor must take reasonable and prompt actions to prevent damage, injury, or loss, without prior authorization from the City if, under the circumstances, there is inadequate time to seek prior authorization from the City.
- 10.6 Confined Space Operations.** If the Work requires a confined space entry, including, but not limited to, manhole or water storage tank entry, Contractor must obtain a confined space entry permit pursuant to Cal/OSHA regulations, as set forth in 8 CCR § 5156 et seq. For any confined space entry for construction operations regulated by 8 CCR § 1502, Contractor must comply with 8 CCR § 5158. For any other confined space operations, Contractor must comply with 8 CCR § 5157. With respect to entry to any City-maintained confined space, Contractor is responsible for obtaining any available information regarding hazards and operations for any City-maintained confined spaces, pursuant to 8 CCR § 5157. The City-maintained Confined Space Entry Manual is available for viewing at the Water Department or Transportation and Public Works Department office. Contractor must immediately notify the Engineer of any previously unidentified hazards confronted or created during confined space entry.

## **Article 11 - Completion and Warranty Provisions**

### **11.1 Final Completion.**

(A) ***Final Inspection and Punch List.*** When the Work required by this Contract is fully performed, Contractor must provide written notification to City requesting final inspection. The Engineer will schedule the date and time for final inspection, which must include Contractor's primary representative for this Project and its superintendent. Based on that inspection, City will prepare a punch list of any items that are incomplete, missing, defective, incorrectly installed, or otherwise not compliant with the Contract Documents. The punch list to Contractor will specify the time by which all of the punch list items must be completed or corrected. The punch list may include City's estimated cost to complete each punch list item if Contractor fails to do so within the specified time. The omission of any non-compliant item from a punch list will not relieve Contractor from fulfilling all requirements of the Contract Documents. Contractor's failure to complete any punch list item within the time specified in the punch list will not waive or abridge its warranty obligations for any such items that must be completed by the City or by a third party retained by the City due to Contractor's failure to timely complete any such outstanding item.

(B) ***Requirements for Final Completion.*** Final Completion will be achieved upon completion or correction of all punch list items, as verified by City's further inspection, and upon satisfaction of all other Contract requirements, including any commissioning required under the Contract Documents and submission of all final submittals, including instructions and manuals as required under Section 7.10, and complete, final as-built drawings as required under Section 7.11, all to City's satisfaction.

(C) ***Acceptance.*** The Project will be considered accepted upon the date of the Engineer's issuance of a written notice of acceptance. In order to avoid delay of Project

close out, the City may elect, acting in its sole discretion, to accept the Project as complete subject to exceptions for punch list items that are not completed within the time specified in the punch list.

(D) **Final Payment and Release of Retention.** Final Payment and release of retention, less any sums withheld pursuant to the provisions of the Contract Documents, will not be made sooner than 35 days after recordation of the notice of completion. If Contractor fails to complete all of the punch list items within the specified time, City may withhold up to 150% of City's estimated cost to complete each of the remaining items from Final Payment and may use the withheld retention to pay for the costs to self-perform the outstanding items or to retain a third party to complete any such outstanding punch list item.

## 11.2 Warranty.

(A) **General.** Contractor warrants that all materials and equipment will be new unless otherwise specified, of good quality, in conformance with the Contract Documents, and free from defective workmanship and materials. Contractor further warrants that the Work will be free from material defects not intrinsic in the design or materials required in the Contract Documents. Contractor warrants that materials or items incorporated into the Work comply with the requirements and standards in the Contract Documents, including compliance with Laws, and that any Hazardous Materials encountered or used were handled as required by Laws. At City's request, Contractor must furnish satisfactory evidence of the quality and type of materials and equipment furnished. Contractor's warranty does not extend to damage caused by normal wear and tear, or improper use or maintenance.

(B) **Warranty Period.** Contractor's warranty must guarantee its Work for a period of one year from the date of Project acceptance (the "Warranty Period"), except when a longer guarantee is provided by a supplier or manufacturer or is required by the Specifications or Special Conditions. Contractor must obtain from its Subcontractors, suppliers and manufacturers any special or extended warranties required by the Contract Documents.

(C) **Warranty Documents.** As a condition precedent to Final Completion, Contractor must supply City with all warranty and guarantee documents relevant to equipment and materials incorporated into the Work and guaranteed by their suppliers or manufacturers.

(D) **Subcontractors.** The warranty obligations in the Contract Documents apply to Work performed by Contractor and its Subcontractors, and Contractor agrees to be co-guarantor of such Work.

(E) **Contractor's Obligations.** Upon written notice from City to Contractor of any defect in the Work discovered during the Warranty Period, Contractor or its responsible Subcontractor must promptly correct the defective Work at its own cost. Contractor's obligation to correct defects discovered during the Warranty Period will continue past the expiration of the Warranty Period as to any defects in Work for which Contractor was notified prior to expiration of the Warranty Period. Work performed during the Warranty Period ("Warranty Work") will be subject to the warranty provisions in this Section 11.2 for a one-year period that begins upon completion of such Warranty Work to City's satisfaction.

(F) **City's Remedies.** If Contractor or its responsible Subcontractor fails to correct defective Work within ten days following notice by City, or sooner if required by the



circumstances, City may correct the defects to conform with the Contract Documents at Contractor's sole expense. Contractor must reimburse City for its costs in accordance with subsection (H), below.

(G) **Emergency Repairs.** In cases of emergency where any delay in correcting defective Work could cause harm, loss or damage, City may immediately correct the defects to conform with the Contract Documents at Contractor's sole expense. Contractor or its surety must reimburse City for its costs in accordance with subsection (H), below.

(H) **Reimbursement.** Contractor must reimburse City for its costs to repair under subsections (F) or (G), above, within 30 days following City's submission of a demand for payment pursuant to this provision. If City is required to initiate legal action to compel Contractor's compliance with this provision, and City is the prevailing party in such action, Contractor and its surety are solely responsible for all of City's attorney's fees and legal costs expended to enforce Contractor's warranty obligations herein, in addition to any and all costs City incurs to correct the defective Work.

**11.3 Use Prior to Final Completion.** City reserves the right to occupy or make use of the Project, or any portions of the Project, prior to Final Completion if City has determined that the Project or portion of it is in a condition suitable for the proposed occupation or use, and that it is in its best interest to occupy or make use of the Project, or any portions of it, prior to Final Completion.

(A) **Non-Waiver.** Occupation or use of the Project, in whole or in part, prior to Final Completion will not operate as acceptance of the Work or any portion of it, nor will it operate as a waiver of any of City's rights or Contractor's duties pursuant to these Contract Documents, and will not affect nor bear on the determination of the time of substantial completion with respect to any statute of repose pertaining to the time for filing an action for construction defect.

(B) **City's Responsibility.** City will be responsible for the cost of maintenance and repairs due to normal wear and tear with respect to those portions of the Project that are being occupied or used before Final Completion. The Contract Price or the Contract Time may be adjusted pursuant to the applicable provisions of these Contract Documents if, and only to the extent that, any occupation or use under this Section actually adds to Contractor's cost or time to complete the Work within the Contract Time.

**11.4 Substantial Completion.** For purposes of determining "substantial completion" with respect to any statute of repose pertaining to the time for filing an action for construction defect, "substantial completion" is deemed to mean the last date that Contractor or any Subcontractor performs Work on the Project prior to City acceptance of the Project, except for warranty work performed under this Article.

## **Article 12 - Dispute Resolution**

**12.1 Claims.** This Article applies to and provides the exclusive procedures for any Claim arising from or related to the Contract or performance of the Work.

(A) **Limitations.** A Claim may only include the portion of a previously rejected demand that remains in dispute between Contractor and City. With the exception of any dispute regarding the amount of money actually paid to Contractor as Final Payment, Contractor is not entitled to submit a Claim demanding a change in the Contract Time or the Contract Price, which has not previously been submitted to City in full compliance with Article 5 and Article 6, and subsequently rejected in whole or in part by City.

(B) **Scope of Article.** This Article is intended to provide the exclusive procedures for submission and resolution of Claims of any amount and applies in addition to the provisions of Public Contract Code § 9204 and § 20104 et seq., which are incorporated by reference herein.

(C) **No Work Delay.** Notwithstanding the submission of a Claim or any other dispute between the parties related to the Project or the Contract Documents, Contractor must perform the Work and may not delay or cease Work pending resolution of a Claim or other dispute, but must continue to diligently prosecute the performance and timely completion of the Work, including the Work pertaining to the Claim or other dispute.

(D) **Informal Resolution.** Contractor will make a good faith effort to informally resolve a dispute before initiating a Claim, preferably by face-to-face meeting between authorized representatives of Contractor and City.

**12.2 Claims Submission.** The following requirements apply to any Claim subject to this Article:

(A) **Substantiation.** The Claim must be submitted to City in writing by registered or certified mail with return receipt requested and clearly identified as a "Claim" submitted pursuant to this Article 12. The Claim must include all of the documents necessary to substantiate the Claim including the Change Order request that was rejected in whole or in part, and a copy of City's written rejection that is in dispute. The Claim must clearly identify and describe the dispute, including relevant references to applicable portions of the Contract Documents, and a chronology of relevant events. Any Claim for additional payment must include a complete, itemized breakdown of all known or estimated labor, materials, taxes, insurance, and subcontract, or other costs. Substantiating documentation such as payroll records, receipts, invoices, or the like, must be submitted in support of each component of claimed cost. Any Claim for an extension of time or delay costs must be substantiated with a schedule analysis and narrative depicting and explaining claimed time impacts.

(B) **Claim Format and Content.** A Claim must be submitted in the following format:

(1) Provide a cover letter, specifically identifying the submission as a "Claim" submitted under this Article 12 and specifying the requested remedy (e.g., amount of proposed change to Contract Price and/or change to Contract Time).

(2) Provide a summary of each Claim, including underlying facts and the basis for entitlement, and identify each specific demand at issue, including the specific Change Order request (by number and submittal date), and the date of City's rejection of that demand, in whole or in part.

(3) Provide a detailed explanation of each issue in dispute. For multiple issues included within a single Claim or for multiple Claims submitted concurrently, separately number and identify each individual issue or Claim, and include the following for each separate issue or Claim:

a. A succinct statement of the matter in dispute, including Contractor's position and the basis for that position;

b. Identify and attach all documents that substantiate the Claim, including relevant provisions of the Contract Documents, RFIs,

calculations, and schedule analysis (see subsection (A), Substantiation, above);

c. A chronology of relevant events; and

d. Analysis and basis for claimed changes to Contract Price, Contract Time, or any other remedy requested.

(4) Provide a summary of issues and corresponding claimed damages. If, by the time of the Claim submission deadline (below), the precise amount of the requested change in the Contract Price or Contract Time is not yet known, Contractor must provide a good faith estimate, including the basis for that estimate, and must identify the date by which it is anticipated that the Claim will be updated to provide final amounts.

(5) Include the following certification, executed by Contractor's authorized representative:

"The undersigned Contractor certifies under penalty of perjury that its statements and representations in this Claim submittal are true and correct. Contractor warrants that this Claim submittal is comprehensive and complete as to the matters in dispute, and agrees that any costs, expenses, or delay not included herein are deemed waived."

(C) ***Submission Deadlines.***

(1) A Claim disputing rejection of a request for a change in the Contract Time or Contract Price must be submitted within 21 days following the date that City notified Contractor in writing that a request for a change in the Contract Time or Contract Price, duly submitted in compliance with Article 5 and Article 6, has been rejected in whole or in part. A Claim disputing the terms of a unilateral Change Order must be submitted within 21 days following the date of issuance of the unilateral Change Order. These Claim deadlines apply even if Contractor cannot yet quantify the total amount of any requested change in the Contract Time or Contract Price. If the Contractor cannot quantify those amounts, it must submit an estimate of the amounts claimed pending final determination of the requested remedy by Contractor.

(2) With the exception of any dispute regarding the amount of Final Payment, any Claim must be filed on or before the date of Final Payment or will be deemed waived.

(3) A Claim disputing the amount of Final Payment must be submitted within 21 days of the effective date of Final Payment, under Section 8.7, Final Payment.

(4) Strict compliance with these Claim submission deadlines is necessary to ensure that any dispute may be mitigated as soon as possible, and to facilitate cost-efficient administration of the Project. ***Any Claim that is not submitted within the specified deadlines will be deemed waived by Contractor.***

**12.3 City's Response.** City will respond within 45 days of receipt of the Claim with a written statement identifying which portion(s) of the Claim are disputed, unless the 45-day period is extended by mutual agreement of City and Contractor or as otherwise allowed under Public Contract Code § 9204. However, if City determines that the Claim is not adequately substantiated pursuant to Section 12.2(A), Substantiation, City may first

request in writing, within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to defenses to the Claim that City may have against the Claim.

(A) **Additional Information.** If additional information is thereafter required, it may be requested and provided upon mutual agreement of City and Contractor. If Contractor's Claim is based on estimated amounts, Contractor has a continuing duty to update its Claim as soon as possible with information on actual amounts in order to facilitate prompt and fair resolution of the Claim.

(B) **Non-Waiver.** Any failure by City to respond within the times specified above will not be construed as acceptance of the Claim, in whole or in part, or as a waiver of any provision of these Contract Documents.

**12.4 Meet and Confer.** If Contractor disputes City's written response, or City fails to respond within the specified time, within 15 days of receipt of City's response or within 15 days of City's failure to respond within the applicable 45-day time period under Section 12.3, respectively, Contractor may notify City of the dispute in writing sent by registered or certified mail, return receipt requested, and demand an informal conference to meet and confer for settlement of the issues in dispute. If Contractor fails to notify City of the dispute and demand an informal conference to meet and confer in writing within the specified time, Contractor's Claim will be deemed waived.

(A) **Schedule Meet and Confer.** Upon receipt of the demand to meet and confer, City will schedule the meet and confer conference to be held within 30 days, or later if needed to ensure the mutual availability of each of the individuals that each party requires to represent its interests at the meet and confer conference.

(B) **Location for Meet and Confer.** The meet and confer conference will be scheduled at a location at or near City's principal office.

(C) **Written Statement After Meet and Confer.** Within ten working days after the meet and confer has concluded, City will issue a written statement identifying which portion(s) of the Claim remain in dispute, if any.

(D) **Submission to Mediation.** If the Claim or any portion remains in dispute following the meet and confer conference, within ten working days after the City issues the written statement identifying any portion(s) of the Claim remaining in dispute, the Contractor may identify in writing disputed portion(s) of the Claim, which will be submitted for mediation, as set forth below.

## **12.5 Mediation and Government Code Claims.**

(A) **Mediation.** Within ten working days after the City issues the written statement identifying any portion(s) of the Claim remaining in dispute following the meet and confer, City and Contractor will mutually agree to a mediator, as provided under Public Contract Code § 9204. Mediation will be scheduled to ensure the mutual availability of the selected mediator and all of the individuals that each party requires to represent its interests. If there are multiple Claims in dispute, the parties may agree to schedule the mediation to address all outstanding Claims at the same time. The parties will share the costs of the mediator and mediation fees equally, but each party is otherwise solely and separately responsible for its own costs to prepare for and participate in the mediation, including costs for its legal counsel or any other consultants.

(B) **Government Code Claims.**

(1) Timely presentation of a Government Code Claim is a condition precedent to filing any legal action based on or arising from the Contract. Compliance with the Claim submission requirements in this Article 12 is a condition precedent to filing a Government Code Claim.

(2) The time for filing a Government Code Claim will be tolled from the time Contractor submits its written Claim pursuant to Section 12.2, above, until the time that Claim is denied in whole or in part at the conclusion of the meet and confer process, including any period of time used by the meet and confer process. However, if the Claim is submitted to mediation, the time for filing a Government Code Claim will be tolled until conclusion of the mediation, including any continuations, if the Claim is not fully resolved by mutual agreement of the parties during the mediation or any continuation of the mediation.

**12.6 Tort Claims.** This Article does not apply to tort claims and nothing in this Article is intended nor will be construed to change the time periods for filing tort-based Government Code Claims.

**12.7 Arbitration.** City does not consent to arbitration unless required by Laws. It is expressly agreed, under Code of Civil Procedure § 1296, that in any arbitration to resolve a dispute relating to this Contract, the arbitrator's award must be supported by law and substantial evidence.

**12.8 Burden of Proof and Limitations.** Contractor bears the burden of proving entitlement to and the amount of any claimed damages. Contractor is not entitled to damages calculated on a total cost basis, but must prove actual damages. Contractor is not entitled to speculative, special, or consequential damages, including home office overhead or any form of overhead not directly incurred at the Project site or any other Worksite; lost profits; loss of productivity; lost opportunity to work on other projects; diminished bonding capacity; increased cost of financing for the Project; extended capital costs; non-availability of labor, material or equipment due to delays; or any other indirect loss arising from the Contract. The Eichleay Formula or similar formula will not be used for any recovery under the Contract. The City will not be directly liable to any Subcontractor or supplier.

**12.9 Legal Proceedings.** In any legal proceeding that involves enforcement of any requirements of the Contract Documents, the finder of fact will receive detailed instructions on the meaning and operation of the Contract Documents, including conditions, limitations of liability, remedies, claim procedures, and other provisions bearing on the defenses and theories of liability. Detailed findings of fact will be requested to verify enforcement of the Contract Documents. All of the City's remedies under the Contract Documents will be construed as cumulative, and not exclusive, and the City reserves all rights to all remedies available under law or equity as to any dispute arising from or relating to the Contract Documents or performance of the Work.

**12.10 Other Disputes.** The procedures in this Article 12 will apply to any and all disputes or legal actions, in addition to Claims, arising from or related to this Contract, including disputes regarding suspension or early termination of the Contract, unless and only to the extent that compliance with a procedural requirement is expressly and specifically waived by City. Nothing in this Article is intended to delay suspension or termination under Article 13.

## Article 13 - Suspension and Termination

**13.1 Suspension for Cause.** In addition to all other remedies available to City, if Contractor fails to perform or correct Work in accordance with the Contract Documents, including non-compliance with applicable environmental or health and safety Laws, City may immediately order the Work, or any portion of it, suspended until the circumstances giving rise to the suspension have been eliminated to City's satisfaction.

(A) **Notice of Suspension.** Upon receipt of City's written notice to suspend the Work, in whole or in part, except as otherwise specified in the notice of suspension, Contractor and its Subcontractors must promptly stop Work as specified in the notice of suspension; comply with directions for cleaning and securing the Worksite; and protect the completed and in-progress Work and materials. Contractor is solely responsible for any damages or loss resulting from its failure to adequately secure and protect the Project.

(B) **Resumption of Work.** Upon receipt of the City's written notice to resume the suspended Work, in whole or in part, except as otherwise specified in the notice to resume, Contractor and its Subcontractors must promptly re-mobilize and resume the Work as specified; and within ten days from the date of the notice to resume, Contractor must submit a recovery schedule, prepared in accordance with the Contract Documents, showing how Contractor will complete the Work within the Contract Time.

(C) **Failure to Comply.** Contractor will not be entitled to an increase in the Contract Time or Contract Price for a suspension occasioned by Contractor's failure to comply with the Contract Documents.

(D) **No Duty to Suspend.** City's right to suspend the Work will not give rise to a duty to suspend the Work, and City's failure to suspend the Work will not constitute a defense to Contractor's failure to comply with the requirements of the Contract Documents.

**13.2 Suspension for Convenience.** City reserves the right to suspend, delay, or interrupt the performance of the Work in whole or in part, for a period of time determined to be appropriate for City's convenience. Upon notice by City pursuant to this provision, Contractor must immediately suspend, delay, or interrupt the Work and secure the Project site as directed by City except for taking measures to protect completed or in-progress Work as directed in the suspension notice, and subject to the provisions of Section 13.1(A) and (B), above. If Contractor submits a timely request for a Change Order in compliance with Articles 5 and 6, the Contract Price and the Contract Time will be equitably adjusted by Change Order pursuant to the terms of Articles 5 and 6 to reflect the cost and delay impact occasioned by such suspension for convenience, except to the extent that any such impacts were caused by Contractor's failure to comply with the Contract Documents or the terms of the suspension notice or notice to resume. However, the Contract Time will only be extended if the suspension causes or will cause unavoidable delay in Final Completion. If Contractor disputes the terms of a Change Order issued for such equitable adjustment due to suspension for convenience, its sole recourse is to comply with the Claim procedures in Article 12.

**13.3 Termination for Default.** City may declare that Contractor is in default of the Contract for a material breach of or inability to fully, promptly, or satisfactorily perform its obligations under the Contract.

(A) **Default.** Events giving rise to a declaration of default include Contractor's refusal or failure to supply sufficient skilled workers, proper materials, or equipment to perform the Work within the Contract Time; Contractor's refusal or failure to make prompt

payment to its employees, Subcontractors, or suppliers or to correct defective Work or damage; Contractor's failure to comply with Laws, or orders of any public agency with jurisdiction over the Project; evidence of Contractor's bankruptcy, insolvency, or lack of financial capacity to complete the Work as required within the Contract Time; suspension, revocation, or expiration and nonrenewal of Contractor's license or DIR registration; Contractor's failure to procure, maintain, or renew insurance coverage or provide notice of any modifications or reductions in insurance coverage; dissolution, liquidation, reorganization, or other major change in Contractor's organization, ownership, structure, or existence as a business entity; unauthorized assignment of Contractor's rights or duties under the Contract; or any material breach of the Contract requirements.

(B) **Notice of Default and Opportunity to Cure.** Upon City's declaration that Contractor is in default due to a material breach of the Contract Documents, if City determines that the default is curable, City will afford Contractor the opportunity to cure the default within ten days of City's notice of default, or within a period of time reasonably necessary for such cure, including a shorter period of time if applicable.

(C) **Termination.** If Contractor fails to cure the default or fails to expediently take steps reasonably calculated to cure the default within the time period specified in the notice of default, City may issue written notice to Contractor and its performance bond surety of City's termination of the Contract for default.

(D) **Waiver.** Time being of the essence in the performance of the Work, if Contractor's surety fails to arrange for completion of the Work in accordance with the Performance Bond within seven calendar days from the date of the notice of termination pursuant to paragraph (C), City may immediately make arrangements for the completion of the Work through use of its own forces, by hiring a replacement contractor, or by any other means that City determines advisable under the circumstances. Contractor and its surety will be jointly and severally liable for any additional cost incurred by City to complete the Work following termination, where "additional cost" means all cost in excess of the cost City would have incurred if Contractor had timely completed Work without the default and termination. In addition, City will have the right to immediate possession and use of any materials, supplies, and equipment procured for the Project and located at the Project site or any Worksite on City property for the purposes of completing the remaining Work.

(E) **Compensation.** Within 30 days of receipt of updated as-builts, all warranties, manuals, instructions, or other required documents for Work installed to date, and delivery to City of all equipment and materials for the Project for which Contractor has already been compensated, Contractor will be compensated for the Work satisfactorily performed in compliance with the Contract Documents up to the effective date of the termination pursuant to the terms of Article 8, Payment, subject to City's rights to withhold or deduct sums from payment otherwise due pursuant to Section 8.3, and excluding any costs Contractor incurs as a result of the termination, including any cancellation or restocking charges or fees due to third parties. If Contractor disputes the amount of compensation determined by City, its sole recourse is to comply with the Claim Procedures in Article 12, by submitting a Claim no later than 30 days following notice from City of the total compensation to be paid by City.

(F) **Wrongful Termination.** If Contractor disputes the termination, its sole recourse is to comply with the Claim procedures in Article 12. If a court of competent jurisdiction or an arbitrator later determines that the termination for default was wrongful, the termination will be deemed to be a termination for convenience, and Contractor's damages will be strictly limited to the compensation provided for termination for convenience under Section 13.4, below. Contractor waives any claim for any other

damages for wrongful termination including special or consequential damages, lost opportunity costs, or lost profits, and any award of damages is subject to Section 12.8, Burden of Proof and Limitations.

**13.4 Termination for Convenience.** City reserves the right, acting in its sole discretion, to terminate all or part of the Contract for convenience upon written notice to Contractor.

(A) **Compensation to Contractor.** In the event of City's termination for convenience, Contractor waives any claim for damages, including for loss of anticipated profits from the Project. The following will constitute full and fair compensation to Contractor, and Contractor will not be entitled to any additional claim or compensation:

(1) *Completed Work.* The value of its Work satisfactorily performed as of the date notice of termination is received, based on Contractor's schedule of values and unpaid costs for items delivered to the Project site that were fabricated for incorporation in the Work;

(2) *Demobilization.* Demobilization costs specified in the schedule of values, or if demobilization costs were not provided in a schedule of values pursuant to Section 8.1, then based on actual, reasonable, and fully documented demobilization costs; and

(3) *Termination Markup.* Five percent of the total value of the Work performed as of the date of notice of termination, including reasonable, actual, and documented costs to comply with the direction in the notice of termination for convenience, and demobilization costs, which is deemed to cover all overhead and profit to date.

(B) **Disputes.** If Contractor disputes the amount of compensation determined by City pursuant to paragraph (A), above, its sole recourse is to comply with the Claim procedures in Article 12, by submitting a Claim no later than 30 days following notice from City of total compensation to be paid by City.

**13.5 Actions Upon Termination for Default or Convenience.** The following provisions apply to any termination under this Article, whether for default or convenience, and whether in whole or in part.

(A) **General.** Upon termination, City may immediately enter upon and take possession of the Project and the Work and all tools, equipment, appliances, materials, and supplies procured or fabricated for the Project. Contractor will transfer title to and deliver all completed Work and all Work in progress to City.

(B) **Submittals.** Unless otherwise specified in the notice of termination, Contractor must immediately submit to City all designs, drawings, as-built drawings, Project records, contracts with vendors and Subcontractors, manufacturer warranties, manuals, and other such submittals or Work-related documents required under the terms of the Contract Documents, including incomplete documents or drafts.

(C) **Close Out Requirements.** Except as otherwise specified in the notice of termination, Contractor must comply with all of the following:

(1) Immediately stop the Work, except for any Work that must be completed pursuant to the notice of termination and comply with City's instructions for cessation of labor and securing the Project and any other Worksite(s).



(2) Comply with City's instructions to protect the completed Work and materials, using best efforts to minimize further costs.

(3) Contractor must not place further orders or enter into new subcontracts for materials, equipment, services or facilities, except as may be necessary to complete any portion of the Work that is not terminated.

(4) As directed in the notice, Contractor must assign to City or cancel existing subcontracts that relate to performance of the terminated Work, subject to any prior rights, if any, of the surety for Contractor's performance bond, and settle all outstanding liabilities and claims, subject to City's approval.

(5) As directed in the notice, Contractor must use its best efforts to sell any materials, supplies, or equipment intended solely for the terminated Work in a manner and at market rate prices acceptable to City.

(D) **Payment Upon Termination.** Upon completion of all termination obligations, as specified herein and in the notice of termination, Contractor will submit its request for Final Payment, including any amounts due following termination pursuant to this Article 13. Payment will be made in accordance with the provisions of Article 8, based on the portion of the Work satisfactorily completed, including the close out requirements, and consistent with the previously submitted schedule of values and unit pricing, including demobilization costs. Adjustments to Final Payment may include deductions for the cost of materials, supplies, or equipment retained by Contractor; payments received for sale of any such materials, supplies, or equipment, less re-stocking fees charged; and as otherwise specified in Section 8.3, Adjustment of Payment Application.

(E) **Continuing Obligations.** Regardless of any Contract termination, Contractor's obligations for portions of the Work already performed will continue and the provisions of the Contract Documents will remain in effect as to any claim, indemnity obligation, warranties, guarantees, submittals of as-built drawings, instructions, or manuals, record maintenance, or other such rights and obligations arising prior to the termination date.

## Article 14 - Miscellaneous Provisions

**14.1 Assignment of Unfair Business Practice Claims.** Under Public Contract Code § 7103.5, Contractor and its Subcontractors agree to assign to City all rights, title, and interest in and to all causes of action it may have under section 4 of the Clayton Act (15 U.S.C. § 15) or under the Cartwright Act (Chapter 2 (commencing with § 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the Contract or any subcontract. This assignment will be effective at the time City tenders Final Payment to Contractor, without further acknowledgement by the parties.

**14.2 Provisions Deemed Inserted.** Every provision of law required to be inserted in the Contract Documents is deemed to be inserted, and the Contract Documents will be construed and enforced as though such provision has been included. If it is discovered that through mistake or otherwise that any required provision was not inserted, or not correctly inserted, the Contract Documents will be deemed amended accordingly.

**14.3 Waiver.** City's waiver of a breach, failure of any condition, or any right or remedy contained in or granted by the provisions of the Contract Documents will not be effective unless it is in writing and signed by City. City's waiver of any breach, failure, right, or remedy will not be deemed a waiver of any other breach, failure, right, or remedy,

whether or not similar, nor will any waiver constitute a continuing waiver unless specified in writing by City.

- 14.4 Titles, Headings, and Groupings.** The titles and headings used and the groupings of provisions in the Contract Documents are for convenience only and may not be used in the construction or interpretation of the Contract Documents or relied upon for any other purpose.
- 14.5 Statutory and Regulatory References.** With respect to any amendments to any statutes or regulations referenced in these Contract Documents, the reference is deemed to be the version in effect on the date that bids were due.
- 14.6 Survival.** The provisions that survive termination or expiration of this Contract include Contract Section 11, Notice, and subsections 12.1, 12.2, 12.3, 12.4, 12.5, and 12.6 of Section 12, General Provisions; and the following provisions in these General Conditions: Section 2.2(J), Contractor's Records, Section 2.3(C), Termination, Section 3.7, Ownership, Section 4.2, Indemnity, Article 12, Dispute Resolution, and Section 11.2, Warranty.

END OF GENERAL CONDITIONS

## Special Conditions

**1. Pre-Construction Conference.** City will designate a date and time for a pre-construction conference with Contractor following Contract execution. Project administration procedures and coordination between City and Contractor will be discussed. Contractor must present City with the following information or documents at the conference, unless otherwise specified in the Notice to Proceed, for City's review and acceptance before the Work commences:

- 1.1** Name, 24-hour contact information, and qualifications of the proposed on-site superintendent;
- 1.2** List of all key Project personnel and their complete contact information, including email addresses and telephone numbers during regular hours and after hours;
- 1.3** Staging plans that identify the sequence of the Work, including any phases and alternative sequences or phases, with the goal of minimizing the impacts on residents, businesses and other operations in the Project vicinity;
- 1.4** If required, traffic control plans associated with the staging plans that are signed and stamped by a licensed traffic engineer;
- 1.5** Draft baseline schedule for the Work as required under Section 5.2 of the General Conditions, to be finalized within ten days after City issues the Notice to Proceed;
- 1.6** Breakdown of lump sum bid items, to be used for determining the value of Work completed for future progress payments to Contractor;
- 1.7** Schedule with list of Project submittals that require City review, and list of the proposed material suppliers;
- 1.8** Plan for coordination with affected utility owner(s) and compliance with any related permit requirements;
- 1.9** Videotape and photographs recording the conditions throughout the pre-construction Project site, showing the existing improvements and current condition of the curbs, gutters, sidewalks, signs, landscaping, streetlights, structures near the Project such as building faces, canopies, shades and fences, and any other features within the Project area limits;
- 1.10** If requested by City, Contractor's cash flow projections; and
- 1.11** Any other documents specified in the Special Conditions or Notice of Award.

## **2. Authorized Work Days and Hours.**

- 2.1 Authorized Work Days.** Except as expressly authorized in writing by City, Contractor is limited to performing Work on the Project on the following days of the week, excluding holidays observed by City: Monday – Friday

- 2.2 Authorized Work Hours.** Except as expressly authorized in writing by City, Contractor is limited to performing Work on the Project during the following hours: 7am – 4pm

**3. Normal Weather Delay Days.** This provision is intended to supplement the requirements of General Conditions Section 5.2 on Schedule Requirements and Section 5.3 on Delays and Extensions of Contract Time. Based on historic records for the Project location, Contractor's schedule should assume the following number of normal Weather Delay Days for each month:

| Month     | # Normal Weather Delay Days |
|-----------|-----------------------------|
| January   | 10                          |
| February  | 10                          |
| March     | 12                          |
| April     | 8                           |
| May       | 4                           |
| June      | 2                           |
| July      | 1                           |
| August    | 1                           |
| September | 2                           |
| October   | 5                           |
| November  | 8                           |
| December  | 13                          |

Weather Delay Days which do not occur during a given month based on the number of days allocated for that month (above) do not carry over to another month.

**4. Construction Manager Role and Authority.** The City of Santa Rosa is the Construction Manager for this Project. The Construction Manager will assist City in the management of the construction of the Project. The Construction Manager may perform services in the areas of supervision and coordination of the work of Contractor and/or other contractors, scheduling the Work, monitoring the progress of the Work, providing City with evaluations and recommendations concerning the quality of the Work, recommending the approval of progress payments to Contractor, or other services for the Project in accordance with the Construction Manager's contract with City.

- 4.1 Communications.** Contractor must submit all notices and communications relating to the Work directly to the Construction Manager in writing, as follows:

*Chad Anderson*  
*cadnerson@srcity.org*

With a copy to the Engineer:

*Peter Porata*  
*pporata@srcity.org*

- 4.2 On-Site Management and Communication Procedures.** The Construction Manager will provide and maintain a management team on the Project site to provide contract administration as an agent of City, and will establish and implement coordination and communication procedures among City, the Design Professional, Contractor, and others.

- 4.3 Contract Administration Procedures.** The Construction Manager will establish and implement procedures for reviewing and processing requests for clarifications and interpretations of the Contract Documents, Shop Drawings, samples, other submittals, schedule adjustments, Change Order proposals, written proposals for substitutions, payment applications, and maintenance of logs.
- 4.4 Pre-Construction Conference.** Contractor will attend the pre-construction conference, during which the Construction Manager will review the Contract administration procedures and Project requirements.
- 4.5 Contractor's Construction Schedule.** The Construction Manager will review Contractor's construction schedules and will verify that each schedule is prepared in accordance with the requirements of the Contract Documents.
- 5. Survey Staking.** Contractor is not responsible for providing the construction stakes for the Project. Contractor will coordinate directly with the Engineer for City-provided construction stakes. Contractor must submit a written request for staking to the Engineer at least four Working Days in advance of the date and time stakes are needed for the Work. Contractor must promptly notify the Engineer of any discrepancies found between City-provided staking and information provided by the Contract Documents. Contractor must preserve any City-provided construction stakes. If City is required to replace City-provided construction stakes, Contractor will be responsible for the cost thereof, which may be deducted from payments otherwise due to Contractor.
- 6. Close Out Requirements.** Contractor's close out requirements include the following, if applicable:
- 6.1** Contractor must replace, with thermoplastic, any existing striping within and adjacent to the Project site that is damaged during the Work. Partially damaged striping must be replaced in its entirety.
- 6.2** Contractor must replace any survey monuments that are damaged or removed during the Work, with a Record of Survey filed by a licensed land surveyor as required by California law.
- 6.3** Before removing any traffic control or street signs on the Project site, Contractor must take photographs showing their original locations. Upon completion of each phase of construction, Contractor must temporarily reset the signs at those locations. Contractor must then replace the signs permanently upon completion of the Work and the cost of their removal and replacement must be included in the Bid Proposal.
- 6.4** Contractor must maintain any rural mail boxes on the Project site and relocate them to their permanent locations as soon as possible in the course of the Work, to the satisfaction of the affected property owners and the postal service.
- 7. Value Engineering.** The Contractor may be entitled to additional compensation for cost reduction changes made pursuant to a value engineering proposal submitted by the Contractor, subject to the limitations of Public Contract Code § 7101, and in strict compliance with this Section 7. Contractor will not be entitled to any such additional compensation unless all of the following requirements have been met:

- 7.1** The Contractor must submit a written proposal for changes to the Plans or Specifications for the Project, in which it:
- (A) Identifies the written proposal as a proposal for cost reduction changes with reference to this section;
- (B) Clearly and specifically identifies the proposed cost reduction changes by describing in detail each of the changes proposed with specific references to each of the Specifications and Plans involved in the proposed changes, and providing proposed revised Specifications and Plans as applicable; and
- (C) Estimates the net amount of the cost reduction and provides the basis for that estimate.
- 7.2** The proposed changes have been identified and developed solely by the Contractor, and not, in whole or in part, by the City.
- 7.3** The City accepts the proposed changes in whole or in part in a writing signed by the Engineer. The Contractor will only be entitled to additional compensation for those changes specifically accepted by the City. The Engineer will determine the net savings in construction costs from any such changes that are both accepted and implemented by the City. Contractor will not be entitled to more than 50% of the net savings as determined by the Engineer, acting in his or her sole discretion.

**8. Advance Order Requirement.** Within ten days following receipt of the fully executed Contract from City, Contractor must promptly order all electrical and traffic materials, ("Materials") from the supplier and submit documentation to City evidencing the order, including, but not limited to, the purchase order, documentation showing that the order has been accepted by the supplier, and the anticipated shipment and delivery date for the Materials. Within two days following delivery of the Materials to Contractor, Contractor must provide written notice of the delivery to the Engineer. Except as set forth in this Section 8, Contractor will not perform any Work until the start date set forth in the Notice to Proceed. City anticipates issuing the Notice to Proceed following delivery of the Materials to Contractor.

END OF SPECIAL CONDITIONS

# COMMUNITY WORKFORCE AGREEMENT

for the

CITY OF SANTA ROSA

## PREAMBLE

This Community Workforce Agreement ("Agreement") is made and entered into on this 1st day of July, 2023 ("Effective Date"), by and between the City of Santa Rosa ("City") together with its Contractor(s) who shall become signatory to the Agreement by execution of an "Agreement To Be Bound" (Appendix A), and the North Bay Building and Construction Trades Council ("Council") and its affiliated local Unions that have executed this Agreement.

## RECITALS

A. The Covered Projects have been designated by the City as ones in which a Community Workforce Agreement requirement applies; and

B. A large number of workers of various skills will be required in the performance of construction work on the Covered Projects and will be represented by the Unions and affiliated with the Council, who are all signatories to this Agreement and employed by the Contractors and Subcontractors who are also signatories to this agreement; and

C. The use of skilled labor on construction work increases the safety of construction projects, as well as the quality of completed work; and

D. It is recognized that the Covered Projects require multiple contractors and bargaining units on the job site at the same time over an extended period of time, and that there could be a potential for work disruption in the absence of a binding commitment to maintain continuity of work; and

E. The City places high priority upon the development of comprehensive programs for the recruitment, training and employment of Local Area residents and has identified the value of introducing Local Area residents to lifelong careers and continuing education, and recognizes the ability of bona fide joint labor management apprenticeship programs to provide meaningful and sustainable careers in the building and construction industry; and

F. The Agreement provides a level of accountability that greatly reduces if not eliminates the exploitation of workers and circumvention of the Labor Code as it applies to the payment of prevailing wages and will save the City's financial and human resources in prevailing wage enforcement; and

G. The Parties recognize the need for safe, efficient and speedy construction in order to reduce unnecessary delays and result in timely completion of the Covered Projects; and

H. Contractors and Unions desire to mutually establish and stabilize wages, hours and working conditions for the workers employed on the Covered Projects by the Contractors, and further to encourage close cooperation to achieve a satisfactory, continuous and harmonious relationship between the Parties to this Agreement; and

I. The Parties pledge their full good faith and trust to work toward the mutually satisfactory completion of the Covered Projects subject to this Agreement.

J. The City has the absolute right to select the responsible bidder submitting the lowest and best bid for the award of each construction contract for the Projects, or to reject all bid proposals, or to use other legal project delivery methodologies; and

NOW THEREFORE, the Parties, in consideration of the mutual promises and covenants herein contained, mutually agree as follows:

## **ARTICLE 1 PURPOSE AND DEFINITIONS**

### **1.1 Purpose.**

- (a) In addition to the Recitals stated above, the purposes of this Agreement are to promote efficient construction operations on Covered Projects, to provide skilled labor, and to provide for peaceful, efficient and binding procedure for settling labor disputes without work disruptions or delays. In so doing, the Parties to this Agreement establish the foundation to promote the public interest, to provide a safe workplace, to assure high quality construction, to ensure an uninterrupted construction project, and to secure optimum productivity, on-schedule performance and City satisfaction.
- (b) It is the intent of the Parties to set out uniform and fair working conditions for the efficient completion of Covered Projects subject to this Agreement, maintain harmonious labor/management relations and eliminate strikes, lockouts and other delays.
- (c) The Parties agree that one of the primary purposes of this Agreement is to avoid the tensions that might arise on the Covered Project if union and nonunion workers of different employers were to work side by side on the Covered Project thereby leading to labor disputes that could delay completion of the Covered Project.

### **1.2 Definitions.**

- (a) "*Agreement*" means this Community Workforce Agreement plus Appendices.
- (b) "*Agreement to be Bound*" means the agreement that each and every Contractor(s) shall execute as a condition of performing Project work in the form attached to this Agreement as Appendix A.
- (c) "*Bona Fide Apprenticeship Program*" means a joint labor management apprenticeship training program approved by the State Division of Apprenticeship Standards in the applicable crafts.
- (d) "*City*" means the City of Santa Rosa.
- (e) "*Completion*" means that point at which there is Final Acceptance by the City under the Construction Contract for a Covered Project and the City has filed a Notice of Completion.



- (f) "*Construction Contract*" means a public works contract(s) awarded by the City to complete a Covered Project, including design-bid, design-build, lease-leaseback or other contracts under which construction of a Covered Project is performed, and all related contracts and subcontracts of any tier.
- (g) "*Contractor(s)*" means any individual, firm, partnership or corporation (including the prime contractor, general contractor, design-build entity, lease-leaseback entity or equivalent entity), or combination thereof, including joint ventures, which is an independent business enterprise and enters into a Construction Contract with the City, and all contractors and subcontractors of any tier. A "Contractor" includes any person, firm or corporation, including construction building material delivery truckers, trucking companies and trucking brokers, who agrees under contract with the City or another Contractor of any tier, to perform on a Project any part or portion of the construction work under a Construction Contract, including the operating of construction equipment, performance of labor and/or installation of materials.
- (h) "*Covered Project*" means a project for which the City sends out the initial solicitation of a bid or proposal after the Effective Date of this Agreement, and that meets the following requirements:
  - (i) The project is solicited by the City on or after the Effective Date of this Agreement and prior to the end of the Term of this Agreement;
  - (ii) The project is awarded by the City; and
  - (iii) The engineer's estimate of total construction costs for the Project meets or exceeds five-hundred thousand dollars (\$500,000) in City funding (the "Project Threshold").
  - (iv) In determining whether a project meets the Project Threshold:
    - (A) The City will consider all Construction Contracts required to complete an integrated project.
    - (B) The City and the Council may mutually agree in writing to add additional projects or components to be covered by this Agreement.
    - (C) The term "Covered Project" applies to each and all projects as defined in this section, whether used in the singular or plural herein.
- (i) "*Covered Work*" has the meaning set forth in Section 2.5 below.
- (j) "*Council*" means the North Bay Building and Construction Trades Council.
- (k) "*Council Policy 000-73*" means the Council Policy 000-73 (Project Labor Agreements) adopted by the Santa Rosa City Council with Resolution No. RES-2022-214 on October 25, 2022.
- (l) "*Final Acceptance*" means that point in time at which the City has determined upon final inspection that the work has been completed in all respects and all required

contract documents, contract drawings, warranties, certificates, manuals and data have been submitted and training completed in accordance with the contract documents and the City has executed a written acceptance of the work.

- (m) “*Local Area*” means Sonoma, Lake, Mendocino, Marin and Napa Counties in California.
- (n) “*Master Agreement(s)*” means the Master Collective Bargaining Agreements of each Union signatory hereto, to which the Union(s) and Contractor(s) are bound, which are incorporated herein by reference and which shall apply to Covered Projects, current copies of which (including any agreements incorporated therein) each Union agrees to provide to City promptly upon request.
- (o) “*Union*” or “*Unions*” means the North Bay Building and Construction Trades Council, AFL-CIO and its affiliated labor organizations signatory to this Agreement, acting on their own behalf and on behalf of their respective affiliates and member organizations, whose names are subscribed hereto and who have through their officers executed this Agreement.

## **ARTICLE 2 SCOPE OF AGREEMENT**

- 2.1 Parties.** This Agreement applies to and is limited to all Contractor(s) performing under Construction Contract(s) on a Covered Project (including subcontractors at any tier), and their successors and assigns, the City, the Council, and its affiliated Unions signatory to this Agreement.
- 2.2 Applicability.**
  - (a) This Agreement applies to and governs all Construction Contracts awarded on a Covered Project.
  - (b) Notwithstanding any other provision of this Agreement, in the event of any conflict or inconsistency between this Agreement and Council Policy 000-73, Council Policy 000-73 shall take precedence and shall apply.
- 2.3 Project Splitting.** The City agrees that it will not split, divide or otherwise separate work for the purpose of avoiding the application of this Agreement. The City may, in its sole discretion, group (or bundle) for bidding contracts not meeting the threshold of Section 1.2(h) above.
- 2.4 Non-Covered Employees.**
  - (a) This Agreement shall apply only to construction/craft employees of Contractor(s) working on a Covered Project represented by the Unions signatory hereto, and shall not apply to Contractors' supervisors, technical or non-manual employees including, but not limited to, executives, engineers, office and clerical employees, drafters, supervisors, timekeepers, messengers, guards, other employees above the classification of general foreman or inspectors, material testers, and/or x-ray technicians, except to the extent that such inspectors, material testers, and/or x-ray technicians are covered by a Master Agreement.

- (b) This Agreement shall apply to employees of a Contractor performing site survey testing and inspection (including soils and materials) where such testing and inspection is covered by a Master Agreement, regardless of its performance under a Construction Contract, construction management contract or engineering services contract.
- (c) This Agreement shall not be interpreted to limit or restrict the choice of materials or upon the full use and installation of equipment, machinery, package units, factory pre-cast, prefabricated or preassembled materials, tools or other labor-saving devices, except that the lawful fabrication provisions of the appropriate Master Agreements shall be applicable to covered Projects. Prefabrication of materials that are directly part of the Project and are traditionally performed under the provisions of an existing Master Agreement of a signatory Union(s), or local addenda to a National Agreement, shall be covered by the terms and conditions of this Agreement.

## 2.5 Covered Work.

- (a) Definition. The term "Covered Work" includes the following work for any Covered Project:
  - (i) All site preparation, surveying, construction, alteration, demolition, installation, improvement, remediation, retrofit, painting or repair of buildings, structures and other works, and related activities for any Covered Project, that is within the craft jurisdiction of one of the Unions and that is part of such Covered Project, including, without limitation to the following examples: geotechnical and exploratory drilling; soils and materials testing and inspection; temporary HVAC; landscaping and temporary fencing; pipelines (including those in linear corridors built to serve the Covered Project); pumps and pump stations; start-up; modular furniture installation; and final clean-up. Covered Work includes work done for the Covered Project in temporary yards, dedicated sites, or areas adjacent to the Covered Project, and at any on-site or off-site batch plant constructed solely to supply materials to the Covered Project.
  - (ii) Any start-up, calibration, commissioning, performance testing, repair, warranty work, modification, maintenance, and operational revisions to systems and/or subsystems for the Covered Project performed after Completion pursuant to a Construction Contract, including punch list work or work under a change order, unless performed by City employees.
  - (iii) On-site fabrication work for a Covered Project over which the City or any Contractor possesses the right of control, including work done for the Covered Project in any temporary yard or area established for the Project.
  - (iv) Off-site work, including fabrication, that is necessary for the Covered Project and that is traditionally performed by the Unions and is directly or indirectly part of the Covered Project, including any 3D BIM modeling and mechanical computer aided drafted and/or hand detailing of shop and field drawings used for fabrication and/or erection, provided such work is covered by a Master Agreement or local addenda to a national agreement of the applicable Union(s).
  - (v) Except for the delivery of supplies, equipment or materials that are stockpiled

for later use, all construction trucking work for a Covered Project, including the hauling and delivery of ready-mix, asphalt, aggregate, sand, soil or other fill or similar material that is directly incorporated into the construction process as well as the off-hauling of soil, sand, gravel, rocks, concrete, asphalt, excavation materials, construction debris and excess fill, materials and/or mud.

Contractor(s), including brokers, using persons providing construction trucking work shall provide certified payroll records to the City within ten (10) days of written request or as required by the bid specifications.

- (vi) Work covered by this Agreement within the following craft jurisdictions shall be performed under the terms of their National Agreements as follows: the National Transient Lodge (NTL) Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, the National Agreement of Elevator Constructors, and any instrument calibration work and loop checking shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, with the exception that Article 5 (no strikes-no lockouts), Article 6 (work assignments and jurisdictional disputes) and Article 11 (grievance procedure) of this Agreement shall apply to such work.

**2.6 Exclusions from the Definition of “Covered Work”.** Notwithstanding any other provision of this Agreement, the term "Covered Work" excludes the following for any Covered Project:

- (a) The operation of equipment and machinery owned or controlled by the City and not directly related to the Project if operated by City personnel.
- (b) Manufacturer Guarantees and Warranties. Work performed by employees of a manufacturer or other persons if necessary to maintain the validity a manufacturer's guarantee or warranty; provided, however, that in such cases, the City or the Contractor, as applicable, shall provide written evidence in the form of a warranty, guarantee or other written evidence from the manufacturer demonstrating that the work cannot be performed under this Agreement without voiding the warranty/guarantee. Such evidence shall be provided at the Pre-Job Conference discussed in Section 8.2, or as soon as practicable thereafter. In no event shall a Contractor fail to provide notice of intent to use this provision less than ten (10) days before the commencement of such work, and Contractor shall be liable for any project delay and related costs caused by such failure. The City and the Council agree that preserving the integrity of a manufacturer's guarantee or warranty is a priority for the City, and the Council will not intentionally or knowingly compromise the City's ability to establish or preserve a manufacturer's guarantee or warranty.
  - (i) Work performed by a manufacturer or its agents under a manufacturer's warranty or guaranty once the warranty or guaranty is effective is excluded from the definition of “Covered Work”.
- (c) Governmental and Utility Work.
  - (i) Any work performed on or near or leading to or on to the site of a Covered Project and undertaken by state, county, city or other governmental bodies, or their contractors, or by public or private utilities or their contractors.

- (ii) Work performed by public or private utilities including all electrical utility, voice-data-video, and security installation work ahead of and up to the electrical service entry connection or the main point of entry into the building shall be excluded. However, all electrical utility, voice-data-video, and security installation work performed after the electrical utility service entrance or the main point of entry shall be Covered Work. Additionally, all work contracted by the City performed ahead of the service entrance connection and main point of entry that is inside the property line and provides for access to the building via a conduit or series of conduits shall be Covered Work;
- (d) Off-site maintenance of leased equipment and on-site supervision of such work;
- (e) Non-construction support services contracted by the City in connection with a Project;
- (f) All work by employees of the City;
- (g) Any work that falls within the exclusions set forth in section 4.3 of Council Policy 000-73.

## 2.7 Reservation of City Rights.

- (a) This Agreement is not intended to, and shall not, affect or govern the award of public works contracts by the City for projects that are not Covered Projects. It is expressly agreed and understood by the Parties hereto that the City shall retain the right at all times to perform and/or subcontract all work not covered by this Agreement.
- (b) It is expressly agreed and understood by the Parties hereto that the City shall have the right to purchase material and equipment from any source and the craftspersons will handle and install such material and equipment, subject to limitations set forth in Sections 2.5 and 2.6 of this Agreement.
- (c) It is understood and agreed that the City has the right to select any qualified bidder for the award of Construction Contracts under this Agreement. The bidder need only be willing, ready and able to execute and comply with this Agreement.

## 2.8 Solicitation and Award of Construction Contracts.

- (a) The Council agrees to make best efforts to assist the City in soliciting interested parties in bidding on the Covered Project(s) and in encouraging and soliciting subcontractors in bidding to interested general contractors.
- (b) By executing this Agreement, the Council and the Unions agree to be bound by each and all of the provisions of the Agreement. By accepting the award of work under a Construction Contract for the Covered Project, whether as a Contractor or subcontractor thereunder, all Contractors agree to be bound by each and every provision of this Agreement and agree to evidence their acceptance prior to the commencement of work by executing the **Agreement to be Bound** in the form attached hereto as **Appendix A**.

The City agrees to include notice of this Agreement in all applicable bid documents,

requests for proposals, or other equivalent Covered Project solicitations, which shall include notice that entering into this Agreement is a condition of the award of a Construction Contract(s) for the Project. At the time of issuance of a solicitation for a Covered Project, the City agrees to either provide a copy of the solicitation for Covered Projects to the Council or give notice to the Council representative identified in Section 20.7 of this Agreement, which notice may direct the Council to a City website.

### **ARTICLE 3 SUBCONTRACTS**

- 3.1** Each Contractor(s), which includes all subcontractors of any tier performing work on a Project, agrees that neither it nor any of its subcontractors will subcontract any work to be done on the Covered Project except to a person, firm, or corporation who is or becomes party to this Agreement by signing the Agreement to be Bound attached to this Agreement as **Appendix A** prior to the commencement of work. All Contractor(s) working on the Covered Project shall, as a condition to working on the Project, become signatory to and perform all work under the terms of this Agreement.
- 3.2** Each Contractor with a contract directly with the City has the primary obligation for performance of all conditions of this Agreement, including the performance of all of that Contractor's subcontractors. This obligation cannot be relieved, evaded or diminished by subcontracting. Should a Contractor elect to subcontract, that Contractor shall continue to have such primary obligation.
- 3.3** Each Contractor, which includes all subcontractors of any tier performing work on the Project, shall give written notice to the Union(s) of any subcontract involving the performance of work covered by this Agreement within either five (5) days of entering such subcontract or before the subcontractor commences work on the Project, whichever occurs first. Such notice shall specify the name and address of the subcontractor. Written notice at a Pre-Job Conference shall be deemed written notice under this provision for those subcontractors listed at the Pre-Job only.
- 3.4 Signatory Contractors.**
- (a) With regard to any Contractor that is independently signed to any Master Agreement, this Agreement shall in no way supersede or prevent the enforcement of any subcontracting clause contained in such Master Agreement, except as specifically set forth in subsection (b) of this Section. Any such subcontracting clause in a Master Agreement shall remain and be fully enforceable between each craft union and its signatory contractors, and no provision of this Agreement shall be interpreted and/or applied in any manner that would give this Agreement precedence of subcontracting obligations and restrictions that exist between craft unions and their respective signatory contractors under a Master Agreement, except as specifically set forth in subsection (b) of this Section.
  - (b) If a craft union ("aggrieved union") believes that an assignment of work on this Covered Project has been made improperly by a Contractor or subcontractor, even if that assignment was as a result of another craft union's successful enforcement of the subcontracting clause in its Master Agreement, as permitted by subsection (a) of this Section, the aggrieved union may submit a claim under the jurisdictional resolution procedure contained in Article 6 of this Agreement, and the decision rendered as part of

that process shall be enforceable to require the Contractor or subcontractor that made the work assignment to assign that work prospectively to the aggrieved union. An award made to a craft union under the subcontracting clause of its Master Agreement, as permitted pursuant to subsection (a) of this Section, shall be valid and fully enforceable by that craft union unless it conflicts with a jurisdictional award made pursuant to this Agreement. If the award made under the Master Agreement conflicts with the jurisdictional award, the former shall be null and void ab initio.

- 3.5** The provisions of this Agreement, including the Master Agreements, incorporated herein by reference, shall apply to Projects covered by this Agreement, notwithstanding the provisions of any other local, area and/or national agreements which may conflict with or differ from the terms of this Agreement. To the extent a provision of this Agreement conflicts with a Master Agreement, the provision of this Agreement shall prevail. Where a provision of a Master Agreement does not conflict with this Agreement, the provision of the Master Agreement shall apply.

#### **ARTICLE 4 RELATIONSHIP BETWEEN PARTIES**

- 4.1** This Agreement shall only be binding on the signatory Parties hereto, and shall not apply to parents, affiliates, subsidiaries, or other divisions of the Parties unless signed by such parent, affiliate, subsidiary, or other division of such company.
- 4.2** Each Contractor(s) shall alone be liable and responsible for its own individual acts and conduct and for any breach or alleged breach of this Agreement. Any alleged breach of this Agreement by a Contractor(s) or any dispute between the signatory Union(s) and the Contractor(s) respecting compliance with the terms of this Agreement, shall not affect the rights, liabilities, obligations and duties between the signatory Union(s) and each other Contractor(s) party to this Agreement.
- 4.3** It is mutually agreed by the Parties that any liability by a signatory Union(s) to this Agreement shall be several and not joint. Any alleged breach of this Agreement by a signatory Union(s) shall not affect the rights, liabilities, obligations and duties between the signatory Contractors and the other Unions party to this Agreement.

#### **ARTICLE 5 NO STRIKES - NO LOCKOUTS**

- 5.1** During the life of this Agreement, the Union(s) and its members, agents, representatives and employees agree that for the duration of a Project, there shall be no strike, walkout, slowdown, sit-down, stay-in, boycott, wobble, sympathy strike, lockout, picketing or other work stoppage or handbilling of any nature whatsoever, because of a dispute on the Project, and it is expressly agreed that any such action is a violation of this Agreement. Disputes arising between the Unions and Contractor(s)/Employer(s) on other City projects are not governed by the terms of the Agreement or this Article.
- 5.2** There shall be no lockout of any kind by a Contractor/Employer of workers employed on the Project.
- 5.3** Withholding of employees for failure of a Contractor(s) to make trust fund contributions as

required in accordance with Article 17 and/or for failure to meet its weekly payroll is not a violation of this Article 5; however, the Union shall give the affected Contractor and the Coordinator (if selected) written notice seventy-two (72) hours prior to the withholding of employees.

- (a) Should a Contractor performing work on this Covered Project be delinquent in the payment of Trust Fund contributions required under this Agreement with respect to employees represented by the Union, the Union may request that a higher-tier Contractor issue joint checks payable to the Contractor and the appropriate employee benefit Trust Fund(s) until such delinquencies are satisfied.
- (b) Expiration of Local and Other Applicable Agreements. It is specifically agreed that there shall be no strike, sympathy strike, picketing, lockout, slowdown, withholding of work, refusal to work, walk-off, sick-out, sit-down, stand-in, wobble, boycott or other work stoppage of any kind as a result of the expiration of any local, regional or other applicable labor agreement having application at the Covered Project and/or failure of the parties to that agreement to reach a new contract. If a Master Agreement between a Contractor and a Union expires before the Contractor completes the performance of a Construction Contract and the Union or Contractor gives notice of demands for a new or modified Master Agreement, the Union agrees that it will not strike or withhold labor from the Contractor on said contract for work covered under this Agreement and the Union and the Contractor agree that the expired Master Agreement shall continue in full force and effect for work covered under this Agreement until a new or modified Master Agreement is reached between the Union and Contractor. If the Union and Contractor agree to an interim agreement that will apply until a new Master Agreement is reached, then, at the Contractor's option, the Contractor may work under the terms of the interim agreement until a new or modified Master Agreement is reached between the Union and Contractor. If the new or modified Master Agreement reached between the Union and Contractor provides that any terms of compensation of the Master Agreement shall be retroactive, the Contractor agrees to comply with any retroactive terms of the new or modified Master Agreement to its effective date which is applicable to employees employed on a project within seven (7) days after notification by the Union.

**5.4** In consideration of the foregoing, the Contractor(s) agree there shall be no lockout on Projects covered under the provisions of this Agreement. The term "lockout" does not refer to the discharge, termination or layoff of employees by the Contractor(s) for any reasons in the exercise of its rights as set forth in any provision of this Agreement, nor does "lockout" include the City's decision to terminate or suspend work on the site due to an unforeseen circumstance or natural disaster.

**5.5** Should the Contractor or City consider it necessary to shut down a Covered Project to avoid the possible loss of human life because of an emergency situation that could endanger the life and safety of an employee(s), compensation of employees shall be governed by the Master Agreements.

**5.6** Any employee or employees inciting, encouraging or participating in any strike, slowdown, picketing, sympathy strike or other activity in violation of this Agreement may be subject to immediate discharge from the Covered Project and the procedure under the applicable Master Agreement, if invoked.



- 5.7** Upon written facsimile or electronic mail notice of a violation to the Local and International Union(s) offices, the Council, the Union(s) and its officers shall take immediate action and will use its (their) best efforts to prevent, end or avert any such aforementioned activity or the threat thereof by any of its officers, members, representatives or employees, either individually or collectively, including but not limited to, publicly disavowing any such action and ordering all such officers, representatives, employees or members who participate in such unauthorized activity to cease and desist from same immediately and to return to work and comply with its orders. The Contractor(s) shall have the right, in the event of a work stoppage by the Union(s) to replace the employees represented by the Union(s) in violation of this Agreement until the Union(s) effects the return to work of such employees. Nothing in this Agreement shall be construed to limit or restrict the right of any of the Parties to this Agreement to pursue fully any and all remedies available under law in the event of a violation of this Article 5.
- 5.8** Any party to this Agreement shall institute the following binding arbitration procedure when such a breach is alleged. In the event a party institutes this procedure, arbitration shall be mandatory.
- (a) The party invoking this procedure shall immediately notify **David Weinberg** who the parties agree shall be the permanent Arbitrator under this procedure. **Martin Gran** shall serve as the alternate in the event that the permanent Arbitrator is unavailable at any time. If neither is available, an arbitrator shall be selected from a mutually agreed upon list of Arbitrators who are experienced in Building Trades matters/agreements. Notice to the Arbitrator shall be by the most expeditious means available, with notice by facsimile, electronic mail or similar means to the party alleged to be in violation and the involved Union General President.
  - (b) Upon receipt of said notice, the Arbitrator named above (or if unavailable, the alternate) shall designate a place for, schedule and hold a hearing within twenty-four (24) hours.
  - (c) The Arbitrator shall notify the parties by email (with read receipt) and telephone of the place and time chosen for the session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an award by the Arbitrator.
  - (d) The sole issue at the hearing shall be whether or not a violation of this Article has in fact occurred, and the Arbitrator shall have no authority to consider any matter in justification, explanation or mitigation of such violation or to award damages, which issue is reserved for court or other arbitration proceedings, if any. The award shall be issued in writing within three (3) hours after the close of the hearing and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the award. The Arbitrator shall order cessation of the violation of this Article and other appropriate relief, and such award shall be served on all parties by email (with read receipt) upon issuance.
  - (e) The award shall be final, binding and non-reviewable as to the merits. Such award may be enforced by any court of competent jurisdiction, upon the filing of this Agreement and all other relevant documents referred to hereinabove in the following manner. Notice of the filing of such enforcement proceedings shall be given to the other party as required by law. In the proceeding to obtain a temporary order enforcing the Arbitrator's

award as issued under this Article, all parties agree that such proceedings may proceed in accordance with procedures for *ex parte* matters under the Code of Civil Procedure. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Arbitrator's award shall be served on all parties by hand or by delivery to their last known address or by registered mail.

- (f) Any rights created by statute or law governing arbitration or injunction proceedings inconsistent with the above procedure, or which interfere with compliance therewith, are hereby waived by the parties to whom they accrued.
- (g) The costs of the arbitration, including the fee and expenses of the Arbitrator, shall be borne equally by the affected Union(s) and the affected Contractor(s).
- (h) The procedures contained in Article 5 shall be applicable only to alleged violations of this Article. Discharge or discipline of employees for violation of this Article shall be subject to the grievance and arbitration procedures of Article 11.

## **ARTICLE 6**

### **WORK ASSIGNMENTS AND JURISDICTIONAL DISPUTES**

- 6.1** The assignment of Covered Work will be solely the responsibility of the Employer performing the work involved; and such work assignments will be in accordance with the Plan for the Settlement of the Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.
- 6.2** All jurisdictional disputes on this Covered Project between or among the building and construction trades Unions and the Employers Parties to this Agreement, shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding and conclusive on the Employers and Unions Parties to this Agreement.
- 6.3** If a dispute arising under this Article involves the Northern California Carpenters Regional Council or any of its subordinate bodies, an arbitrator shall be chosen by the procedures specified in Article V, Section 5 of the Plan from a list composed of Andrea Dooley, Mark Devibciss, Robert Hirsch and Thomas Pagan, and the arbitrator's hearing on the dispute shall be held at the offices of the California State Building and Construction Trades Council in Sacramento, California within fourteen (14) calendar days of the selection of the arbitrator. All other procedures shall be as specified in the Plan.
- 6.4** All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature, and the Employer's assignment shall be adhered to until the dispute is resolved. Individual employees violating this section shall be subject to immediate discharge.
- 6.5** Each Employer will conduct a pre-job conference with the Council prior to commencing work. The City and the Coordinator (if selected) will be advised in advance of all such conferences and may participate if they wish. Pre-job conferences for different Employers may be held together.

## **ARTICLE 7 COORDINATOR**

- 7.1** A "Coordinator," as mutually agreed upon by the City and the Unions may be selected in order to coordinate the administration and application of this Agreement.
- 7.2** The Coordinator shall endeavor to facilitate harmonious relations between the Contractors and Unions signatory hereto. The Coordinator shall not be responsible for the acts of the Contractors or Unions signatory hereto, and will not be a party to any arbitration or litigation arising out of this Agreement.
- 7.3** It is recognized by the Parties to this Agreement that the Coordinator is acting only on behalf of said Coordinator and has no authority, either expressed, implied, actual, apparent or ostensible, to speak for or bind the City.

## **ARTICLE 8 PARTNERING COMMITTEE MEETINGS**

### **8.1 Partnering Committee.**

- (a) The Parties to this Agreement will form a Partnering Committee consisting of equal numbers of representatives selected by the Council and the City, to be chaired jointly by a representative of each. The Committee may form sub-committees to consider and advise the full Committee with regard to any issues affecting this Agreement and Covered Project(s). A Partnering Committee meeting will be held by request.
- (b) The Coordinator (or the City if no Coordinator is used) shall be responsible for the scheduling of meetings, the preparation of the agenda topics for the meetings, with input from the Unions and the Contractors. Notice of the date, time and place of meetings, shall be given to the Committee members at least three (3) days prior to the meeting.
- (c) The purpose of these meetings is to promote harmonious labor/management relations, ensure adequate communications and advance the proficiency and efficiency of the employees and the Contractors on the Project. These regular meetings will also include discussion of the scheduling and productivity on work performed on the Project.

**8.2 Pre-Job Conference and Mark-up Meeting.** A Pre-Job Conference will be held at least fourteen (14) days prior to the commencement of work to establish the scope of work in each Contractor's contract. When a contract has been let to a Contractor(s) covered hereby, a Pre-Job Conference and/or Mark-Up Meeting shall be required and shall be held at a location and time mutually agreeable to the Council. The Parties acknowledge and agree that in the case of emergency work the Parties may mutually agree in writing to waive the pre-job conference without the need to amend this agreement.

- (a) The Pre-Job Conference shall include, but not be limited, to the following subjects:
  - (i) A listing of each Contractor's scope of work;
  - (ii) The craft assignments;
  - (iii) The estimated number of craft workers required to perform the work;

- (iv) Transportation arrangements;
  - (v) The estimated start and completion dates of the work; and
  - (vi) Discussion of pre-fabricated materials
- (b) The Coordinator (if selected) will schedule and attend all Pre-Job and Mark-Up Meetings and participate in discussions as they pertain to the terms and conditions of this Agreement

**8.3** The Contractor performing the work shall have the responsibility for making work assignments in accordance with Section 6.1 of this Agreement. The work assignments shall be made in writing.

## **ARTICLE 9 MANAGEMENT RIGHTS**

**9.1** Consistent with the applicable Master Agreement(s), the Contractor(s) retains full and exclusive authority for the management of their work forces for all work performed under this Agreement. This authority includes, but is not limited to the right to:

- (a) Plan, direct and control the operation of all the work.
- (b) Decide the number and types of employees required to perform the work safely and efficiently. The lawful manning provisions of the applicable Master Agreement shall be recognized.
- (c) Hire, promote and layoff employees as deemed appropriate to meet work requirements and/or skills required.
- (d) Require all employees to observe the City and Contractors' Covered Project Rules, Security and Safety Regulations, provided such Rules and Regulations are uniformly applicable and consistent with the provisions of this Agreement. These Covered Project Rules and Regulations shall be reviewed and mutually agreed upon at the Pre-Job meeting and supplied to all employees and/or posted on the jobsite.
- (e) Discharge, suspend or discipline employees under the applicable craft agreement. No employee shall be discharged, suspended or disciplined without just cause.
- (f) Assign and schedule work at its sole discretion and determine when overtime will be worked consistent with the applicable Master Agreement.
- (g) Utilize any work methods, procedures or techniques and select and use any type or kind of materials, apparatus or equipment regardless of source, manufacturer or designator, subject to the provisions of this Agreement.

**9.2** The foregoing listing of management rights shall not be deemed to exclude other functions not specifically set forth herein. The Contractors, therefore, retain all legal rights not specifically enumerated in this Agreement or in a local Master Agreement.

## **ARTICLE 10 WORK RULES**

- 10.1** The selection of craft foremen and general foremen shall be entirely the responsibility of the Contractor(s), and consistent with the applicable local Master Agreement, it being understood that in the selection of such foremen, the Contractor(s) will give first consideration to the qualified individuals available in the Local Area. Foremen and general foremen shall take orders from the designated Contractor(s) representatives.
- 10.2** There shall be no limit on production by employees nor restrictions on the full use of tools or equipment. Craftpersons using tools shall perform any of the work of the trade and shall work under the supervision of the craft foremen.
- 10.3** Security procedures for control of tools, equipment and materials are solely the responsibility of Contractor(s).
- 10.4** Slowdowns, standby crews and featherbedding practices will not be tolerated.
- 10.5** It is understood by the Contractor(s) and agreed to by the Union(s), that the employees of the Contractor(s) will perform the work requested by the Contractor(s) without having any concern or interference with any other work performed by any employees of the City or others who are not covered by this Agreement including, but not limited to, maintenance and operations.
- 10.6** Contractors shall provide meal and rest periods in accordance with the California Labor Code.
- 10.7** All foremen will remain with their crews and supervise such crews in the performance of their duties.
- 10.8** There shall be no interference with vendor or supplier deliveries of equipment, apparatus, machinery to the jobsite since such deliveries shall not fall under this Agreement. Unloading of the above will be performed by signatory Contractors' employees.
- 10.9** The Contractor(s) and the Unions recognize the necessity for promoting efficiency and agree that no rules, customs or practices shall be permitted that cause overmanning, limit production or increase the time required to do the work, and no limitation shall be placed upon the amount of work which an employee shall perform, nor shall there be any restrictions against the use of any kind of machinery, tools or labor-saving devices, except that all lawful manning provisions in the Master Agreement shall be recognized.

## **ARTICLE 11 GRIEVANCE PROCEDURE**

- 11.1** All disputes concerning the interpretation and/or application of this Agreement which do not fall within the Article 5 No-Strike/No-Lockout procedure or Article 6 Jurisdictional Dispute procedure shall be governed by the following grievance and arbitration procedures.
- 11.2** All disputes involving the discipline and/or discharge of an employee working on the Covered Project shall be resolved through the grievance and arbitration provisions contained in the Master Agreement for the craft of the affected employee. No employee working on the Covered Project shall be disciplined or discharged without just cause.

- 11.3** A grievance shall be considered null and void if not brought to the attention of the Contractor(s) within ten (10) working days after the grievance is alleged to have occurred or within ten (10) working days after the Union's first knowledge of the grievance. Similarly, a grievance shall be considered null and void if not brought to the attention of the Union(s) within ten (10) working days after the grievance is alleged to have occurred or within ten (10) working days after the Contractor(s)' first knowledge of the grievance.
- 11.4** Grievances shall be settled according to the following Steps:
- (a) Step 1: The steward or business representative and the grievant shall attempt to resolve the grievance with the craft supervisor within five (5) working days after the grievance has been brought to the attention of the Contractor.
  - (b) Step 2: In the event the matter remains unresolved in Step 1 above, within five (5) working days, the grievance shall be reduced to writing and may then be referred by the Union to the Contractor(s) for discussion and resolution. The Union will also notify its International Union representative, which shall advise the parties if it intends to participate in Step 2.
  - (c) Step 3: In the event the matter remains unresolved in Step 2, either Party may request, within five (5) working days, that the dispute be submitted to arbitration. The time limits set out in this procedure may, upon mutual agreement, be extended. Any request for arbitration, request for extension of time limits, and agreement to extend such time limits shall be in writing.
  - (d) Step 4: The Parties agree that the Arbitrator who will hear the grievance shall be selected from among the following: **Morris Davis, David Weinberg, William Riker, Robert Hirsch and Carol Vendrillo**. If the parties cannot agree on which Arbitrator to hear the case, then the parties shall alternately strike names until one of the Arbitrators remains, who shall then hear the dispute. The party bringing the grievance shall strike the first name. The arbitration procedure contained herein, once invoked, shall be mandatory. Should a Party to the procedure fail or refuse to participate in the hearing, if the Arbitrator determines that proper notice of the hearing has been given, said hearing shall proceed in to a default award. The Arbitrator's award shall be final and binding on all Parties to the arbitration. The costs of the arbitration, including the arbitrator's fee and expenses, shall be borne equally by the affected Union(s) and the affected Contractor(s). The Arbitrator's decision shall be confined to the question(s) posed by the grievance and the Arbitrator shall not have authority to modify amend, alter, add to, or subtract from, any provisions of this Agreement.
- 11.5** Should any of the arbitrators identified in Section 11.4 or Section 5.8(a) no longer be available to conduct arbitrations, the City and the Council shall mutually agree upon a replacement.
- 11.6** The Contractor(s), as well as the Union, may bring forth grievances under this Article.
- 11.7** Where an issue is addressed in this Agreement and the local Master Agreement, this Agreement shall prevail. Where an issue is addressed in the local Master Agreement and not in this Agreement, the local Master Agreement shall control.

- 11.8** Grievances between a Union and a Union-signatory contractor involving interpretation or application of the applicable local Master Agreement shall be governed by the grievance procedures contained in such local Master Agreement.
- 11.9** At the time a grievance is submitted under this Agreement or any Master Agreement, the Union(s) may request that the City withhold and retain an amount from what is due and owing to the Contractor(s) against whom the grievance is filed, or its higher-tier Contractor, sufficient to cover the damages alleged in the grievance, should the Union(s) prevail. The City may, in its sole discretion, elect to withhold and/or retain funds where not otherwise prohibited by law or contract.

## **ARTICLE 12 UNION RECOGNITION AND REPRESENTATION**

- 12.1** The Contractor(s) recognizes the Unions signatory hereto as the sole and exclusive collective bargaining representatives for all craft employees on the Project, and all such employees must be represented by a Union for the duration of their employment on the Project.
- 12.2** The Contractors/Employers shall make and transmit all deductions for Union dues, fees, and assessments that have been authorized by employees in writing in accordance with the applicable Master Agreement. This Agreement does not require any employee of a non-union Contractor/Employer to join a Union or to pay dues or fees to a Union as a condition of working on the Project; however, nothing in this Article is intended to supersede the requirements of the applicable Master Agreements as to Contractors/Employers signatory to such Master Agreements and as to employees of those Contractors/Employers who are performing Covered Work.
- 12.3** Authorized representatives of the Unions shall have access to the Covered Project site at all times when work is being, has been or will be performed. Such representatives shall comply with the reasonable visitor safety and security rules established for the Project. Access for Union representatives will not be unduly restricted.
- 12.4** A Steward shall be a working journeyman appointed in writing by the authorized union representative of the Local Union(s) who shall, in addition to work as a journeyman, be permitted to perform during working hours such Union(s) duties as cannot be performed at other times which consists of those duties assigned by the Business Manager or Business Agent. The Union(s) agrees that such duties shall be performed as expeditiously as possible and the Contractor(s) agrees to allow the Steward a reasonable amount of time for the performance of such duties. The Steward shall not leave the work area without notifying the appropriate supervisor.
- 12.5** The Steward will be paid at the journeyman wage for the job classification in which the Steward is employed.
- 12.6** The treatment of stewards shall be in accordance with the applicable craft agreement.

## **ARTICLE 13 REFERRAL PROCESS**

- 13.1** The Union(s) shall be the sole source of all craft labor employed on the Covered Project.

- 13.2** All Contractors shall be bound by and utilize the registration facilities and referral systems established or authorized by the signatory Unions.
- 13.3** In the event that referral facilities maintained by the Union(s) are unable, despite good faith efforts, to fill the requisition of a Contractor for employees within a forty-eight (48) hour period after such request is made by the Contractor, Saturdays, Sundays and Holidays excluded, the Contractor shall be free to obtain work persons from any source. Upon hiring employees from an alternative source pursuant to this section, the Contractor shall immediately notify the appropriate Local Union of the name and address of the alternative source employee hired, which employee shall be bound by the provisions of Article 12.
- 13.4** In the event the City awards a Covered Project using a design-build or lease-leaseback contracting method, or any contracting method requiring a “skilled and trained workforce” commitment pursuant to State Law, the Contractors shall employ “skilled journeypersons” as required and comply with the apprenticeship graduation requirements stated in Public Contract Code Sections 2600 to 2603.

## **ARTICLE 14 COMMUNITY WORKFORCE INITIATIVES**

- 14.1 Helmets to Hardhats.** The Parties recognize the Council’s participation in the “Helmets-to-Hardhats” Program and the Parties’ mutual desire to facilitate the entry into the Building and Construction Trades of veterans who are interested in careers in the building and construction industry. The Unions agree to utilize services for the Center for Military Recruitment, Assessment and Veteran’s Employment (“Center”) and the orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs of such veterans. The Unions agree to coordinate with the Center to create and maintain an integrated database of veterans interested in working on the Project. To the extent permitted by law, the Unions will give credit to such veterans for bona fide, provable past experience. The experience and practical knowledge of veterans will be reviewed and tested by the applicable Joint Apprenticeship Training Committee. Applicants will be placed at the appropriate stage of apprenticeship or at the journey level as the case may be. Final decision will be the responsibility of the applicable Joint Apprenticeship Training Committee.
- 14.2 Local Workforce Requirement.** It is in the interest of the Parties to facilitate employment of Local Area residents and to use resources in the Local Area in construction of any Project. Section 4.2.1(A) of Council Policy 000-73 requires this Agreement to incorporate provisions that establish a “local workforce requirement” of thirty percent (30%). Therefore, to the maximum extent permitted by law, the Contractors and the Unions will ensure that not less than thirty percent (30%) of all hours on the Covered Project will be performed by residents of the Local Area (the “Local Workforce Requirement”). To the extent allowed by law, and consistent with the Unions’ hiring hall provisions, and as long as they possess the requisite skills and qualifications, residents of the Local Area, including journeymen and apprentices, shall be referred by the Unions for Covered Project work. The City Manager may waive or otherwise modify the Local Workforce Requirement where a particular construction craft does not have sufficient local presence to meet the requirement. To the maximum extent permitted by law, the Unions agree to use their utmost efforts to recruit and obtain sufficient numbers of workers from the Local Area to fulfill the referral requirements of the Contractor(s)/Employer(s).



**14.3 Reporting and Data Collection.** To the extent permitted by law and desired by the City, the Parties will collaborate in good faith, to the extent reasonable and practicable, to provide for the collection of, and reporting on demographic data relating to workers on any Covered Project covered by this Agreement. If requested by the City, the Council will work collaboratively to create and present an annual report on such data to the City Council, which may include specific demographics where such information is available, and may also include data related to the employment of NB TIP graduates and Local Area residents on Covered Projects.

**14.4 North Bay Trades Introduction Program (“NB TIP”).**

- (a) NB TIP is a partnership of the Council, local workforce boards, local education agencies, the North Bay Apprenticeship Coordinators Association, and other community-based organizations. NB TIP is approved by the California Division of Apprenticeship Standards as a “pre-apprenticeship program,” utilizes the MC3 apprenticeship readiness curriculum, and works closely with partner agencies and community organizations to develop local apprenticeship candidates. The primary objective of NB TIP is to prepare and place NB TIP graduates into state-approved apprenticeships.
- (b) The Parties agree to recognize NB TIP graduates as apprenticeship candidates, consistent with hiring and referral processes otherwise noted in this Agreement, for possible employment as apprentices on the Projects. To comply with Section 14.2, Contractors/Employers shall endeavor to hire either a NB TIP graduate or another candidate provided through a Union pre-apprenticeship program, in compliance with the Union Master Agreements and applicable apprenticeship program standards. Successful placement of NB TIP candidates may positively affect contractor ratings for future projects covered by this Agreement.
- (c) NB TIP conducts outreach by a variety of media, and also by making presentations to local trades introduction classes. Special outreach efforts are directed at under-represented groups including women, racial/ethnic minorities, disadvantaged youth (with a minimum age of 18 for construction work), military veterans, and those from socio-economically disadvantaged areas within the community. The Parties are encouraged to participate in such outreach with NB TIP, as good faith efforts toward the local hire goals in Section 14.2. Such participation may include jobsite tours, recognition agreements with individual apprenticeship programs, presentations to possible candidates and other activities.

**ARTICLE 15  
NON-DISCRIMINATION**

**15.1** The Contractor/Employer(s) and Union(s) agree not to engage in any form of discrimination on the grounds of/ or because of race, color, religion, national origin, culture, ancestry, age, sex, gender, sexual orientation, gender identity, pregnancy, marital status, disability, medical condition, political belief or affiliation, organizational affiliation, or any other basis recognized by law, against any employee, or applicant for employment, including Vietnam veteran or Vietnam Era status, disability as identified in the Americans with Disabilities Act or any other basis recognized by law.

## **ARTICLE 16 APPRENTICES**

- 16.1** Each contractor or subcontractor performing work on any Covered Project shall, for each apprenticeable craft that it employs, employ on its regular workforce the ratio of apprentices as required by Labor Code Section 1777.5 who are enrolled and participating in a Bona Fide Apprenticeship Program approved by the State Division of Apprenticeship Standards in the applicable crafts. Recognizing the need to develop adequate numbers of competent workers in the construction industry, including on public works projects, the Contractors/Employers shall employ apprentices from a Bona Fide Apprenticeship Program to perform such work as is within their capabilities and that is customarily performed by the craft in which they are indentured.
- 16.2** Consistent with the Master Agreements, there shall be no restriction on the utilization of apprentices in performing the work of their craft provided they are properly indentured and supervised.

## **ARTICLE 17 WAGE SCALES AND FRINGE BENEFITS**

- 17.1** All employees covered by this Agreement shall be classified and paid in accordance with the classification and wage scales contained in the appropriate Master Agreement(s) which have been negotiated by the historically recognized bargaining parties and in compliance with the applicable general prevailing wage determination made by the Director of Industrial Relations pursuant to the California Labor Code. The Contractors/Employers agree to pay contributions to the vacation, pension and/or other deferred compensation plan, apprenticeship, worker protection and assistance, and health benefit funds established by the applicable Master Agreement(s) for each hour worked on the Project, in the amounts designated in the applicable Master Agreement(s).
- 17.2** During the period of construction on this Project, the Contractors agree to recognize and put into effect such increases in wages and recognized fringe benefits as shall be negotiated between the various Unions and the historically recognized local bargaining parties on the effective date as set forth in the applicable local Master Agreement. The Unions shall notify the Contractors in writing of the specific increases in wages and recognized fringe benefits and the date on which they become effective.
- 17.3** The Contractors agree to pay contributions to the vacation, pension and/or other deferred compensation plan, apprenticeship, worker protection and assistance, and health benefit funds established by the applicable Master Agreement(s) for each hour worked on the Project, in the amounts designated in the applicable Master Agreement(s). The Contractors hereby adopt and agree to be bound by the written terms of the legally established local trust agreements specifying the detailed basis on which payments are to be made into, and benefits paid out of, such appropriately qualified employee fringe benefit funds established by such appropriate local agreements. The Contractors authorize the parties to such local trust agreements to appoint Trustees and successor Trustees to administer the trust funds, and hereby ratify and accept the Trustees so appointed as if made by the Contractors.
- 17.4** When an employee is discharged, the employee shall be paid wages due immediately. If an employee voluntarily terminates, wages due shall be paid in accordance with State Law.

- 17.5** Wage rates, fringe benefits or working conditions on the Covered Project shall be governed by the negotiated Master Agreement(s), to the extent such agreements are not inconsistent with this Agreement. Where a subject is covered by the Master Agreement and not covered by this Agreement, the Master Agreement will prevail. When a subject is covered by both the Master Agreement and this Agreement, to the extent there is any inconsistency, this Agreement will prevail.
- 17.6** It shall be the responsibility of the Contractors/Employers and Unions to investigate and monitor compliance with the provisions of this Article. Nothing in this Agreement shall be construed to interfere with or supersede the usual and customary legal remedies available to the Unions and/or employee benefit Trust Funds to collect delinquent wages or Trust Fund contributions for work performed for the Project. Because the Covered Project is a public work subject to the California Labor Code, the City shall monitor and enforce the Contractors/Employers' compliance with state prevailing wage requirements as well as this Agreement.

## **ARTICLE 18 HOLIDAYS**

- 18.1** Holidays will be in compliance with the applicable Master Agreements for each trade.

## **ARTICLE 19 HEALTH AND SAFETY**

- 19.1** The employees covered by the terms of this Agreement shall at all times, while in the employ of the Contractor(s), be bound by the safety rules and regulations established by the City and Contractor(s) and in accordance with OSHA/Cal- OSHA. These rules and regulations will be published and posted at conspicuous places throughout the Project.
- 19.2** In accordance with the requirements of OSHA/Cal-OSHA, it shall be the exclusive responsibility of each Contractor(s) on the Covered Project to assure safe working conditions for its employees and compliance by them with any safety rules contained herein or established by the contractor(s).
- 19.3** The use, sale, transfer, purchase and/or possession of a controlled substance, alcohol and/or firearms at any time during the work day is strictly prohibited. Contractor(s) and Union(s) agree to abide by the substance abuse policies contained in the applicable Master Agreement(s) as well as City policies.

## **ARTICLE 20 MISCELLANEOUS PROVISIONS**

- 20.1 Counterparts.** This Agreement may be executed in counterparts, such that original signatures may appear on separate pages, and when bound together all necessary signatures shall constitute an original. Facsimile signature pages transmitted to other Parties to this Agreement shall be deemed equivalent to original signatures.
- 20.2 Warranty of Authority.** Each of the persons signing this Agreement represents and warrants that such person has been duly authorized to sign this Agreement on behalf of the party indicated, and each of the Parties by signing this Agreement warrants and represents that such

party is legally authorized and entitled to enter into this Agreement.

**20.3 Interpretation.** The section headings contained in this Agreement are inserted for convenience only and shall not affect in any way the meaning or interpretation of this Agreement. All defined terms used in this Agreement shall be deemed to refer to the singular and/or plural, in each instance as the context and/or particular facts may require.

**20.4 Rules of Construction.** The Parties acknowledge that this is a negotiated agreement, that they have had the opportunity to have this Agreement reviewed by their respective legal counsel, and that the terms and conditions of this Agreement are not to be construed against any party on the basis of such party's draftsmanship thereof.

**20.5 No Joint and Several Liability.** To the fullest extent consistent with the applicable Master Agreement and trust agreement, it is agreed that any liability under this Agreement by the City, the Council, a Union, or any other Contractor shall be several and not joint. Any alleged breach of this Agreement by a party shall not affect the rights, liabilities, obligations, and duties among the other Parties or between that party and any other party.

**20.6 Notice.** Notice under this Agreement may be provided electronically or via mail as follows:

(a) To City: Director of Transportation and Public Works  
City of Santa Rosa  
Transportation and Public Works Department  
69 Stony Circle  
Santa Rosa, CA 95401  
jnutt@srcity.org

With Copies to:

City Attorney's Office  
100 Santa Rosa Avenue, Room 8  
Santa Rosa, CA 95404  
caoffice@srcity.org

(b) To Council: President and Secretary-Treasurer  
3473 Santa Rosa Avenue  
Santa Rosa, CA 95407  
mallen@northbaybuildingtrades.org  
john@sprinklerfitters483.org

The Parties may revise the contacts listed above by providing advance written notice to the other Party.

## **ARTICLE 21 GENERAL SAVINGS CLAUSE**

**21.1** It is not the intention of either the Contractor(s) or the Union(s) to violate any laws governing the subject matter of this Agreement. If any Article or provision of this Agreement shall be declared invalid, inoperative, or unenforceable by any competent authority of the executive, legislative, judicial or administrative branch of the federal, state or local government, the City

and the Council shall suspend the operation of each such article or provision during the period of invalidity. Such suspension shall not affect the operation of any provision covered in this Agreement to which the law or regulation is not applicable. In that event, the City and the Council will promptly enter into negotiations concerning the substance affected by such decision for the purpose of achieving conformity with the requirements of an applicable law and the intent of the Parties hereto.

- 21.2** In the event a decision of a court of competent jurisdiction materially alters the terms of this Agreement such that the intent of the City and the Council is defeated, then the entire Agreement shall be null and void.
- 21.3** If a court of competent jurisdiction determines that all or part of the Agreement is invalid and/or enjoins the City from complying with all or part of the Agreement's provisions, and the City accordingly determines that compliance with this Agreement will not be required in order to perform work under a Construction Contract, the Unions will no longer be bound by the provisions of Article 5.

## **ARTICLE 22 DURATION OF AGREEMENT**

- 22.1** This Agreement shall apply until the Completion of each Covered Project in accordance with Sections 1.2(e) and 2.5(a)(ii).
- 22.2** **Term; Extension.** This Agreement shall become effective on the day the City and the Council execute this Agreement and shall continue in full force and effect for a period of five (5) years. Approximately six (6) months prior to the conclusion of the term of this Agreement, the City and the Council shall meet to discuss whether to extend the term of this Agreement and if so, to agree upon any necessary changes.
- 22.3** **Reopener.** If either the City or the Council reasonably believes that this Agreement has had a material adverse effect on the City's delivery of capital improvement project(s), the City and Council agree to promptly re-open this Agreement as follows:
- (a) The City or the Council will provide written notice to the other of a request to reopen the Agreement to reasonably address material adverse effects on the City's delivery of capital improvement projects ("Request to Reopen").
  - (b) Within thirty (30) days of the date of a Request to Reopen under this Section, the City and the Council each agree to (i) designate a senior management or executive level representative and legal counsel to negotiate any dispute; and (ii) attempt through good faith negotiations to resolve the dispute and mitigate any material adverse effect on City capital improvement project(s) by any means within their authority.

*[SIGNATURES ON PAGES TO FOLLOW]*

In witness whereof, the Parties have caused this Agreement to be executed as of the Effective Date.

**SIGNATURES**

CITY OF SANTA ROSA


NORTH BAY BUILDING AND  
CONSTRUCTION TRADES COUNCIL

By:   
Mara Keshia Smith (Aug 9, 2023 11:21 PDT)

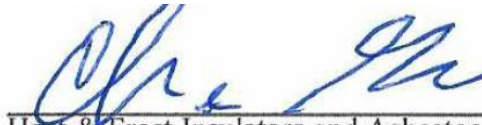
Title: City Manager

  
Michael Allen (Aug 9, 2023 09:18 PDT)  
By: Michael Allen, Secretary/Treasurer

APPROVED AS TO FORM

  
Jessica Mullan (Aug 9, 2023 10:04 PDT)  
City Attorney

**AFFILLIATE SIGNATURE PAGE: COMMUNITY WORKFORCE AGREEMENT FOR THE CITY OF SANTA ROSA**

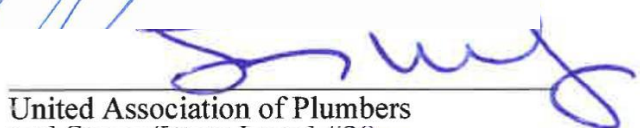
  
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Workers, Local #16

  
Bricklayers & Allied Craftworkers, Local #3

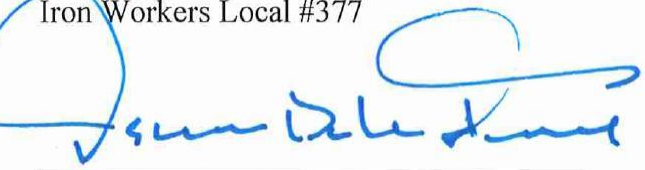
  
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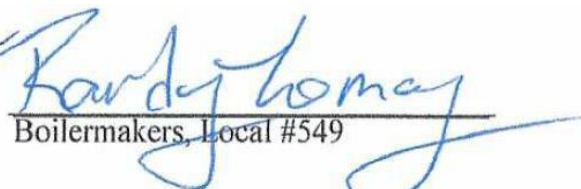
  
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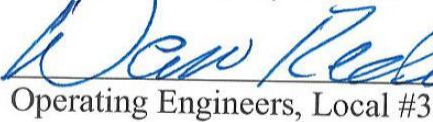
  
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Iron Workers Local #377

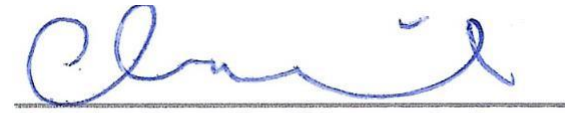
  
Northern California District Council of  
Laborers for itself and its affiliated  
Local Unions

  
Boilermakers, Local #549


  
International Brotherhood of  
Electrical Workers, Local #551

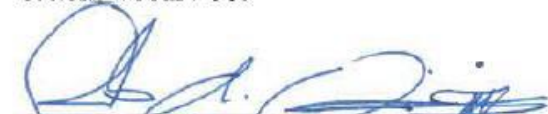
  
Operating Engineers, Local #3


  
Sheet Metal Workers Local #104

  
District Council of Plasters & Cement  
Masons of Northern California #300

  
Iron Workers Local #378

  
Construction & General Teamsters  
Union, Local #665

  
District Council No. 16, Northern  
California and Nevada International Union of  
Painters & Allied Trades

  
Northern CA Regional Council of Carpenters  
(On behalf of Carpenters Local 751; Lathers, Local  
9109; Millwrights, Local 102; Pile Drivers, Local 34)

## **APPENDIX A**

### **CITY OF SANTA ROSA COMMUNITY WORKFORCE AGREEMENT**

#### **CONTRACTOR AGREEMENT TO BE BOUND**

The undersigned, as a Contractor or Subcontractor ("Contractor") for the \_\_\_\_\_ Project, (hereinafter the "Covered Project"), for and in consideration of the award to it of a contract to perform work on said Covered Project, and in further consideration of the mutual promises made in the "City of Santa Rosa Community Workforce Agreement" (hereinafter "Agreement"), a copy of which was received and is acknowledged, hereby:

- (1) Accepts and agrees to be bound by the terms and conditions of the Agreement, together with any and all amendments and supplements now existing or which are later made thereto.
- (2) Agrees to be bound by the legally established local trust agreements as set forth in Article 17 of this Agreement.
- (3) Authorizes the parties to such local trust agreements to appoint trustees and successor trustees to administer the trust funds and hereby ratifies and accepts the trustees so appointed as if made by the Contractor;
- (4) Certifies that it has no commitments or agreements which would preclude its full and complete compliance with the terms and conditions of the Agreement.
- (5) Agrees to secure from any Contractor(s) (as defined in said Agreement) which is or becomes a subcontractor (of any tier) to it, a duly executed Agreement to be Bound in form identical to this document.

The obligation to be a party to and bound by the Agreement shall extend to all work for the Covered Project undertaken by the Contractor.

This letter shall constitute a subscription agreement, to the extent of the terms of the letter.

CONTRACTOR/SUBCONTRACTOR: \_\_\_\_\_

California Contractor State License No. or Motor Carrier (CA) Permit No.: \_\_\_\_\_

Name of Authorized Person (print): \_\_\_\_\_

Signature of Authorized Person: \_\_\_\_\_

Title of Authorized Person: \_\_\_\_\_

Telephone Number of Authorized Person: \_\_\_\_\_

Address of Authorized Person: \_\_\_\_\_

State Public Works Registration Number: \_\_\_\_\_

153640\1386601





**TECHNICAL SPECIFICATIONS**

**FOR**

**B STREET AND 3<sup>RD</sup> STREET RIGHT TURN POCKET**  
**IMPROVEMENTS**

**CONTRACT NO. C02408**



**JULY 2024**

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[Revised: 09/03/19-CDA STD2018]

# 12 TEMPORARY TRAFFIC CONTROL

## **12-1 General**

**12-1.01 General:** Construction area traffic control devices shall be installed and maintained in accordance with the applicable sections of these Special Provisions, the Standard Specifications, the current Edition of the California Manual on Uniform Traffic Control Devices (CA MUTCD), the Americans with Disabilities Act (ADA) and as directed by the Engineer.

**12-1.03 Flagging Costs:** Section 12-1.04, "Payment," of the Standard Specifications is amended to read:

The cost of furnishing all flaggers, including transporting flaggers, to provide for passage of public traffic through the work under the provisions in Section 7-1.03, "Public Convenience," and Section 7-1.04, "Public Safety," shall be considered as included in the contract lump sum price paid for traffic control and no additional allowance will be made therefor.

## **12-3 Traffic-Handling Equipment and Devices**

**12-3.01 General:** Prior to commencing construction which will affect existing vehicular, including bikes, and pedestrian traffic, the Contractor shall submit for review by the Engineer, Traffic Control Plans on 11" x 17" sheets of paper which contains only information specifically related to work zone vehicular and pedestrian traffic control. If the Contractor proposes to use the current edition of the CA MUTCD published by Caltrans in lieu of a traffic control plan, in specific work operations, they shall submit in writing for consideration which Typical Application Diagram will be used and how it will be applied for each work operation. Traffic Control Plans or proposals shall be submitted for review at least two weeks prior to implementation.

Traffic Control Plans shall contain a title block which contains the Contractor's name, address, phone number, project superintendent's name, contract name, dates and hours traffic control will be in effect, and a space for review acknowledgment.

The content of the Traffic Control Plan shall include, but is not limited to, the following:

1. Show location and limits of the work zone.
2. Give dimensions of lanes affected by traffic control that will be open to traffic.
3. Indicate sign placement, cone placement, and other methods of delineation and reference to appropriate City or Caltrans Standards.
4. Dimension location of signs and cone tapers.
5. Identify side streets and driveways affected by construction and show how they will be handled.
6. Show how bicycle and pedestrian traffic will be handled through the construction site. Pedestrian pathways through the work zone shall be in compliance with the requirements of ADA during and after work hours.
7. Identify message board locations. A minimum of 2 changeable message boards shall be required. Location to be approved by Engineer.
8. Demonstrate how two-way traffic will be maintained.

No work except for installation of project identification signs will be allowed to commence prior to approval of the Work Zone Traffic Control Plans.

## **12-4 Maintaining Traffic**

### **12-4.01A Maintaining Traffic:**

1. The full width of the traveled way shall be open for use by public traffic on Saturday, Sundays and designated legal holiday(s), after 4:00 p.m. on Fridays and the day preceding designated legal holidays, and when construction operations are not actively in progress; unless work has specifically been authorized by the Engineer.
2. The location of traffic control signing, barricades, and other facilities shall be monitored frequently (four to five times per day) by the Contractor to verify their proper location. All traffic signal and other traffic control devices shall be maintained at all times.
3. The Contractor shall conduct these operations to cause the minimum obstruction and inconvenience to traffic and to places of business, multiple dwelling units and residences adjacent to the work. The Contractor shall notify the Engineer of his planned work and utility service interruption at least five working days in advance to allow time to notify residents and businesses.
4. When construction activities will prevent vehicle access to individual driveways the Contractor shall notify and receive permission from the affected businesses and residents. Attention is directed to Section 7-1.03, "Public Convenience". **Full access shall be provided to all driveways during non-working hours.**
5. At locations where traffic is routed perpendicular to trench excavation, the excavation shall be conducted in a manner to provide for traffic at all times. Substructure installation or construction shall be conducted on only one-half the width of the roadway at a time, and that portion of the roadway being used by traffic shall be kept open and unobstructed until the opposite side of the roadway is ready for use. Upon completion of the rough grading, the surface of the roadbed shall be brought to a smooth, even condition free from humps and depressions and made satisfactory for traffic.

**12-4.01A Construction Traffic:** The Contractor shall submit a trucking route along with the traffic control plans for approval by the Engineer. The route must minimize traffic on residential streets that are not part of the project.

Existing pavement damaged by the Contractor's operations and not shown to be replaced shall be replaced at the Contractor's expense, per City Standards and to the satisfaction of the Engineer.

**12-4.02 Closure Requirements:** Attention is directed to Section 7-1.03, "Public Convenience", to Section 5-1.05, "Order of Work," of these Special Provisions.

Exact locations of Project Identification signs and Advance Notice signs (7-1.03, "Public Convenience") shall be determined in the field by the Engineer.

Lane closures will be permitted between the hours of 8:30 a.m. and 4:00 p.m. only. Only one lane at a time may be closed and no lanes shall be closed at any other hours unless specifically approved by the Engineer. The Contractor shall maintain vehicle access to homes and other properties at all times while work is in progress.

The Contractor shall not park construction vehicles, contractor employee vehicles, stage materials or stockpiles in front of any business or residential driveway access and the Contractor shall maintain access to private parking lots within the block where work is in progress. Construction vehicles shall not be left running for any length of time if parked in front of a business or residential unit.

The Contractor shall keep the City of Santa Rosa Fire Department informed regarding the closure of any traveled way. At a minimum, the Contractor shall call the Fire Department at (707) 543-3535 **and** the Communications Center at (707) 543-3666 **daily** to report any traveled way closure. This means immediately upon closure for that day and again immediately after removal of the closure. For closures over multiple days, the daily notification still applies. This requirement does not apply for single lane closures on multiple lane streets.

The Contractor shall notify Sonoma County Transit at (707) 585-7516, Superintendent of Golden Gate Transit at (415) 257-4442, Santa Rosa City Bus at (707) 543-3922, Sonoma County Airport Express at (707) 837-8700, the local Postal Service at (707) 526-0113 and Recology at (800) 243-0291 5 calendar days prior to any lane closures or restrictions in turning movements. Furthermore, the Contractor shall notify Santa Rosa City Bus at (707) 543-3922 of any bus stop closures and/or relocations at least 24 hours prior to the closure/relocation and again 24 hours prior to reopening.

If the Contractor has been given an approved Traffic Control Plan that includes road closures, they shall maintain vehicular access to homes and other properties where work is in progress within the closure area.

Where necessary, and only after receiving written approval from the Engineer, the Contractor may temporarily suspend curb side parking in their immediate work zone. Notification to businesses and residents shall be hand delivered at least 72 hours prior to construction in the affected areas.

Notification shall be as follows:

1. A notice placed on the front door of each home or business where curb side parking will be suspended and attempt made to notify each business or resident verbally that work will be underway within the block and that curb side parking will be suspended during stated working hours and request that vehicles be parked out of the roadway by 8:00 a.m. Service of notice shall not bar use of cars within the block, as individual plans change and emergencies arise.
2. Type 1 barricades every 50 feet (100 feet depending on street) adjacent to the curb where parking will be suspended with a notice posted on the barricade stating specific dates and times that curb side parking will be temporarily suspended. If work will not take place in the posted area, then Contractor shall remove "No Parking" notices.

Contractor shall maintain vehicle access to all homes and other properties along the work zone. During paving operations, the Contractor will be allowed to temporarily suspend vehicle access to a limited number of driveways when approved by the Engineer. When approved by the Engineer and at least 72 hours prior to suspending access to any driveway, the Contractor shall give both written and verbal notice to the affected businesses and residents and place barricades adjacent to the driveways with posted notices stating the specific dates and times of the suspension for that area. The notice shall also indicate an alternate parking location. Suspension of access to driveway will be permitted only as approved by the Engineer and only between the hours of 8:00 am and 4:30 pm.

Cross streets will require maintenance of at least one-half (1/2) width of each street for traffic purposes, unless a parallel route is approved by the Engineer. Flagging will only be allowed between the hours of 8:30 am and 4:00 pm.

Barricades and flaggers shall be positioned to allow safe turns at intersections and curves.

## **12-4.04 Temporary Pedestrian Access Routes**

**12-4.04A(1) Summary:** The Contractor is directed to Chapter 6D, Pedestrian and Worker Safety, in the CA MUTCD, the improvement plans and these Special Provisions.

Pedestrians shall be provided with a safe convenient and accessible path that, at a minimum, replicates the most desirable characteristics of the existing sidewalk, path or footpath. At no point along the road shall the sidewalks on both sides of the road be closed at the same time.

The Contractor shall construct and maintain temporary pedestrian pathways through the work zone, where required, that shall be in compliance with the requirements of the Americans with Disabilities Act (ADA), and the CA MUTCD.

Pedestrian routes shall not be impacted for the purposes of any non-construction activities such as parking of vehicles or equipment, or stock piling of materials. Pedestrians shall not be led into conflicts with work site vehicles, equipment or operations.

Pedestrian routes shall be open and accessible at the end of the workday unless an alternate ADA compliant route has been approved by the Engineer. The construction of curb ramps and/or long sections of sidewalk do not alleviate the Contractor from this requirement.

## **12-9 Measurement and Payment**

**12-9.01 Payment:** **Traffic Control** shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all work involved in vehicular and pedestrian traffic control, including but not limited to, providing, placing, maintaining, and removal of temporary paths and/or ramps, temporary relocation of regulatory signs, project and public notification signs, flagging, excavation, compaction, furnishing, and placement of asphalt concrete and/or PCC, barricades, toe-rails, hand rails, complying with CA MUTCD Standards for Pedestrian Safety, coordination efforts and any other items necessary for vehicle and pedestrian traffic control not specifically enumerated in the plans or these specifications, and no additional allowance will be made therefor.

[Version: 09/08/19 CDA STD2018]

## 13 WATER POLLUTION CONTROL

**13-1.01A Summary:** Water Pollution Control shall be performed in accordance with Section 13, Water Pollution Control, of the Standard Specifications and these Special Provisions. In addition, construction activities shall comply with:

1. The current California Water Quality Control Board, North Coast Region Order No. National Pollutant Discharge Elimination System Municipal Storm Water Permit, commonly referred to as the “Storm Water Permit”. A copy of the Storm Water Permit is available for review at the City of Santa Rosa Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, CA, and at [www.srcity.org/stormwaterpermit](http://www.srcity.org/stormwaterpermit).
2. The California Stormwater Quality Association Storm Water BMP Handbook for Construction (CASQA Handbook). BMPs shall be selected, installed and maintained in accordance with the latest edition. A copy of the handbook can be viewed at the City of Santa Rosa Department of Transportation and Public Works office at 69 Stony Circle or downloaded from CASQA, <http://www.casqa.org/>.

In this technical specification the CASQA Handbook BMP numbers are appended to the associated Standard Specification sections. If a conflict occurs the CASQA Handbook BMP's shall govern.

**13-1.01B Definitions: Construction phase:** The construction phase starts at the start of job site activities and ends at Contract acceptance.

**13-1.01C(4)(c) Water Quality Monitoring Reports:** The Contractor shall complete and sign the Storm Water Correction Site Inspection form with the City as part of the Storm Water Permit. A copy of the Storm Water Correction Notice is included in Appendix C.

**13-1.04 Payment:** Full compensation for conforming to the requirements of Section 13 shall be paid for at the contract **lump sum** price for **Water Pollution Control**, which price shall include full compensation for furnishing all submittals, labor, materials, tools and equipment, and doing all the work involved in water pollution control, and no additional allowance will be made therefor.

### **13-2 Water Pollution Control Program**

**13-2.01C Submittals:** The program to control water pollution required to be submitted under this section of the Standard Specifications shall include a spill contingency plan that establishes clean-up procedures that will be followed in the event of a spill of potentially hazardous, toxic, or polluting materials.

**13-2.04 Payment:** The City pays the Contractor to prepare a Water Pollution Control Program as part of the **lump sum** price paid for **Water Pollution Control**.

### **13-3 Storm Water Pollution Prevention Plan**

**13-3.01A Summary:** This project is exempt from the State Water Resources Control Board General NPDES Permit for the Discharge of Storm Water related to Construction Activities (Construction General Permit) and is not required to have a Storm Water Pollution Prevention Plan (SWPPP), therefore Section 13-3, Storm Water Pollution Prevention Plan, of the Standard Specifications does not apply to this project.

## **13-4 Job Site Management**

**13-4.03B: Spill Prevention and Control:** The Contractor shall also comply with CASQA Spill Prevention and Control (BMP WM-4). If a spill occurs at the construction site and the Contractor does not take immediate and adequate steps to contain and clean up the spill, especially if rain is threatening or if a discharge to a storm drain or creek could occur, the City shall have the right, in its sole and absolute discretion, to clean up the spill using City forces or an independent contractor. The cost of any such cleanup, in addition to recovery of any penalty or fine imposed upon the City, plus an administrative charge of fifteen percent (15%) of the costs incurred by the City, shall be deducted from any amounts owed to the Contractor hereunder.

In the event there are insufficient amounts owed to the Contractor hereunder to cover the foregoing costs and charges, the City shall have the right to pursue any other remedy to recover same, including, but not limited to, proceeding against any surety or bond in favor of the City. The City's rights under this section are intended to be in addition to and not in lieu of any imposed by the City against Contractor for violations of City Code Chapter 17-12, "Storm Water".

**13-4.03C(3): Stockpile Management:** The Contractor shall also comply with CASQA Stockpile Management (BMP WM-3). Do not block storm water flows.

**13-4.03D(1): General:** The Contractor shall also comply with Waste Management/CASQA Solid Waste Management (BMP WM-5). The Contractor shall dispose of all trash, rubbish, and waste materials of any kind generated by the Contractor, subcontractor, or any company hired by the Contractor on a daily basis.

**13-4.03D(3): Concrete Waste:** The Contractor shall also comply with CASQA Concrete Waste Management (BMP WM-8). Ensure the containment of concrete washout areas and other washout areas that may contain pollutants so there is no discharge into the underlying soil and onto the surrounding areas.

**13-4.03D(4): Sanitary and Septic Waste:** The Contractor shall also comply with CASQA Sanitary and Septic Waste Management (BMP WM-9). Sanitation facilities must be maintained periodically by a licensed service to keep them in good working order and prevent overflows. Portable toilets are required to have secondary containment.

**13-4.03D(5): Liquid Waste:** Liquid waste includes water generated from excavation dewatering. Minimize transfer piping by locating containers near the excavation to be dewatered while protecting the containers from moving vehicles and equipment.

**13-4.03E(1): Water Control and Conservation:** The Contractor shall also comply with CASQA Water Conservation Practices (BMP NS-1 and NS-2).

**13-4.03E(3): Vehicle and Equipment Cleaning:** The Contractor shall also comply with CASQA Vehicle and Equipment Cleaning (BMP NS-8).

**13-4.03E(4): Vehicle and Equipment Fueling and Maintenance:** The Contractor shall also comply with CASQA Vehicle and Equipment Fueling (BMP NS-9), and CASQA Vehicle and Equipment Maintenance (BMP NS-10).

**13-4.03E(7): Paving, Sealing, Sawcutting, Grooving, and Grinding Activities:** As listed in Part 9, sections 4 and 5 of the Storm Water Permit, the following additional BMPs shall be implemented for street paving, repaving, reconstruction, patching, digouts or resurfacing.



1. Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall unless required by emergency conditions
2. Install BMPs at all susceptible storm drain inlets and manholes to prevent paving products and tack coat from entering
3. Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or watercourses
4. Minimize non-storm water runoff from water use for the roller and for evaporative cooling of the asphalt
5. Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly
6. Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled, or disposed of properly 13-4.03D(5)
7. Collect solid waste by shoveling and vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled, or disposed of properly 13-4.03D(5)
8. Cover "cold-mix" asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm 13-4.03C(3)
9. Cover loads with tarp before haul-off to a storage site, ensuring that trucks are not overloaded
10. Minimize airborne dust by using water spray during grinding 14-9.03
11. Protect stockpiles with a cover or sediment barriers during a rain event and
12. Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or watercourses 13-4.03C(1)

**13-4.03F: Sweeping:** The Contractor shall also comply with CASQA Street Sweeping and Vacuuming (BMP SE-7).

**13-4.03G: Dewatering:** Dewatering consists of discharging accumulated stormwater, groundwater, or surface water from excavations or temporary containment facilities.

Groundwater levels may change depending on the time of year and the amount of seasonal rainfall.

Water accumulated in excavations shall be discharged to the sanitary sewer under the conditions set forth in the discharge permit issued by the City included in Appendix A-1 of these Special Provisions. Said water shall be disposed of in a manner as to cause no injury to public or private property, or be a menace to public health. Sediment shall be removed from water to be disposed of, prior to discharge, by placing the pump inlet hose into a sump filled with clean gravel, or a perforated bucket filled with clean gravel. The outlet of the pump shall have a filter sock installed to retain residual sediment. An approved air gap shall be maintained at all times when dewatering from a water main trench.

The discharge shall be monitored to verify the lack of contamination. Periodic samples shall be analyzed by the City's Environmental Compliance Laboratory to confirm the acceptability of the discharge. **If any odor, sheen or other visual discrepancy is noted during excavation or discharge, stop pumping and immediately notify the Engineer.**

Pumped groundwater will not be allowed into any watercourse or storm drain system.

Contractor shall be responsible for constructing, operating and maintaining all necessary features to complete the work including furnishing, installing and maintaining all pumping and other equipment required to dewater any trenches containing water as may be encountered during

performance of the work. Dewatering plan for each occurrence shall be approved by the Engineer prior to implementation.

**13-4.04 Payment:** Job Site Management shall be paid for at the contract **lump sum** price for **Water Pollution Control**.

### **13-6 Temporary Sediment Control**

**13-6.03C Temporary Drainage Inlet Protection:** The Contractor shall also comply with CASQA Storm Drain Inlet Protection (BMP SE-10).

**13-6.04 Payment:** Temporary Sediment Control shall be paid for at the contract **lump sum** price for **Water Pollution Control** which includes all maintenance costs.

### **13-10 Temporary Linear Sediment Barrier**

**13-10.01A Summary:** The Contractor shall also comply with CASQA Silt Fence and Sand Bag Barrier (BMP SE-1 and SE-8).

**13-10.04 Payment:** Full compensation for conforming to the provisions of Section 13 shall be paid for at the contract **lump sum** price for **Water Pollution Control**.

[Revised: 06/19/19 CDA STD2018]

## 14 ENVIRONMENTAL STEWARDSHIP

### **14-9.03 Dust Control**

**14-9.03A General:** Sweeping per section 14-9.03C shall also be performed to prevent and alleviate dust.

Sweeping, covering stockpiles, applying water, and/or dust palliative, to control dust caused by public traffic is not change order work.

**14-9.03C Construction:** All dust-producing work and unpaved construction sites shall require a minimum watering in the middle and ending of each workday. The frequency of watering shall increase if dust is airborne. Water shall not produce runoff.

The Contractor shall maintain dust control to the satisfaction of the Engineer, 7 days a week, 24 hours per day.

At the end of each workday the Contractor shall thoroughly sweep all streets in the work zone to minimize airborne dust.

At the end of each work week the Contractor shall sweep all streets in the work zone with a commercial street sweeping truck equipped with a rear pick up broom.

At the Engineer's discretion additional sweeping or watering may be required, including the use of a commercial street sweeping truck equipped with a rear pick up broom, at any time or place.

**14-9.03D Payment:** Full compensation for conforming to this section shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed.

**14-10.01 General:** The Contractor shall dispose of all Portland cement concrete, brick wall and asphalt concrete, generated from removal or demolition activities on the project, at a recycler for these materials.

All other excess materials from the project shall become the property of the Contractor and shall be disposed of by him, at his expense.

**14-10.02 Solid Waste Disposal and Recycling Report:** Submit a Solid Waste Disposal and Recycling Report prior to final acceptance of work performed under the Contract. Show the types and amounts of project-generated solid waste taken to or diverted from landfills or reused on the project.

The Contractor shall provide receipts verifying delivery and approximate quantity (in tons) of the material delivered to a material recycler.

**14-10.03 Payment:** Full compensation for conforming to this section shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed.

## **14-11 Hazardous Waste and Contamination**

### **14-11.07: Department Generated Hazardous Waste**

**14-11.07A General:** Based on analytical tests of project soils, this project is within an area that contains subsurface hydrocarbon contamination.

Analytical test results are documented in a Summary Report “Pre-Construction Hazardous Materials Assessment – B Street Right Turn Pocket Project” dated October 31, 2023, prepared by EBA Engineering. The report is on file with the City of Santa Rosa Public Works Department, 69 Stony Circle, Santa Rosa, CA 95401. A copy of the EBA report, is also available in Appendix B for the Contractor’s use and is not part of the contract documents.

In general, the Contractor shall maintain awareness of potential signs of soil and groundwater contamination throughout the project limits and shall notify the City immediately upon discovery of any potential soil or groundwater contamination.

The Contractor shall provide 40-hour OSHA-HAZWOPER certified workers in the contaminated area and provide a field Site Safety Officer that is also an 8-hour OSHA-HAZWOPER Supervisor trained to directly oversee the contaminated materials removal and handling operation. All workers in this circumstance must have their initial and annual renewal refresher training, medical clearance and personal protection equipment in accordance with 8CCR Section 5192.

**14-11.07C Transport and Disposal of Department-Generated Hazardous Waste:** All soil and base rock from excavations on this project shall be considered contaminated and shall be transported to, and disposed of at, an approved landfill.

The Contractor shall furnish completed hazardous waste manifests ready for the Engineer’s signature.

The Contractor is responsible for disposal of contaminated soil, including trucking, disposal site fees, and additional testing if required by disposal sites. The Contractor shall comply with all disposal regulations, such as City, County, and/or State permits and licenses, as may be required.

Prior to disposal of any excess material from the work site, submit to the Engineer written authorization for such disposal and entry permission signed by the approved disposal site. The Contractor shall disclose in landfill applications the existing conditions and the written disposal and entry permission shall include acknowledgement of such disclosure.

Pre-construction soil sampling as described in section 14-11 of these Special Provisions indicated the presence of lead, and other contaminants. Based on these results the City has obtained letters of acceptance for disposal of up to 250 CY of soil from this project at the following landfills:

- Hay Road Landfill in Vacaville, CA – Approval No. HRL J#9779
- Potrero Hills Landfill in Suisun City, CA – Approval No. PH-23-1029

Conditional letters of landfill acceptance are included in Section A, Fees and Permits, of these Special Provisions for the Contractor’s use and are not considered a part of the contract documents. The Contractor shall be aware of disposal limitations at the landfills based on weather, time of year, etc.

Within 5 business days of transporting Department-generated hazardous waste, submit documentation of proper disposal from the receiving landfill.

**14-11.08 Payment: Contaminated Soil Disposal** shall be paid for at the contract price per **cubic yard**, which price shall include full compensation for all work as specified herein including but not limited to disposal of contaminated soil, trucking, disposal site fees, and additional testing if required by disposal sites and no additional allowance will be made therefor. This item may be eliminated in its entirety based on field conditions, and no adjustment in the contract bid price will be made therefor. The provisions in Section 4-1.05 and 9-1.06 of the 2018 Standard Specifications shall not apply.

[Revised: 09/10/19-CDA STD2018]

## 15 EXISTING FACILITIES

**15-1.03A General:** Existing facilities disturbed by construction shall conform to the applicable provisions of Section 5-1.36. All existing active utilities found to reside in excavated areas shall be supported in place with service maintained during construction. The Contractor shall be responsible for any damage caused by the Contractor's operations and any needed repairs shall be completed to the Engineer's satisfaction.

Existing storm drains found to reside in excavated areas shall be supported, removed, or replaced at the Contractor's option and at no additional cost to the City. The Contractor shall be responsible for maintaining the existing line and grade of the storm drains. If the Contractor elects to remove and replace, it shall be done per applicable City Standards and Specifications.

Existing utility trenches and/or structures that are in proximity to proposed trenches shall be safeguarded in an appropriate manner from damage.

**15-1.04 Payment:** Full compensation for supporting, removal, and disposal of existing utilities and their appurtenances is considered as included in the contract prices paid for various contract items of work and no additional allowance will be made therefor.

**15-2.02C Traffic Stripes and Pavement Markings:** All traffic stripes, pavement markings or any other traffic markings shall be removed by the Contractor to the satisfaction of the Engineer and in accordance with Sections 84 of these Special Provisions, the Standard Specifications, and the Plans.

**15-2.02D Pavement Markers:** All raised pavement markers shall be removed by the Contractor to the satisfaction of the Engineer and in accordance with Sections 82 of these Special Provisions, the Standard Specifications, City Standards, and the Plans.

**15-2.02E Payment:** Full compensation for the replacement of all traffic stripes, pavement markings, and other traffic markings and all raised pavement markers disturbed by construction and not specifically shown to be replaced on the Project Plans shall be considered as included in the prices paid for various contract items of work and no additional allowance will be made therefor.

**15-2.02N Asbestos Cement Pipe:** The Contractor is advised that asbestos cement pipe (ACP) will likely be encountered on the project and must be cut, handled, and disposed of according to Section 132-1.10 of the City Standards and the Contractor's State Licensing Law and all other applicable laws and regulations.

**15-2.02O Payment:** Full compensation for the cutting, removal and disposal of asbestos cement pipe shall be considered as included in the prices paid for various contract items of work and no additional allowance will be made therefor.

### **15-2.10 Existing Frames, Covers, Grates, and Manholes**

**15-2.10A General:** Reset existing City facility boxes and covers to grade. The City will furnish, at no cost to the Contractor, new boxes and covers to replace the existing boxes and covers that are not shown to be replaced as part of the work and that do not comply with current City Standards or are damaged prior to Contractor's operations.

**15-2.10B Adjust Utility Boxes, Frames, Covers, Grates, and Manholes:** Existing utility boxes, manhole frames and covers, valve boxes, mainline cleanouts and monuments adjusted to grade shall conform to City Standards.

The Contractor shall accurately locate and record the location of existing and new manholes, valve boxes, mainline cleanouts, and monuments to be adjusted to grade that do not meet current City Standards and shall furnish the Engineer a copy of said record prior to starting construction.

All facilities on active systems shall be accessible at all times to City personnel unless otherwise stated in these Special Provisions or approved by the Engineer.

After placement of the finish course of asphalt concrete, the Contractor shall mark all overlaid manholes, valve boxes, mainline cleanouts and monuments, whether new or existing, with white paint by the end of that working day.

All new and existing manholes, valve boxes, mainline cleanouts and monuments shall be accessible within 48 hours after they are covered.

Final grade adjustments and installation of concrete collars shall be done on the same working day. Final paving around manholes, valve boxes, mainline cleanouts and monuments shall be completed the following working day.

All silt and debris shall be removed from finished structures. This shall include all existing silt and debris plus material caused by The Contractor's operation.

If new or existing water valve riser pipe needs to be extended after paving to conform to City STD-877, the Contractor shall use either a slip x slip glued PVC coupling or a transition coupling with sheer bands as directed by the Engineer. Upsizing the existing riser pipe to 8-inch will not be required unless otherwise directed by the Engineer. Any added extension must be a minimum of 12 inches. The lower section of riser pipe shall be adjusted to accommodate this requirement.

If the Contractor encounters water valve boxes with round lids or sanitary sewer frame and covers with open pick holes which must be adjusted to grade, the Contractor is to provide a count to the Engineer a minimum of two days prior to paving to obtain replacements that comply with current City Standards. The City will provide replacements provided the Contractor is not required to replace them as part of the contract or due to damage by the Contractor's operations. Valve boxes and frames and covers on facilities to be abandoned shall not be included in the count provided to the Engineer. The Contractor shall be responsible for pickup or delivery of new frames, boxes, and covers from the City warehouse or their materials supplier if purchased by the City there, to the job site. Prior to removal of an existing manhole frame, a platform shall be constructed in the manhole above the top of the sewer to prevent any dirt or debris from falling into the sewer. The platform shall remain in place until all work on the manhole has been completed and the asphalt concrete has been placed around the manhole. Prior to the removal of the platform from the manhole, all dirt and debris shall be removed.

All grade rings shall be set in cement mortar the same day they are placed. All joints shall be smoothly plastered inside and out.

Existing grade rings removed in the adjustment of manhole frames shall become the property of The Contractor and if undamaged and thoroughly cleaned of mortar may be reused in the work. If not so used, they shall be disposed of away from the site of work at the Contractor's expense.

Manhole frames shall be reinstalled to align directly over the grade rings. Any frames misaligned by more than ½ inch shall be removed and reinstalled.

Existing Monuments adjusted shall conform to City Standards 280 to 284 and 78-2 Survey Monuments, of the specifications.

**15-2.10C Payment: Adjust Utility Boxes to Grade** shall be paid for at the contract unit price **each** which price shall include full compensation for furnishing all labor, materials, tools and equipment and doing all the work involved in adjusting manholes or Utility boxes to grade, including but not limited to: required excavation and backfill; additional grade rings if required; furnishing location of manholes and transporting new frames and covers to job site, as specified herein, and no additional allowance will be made therefor.

**15-3.03 Construction:** All removed concrete shall become the property of the Contractor and shall be immediately off-hauled. None of the removed concrete shall be dumped or stockpiled on the work site. The Contractor shall dispose of all removed concrete at a recycler for this material. Burying of broken concrete within the limits of the project will not be allowed.

All concrete which is to be removed from sidewalk, curb, gutter and driveway areas shall be removed to the nearest score mark or construction joint as directed by the Engineer unless otherwise noted on the Project Plans. The edge of existing concrete to remain shall be neat and free of defects. Saw cutting may be required to achieve this.

Concrete removal includes removal of any reinforcing steel embedded in the concrete and no additional allowance will be made for the removal of such steel.

Aggregate base shall be removed as required to accommodate the proposed improvements.

Where new concrete is to join existing concrete, remove enough concrete to allow splicing of new reinforcement. Protect existing reinforcement to be incorporated into the new work from damage.

Irrigation facilities may be encountered during concrete removal and replacement. The Contractor shall exercise care in this area and repair any damage done by their operations at no additional cost to the City.

Landscaping and other surfaces or structures damaged or destroyed during the removal of existing concrete or asphalt concrete shall be restored to original condition at no additional cost to the City. The Contractor's attention is directed to Section 5-1.36A "Property and Facility Preservation" of these Special Provisions.

**15-3.04 Payment:** Payment for saw cutting, removal, and disposal of concrete sidewalk, curb and gutter, concrete slabs, and walls shall be included in the contract prices paid for various contract items of work and no additional allowance will be made therefor.

**15-7 Utility Clearances:** All items noted in this Section shall take place prior to any other construction activities.

Suggested pothole locations provided on the Project Plans shall be for reference use only and shall not be considered as accurate information for any other areas within the project limits.

The Contractor shall, through field investigations, determine any conflicts or interferences between existing utilities and new utilities or where new AC and Concrete sections are to be constructed under this project. Work for verification of utility clearances shall include but is not



limited to potholing to verify potential conflicts, grades, and alignments of existing facilities to be connected to; excavation; backfill; notification; and coordination and redirection of crews to other contract work if required.

**The Contractor shall provide all relevant information in writing to the Engineer immediately upon discovery of any conflict.** Any delay in notification to the Engineer may delay direction and/or corrective action and a delay claim due to this reason shall not be considered by the City. The Contractor shall not proceed with any work that is in conflict until direction is provided by the Engineer and shall redirect crews to other contract work. All the information required to be obtained per this Section and any other information not noted but relative to the project shall be provided to the Engineer on a set of Plans when the investigative effort is complete.

In the event the Contractor fails to bring a potential conflict or interference to the attention of the Engineer prior to beginning excavation work, any actual conflict or interference which does arise shall be corrected by the Contractor, as directed by the Engineer, at no additional expense to the City.

**15-7.01 Payment: Utility Clearances** shall be paid for at the contract **lump sum** price, which price shall not exceed 5% of the contract amount and shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all the work involved in verifying utility clearances, including but not limited to: potholing to verify potential conflicts, grades and alignments of existing facilities to be connected to; excavation; backfill; notification; and coordination and redirection of crews to other contract work *if required*, as specified herein, and no additional allowance will be made therefor.

**15-8 Utility Conflict Resolution:** In accordance with Section 5-1.36C Non-Highway Facilities, and Section 19-1.03D Buried Man-Made Objects of the Standard Specifications: Remove, relocate or mitigate utility conflicts, man-made buried objects or other unforeseen items as ordered by the Engineer.

**15-9 Tree Root Pruning:** All tree roots two inches and greater which are encountered during excavation must be pruned by hand. The root shall be cut cleanly with a saw to avoid splits. When digging within the drip line of trees, the Contractor shall exercise extreme caution to avoid pulling on roots with excavation equipment. Hand dig around all roots greater than one inch in diameter. The Contractor shall notify the Engineer when encountering roots within the drip line of trees which are greater than one inch. If the Engineer elects to get direction from an arborist The Contractor shall redirect crews to other contract work after safeguarding the area.

**15-9.01 Payment:** Full compensation for removing and pruning tree roots, hand digging to avoid damaging roots, and excavating cautiously with respect to tree roots is considered as included in the prices paid for various contract items of work and no additional allowance will be made therefor.

**15-10 Irrigation Modifications:** Where required to accommodate the sidewalk and ramp improvements, the Contractor shall remove and replace existing irrigation piping and sprinkler heads behind new concrete sidewalk and ramps. Materials used shall closely match and are to be field determined during initial excavation for the new sidewalk and ramps. The Contractor shall coordinate this work with the property owner and minimize impact to their irrigation schedule during construction.

**15.10.01 Payment: Irrigation Modifications** shall be paid for at the contract **lump sum** price, which price shall include full compensation for modifying and/or furnishing and installing new irrigation piping, sprinkler heads, coordination with property owner, and any other items necessary

to modify the existing irrigation facilities not specifically enumerated in the plans or these specifications, and no additional compensation will be made therefor.

**15-11 Preservation of Survey Monuments:** The Contractor shall be responsible for preservation and/or perpetuation of existing survey monuments (iron pipes on lot lines and corners, centerline well monuments, etc.). Damaged or disturbed monumentation shall be replaced and reset in accordance with the business and professions code and the requirements of the Sonoma County Surveyor. A corner record shall be submitted to the Sonoma County Surveyor for any replacement or resetting of existing survey monuments.

**15-11.01 Payment:** Full compensation for Preservation of Survey Monuments is considered as included in the contract prices paid for various contract items of work and no additional allowance will be made therefor.

[Revised: 09/10/19-CDA STD2018]

## 16 CLEARING AND GRUBBING

**16-1.01 Description:** Clearing and grubbing shall conform to the applicable provisions of Section 16 of the Standard Specifications, with the following modifications and additional requirements.

Clearing, grubbing, and access shall be confined to the limits of the project site shown on the plans and shall not exceed the minimum necessary to complete operations.

The Contractor shall not remove any trees, brush, shrubs, or other natural objects outside the limits of construction as shown on the plans, unless directed by the Engineer.

Any trees, brush, shrubs, or other natural objects not ordered removed by the Engineer which have been removed, altered, or damaged shall be replaced in kind by the Contractor before completion of the project.

All unsuitable material shall be disposed of away from the site by the Contractor. The Contractor shall make all necessary arrangements for disposal of material.

**16-1.03 Construction:** The area to be cleared and grubbed shall be the area within the right-of-way and temporary construction easement as shown on the plans, unless otherwise specified in the Special Provisions.

### **16-1.04 Tree and Stump Removal:**

- A. Tree removal within Right-of-Way limits: Remove trees and shrubs within the City property / Temporary Construction Easement area as indicated on the plans, avoiding damage to trees and shrubs designated to remain.
- B. Safety Standards
  - 1. All equipment to be used and all work to be performed must be in full compliance with the most current revision of the American National Standards Institute Standard Z-133.1-2000 and A300-1995, or as amended.
  - 2. The contractor shall provide adequate barricades, flag person(s), signs and/or warning devices during the performance of the Contract to protect the motorists and pedestrians.
  - 3. All placements of cones, signs and barricades must conform to the American Traffic Safety Standards. Yellow flashing lights mounted on a vehicle shall not be deemed as sufficient or adequate protection.
- C. Stump Removal: All stumps, large roots and other objectionable material shall be removed to a depth of three feet below finished grade. All trees and bushes marked on the Project Plans to be removed shall be cut and removed, including the root ball. The resulting spaces shall be backfilled with material suitable for the planned use. Such suitable material shall be placed and compacted in layers as specified in Section 19-6 "Embankment Construction" of the Standard Specifications. Backfill material must be approved by the Project Engineer and should be of sufficient quality to support grass cover and contain no debris (glass, sawdust, large rock, etc.). The Contractor must fill the holes with a good quality topsoil, free of stones, rake and compact topsoil to grade, and seed or mulch the disturbed area per the Erosion Control Specifications. All surface roots and/or raised areas from the root flare must be ground out or leveled and filled to match the surrounding grade. If settlement of the backfill material occurs, it will be the Contractor's responsibility to repair the area again at his/her expense.

D. All tree roots two inches and greater which are encountered during excavation must be pruned by hand. The root shall be cut cleanly with a saw to avoid splits. When digging within the drip line of trees, the Contractor shall exercise extreme caution to avoid pulling on roots with excavation equipment. Hand dig around all roots greater than one inch in diameter. The Contractor shall notify the Engineer when encountering roots within the drip line of trees which are greater than one inch. If the Engineer elects to get direction from an arborist the Contractor shall redirect crews to other contract work after safeguarding the area.

**16-1.06 Payment:** **Clearing and Grubbing** shall be paid for at the contract **lump sum** price for clearing and grubbing, which price shall include full compensation for furnishing all labor, materials tools and equipment, and doing all the work involved in clearing and grubbing, tree removal, and pruning as specified herein, and no additional allowance will be made therefor.

**Tree and Stump Removal** shall be paid for at the contract unit price **each**, which price shall include full compensation for furnishing all labor, hauling, materials, tools, and equipment, and doing all work involved in tree and stump removal as specified herein, and no additional allowance will be made therefor.

# 19 EARTHWORK

## **19-1 General**

### **19-1.01 General:**

1. Special Provisions for handling and disposal of all site contaminated soil and water are included in Section 13 and 14. All soil is to be considered contaminated with lead, though not considered hazardous to human exposure.
2. See section 19-2.03B, Surplus Material, of these Special Provisions.

**19-1.01A Summary:** Earthwork shall include all excavation, disposal of excess material, trenching, and other work in accordance with the requirements of the Standard Specifications and these Special Provisions.

**19-1.03B Unsuitable Material:** Stabilization of unsuitable material shall comply with the following provisions:

- A. Unsuitable material may be processed in place, may be excavated and placed on the grade or other locations suitable for further processing, or may be partially excavated and partially processed in place.
- B. Processing may consist of drying to provide a stable replacement material.
- C. Stabilized material shall be placed and compacted in layers as hereinafter specified for constructing embankments.

**19-1.03B(1) Subgrade Stabilization:** Any area of the subgrade determined by the Engineer to be unsuitable shall be removed to the limits marked in the field and to a depth of approximately 0.5' below the subgrade plane as directed by the Engineer. Deeper excavations may be required depending on field conditions. Soil stabilization fabric shall be placed, and aggregate base shall be placed and compacted to fill the excavation. Compaction shall be in accordance with Section 19-5.03B.

For roadway reconstruction per Section 19-2.03A of these Special Provisions where processing of unsuitable subgrade material is not allowed, the areas to be stabilized will be marked in the field by the Engineer after roadway excavation of the area is complete. Use of a pavement grinder shall be considered an acceptable method of excavation of areas requiring subgrade stabilization.

Included in the subgrade stabilization work, test holes to verify that subgrade conditions are sufficiently dry to proceed with subgrade stabilization may be required.

**19-1.03C Grade Tolerance:** When aggregate subbase or aggregate base are to be placed on the grading plane, the grading plane shall not vary more than 0.05' above or 0.1' below the grade established by the Engineer.

**19-1.04 Payment:** **Subgrade Stabilization/Digouts** shall be paid for at the contract price per **square yard** as measured in the field. Price shall include full compensation for stabilization fabric, asphalt concrete base, compaction, doing all work involved in stabilizing the subgrade as specified herein including labor, materials, tools and equipment, excavation, and no additional allowances will be made therefore.

In the event of an increase or a decrease in the amount of the engineer's estimated quantity of Subgrade Stabilization, such increase or decrease shall not be considered an alteration in excess

of the 25 percent of the contract amount of such items under provisions of Section 4-1.05 of the Standard Specifications and no adjustment of the contract price for Subgrade Stabilization will be made.

No additional compensation will be made for excavation and stabilization beyond the limits of the areas marked by the Engineer or for excavation and stabilization of locations other than those marked by the Engineer. Any excavation for subgrade stabilization done by the Contractor to accommodate equipment width beyond the limits of the areas marked by the Engineer shall be at the Contractor's expense.

Quantities of Stabilization Fabric to be paid for shall be computed on the basis of the exact amount of area covered in the field.

The cost for the asphalt concrete base shall be included with the contract unit price for subgrade stabilization.

## **19-2 Roadway Excavation**

**19-2.03A General:** The Engineer shall provide reference points and cut sheets for the excavation of the roadway. The Contractor shall furnish an excavation and paving plan and a qualified grade setter to ensure the subgrade conforms to the lines and grades established by the Engineer.

The Contractor shall note that there are street and other trees near areas intended for roadway excavation. The Contractor's operation, including the size of the excavation and grinding equipment, shall ensure that existing street trees are not damaged. Where limited clearance under the street trees prevents the use of a grinder, excavation shall be performed by an alternate method as approved by the Engineer. Alternate methods may include jackhammering and removal of existing pavement and base materials by hand, or by use of smaller excavation or grinding equipment.

Rubber-tired equipment shall not be allowed on the subgrade unless approved by the Engineer.

Where tree roots are encountered during roadway excavation, the Contractor shall cut the roots off six inches below the planned subgrade. Each cut shall be clean with no torn bark or splintered wood remaining on the root and shall be accomplished by use of a saw appropriate for the size of the root to be cut.

**19-2.03B Surplus Material:** Unless otherwise indicated on the Project Plans or in these Special Provisions, the Contractor shall load, haul from the site of work and properly dispose of all surplus excavated material including, but not limited to, rock, concrete, asphalt, debris and soil. Except as otherwise noted, all material excavated from the work sites shall be the property of the Contractor. None of the surplus materials generated from the work sites shall be disposed of on the work sites. Prior to the beginning of any earthwork, the Contractor shall submit to the Engineer written authorization for such disposal and entry permission signed by the approved disposal site. The Contractor shall comply with all disposal regulations such as City, County, and/or State permits and licenses, as may be required. Contractor is directed to section 14-11.07C "Transport and Disposal of Department-Generated Hazardous Waste" for information regarding soil disposal.

**19-2.04 Payment:** **Roadway Excavation** shall be a final pay quantity (F) paid for at the contract price per **cubic yard**, which price shall include full compensation for all work as specified herein and no additional allowance will be made therefor.

Removal of existing bituminous pavement and base materials will be paid for as roadway excavation.

### **19-5 Compaction:**

**19-5.03B Relative Compaction:** Compaction under roadway sections is omitted where Subgrade Enhancement Geotextile (Soil Stabilization Fabric) is specified.

Relative compaction of not less than 95 percent shall be obtained for embankment under bridge and retaining wall footings without pile foundations within the limits established by inclined planes sloping 1.5:1 out and down from lines one foot outside the bottom edges of the footing.

### **19-8 Subgrade Enhancement Geotextile**

**19-8.02 Materials:** Subgrade enhancement geotextile (aka soil stabilization fabric) shall be installed per manufacturer's recommendations and shall meet or exceed the following specifications:

|   |                        |
|---|------------------------|
| Grab Tensile Strength (ASTM D4632)            | 290 lb.                |
| Mullin Burst Strength (ASTM D3786)            | 500 psi                |
| Trapezoid Tearing Strength (ASTM D4533)       | 113 lb.                |
| Modulus (Load at 10% Elongation) (ASTM D4632) | 120 lb.                |
| Apparent Opening Size (ASTM D4751)            | 40-70 sieve            |
| Permittivity (ASTM D4491)                     | 0.05 sec <sup>-1</sup> |

Soil stabilization fabric shall be Mirafi 600-X, GeoTex 315ST, Carthage Mills FX-66, TerraTex HD, or approved equivalent.

Prior to placement of soil stabilization fabric, the Contractor shall remove all loose dirt left from excavation operations.

Soil stabilization fabric shall be placed over the entire subgrade area. The soil stabilization fabric shall be held in place with wooden stakes driven through the fabric into the subgrade at the beginning and the end of the fabric and at 50-foot intervals. A minimum of three stakes shall be placed across the width of the fabric roll at each interval. The stakes shall be a minimum length of 8-inches and shall be driven at an angle opposite to the direction of pull exerted on the fabric by the paving machine.

**19-8.04 Payment:** **Soil Stabilization Fabric (HMA Road Section)** shall be paid for at the contract price per **square yard** as measured in the field. Payment shall include full compensation for doing all work involved in placing the fabric including root pruning labor, materials, tools and equipment, and no additional allowance will be made therefor.

[Version: 04/16/19 RY STD2018]

## 26 AGGREGATE BASE

### **26-1.01 General**

**26-1.01A Summary:** Aggregate base shall be Class 2 conforming to and placed in accordance with the requirements of Section 26 of the City Specifications.

### **26-1.02 Materials**

**26-1.02B Class 2 Aggregate Base:** All Class 2 aggregate base material shall be virgin material. Recycled aggregate base may be permissible for use as road base within roadway sections, as approved by the Engineer. Recycled material shall not be used below the structural section within the roadway or for structural fill outside of the roadway structural section. The minimum sand equivalent shall be 31 for any individual test.

### **26-1.03 Construction**

**26-1.03E Compacting:** Compaction shall commence immediately after spreading of the moisture conditioned material and before the material has dried sufficiently to allow separation between the fine and coarse particles. The surface of the finished aggregate base shall be firm and unyielding when tested with a fully loaded water truck. Any visible movement vertically or horizontally of the aggregate base under the action of construction equipment or other maximum legal axle loads shall be considered as evidence that the aggregate base does not meet this requirement.

**26-1.03C Grade Tolerance:** When aggregate subbase or aggregate base are to be placed on the grading plane, the grading plane shall not vary more than 0.05 feet above or 0.10 feet below the grade established by the Engineer.

**26-1.04 Payment:** Payment for Aggregate base shall be made as noted below.

**Aggregate Base (HMA Paving)** shall be paid at the contract price per **square foot** per the depths/sections noted for the limits of AC Conform noted on sheet 4 and shown in Typical section 1 on sheet 7 of the plans and shall include all compensation for furnishing all labor, materials, tools and equipment and doing all the work involved in furnishing and placing the base material as specified, including furnishing, hauling, compacting, and applying water as specified and directed by the Engineer, and no additional allowance will be made therefor.

**Aggregate Base (P.C.C. Pavement)** shall be paid at the contract price per **square foot** per the depths/sections noted for the limits of P.C.C. Pavement noted on sheet 4 and shown in Typical section 1 on sheet 7 of the plans and shall include all compensation for furnishing all labor, materials, tools and equipment and doing all the work involved in furnishing and placing the base material as specified, including furnishing, hauling, compacting, and applying water as specified and directed by the Engineer, and no additional allowance will be made therefor.

[Version: 09/18/19 CDA STD2018]



## 39 HOT MIX ASPHALT

### **39-1.01 General**

**39-1.01A Summary:** Section 39 includes specific specifications for producing and placing Hot Mix Asphalt (HMA) by mixing aggregate and asphalt binder at a mixing plant and spreading and compacting the HMA mixture.

**39-1.01B Definitions:** For these specifications, HMA and asphalt concrete shall be the same.

Use Section 39-3 Method construction process of these specifications for HMA production and construction.

**39-1.01C Description:** HMA shall be placed in separate lifts as shown on the Project Plans.

Asphalt concrete base shall be placed on the same day the area is excavated so that all areas will either have existing asphalt surface or new asphalt concrete base by the end of each working day. No subgrade areas shall be exposed or open to traffic during non-working hours.

Asphalt concrete base paving shall be accomplished by use of a paving machine. The asphalt mix shall be transferred from the trucks to the hopper of the paving machine by means of a shoulder machine equipped with a side caster. Any equipment used to transfer asphalt concrete to the paving machine shall not exceed the load capacity of any surface it is driven over and shall not produce rutting or pumping of the existing roadway surface or newly placed asphalt concrete base at any time.

Construction vehicles/equipment shall not be allowed on the newly placed asphalt concrete base until the day after it is placed. Super Dumps or other trucks with liftable trailing load bearing axles shall not be allowed on the newly placed asphalt concrete base at any time. All trucks or other construction equipment to be driven on the newly placed asphalt concrete base shall not exceed the surface load bearing capacity and shall not produce rutting or pumping at any time.

All longitudinal surface paving joints shall fall on a lane line. Longitudinal Subsurface paving joints shall be offset by at least 6 inches.

No longitudinal vertical drop offs will be allowed between the lanes when the roadway is opened to traffic. Where a longitudinal vertical drop off occurs along the roadway crown between the existing street surface and the new asphalt concrete base, the Contractor shall grind a 10:1 taper in the existing surface to make a temporary conform to accommodate traffic. The temporary taper shall be ground after the asphalt concrete base paving has been completed each day.

Where a vertical drop off will occur between the top of the new asphalt concrete base and a valley gutter, driveway, or side street conform, the Contractor shall install a temporary 10:1 asphalt taper.

Where a vertical drop off would occur between the asphalt concrete base and a pedestrian ramp, the Contractor shall install a temporary 12:1 asphalt taper.

All ground edges adjacent to curb ramps and driveways shall have temporary asphalt concrete ramps (tapers) installed if the asphalt concrete surfacing cannot be placed back the same day the

existing pavement is removed. Kraft paper or other bond breaker shall be placed under the conform ramps to facilitate removal when paving operations start.

Kraft paper or other bond inhibitor shall be placed under the temporary asphalt taper to facilitate removal when paving operations resume.

Temporary asphalt tapers and associated bond breaker material shall be removed prior to placement of the asphalt concrete surface lift. Where the bond breaker material adheres to the asphalt concrete base course it shall be fully removed with a method, approved by the Engineer that will in no way degrade the quality of the final product.

The Engineer shall provide reference points and cut sheets for the placing of asphalt concrete base and asphalt concrete surface.

The Contractor shall furnish an excavation and paving plan which shall include the following:

1. Requested location for survey staking of reference points
2. Asphalt plant supplying mix including aggregate source
3. Disposal site for spoils
4. Type of trucks and equipment to be used
5. Haul routes through adjacent residential streets
6. Staging locations
7. Sequencing
8. Taper grind locations

The Contractor shall set a rotary laser level or string line based on the reference points to control the grade of the paving machine along the crown line. The rotary laser level may be used provided the level can be accurately set to the design centerline slope, and the detector is directly mounted to the paving machine screed to control the grade of the paving along the crown line. The Contractor shall also furnish a grade setter to ensure that the asphalt concrete base and asphalt concrete surface paving conforms to the lines and grades established by the Engineer.

A tack coat of SS-1h or SS-1 emulsified asphalt shall be applied to all asphalt concrete and concrete surfaces and allowed to break immediately in advance of placing all lifts of asphalt concrete. Tack coat applied to horizontal surfaces shall be applied with a tack truck, at a minimum residual rate of 0.02 gal/SY. Unless otherwise shown on the Plans, tack coat shall also be applied to all vertical mating surfaces and conforms to existing pavement, curbs, gutters, and construction joints, and allowed to break immediately in advance of placing all lifts of asphalt concrete. The tack coat shall be reapplied 1) where it becomes contaminated, and 2) where it is significantly tracked (removed) from the surface.

Asphalt concrete surface must be placed and compacted at ambient temperatures of 50°F or greater.

Asphalt concrete base must be placed and compacted at ambient temperatures of 40°F or greater.

Asphalt concrete will not be placed during any form of precipitation.

The asphalt concrete base and asphalt concrete surface courses shall be allowed to cool to 160° F at mid depth before the roadway is opened to traffic each day.

At the end of each working day the Contractor shall place retro reflectorized signs and delineators, as required for nighttime use in accordance with the Standard Specifications and Section 12 of these Special Provisions to warn the public of the existing conditions.

At the end of each workday during paving operations the location of all valves, manholes, monuments and any other facility overlaid with asphalt concrete and required to be raised to grade shall be marked in white paint.

### **39-1.02 Materials:**

**39-1.02B Tack Coat:** Tack coat must comply with the specifications for asphaltic emulsion or asphalts. Tack coat shall be diluted SS1 or SS1h.

**39-1.02C Asphalt Binder:** Asphalt binder in HMA must comply with the specifications for asphalts.

Asphalt binder to be mixed with aggregate for asphalt concrete surface, leveling and base shall be PG64-16 grade paving asphalt.

The amount of asphalt binder to be mixed with the aggregate shall be specified by the Engineer at the time of paving. Different asphalt binder content may be specified for each lift and each location.

Liquid anti-stripping agent (LAS) shall be added to the asphalt binder at a rate of 0.5 to 1.0% by weight of asphalt binder. The LAS shall be AD-here LOF 65-00 or equivalent, and shall be stored, measured, and blended with the asphalt binder in accordance with the anti-stripping agent manufacture's recommended practice.

The LAS can be added at the asphalt plant or at the refinery. When added at the asphalt plant, the equipment shall indicate and record the amount of LAS added. If added at the refinery, the shipping ticket from the refinery shall certify the type and amount of LAS added.

**39-1.02E Aggregate:** The aggregate grading of the various types of asphalt concrete shall conform to one of the following as directed by the Engineer:

Surface or Leveling Course..... ½-inch Coarse HMA Type A

Base Course.....¾-inch HMA Type A

Aggregates should be of high abrasion resistance and durability. Excessively soft and friable aggregates are not allowed.

The specified aggregate gradation must be determined before the addition of asphalt binder and includes supplemental fine aggregate.

The proposed aggregate gradation must be within the TV limits for the specified sieve sizes shown in the following tables:

**Aggregate Gradation  
(Percentage Passing)  
HMA Types A  
3/4-inch HMA Type A**

| Sieve sizes | TV limits | Allowable tolerance |
|-------------|-----------|---------------------|
| 1"          | 100       | --                  |
| 3/4"        | 95–100    | TV ± 5              |
| 3/8"        | 65–80     | TV ± 5              |
| No. 4       | 49–54     | TV ± 5              |
| No. 8       | 36–40     | TV ± 5              |
| No. 30      | 18–21     | TV ± 5              |
| No. 200     | 2.0–8.0   | --                  |

**1/2-inch Coarse HMA Type A**

| Sieve sizes | TV limits | Allowable tolerance |
|-------------|-----------|---------------------|
| 3/4"        | 100       | —                   |
| 1/2"        | 94–100    | --                  |
| 3/8"        | 70–90     | --                  |
| No. 4       | 55–61     | TV ± 5              |
| No. 8       | 40–45     | TV ± 5              |
| No. 30      | 20–25     | TV ± 5              |
| No. 200     | 2.0–8.0   | --                  |

Before the addition of asphalt binder and lime treatment, aggregate must have the values for the quality characteristics shown in the following table:

| Quality characteristic  | Test method         | HMA Type A                 |
|---|---------------------|----------------------------|
| Percent of crushed particles<br>Coarse aggregate (% min.)<br>One fractured face<br>Two fractured faces<br>Fine aggregate (% min)<br>(Passing no. 4 sieve<br>and retained on no. 8 sieve.)<br>One fractured face | California Test 205 | 90<br>75<br><br><br><br>70 |
| Los Angeles Rattler (% max.)<br>Loss at 100 rev.<br>Loss at 500 rev.  | California Test 211 | 10<br>45                   |
| Sand Equivalent (min.) <sup>a</sup>   | California Test 217 | 50 <sup>b</sup>            |
| Fine aggregate angularity<br>(% min.)   | California Test 234 | 45                         |
| Flat and elongated particles<br>(% max. by weight @ 5:1)  | California Test 235 | 10                         |

<sup>a</sup> Reported value must be the average of 3 tests from a single sample.

<sup>b</sup> Minimum Sand Equivalent of 45 for asphalt concrete base.

**39-1.02F Reclaimed Asphalt Pavement:** Reclaimed Asphalt Pavement (RAP) may be used at the Contractor's option. If RAP is used, the Contractor shall provide the proposed mix design and the quality control for all HMA that includes RAP, in accordance with the following requirements:

1. Contractor shall provide City with a mix design per California Test 384 for the proposed RAP HMA.
2. As part of City's evaluation of RAP HMA, Contractor and City shall perform bitumen ratio tests on at least six split samples of Contractor's RAP to establish correlation between respective binder ignition ovens.
3. RAP shall be processed from reclaimed Asphalt Concrete pavement only.
4. RAP pile(s) shall be separate from the stacker pile, not intermingled with other materials, and stored on smooth surfaces free from debris and organic material.
5. The project RAP pile shall be processed and mixed, identified, and of adequate quantity for the proposed project. "Live" piles shall not be permitted.
6. Contractor shall sample the RAP pile and determine the bitumen ratio (using same binder ignition oven used in #2 above) and provide the test results to the City at least one week prior to producing RAP HMA.
7. A minimum of three samples shall be tested for bitumen ratio for RAP pile of 1500 tons, or portion thereof.
8. RAP pile shall be mixed such that individual bitumen ratio test results of RAP pile so not vary more than +/- 0.5%.
9. During RAP HMA production, RAP shall be sampled by the Contractor off of the belt (into the batch plant), per method established by the City, and samples provided to the City.
10. Bitumen ratio of RAP sampled off of the belt shall be 4.0% minimum, as determined by City binder ignition oven. City shall select binder content for RAP HMA mix per Specifications.
11. RAP content shall be no more than 20% by dry aggregate mass in the HMA. If proposing a change in the RAP content, the Contractor shall notify the Engineer. If the content changes more than 5%, the Contractor shall submit a new mix design.
12. Moisture content of RAP pile shall be 4.0% maximum, and shall be tested the day prior to the day of paving and tested/monitored during each day of HMA production.
13. RAP pile(s) shall be protected from exposure to moisture.
14. RAP HMA shall comply with all the specifications for HMA.
15. If batch mixing is used, RAP shall be kept separate from the virgin aggregate until both ingredients enter the weigh hopper or pugmill. After introduction to the pugmill and before asphalt binder is added, the mixing time for the virgin aggregate and RAP shall not be less than five seconds. After asphalt binder is added, the mixing time shall not be less than 30 seconds.
16. If continuous mixing is used, the RAP shall be protected from direct contact with the burner flame with a device such as a shield, separator, or second drum.
17. If any of the above criteria are not satisfied, or if the RAP HMA test result determined by the City are inconsistent, RAP HMA production shall stop for City projects until the issue(s) are corrected.

**39-1.03 HOT MIX ASPHALT MIX DESIGN REQUIREMENTS:**

**39-1.03E Job Mix Formula Verification:**

**(Not Applicable)**

### **39-1.08 Production:**

**39-1.08A General:** During production, with approval of the Engineer, the Contractor may adjust hot or cold feed proportion controls for virgin aggregate and RAP.

### **39-1.12 Smoothness:**

**39-1.12A General:** Determine HMA smoothness with a straightedge. The completed surfacing shall be thoroughly compacted, smooth and free from ruts, humps, depressions or irregularities. Any ridges, indentations or other objectionable marks left in the surface of the asphalt concrete by blading or other equipment shall be eliminated by rolling or other means. The use of any equipment that leaves ridges, indentations or other objectionable marks in the asphalt concrete shall be discontinued, and acceptable equipment shall be furnished by the Contractor.

### **39-1.15 Minor Hot Mix Asphalt:**

(Not Applicable)

### **39-3.02 Acceptance Criteria:**

**39-3.02A Testing:** The acceptance testing requirement for Sand Equivalent shall be 50 (minimum) for asphalt concrete surface and 45 (minimum) for asphalt concrete base. HMA shall meet the following requirements:

| Aggregate Micro-Deval (ASTM D6928-10) <sup>1</sup> | Tensile Strength Ratio, TSR (ASTM D7870) <sup>2</sup> |
|--|---|
| ≤16.0%   | Not Required  |
| 16.1-18.0%   | 70 (minimum)  |
| 18.1-21.0%   | 80 (minimum)  |

<sup>1</sup> Asphalt concrete with an aggregate Micro-Deval loss greater than 21.0% shall be removed and replaced at the Contractor's expense. In addition, no single source of asphalt concrete aggregate shall have a Micro-Deval loss greater than 21.0%.

<sup>2</sup> TSR testing shall be performed on re-compacted asphalt concrete (per ASTM D7870), obtained from field cores, and tested within 30 days of asphalt concrete placement. Specimens tested shall include 1 unconditioned sample, and 2 conditioned samples as follows:

- a) 20.0 hour Adhesion cycle @ 60°C
- b) 3500 cycles @ 40 psi and 60°C

A single TSR test shall not represent more than 750 tons of asphalt concrete. Asphalt concrete not meeting the above requirements shall be removed and replaced at the Contractor's expense.

**39-3.04 Transporting, Spreading, and Compacting:** Test sections shall be approved based on the attainment of 93% relative compaction and a satisfactory surface condition following final rolling. The number of coverages required shall be the minimum number required to obtain 93% relative compaction. Relative density shall be the ratio of in-place density (ASTM Test Method D2950) to test maximum density (California Test 309, Method of Test for Determining Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt) determined during production paving.

The HMA may be cored during paving of the test sections, and the in-place density for each test section shall be the average of three core densities determined per California Test 308.

**39-6 Payment: Asphalt Concrete Surface** shall be paid for at the contract price per **ton**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment and doing all work involved in placing asphalt concrete surface and overlay, including tack coat and overlay conforms, and no additional allowance will be made therefor.

Full compensation for installing and removing temporary asphalt tapers shall be included in the contract price for asphalt concrete surface and no additional allowance will be made therefor.

Full compensation for removing existing asphalt concrete from top of gutters shall be included in the contract price for asphalt concrete surface and no additional allowance will be made therefor.

Full compensation for furnishing weigh master's certificates shall be considered as included in the contract price paid per ton for asphalt concrete surface and asphalt concrete base and no additional allowance will be made, therefor.

[Revised: 03/07/17 Lab STD2010]

## 40 CONCRETE PAVEMENT

**40-1.01A Summary:** Portland cement concrete (P.C.C.) pavement shall be constructed in accordance with Section 40 of the Standard Specifications, the details shown on the plans, these Special Provisions, and as directed by the Engineer.

All P.C.C. pavement shall be constructed of 6.5 sack "Type II Modified" concrete, containing not less than 611 pounds of Portland cement per cubic yard, and conforming to the provisions in Section 90 of the Standard Specifications. Traffic shall not be allowed on new P.C.C. streets until the P.C.C. has attained a minimum compressive strength of 3,500 pounds per square inch (psi). Track-mounted construction equipment will not be allowed on the new P.C.C. streets at any time.

All concrete to be removed shall be disposed of by the Contractor away from the site of work. All concrete shall become the Contractor's property and shall be immediately off-hauled. None of the removed concrete shall be dumped or stockpiled on the work site. The Contractor shall dispose of all removed concrete at a recycler for this material. The Contractor's attention is directed to Section 124, Material Recycling, of these Special Provisions.

The Contractor shall furnish an excavation and paving plan which shall include the following:

Define each paving phase using a map showing what sections will be paved. Note: The paving plan must be sequenced in such a way that the streets will be open to traffic during the time that the one half is being reconstructed.

For each concrete paving phase, the Contractor shall provide:

1. Map showing what sections will be paved.
2. Schedule showing when roadway will be out of service to traffic, show excavation, paving and curing dates
3. Requested location for survey staking of reference points
4. P.C.C. plant supplying mix including aggregate source
5. Disposal site for spoils
6. Type of trucks and equipment to be used
7. Haul routes through adjacent residential streets
8. Staging locations
9. Sequencing

**40-1.01C Submittals:** At least one week prior to the placement of the concrete, the Contractor shall submit for review and approval, a calibration chart for the mix design strength versus concrete temperature and a copy of the mix design proportions and proposed admixture(s) together with all supporting technical data. Submittal must be reviewed and approved by the City of Santa Rosa Material Lab before concrete can be poured.

**40-1.01C(13) Grade Tolerance:** Aggregate base shall conform to the compaction and elevation tolerances specified, and shall be free of loose or extraneous material before the PCC is placed. Aggregate base shall be uniformly moist, and any excess water standing in pools or flowing on the surface shall be removed prior to placing PCC.

**40-1.03B Contraction Joints:** Joints shall be constructed in accordance with the details shown on the Plans and not exceed a shape of 1 to 1.5 ratio. Contraction joints shall be formed with hand-tools. Keyed longitudinal construction joints shall be used between centerline lanes. A keyed



joint shall be formed in the slab edge by attaching a metal or wooden key, of the dimensions shown on the Project Plan details, to the side form. The keyway should be located at mid-depth of the slab to provide maximum strength. If wooden keyway forms are used, they shall be maintained in good condition and well-oiled before each use. A keyed construction joint should be used at the end of each workday at the location of a transverse contraction joint.

**40-1.03F Placing Concrete:** Pavement smoothness requirements specified in Section 40-1.01D(8)(c) will not apply to the pavement surface unless otherwise specified. When a straightedge 12-feet-long is laid on the finished surface and parallel with the centerline, the concrete surface shall not vary more than 0.01-foot from the lower edge of the straightedge. The transverse slope of the finished surface shall be uniform to a degree such that no depressions greater than 0.02-foot are present when tested with a straightedge 12-feet-long laid in a direction transverse to the centerline and extending from edge to edge of a 12-foot lane.

Spreading, compacting and shaping shall also conform to the provisions in Section 40-1.03F(4) of the Standard Specifications, except that a truss screed capable of spreading, screening, shaping and consolidating only one-half of the planned street width in a workday, shall be used. Track-mounted construction equipment will not be allowed on the new P.C.C streets at any time. Immediately in advance of placing concrete, and after all aggregate base operations are completed, side forms shall be trued and maintained to the required line and grade for a distance sufficient to prevent delay in placing concrete. However, the grade adjacent to the existing (or replaced) curb and gutter should not extend more than approximately 1/4-inch above the gutter lip after final finishing.

**40-1.03H(3) Final Finishing:** In advance of curing operations, the pavement surface shall be finished to grade and cross section with a float, and troweled smooth. Concrete adjacent to the joints and lip of gutter shall be finished with an edger tool.

Surfaces shall be broom finished transversely to the line of traffic. If water is necessary, the water shall be applied immediately in advance of brooming.

Fixed forms shall not be removed in less than 12 hours after the finishing has been completed.

**40-1.03I Curing:** The P.C.C. shall be cured using the same methods used during implementation of Section 40-1.01C(7) of these Special Provisions.

The Contractor shall use a pre-approved concrete admixture to obtain the necessary strength within the specified timeframe.

Concrete that is uncured at the end of the workday shall be protected in a manner approved by the Engineer, this may require trench plates.

**40-1.03P Operational Constraint:** The Contractor shall complete each concrete installation location such that the concrete reaches 3,500 psi within 3 days (72 hours).

**40-1.03Q Measurement:** Quantities of P.C.C. Pavement to be paid for will be the area of the completed work in place, measured by the square foot.

**40-1.04 Payment:** **P.C.C. Pavement** shall be paid at the contract price per **square foot** per the depths/sections noted for the limits of P.C.C. Pavement noted on sheet 4 and shown in Typical section 1 on sheet 7 of the plans (including the monolithic curb) and shall include all compensation for furnishing all labor, materials, tools and equipment and doing all the work involved in furnishing and placing the PCC concrete as specified, including placing and removing form boards,

furnishing, hauling, placing, shaping, troweling and texturing the concrete surface as specified and directed by the Engineer, and no additional allowance will be made therefor.

[Version Date: 11/26/19 CDA STD2018]

## 51 CONCRETE STRUCTURES

**51-7.01A General:** Minor Structures shall be constructed in accordance with Section 51 of the City Standards, Section 51-7 of the Standard Specifications, the Project Plans, and these Special Provisions. Minor concrete structures are catch basins, manholes, and retaining curbs.

Concrete shall be cured in accordance with Section 90-1.03B of the Standard Specifications.

Minor Concrete shall conform to the provisions of Section 90-2 of the Standard Specifications.

Placing of concrete under water will not be permitted.

**51-7.01D Payment:** **STORM DRAIN CATCH BASIN (CITY STD 402)** shall be paid for at the contract price per **each**, which price shall include full compensation for furnishing all labor, tools, materials, and equipment, and doing all work involved in placing a new type II catch basin per City STD 402 including removing existing catch basin; excavation; placing backfill; and grouting flowlines complete in place and as shown on the plans and as specified herein and as directed by the Engineer, and no additional allowance will be made therefor.

**48" Storm Drain Manhole** shall be paid for at the contract price per **each**, which price shall include full compensation for furnishing all labor, tools, materials, and equipment, and doing all work involved in installation of a new storm drain manhole around an existing storm drain, including but not limited to: potholing other than as specified in Section 15 to facilitate the progress of work; excavation and disposal of excavated materials; hand digging *if needed*; dewatering and disposal of trench groundwater; bypass pumping *if needed*; contamination awareness; couplings and pipe if connecting to existing mains; water tight sealing of penetrations; coating and patching; supporting or removal and disposal of existing utilities in the same trench, *if required*; placing and compacting all required bedding and backfill including control density fill *if required*; trench plates as needed; temporary trench paving; concrete collar; installing and adjusting the cast iron frame and cover to grade after final paving is complete; testing; as specified herein, and no additional allowance will be made therefor.

[Version: 07/02/19 CDA STD2018]

## 64 PLASTIC PIPE

**64-2.02 Materials:** Plastic pipe for use in public storm drain systems shall be 15 inches through 36 inches in diameter, Type S, smooth interior wall, corrugated exterior wall, high density polyethylene pipe (HDPE) as specified in AASHTO designation M294. Where the storm drain pipe is greater than 36 inches, or when the cover is less than 12" to subgrade, reinforced concrete pipe shall be used.

The use of plastic storm drain pipe shall not be permitted in unpaved areas.

**64-2.02A Joints:** Joints shall be in accordance with Section 64-1.05 Couplings and Fittings of the City Standards and Plans. Pipe and fittings shall be joined with a bell-and-spigot joint meeting AASHTO M252, AASHTO M294, or MP7. The joint shall be silt tight with o-ring gaskets made of polyisoprene meeting the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable wrap to ensure the gasket is free from debris. A joint lubricant supplied by the manufacturer shall be used on gasket and bell during assembly. The spigot shall be pushed into the bell to the "home line" on the pipe.

**64-2.02B Backfill:** Excavation and backfill shall be in accordance with Section 64-1.05 of the City Standards. All trench excavation material from trenches, including any removed portions of the existing storm drain pipe, shall be the property of the Contractor. Excavated material shall not be disposed of on the work site. Prior to disposal of any material, the Contractor shall submit to the Engineer written authorization for such disposal of material and entry permission signed by the owners of the disposal site, and shall comply with any other requirements of disposal, such as City and County permits, as may be required.

Excavation and backfill shall be as shown on Standard 215 Standard Trench Detail of the City of Santa Rosa Standard Plans and the following provisions.

Minimum trench width shall be as follows:

| <u>Pipe Size, Inside Diameter</u> | <u>Trench Width (inches)*</u> |
|-----------------------------------|-------------------------------|
| 15                                | 39                            |
| 18                                | 42                            |
| 24                                | 48                            |
| 30                                | 54                            |
| 36                                | 60                            |

\* If this is not sufficiently wide for the materials and methods proposed, a wider trench allowing for proper installation should be constructed.

Pipe bedding will be placed in 6-inch (maximum) lifts to six inches above the top of pipe with each lift hand or mechanically tamped. The final lift can be compacted with a plate type vibrating compactor.

**64-2.03C Laying Pipe Placement:** Laying Pipe shall be in accordance with Section 64-1.07 of the City Standards. Plastic storm drain pipe shall be installed in accordance with the Standard Specifications, generally accepted practice and on the alignment and grade as shown on the plans. When long radius curves are permitted, adjustments in horizontal alignment will be achieved through adjustments at each coupling, within manufacture's specification, and not by bending of the pipe.

Unless otherwise specifically permitted by the Engineer, all pipe shall be laid upgrade.

Where groundwater or surface drainage occurs, pumping shall continue until backfilling has progressed to a sufficient height to prevent floatation of the pipe.

**64-2.04 Payment:** Full compensation for removing and disposing of existing storm drain pipes encountered during trenching shall be considered as included in the price paid for Storm Drain Pipe.

**HDPE Plastic Storm Drain Pipe** shall be paid for at the contract price per **linear foot**, which price shall include full compensation for furnishing all labor, tools, materials, and equipment, including all couplings and fittings, and for doing all the work involved in constructing plastic storm drains including excavation, replacement of street striping or pavement markings, placing backfill and asphalt concrete surfacing, complete in place and as shown on the plans and as specified in these specifications, the Special Provisions and as directed by the Engineer.

**64-2.05A Trench Shoring and Bracing - Storm Drain:** All bracing and shoring shall conform to Section 64-05B of these Special Provisions.

**64-2.05B Description:** All bracing insurance shall conform to section 7-1.02(6)(b) of the Standard Specifications in the division of industry at industrial safety construction safety orders which are currently in use.

The Contractor shall take all necessary measures to protect the workmen and adjacent areas and structures from the hazards of the trenching or excavation operations.

**65-4.06 Payment:** Full compensation for Trench Bracing and Shoring – Storm Drain shall be considered as included in the prices paid for HDPE Plastic Storm Drain Pipe as indicated in these Special Provisions and no additional allowance will be made therefor.

[Version: 7/03/19 CDA STD2018]

## 73 CONCRETE CURBS AND SIDEWALKS

**73-1.01 General:** This work shall consist of curbs, gutters, sidewalks, driveways, curb ramps, and valley gutters and shall be constructed in accordance with the details and at the location shown on the plans, City Standards, and in conformance to the requirements of Section 73 of these Special Provisions, City Standards, and the Standard Specifications.

Soft or spongy material shall be removed and replaced with suitable material as required by the Engineer.

All new concrete construction joints shall be of the same type as those removed with the existing concrete unless otherwise stated herein or on the plans.

All oil, paint, tire marks, and other discoloring due to the Contractor's operations shall be removed from concrete by power washing or other approved method that will not cause damage prior to acceptance by the Engineer. Cement mortar will not be an acceptable substitute for power washing. Vandalism to uncured concrete surface shall be removed. If it cannot be removed from the surface, then the vandalized concrete shall be removed and replaced to the nearest score-mark.

**73-2.03 Curb Construction:** Curb construction shall be in accordance with Section 73-1.05 of the City Standards.

Curb and gutter shall be constructed per City STD-241 and per the details and at the locations shown on the plans, and in accordance with the City Specifications.

Expansion joint material shall be installed on at least one side of new curb and gutter when length of the new install is over ten feet, and on both sides when over 15 feet.

When length of new curb and gutter is 7 feet or less, both sides shall be dowelled to the adjacent existing curb and gutter. Dowels shall be 8-inch long #4 dowels with two equally spaced in the curb (vertical) and two in the gutter (horizontal).

Where new curb is installed adjacent to existing trees, root barrier, "Biobarrier" manufactured by Typar or approved equivalent, shall be installed a minimum of 14" deep in accordance with City Standard 101-A and as directed by the Engineer.

Where noted on plans, native backfill shall be placed behind new curb. Native backfill shall be suitable material for planting and shall be free from stones larger than 1 in. in size, refuse, plants or roots, clods, weeds, sticks, or other extraneous material. Soil shall be compacted to 85% relative compaction. No separate payment will be made for backfilling and compaction of native soil.

All concrete which is to be removed from curb and gutter areas shall be removed to the nearest transverse score mark or construction joint or as directed by the Engineer.

Curb and gutter shall be cured in accordance with the requirements of Section 90-1.03B of the Standard Specifications except that the Contractor may substitute a pigmented sealer upon the approval in writing of such substituted sealer by the Engineer.

No deduction in measured length of curb and gutter to be paid for will be made for curb openings for driveways or mountable curbs.

**73-3.03 Sidewalk, Gutter Depression, Curb Ramp, and Detectable Warning Surface:**

Sidewalk, gutter depression, curb ramp, and detectable warning surface shall be constructed in accordance with the details and at the location shown on the plans and in conformance to the requirements of Section 73-1.07 of the City Specifications with the following modifications and additional requirements. Additionally, ¼-inch expansion material with thickened edges of 8-inches shall be applied surrounding all vertical poles and base plates.

All concrete which is to be removed from sidewalk and driveway areas shall be removed to the nearest transverse score mark across the full width of sidewalk or construction joint or as directed by the Engineer.

Sidewalk crack control joints shall be scored 1/4" to 3/8" wide with no finished joint larger than 1/2" wide by 1/4" deep.

Joints shall be constructed in accordance with the details shown on the Plans and not exceed a shape of 1 to 1.5 ratio.

Curb ramps shall be constructed at the locations specified on the Plans, in full compliance with the most stringent requirements of the ADA, California Building Code sections 11B-302.3, 11B-406.2, 11B-406.3, and 11B-406.5, as well as Caltrans Standard Plan A88A, with the exception that the ramp thickness shall be a minimum of 4 inches, and the ramp width shall be 48 inches. For purposes of payment, curb ramp will be measured from curb return to curb return and include the back of sidewalk curb as required and exclude the curb and gutter. The area of concrete beneath the detectable warning surface shall be paid for at the contract price per square foot of curb ramp.

Trees overhanging the public right-of-way within proposed curb ramp and adjacent sidewalk areas shall be trimmed in accordance with Section 112 to provide a minimum 7 feet of vertical clearance above the finished walking surface.

Expansion joint material shall be installed full width from edge of pavement to back of sidewalk on both sides of the curb ramp structure. Expansion joint material shall comply with ASTM D2475, sized accordingly and 1/2" to 3/4" from the top of the finished grade. Fill and seal joints with a self-leveling joint sealant complying with ASTM C920-11, Type S, Grade P, Class 25. Allow appropriate cure time prior to any contact. Finished joints shall not be greater than 1/2" wide by 1/4" deep.

Curb ramp detectable warning surfaces shall consist of prefabricated raised truncated domes constructed with curb ramps in conformance with the details shown on the plans and Caltrans Standard Plan A88 and these Special Provisions. The color of the detectable warning surface shall be yellow conforming to the Federal Standard 595C, Co. No. 33538. Prefabricated detectable warning surfaces shall be installed in accordance with the manufacturer's recommendations.

The detectable warning surface tiles shall be protected from concrete splatter during installation by temporary 4 mil plastic sheeting or approved equivalent. The finished surfaces of the detectable warning surface shall be free from blemishes. Installation, cutting, and grinding, as required, shall be per the manufacturer's instructions or as directed by the Engineer.

Soft or spongy base or subgrade material shall be removed and replaced with suitable material as required by the Engineer.

Sidewalks, gutter depression, and curb ramps shall be cured in accordance with the requirements of Section 90-1.03B of the Standard Specifications except that the Contractor may substitute other than pigmented sealer upon approval in writing of such substituted sealer by the Engineer.

All oil, paint, tire marks, and other discoloring shall be removed from the Sidewalks, gutter depression, median curb, curb ramps, and driveways by sandblasting prior to acceptance by the Engineer. Cement mortar will not be an acceptable substitute for sandblasting. Vandalism to uncured concrete surface shall be removed. If it cannot be removed from the surface, then the vandalized concrete shall be removed and replaced to the nearest scoremark.

Concrete with surface cracking exceeding a depth of 0.5 inches or 0.03 inches wide or a level change of 0.25 inches shall be removed and replaced at no additional cost to the City. Patching or any joint fillers are not allowed for repairs to damaged concrete.

**73-3.04 Payment:** The payment quantity for minor concrete (curb ramp) includes detectable warning surface.

**Curb and Gutter (City STD 241)** shall be paid for at the contract price per **linear foot**, which price shall include full compensation for furnishing and applying curing materials, forming and constructing curb opening for driveways, removing discoloring, furnishing all labor, materials, tools and equipment and doing all the work involved in constructing curb and gutter complete in place as specified, including furnishing and placing expansion joint filler, Class 2 Aggregate base, root barrier, native backfill if required, constructing weakened plane joints, excavating, and backfilling.

**Retaining Curb** shall be paid for at the contract price per **linear foot**, which price shall include full compensation for furnishing all labor, tools, materials, and equipment, and doing all work involved in installation the retaining curb, including excavation, forming, backfill, and reinforcement bars, in accordance with the plans.

**Curb Ramp** shall be paid for at the contract price per **square foot**, which price shall include full compensation for furnishing and applying curing materials, removing discoloring, furnishing all labor, materials, tools and equipment and doing all the work involved in constructing curb ramp complete in place as specified, including furnishing and placing expansion joint filler, sand base layer, Class 2 aggregate base, vertical curb, detectable warning surface, removal and restoration of irrigation and landscaping, constructing weakened plane joints, excavating, and backfilling.

For purposes of payment, curb ramp will be measured between the outside border of the ramp, landing, and integral curb areas but will exclude the curb and gutter. The area of concrete beneath the detectable warning surface shall be paid for at the contract price per square foot of curb ramp.

**Sidewalk (City STD 4" Concrete Over 2" Sand)** shall be paid for at the contract price per **square foot**, which price shall include full compensation for the 2" of sand, furnishing applying curing materials, removing discoloring, furnishing all labor, materials, tools and equipment and doing all the work involved in constructing sidewalk complete in place as specified, including furnishing and placing expansion joint filler, Class 2 aggregate base, constructing weakened plane joints, excavating, and backfilling. "Sidewalk" areas shall be interpreted to include curb ramps.

**Sidewalk (Thickened Vehicular Sidewalk – 6" concrete over 4" Class 2 AB)** shall be paid for at the contract price per **square foot**, which price shall include full compensation for furnishing all labor, materials, tools and equipment and doing all the work involved in constructing a thickened



sidewalk section complete in place as specified, including furnishing and placing expansion joint filler, Class 2 aggregate base, constructing weakened plane joints, excavating, curing, backfill and compaction.

[Version: 12/12/2019 CDA STD2018]

## 82 SIGNS AND MARKERS

**82-1.01 General:** This work shall consist of installation, removal, and relocation of roadside signs as shown on the plans, where directed by the Engineer, and shall conform to the City Specifications.

Signs and hardware which are not to be mounted on traffic signal mastarms or poles shall be provided and installed by the Contractor at the locations shown on the plans per Part II of the City Traffic Standards.

Existing signs which are not on traffic signal mastarms or poles shall be relocated as shown on the plans by the Contractor.

New signs and brackets to be mounted on traffic signal mastarms and poles shall be provided and installed by the City.

Existing signs on traffic signal mast arms and poles will be relocated by the City.

Where signs are shown on the plans as relocated or removed, the sign post and foundation shall be removed if no longer in use. Existing sign posts removed from sidewalks shall be ground flush with the existing sidewalk surface, and the void filled with grout.

Salvaged signs shall be returned to the City of Santa Rosa Sign Shop at 55 Stony Point Road. All poles being removed and not relocated shall become the property of the Contractor.

Where traffic regulatory signs (i.e. STOP and crosswalk warning) are removed for construction, Temporary Signs shall be placed and maintained on barricades at stop controlled intersections and the crosswalk until permanent traffic regulatory signs are installed. Temporary stop bars and crosswalks shall be installed in accordance with Section 84 of the specifications.

If existing signs and poles are in good and re-useable condition as determined by the Engineer, the existing signs and poles may be able to be reused on the site or may not require removal for replacement depending on existing site conditions at each location. If no new sign pole is installed and the existing pole and sign are reused, there will be no bid item payment and no additional allowance will be made therefore for reusing the existing pole and sign.

**82-2.01 Payment: Remove or Relocate Roadside Sign** shall be paid for the contract unit price **each**, which price shall include full compensation for furnishing all labor, materials, tools and equipment and doing all work involved in removal and replacement, and relocation of signs and posts complete, including new poles, excavating, coring sidewalk, backfill, concrete, replacing landscaping, and sign mounting hardware, as specified herein, and no additional allowance will be made therefor.

Full compensation for installing and maintaining Temporary Sign, including all labor, materials, tools and equipment, complete as herein specified shall be included in the prices paid for various contract items of work and no additional allowance will be made therefor.

[Updated: 12/19/2019 CDA STD2018]

# 84 MARKINGS

## **84-2 Traffic Stripes and Pavement Markings**

### **84-2.01 General**

**84-2.01A Summary:** Attention is directed to Section 12 “Temporary Traffic Control” and Section 15 “Existing Facilities” of these Special Provisions. Traffic stripes and pavement markings shall conform to the applicable provisions of Section 84 of the Standard Specifications, The City Traffic Standards, and these Special Provisions and shall be placed at the locations shown on the Plans.

The Contractor shall provide and install temporary retro-reflective pavement markings on the same day as the existing permanent markings are removed or destroyed, or as directed by the Engineer, and maintain them until the new permanent markings are in place.

Temporary striping on all ground surfaces shall be paint (white and/or yellow) with retro-reflective glass beads or an approved equivalent and shall be installed the same day as the existing permanent striping is removed, or as directed by the Engineer. Temporary striping shall be maintained until new permanent striping is in place.

Existing pavement markings, including crosswalks, disturbed by construction activities shall be replaced in their entirety.

All striping to be replaced shall match existing sections in kind unless approved by the Engineer.

The Contractor shall remove all existing traffic striping and pavement marking in conflict with proposed improvements, as shown on the Plans, and as directed by the Engineer, and shall be responsible for the proper disposal of their grindings away from site work.

Permanent traffic stripes and pavement markings shall be installed after all iron has been raised for each section, but no more than five days after final paving for that section of roadway.

Existing stripes and pavement markings to remain, which are damaged by the work shall be replaced at the Contractor’s expense. This includes areas outside the immediate project limits.

Painted curbs which are damaged or replaced as part of the work shall be repainted to match existing conditions.

**84-2.02E Traffic Striping and Pavement Marking Tape:** Traffic striping and pavement marking tape must be on the Authorized Material List for signing and delineation materials.

White tape must have an initial retroreflectivity of a minimum 700 mcd/m<sup>2</sup>.

Yellow tape must have an initial retroreflectivity of a minimum 500 mcd/m<sup>2</sup>.

When contrast is required for traffic stripping and pavement marking tape, the tape must be pre-formed and retroreflective, consisting of a white film with retroreflective beads and a contrasting black film border. The contrasting black border must be a nonreflective film bonded on each side of the white film to form a continuous roll. Each black border must be a minimum of 2 inches wide. The width of the tape must be at least 4 inches wider than the stripe width.

**84-2.02I Methyl Methacrylate:** Methyl methacrylate (MMA) shall be used for all traffic striping and pavement markings. Install methyl methacrylate markings per the manufacturer recommendations.

MMA traffic paint must:

1. Be on the Authorized Material List for methyl methacrylate traffic striping and pavement marking.
2. Be Category 2.

**84-2.03 Inspection:** The Engineer shall inspect completed lines and markings as conditions may require and may inform the Contractor of any faulty methods or unsatisfactory results.

**84-2.04 Payment: Stripes and Pavement Markings** shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all equipment, tools, and labor, and doing all the work involved, as herein specified, including but not limited to, pavement surface preparation, glass beads, thermoplastic and/or methyl methacrylate material, tape, removal of existing and temporary stripes and pavement markings, replacement of damaged stripes and markings, raised pavement markers, painted striping, all temporary traffic measures, and any other work required to install thermoplastic and/or methyl methacrylate and painted stripes, pavement markings and raised pavement markings not specifically enumerated in the City Standards, the Project Plans, and these Special Provisions , and no additional compensation will be made therefor.

**84-2.05 Green Preformed Methyl Methacrylate Bike Lane Markings:** Green Preformed Methyl Methacrylate Bike Lane Markings shall meet requirements of FHWA Interim Approval IA-14 and Chromaticity Requirements for Green-Colored Pavement as outlined in FHWA Interpretation Letter 9(09)-86(I).

Green Bike Lane Markings shall have a minimum thickness of 90mil and skid resistance of greater than 45 BPN when tested according at ASTM E303. Green Bike Lane Markings shall be methyl methacrylate material and extend from dashed bike lane to dashed bike lane as shown on the Project Plans. Install Green Preformed Methyl Methacrylate Bike Lane Markings per the manufacturer recommendations.

**84-2.05.01 Payment: Green Preformed Methyl Methacrylate Bike Lane Markings** shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all equipment, tools, and labor, and doing all the work involved, as herein specified, including but not limited to, pavement surface preparation, glass beads, thermoplastic and/or methyl methacrylate material, tape, removal of existing and temporary stripes and pavement markings, replacement of damaged stripes and markings, raised pavement markers, painted striping, all temporary traffic measures, and any other work required to install thermoplastic and/or methyl methacrylate and painted stripes, pavement markings and raised pavement markings not specifically enumerated in the City Standards, the Project Plans, and these Special Provisions , and no additional compensation will be made therefor.

[Updated: 12/19/2019 CDA STD2018]

## 86 TRAFFIC SIGNAL & LIGHTING

### **86-1 General**

**86-1.01 Description:** The Contractor shall furnish and install traffic signal systems and street lighting systems at the locations shown on the plans in conformance with the City Traffic Standards, latest edition, and applicable provisions of Section 86, "Traffic Signal & Lighting", of the Caltrans Standard Specifications and Standard Plans, these Special Provisions, and as directed by the Engineer.

**86-1.07 Scheduling of Work:** Scheduling of work shall conform to Section 86-1.07 of the Standard Specifications except that no traffic signal system turn-on shall be scheduled for Monday, Friday, or the day before or after a legal State holiday.

### **86-2 Materials and Installation**

**86-2.01 Excavating and Backfill:** All trench spoils shall be removed from the work area as they are generated.

Native material shall not be used as trench backfill.

Where conduit containing conductors of 100 volts or less is installed parallel and adjacent to the existing gutter lip, the trench shall be approximately two inches wider than the outside diameter of the conduit and shall not exceed six inches in width. At pull boxes the trench may be hand dug to required depth. The conduit shall be placed in the bottom of the trench with the top of the conduit a minimum of 18 inches below finish grade.

When conduit containing conductors of 100 volts or less is not installed adjacent to the lip of gutter it shall be installed with a minimum of 18 inches of cover.

All conduit containing conductors of more than 100 volts shall be installed with a minimum of 24 inches of cover.

Where existing facilities prevent installing conduit with the minimum 18 or 24 inches of cover, the Contractor shall depress the new conduit under the existing facilities without exception.

Trench backfill and surfacing for trenches shall conform to City STD-215 and as shown on the plans.

**86-2.02 Removing and Replacing Improvements:** Concrete removal shall conform to the applicable provisions of Section 15-3 of the Standard Specifications and these Special Provisions.

All concrete to be removed shall be disposed of by the Contractor away from the site of the work. Burying of broken concrete within the limits of the project will not be allowed.

All concrete which is to be removed from sidewalk, curb, gutter, and driveway slab areas shall be scored at the edges of removal and removed to the nearest score mark or construction joint as directed by the Engineer.

Reinforcing steel may be encountered in portions of concrete to be removed and no additional allowance will be made for the removal of such steel.

All sidewalk and curb and gutter which are removed shall be reconstructed in accordance with Section 73 of the City of Santa Rosa Construction Specifications.

**86-2.03 Foundations:** The Contractor shall construct foundations for traffic signal standards per Caltrans Standard Specifications and Standard Plans.

Minor Portland cement concrete shall be produced from commercial quality aggregates and cement and shall contain not less than 590 pounds of cementitious material per cubic yard and with a minimum 28-day compressive strength of 3000 psi.

#### **86-2.04 STANDARDS, POLES, STEEL PEDESTALS, AND POSTS**

**86-2.04A General:** Traffic signal standards, arms, and related appurtenances shall be installed per Part IV of the City Traffic Standards or per the Caltrans Standard Specifications and Plan for details not shown in City standards.

**86-2.05 Conduit:** Conduit shall conform to Standard Specifications and Part IV-F of the City Traffic Standards.

Trenching depth shall be per Section 86-2.01 of these Special Provisions.

**86-2.06 Pull Boxes:** Pull boxes shall conform to STD 730 of the City Traffic Standards, these Special Provisions, Section 86-2.06 of the 2022 Caltrans Standard Specifications, and the details on the plans.

All existing pull boxes to receive new conductors and/or conduits shall be cleaned out, all existing grout removed, and the bottoms re-grouted with a drain hole or the boxes replaced to meet current City Standards.

**86-2.07 Tamper Resistant Insert:** The Contractor shall supply and install McCain Tamper Resistant Inserts or approved equal in all new number 5 and number 6 pull boxes. Installation of the tamper resistant insert shall be per manufacturer's recommendation and instructions.

The Contractor shall submit the proposed type of Tamper resistant device to the Engineer for approval before ordering.

The City shall supply locks for the tamper resistant inserts. Keys for the City supplied locks shall not be given or loaned to the contractor at any time. The contractor may use their own locks during construction or opt not to lock the pull boxes for ease of access. The City will install City locks on the inserts the day of the signal activation. Once the City locks are installed the contractor shall coordinate with the City inspector to have access to the pull boxes. The proposed-final payment will not be paid until all contractor locks are removed.

If a pull box is not fully surrounded by concrete or asphalt, a concrete pad shall be installed around the pull box. The concrete pad shall be four inches thick and two feet wide on all edges of the pull box at a minimum.

#### **86-2.08 Conductors and Cables**

**86-2.08A General:** All conductors for traffic signal or street lighting systems shall conform to Section 86 of the Standard Specifications, Part IV-G of the City Traffic Standards, as shown on the plans, or as specified herein.

**86-2.09 Wiring:** Wiring shall conform to the Standard Specifications and PART IV-G of the City Traffic Standards.

With the exception of Signal Interconnect Cable (IC), all existing conductors shall be removed and reinstalled. IC shall be removed from existing conduits and repulled when new conductors are installed.

**86-2.10 Bonding and Grounding:** Grounding jumper shall be attached by a 3/16-inch or larger brass bolt in the standard and shall be run to the ground. Grounding jumper shall be visible after cap has been poured on foundation.

**86-2.11 Service:** The existing service enclosure on the NW corner of B Street and 3<sup>rd</sup> Street shall remain in use. Contractor shall protect in place.

**86-2.16 Painting:** All exposed metal signal housings, doors, visors, back plates, and framework parts shall be powder coated by a City approved process.

**86-3.01 Controller Assemblies** The existing controller assembly shall remain in place.

#### **86-3.02 Battery Backup System**

**86-3.02A General:** BBS shall comply with TEES and these Special Provisions.

The existing BBS cabinet on the NW corner of B Street and 3<sup>rd</sup> Street shall remain in use. Contractor shall protect in place.

Contractor shall coordinate the PG&E (Mike Miller (707) 579-6478) at least 30 working days before work on the service enclosure is scheduled to begin for shutoff and turn-on of power. Traffic control shall be provided during signal shutoff, or alternative power source shall be provided to keep the traffic signals in operation.

#### **86-4 Traffic Signals and Fittings**

**86-4.01 Vehicle Signal Faces:** Red signal faces (Balls and Arrows) shall be 12-inch LEDs furnished and installed by the Contractor.

Green signal faces (Balls and Arrows) shall be 12-inch LEDs furnished and installed by the Contractor. Green signal faces shall have a clear lens, tinted lens shall not be accepted.

Yellow signal faces (Balls and Arrows) shall be 12-inch LEDs furnished and installed by the Contractor.

**86-4.01A Signal Sections:** Each signal-section housing shall be either die-cast or permanent mold-cast aluminum conforming to ANSI Standard D-10.1 and shall conform to the requirements of the Standard Specifications. Structural plastic shall not be accepted.

**86-4.01C Visors:** Visors shall be painted flat black, full circle type.

**86-4.01E Backplates:** Backplates shall be mounted to the signal head in a fashion so that no light is visible between the backplate and the signal head or between sections. Backplates shall be secured to all sections of the signal head they are mounted to. Backplates must be made of metal and have a flat black finish. Each backplate shall have a yellow retroreflective strip with a

width of three inches along the perimeter of the face. Backplates and visors shall be painted flat black.

**86-4.03 Pedestrian Signal Faces:** Pedestrian signal heads shall be countdown LED in accordance with Part IV-E.1 of the City of Santa Rosa Traffic Standards. GE PS7-CFF1-27A-J are known to meet this specification. Pedestrian signal housings shall be painted signal green.

**86-4.03H Audible Pedestrian Signals:** The audible pedestrian signals shall be Polara Navigator Accessible Pedestrian Signals, IN2 2-wire unit, with a rack mounted CCU. This equipment shall be installed at the locations shown on the plans and in accordance with the manufacturer's recommendations.

[http://www.polara.com/docs/IN2-OPERATION\\_r121023.pdf](http://www.polara.com/docs/IN2-OPERATION_r121023.pdf)

The Contractor shall program walk speech messages into all audible pedestrian signals. Submit the message and phonetic spelling to the Engineer prior to programming. The walk speech message must be activated from the beginning of the walk interval and repeated for its duration. An example of the message is "Northpoint Parkway. Walk sign is on to cross Northpoint Parkway." The pushbutton information message must play when the pushbutton is activated. The pushbutton information message must say, "Wait."

The minimum volumes will be adjusted by the Contractor as directed by the Engineer.

The body housing and button shall be powder coated the color signal green.

The face plate for the pedestrian push button shall be a R10-3e (MUTCD 2014 Edition) with the appropriate (left or right) arrow representing the direction of the pedestrian crossing that the push button serves.

**86-4.04 Signal Mounting Assemblies:** Terminal compartments shall be cast bronze. Terminal compartments shall be painted signal green.

## **86-5 Detectors**

**86-5.01D Emergency Vehicle Detector System:** Optical detectors are existing to remain or existing to be relocated as shown on the plans. (Global Traffic Technologies Model 721 or 722) shall be mounted on the traffic signal mast arms at the locations shown on the plans.

Phase selectors (Global Traffic Technologies Model 764) are existing to remain.

The Contractor shall provide and install optical detector cable (Global Traffic Technologies Model 138) at the locations shown on the plans and make the appropriate connections in the controller Cabinet.

**86-5.01E Video Detection System:** The Contractor shall furnish and install a complete GridSmart video detection system as shown on the plans, as specified herein, and as directed by the Engineer.

The video detection system shall be installed as recommended by the supplier and as documented in installation materials provided by the supplier.

The camera shall be mounted at the location shown on the plans as recommended by the manufacturer.



All cable for the video detection system shall be per manufacturer's specifications and supplied by the Contractor. No splicing of cable will be allowed.

The Contractor shall arrange for a representative from GridSmart to oversee the alignment of the camera, programming of the processor, and certify that the video detection system has been installed correctly and is fully operational a minimum of one day before the scheduled turn-on of the traffic signal system. The Contractor shall notify the Signal Section Supervisor at 707-543-3888 a minimum of five working days prior to scheduling the GridSmart representative's visit to the project site. The scheduled turn-on cannot proceed until the video detection system operation has been approved by the Signal Section Supervisor.

**86-6 Lighting** shall conform to all applicable specifications in Sections 86-1.02K(2) "Luminaires" and 87-2 "Lighting Systems" of the Caltrans Standard Specifications, and these Special Provisions.

**86-6.01A Light Emitting Diode (LED) Luminaires:** The Contractor shall supply and install Leotek Green Cobra Model GCM1-60J-MV-30K-3R-GY-125-PCR7-FOC-WL-RWG, or approved equal, at locations noted on the plan.

The Contractor shall submit the proposed type of luminaire to the Engineer for approval before ordering.

**86-6.01B Street lights** shall be capable of operating with 120V or 240V input. Light fixtures shall be Leotek GCM2-40F-MV-B-W-GY-1A, 101W, 4000K color, or approved equal with equivalent lumen output.

**86-6.01C Street light housings** shall be painted grey.

**86-6.11 Photoelectric Control:** The photoelectric unit shall be new and shall be installed on a traffic signal standard, the location of which is shown on the plans. A separate contactor located in the service cabinet is existing to remain.

**86-6.11A Types:** Photoelectric control shall be Type II with a Ripley RD8645-5.0 long life PEC.

**86-7 Traffic Signal Fiber Interconnect Cable:** Interconnect cable is existing and to remain, or existing to be pulled into new conduit, as shown on the plans.

**86-8 Interconnect Modem:** The existing interconnect modem is to remain.

**86-8.10 Payment:** **Traffic Signal** shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, tools and equipment to modify the traffic signal and street lighting system complete in place, including but not limited to all utility location and verification potholing, excavation and backfill, foundations, standards, steel pedestals and posts, pull boxes, tamper resistant inserts, conduit, conductors, wiring, service cabinet, traffic signal cabinet assembly, controller and software, traffic signals and fittings, electrical components, pedestrian signal faces, pedestrian push buttons, audible pedestrian signals and testing, emergency vehicle preemption system, vehicle detection system, and doing all work including, removing and disposing of poles, salvaging existing LED's utility location and verification potholing, abandoning foundations, conduit modifications, removing and installing conductors, splicing, as shown on the plans, as specified, and no additional allowance will be made therefor.

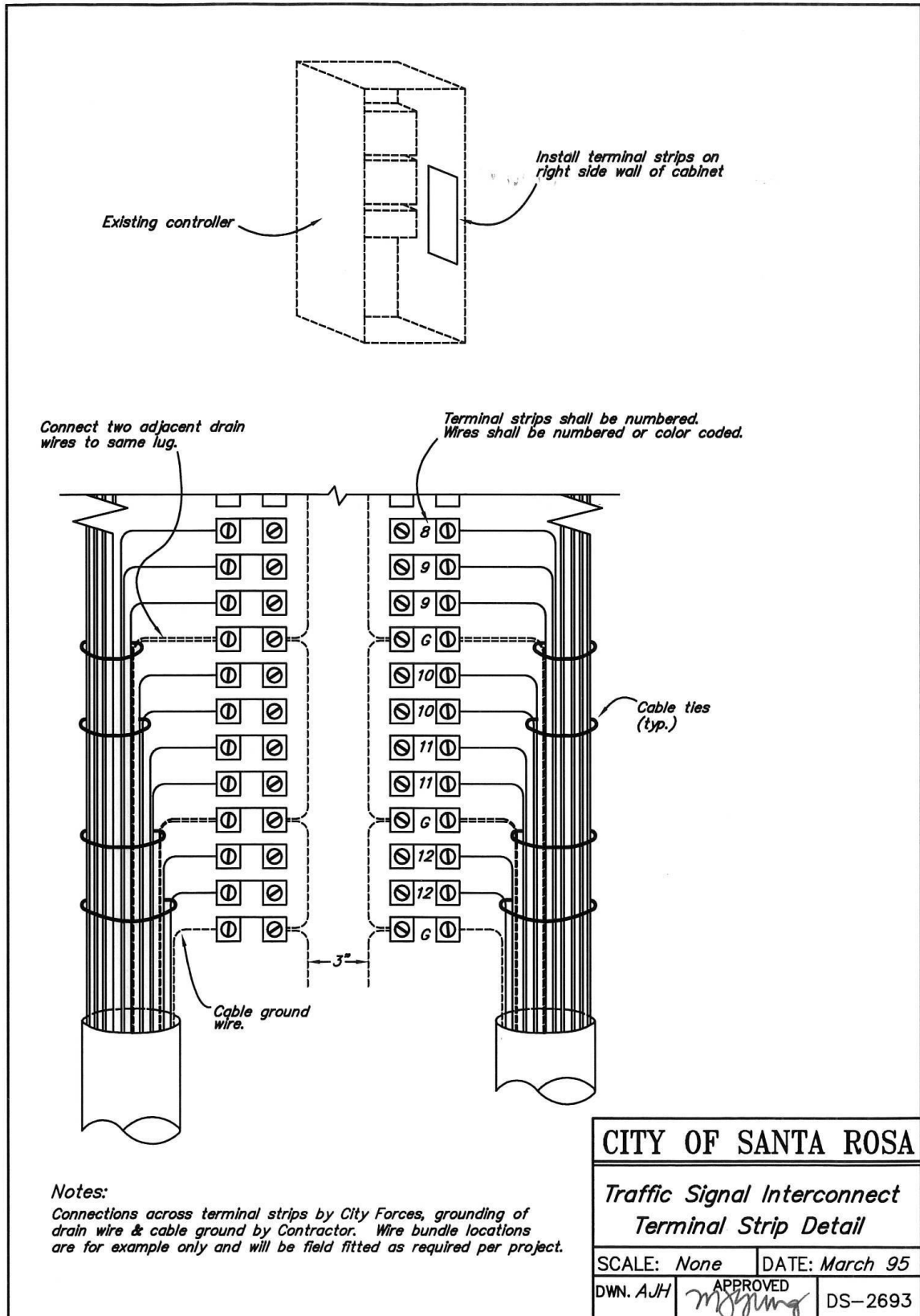
Compensation for removing and replacing existing improvements including curb and gutter and sidewalk in areas not shown as being replaced on the project plans shall be considered as included in the contract prices paid for the appropriate contract item, and no additional allowance will be made therefor.

Intersection lighting shall be considered as included in the contract lump sum prices paid for Traffic Signal and Street Lighting System, which price shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work including furnishing and installing LED lamps, ballasts, and photocell control, and no additional allowance will be made therefor.

Relocating Interconnect Cable shall be considered as included in the lump sum price paid for Traffic Signal and Street Lighting System, which shall include full compensation for furnishing all labor, materials, tools, equipment, and doing all work involved in cable installation, including furnishing and installing cable, installing coiling of cable, supplying and installing terminal strips, and landing all pairs of wires, terminating the fiber in the fiber termination panel, and no additional allowance will be made therefor. Cable will be measured from terminal point to terminal point.

**86-8.11 Payment:** **Street Lighting System** shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, tools and equipment to modify the street lighting system complete in place, including but not limited to all utility location and verification potholing, excavation and backfill, foundations, standards, pull boxes, tamper resistant inserts, conduit, conductors, wiring, and testing, furnishing and installing LED lamps, ballasts, and photocell control, removing and disposing of poles, salvaging existing LED's, utility location and verification potholing, abandoning foundations, conduit modifications, removing and installing conductors, splicing, as shown on the plans, as specified, and no additional allowance will be made therefor.

[Version: 9/18/14CDA STD2010]



## 90 CONCRETE

**90-1.01A Summary:** Portland cement concrete (PCC) shall conform to the requirements of the Standard Specifications, the City Specifications, and these Special Provisions.

**90-1.01C(6) Mix Design:** The proportions of the water, sand, and aggregate shall be regulated so as to produce a plastic, workable, and cohesive mixture.

### **90-1.01D Quality Assurance**

**90-1.01D(2) Cementitious Material Content:** Concrete shall contain a minimum of 611 pounds of cementitious material per cubic yard. The amount of cement by weight of the specified cementitious material shall be 75 to 85 percent.

**90-1.01D(5) Compressive Strength:** The average 28 day compressive strength of concrete shall be 4,000 pounds per square inch (psi) or greater with no one sample less than 3,800 psi, per ASTM C1435. Average compressive strength will be determined through a set of three cylinders per lot. Lots will be a maximum of 200 cubic yards.

**90-1.01D(6) Curing Compound:** Concrete shall be cured per Section 90-1.03B of the Standard Specifications. Pigmented curing compound or any other material that will leave a noticeable residue shall not be allowed.

**90-1.02E(2) Chemical Admixtures:** An admixture shall not be used to reduce the amount of cementitious material content.

**90-4 Payment:** Full compensation for conforming to the provisions of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

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# 112 TREE PROTECTION

**112-1.01 General:** The following requirements shall apply to any contractor who works on any property upon which a protected tree is located.

Protected tree means any tree, including a Heritage tree, designated to be preserved on the plans, or as directed by the Engineer. Heritage tree is any of the trees listed under Section 17-24.010 of the City of Santa Rosa Tree Ordinance.

All pruning shall be done according to International Society of Arboriculture (ISA) or National Arborists Association (NAA) standards, by qualified personnel. Pruning shall be done by ISA certified tree workers or certified arborists, or under the direct supervision of a certified arborist.

**112-1.02 Scope:** Before the start of any clearing, excavation, construction or other work on the site, every protected tree shall be securely fenced off at the protected perimeter. Protected perimeter shall be either the root zone or other limit as directed by the Engineer. Such fences shall remain continuously in place for the duration of all work undertaken in connection with this project. The area so fenced off shall not be used as a storage area, altered, or disturbed except as may be permitted under this section.

If any of the site work encroaches upon the protected perimeter of a protected tree, special measures shall be utilized as approved by the Engineer to ensure that the roots obtain oxygen, water, and nutrients as needed. Any excavation, cutting, filling, or compaction of the existing ground surface within the protected perimeter, if authorized by the Engineer, shall be minimized and subject to such conditions as may be imposed by the Engineer. No significant change in existing ground level shall be made within the drip line of the protected tree except as directed by the Engineer and as shown on the plans. No burning or use of equipment with an open flame shall occur near or within the protected perimeter. All brush, earth, and other debris shall be removed in a manner which prevents injury to the protected tree.

No oil, gas, chemicals, or other substances that may be harmful to trees shall be stored or dumped within the protected perimeter or any other location on the site from which such substances might enter the protected perimeter.

Underground trenching for utilities shall avoid major support and absorbing tree roots of protected trees. If avoidance is impracticable, tunnels shall be made below the roots. Trenches shall be consolidated to serve as many units as possible. Trench within the drip line of the tree shall be avoided and only be done at the approval and direction of the Engineer.

No concrete or asphalt paving shall be placed over the root zones of protected trees. No artificial irrigation shall occur within the root zone of oaks.

No compaction of the soil within the root zones of protected trees shall occur.

**112-1.03 Payment:** Full compensation for work in this section shall be considered as included in the prices paid for the various contract items of work and no additional allowances will be made therefor.

Full compensation for pruning tree roots under an ISA certified tree workers or certified arborists, or under the direct supervision of a certified arborist shall be considered as included in the prices paid for various contract items of work and no additional allowance will be made therefor.

[Version: 11/6/14CDA STD2010]

## 121 NOTIFICATION

**121-1.01:** The Contractor shall notify the Engineer of any work to be performed on any given workday either on the afternoon of the prior working day or before 8:30 a.m. on the given working day. Any work completed for which the Engineer has not received prior notification of its scheduling **MAY NOT BE ACCEPTED FOR PAYMENT.**

The Contractor shall provide a written notice of pending construction and attempt to make personal contact with all businesses and residents in the vicinity of the project 5 working days prior to mobilizing to the site. The notice shall inform the recipients of the type of work, the scheduled date(s) and work hours, and the potential impacts for the neighborhood, such as road closures and/or detours. Provide a map for any approved detour. The notice shall inform all recipients that they will be allowed access to their property at all times. The notice shall also request that cars be parked out of the roadway by 7:30am and shall have contact information for the following personnel: Contractor's onsite Supervisor, Contractor's Project Manager, and the City of Santa Rosa's onsite Inspector.

If loading or unloading of equipment and/or materials has the possibility to impact access to private property, the Contractor shall notify and coordinate this work with the business or resident.

The Contractor shall keep the City of Santa Rosa Fire Department, City Bus, Postal Service, Recology and other related City services, informed of any roadway and lane closures in accordance with Section 12-4.02 of these Special Provisions.

If unanticipated work requires the Contractor to access private property the Contractor shall first notify the business or resident and the Engineer, and all work shall be coordinated through the Engineer or their Representative.

All written notices to residents or businesses shall be submitted to the Engineer for approval prior to distribution. The Engineer shall be allowed two working days to review notices.

**121-3.01 Payment:** Full compensation for conforming to the provisions of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

[Version: 10/13/14-CDA STD2010]

## 124 MATERIAL RECYCLING

**124-1.01 Description:** The Contractor shall dispose of all Portland cement concrete and asphalt concrete, generated from removal or demolition activities on the project, at a recycler for these materials. The Contractor shall provide receipts verifying delivery and approximate quantity (in tons) of the material delivered to a material recycler.

All other excess materials from the project shall become the property of the Contractor and shall be disposed of by him/her, at their expense.

**124-1.02 Payment:** Full compensation for Material Recycling as specified herein shall be considered as included in the contract prices paid for various items of work, and no additional compensation will be allowed therefor.

[Version: 11/6/14CDA STD2010]

## 132 WATER DISTRIBUTION SYSTEM

**132-1.01 Description:** Water Distribution System and related appurtenances shall conform to the requirements as specified in the City of Santa Rosa Water Distribution System Construction Standard Specifications Section 132, the Project Plans, and modifications herein.

**132-1.02 Pipe:** Where shown on the plans and as required by the City of Santa Rosa Blanket Waiver 2, 3 or 4, water distribution pipe shall be Polyvinyl Chloride (PVC) Pipe with a minimum pressure class (PC) rating of PC305, DR 14 conforming to the requirements of AWWA C900 "Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4" through 12" for Water Transmission and Distribution."

**132-1.09 Fire Hydrants and Lateral Assembly:** Existing fire hydrants on existing mains shall be kept operational until the new main is pressurized, and new water services have been pressurized. New fire hydrants shall be operational prior to shutdown of the old main. Notify the City prior to any hydrant shut down. Commercial fire hydrants shall be installed where shown on the Plans.

**132-1.10 Bollard:** Bollard to protect fire hydrant shall be constructed in accordance with the details and at the location shown on the plans.

**132-1.11 Excavation, Backfill, and Resurfacing:** The Contractor shall remove and replace sidewalk and planter strips as required for all water work to the nearest transverse score mark on both sides and full sidewalk width. All areas of sidewalk removed for construction shall be backfilled and compacted level with temporary asphalt concrete or covered with 1-inch-thick plywood, laid flat with ADA compliant temporary asphalt concrete taper on both ends, painted yellow or safety orange for visibility.

**132-1.12 Laying and Handling Pipe Materials:** If the Contractor installs a highpoint in the water system not shown on the Project Plans the Engineer may require the installation of a new combination air and vacuum valve, per City Standards, at no additional cost to the City.

**132-1.15A Water Services:** All existing meter box lids to be removed shall be salvaged and delivered to the City's Corporation Yard located at 55 Stony Point Road.

New service laterals shall be installed with a minimum horizontal clearance of 3 feet from gas laterals and a minimum of 5 feet from sewer laterals. Water services shall be installed via 'open trench' construction methods only, unless otherwise specified herein.

New service laterals shall be installed with a minimum horizontal clearance of 3 feet from gas laterals and a minimum of 5 feet from sewer laterals. Water services shall be installed via 'open trench' construction methods only, unless otherwise specified herein.

**132-1.30 Payment:** **6" Water** shall be paid for at the contract price per **linear foot**, (as determined by measuring the total horizontal length of pipe installed and including tie-ins), which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all the work involved in water main installation, including but not limited to: potholing other than as specified in Section 15 to facilitate the progress of work; excavation and disposal of excavated materials; hand digging *if needed*; root pruning; dewatering and disposal of trench groundwater; contamination awareness; supporting or removal and disposal of existing utilities in the same trench *if required*; water main and fittings *as required*; restrained joints, thrust



blocking and harnesses *as required*; placing and compacting all required bedding and backfill including control density fill *if required*; trench plates *as needed*; temporary trench paving; removal and replacement of valley gutter, median curb and island *as needed*; construction water and all work involved in its obtainment, development and distribution; testing and chlorination of the new water system and appurtenances; purging lines prior to bacteria sampling; disposal of all chlorinated water by the contractor; cleaning, swabbing and flushing of water main and appurtenances; as specified herein, and no additional allowance will be made therefor.

**Fire Hydrant and Lateral Assembly** shall be paid for at the contract price **each**, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all work involved to install fire hydrant and lateral assemblies, including but not limited to: excavation and disposal of excavated materials; dewatering and disposal of trench groundwater; contamination awareness; tapping saddle or tee; valve; fire hydrant and lateral assembly; fittings *as required*; restrained joints, thrust blocking and harnesses *as required*; hot tap preparation if needed (City to perform actual hot tap); connection to saddle or tee; valve box to grade; placing and compacting all required bedding and backfill including control density fill *if required*; trench plates *as needed*; testing and chlorination; temporary trench paving; removal and replacement of median curb and island, curb, gutter, and sidewalk *as needed*; restoration/reconstruction of landscaping/irrigation and fencing *as needed*; as specified herein, and no additional allowance will be made therefor.

If connection to existing main is to be made with a Cut-in Tee, said tee shall be paid for under Cut-in Tee pay item.

**Bollard** shall be paid for at the contract price **each**, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all work involved to install the bollard, included but not limited to excavation for the foundation and disposal of excavated materials.

Version Date: 11/28/17

## 203 ELECTRICAL – GENERAL

### **203-1 GENERAL**

#### **203-1.01 SCOPE OF WORK**

- A. The Contractor shall install, ready for use, the electrical system as specified herein and shown on the Contract drawings. This document describes the function and operation of the system and particular components, but does not necessarily describe all necessary devices. All components and devices shall be furnished and installed as necessary to provide a complete operable and reliable system for accomplishing the functions and meeting the performance set forth hereinafter.
- B. Furnish all required labor, materials, project equipment, tools, construction equipment, safety equipment, transportation, test equipment, incidentals and services to provide a complete and operational electrical system as shown on the Electrical-Series (E-Series) Contract Drawings, included in these Specifications, or necessary for fully operating facility.
- C. Examine the specification and Drawings for mechanical equipment and provide all circuit breakers, switches, pushbuttons and appurtenances which are not specified to be with the mechanical equipment. Erect all electrical equipment not definitely stated to be erected by others, furnish and install conduit, wire and cable and make connections required to place all equipment in complete operation.
- D. It is recommended that the Contractor attend the job walk for the site and shall have accomplished the following:
  - 1. Thoroughly examine existing conditions before submitting their bid proposal to perform any work. Compare site conditions with data given on the plans or in these Specifications. No allowance shall be made for any additional costs incurred by the Contractor due to their failure to have examined the site or to have failed to report any discrepancies to the Engineer prior to bid.
  - 2. It is the Contractor's responsibility to be fully familiar with the existing utility locations, conditions and local requirements and regulations.
  - 3. Verify all measurements and conditions and shall be responsible for the correctness of same. No extra compensation will be allowed because of differences between Work shown on the Drawings and measurements at the site.
- E. Deviations to locations and conduit routing, as shown on the Plans, must first be approved by the Engineer.
  - 1. All plan deviations made by the Contractor shall be reflected on the Contractor supplied "Record Drawings."
  - 2. All engineering, drafting, and clerical expenses associated with updating the Record Drawings due to any major unauthorized changes shall be the responsibility of the Contractor and shall be deducted from the Contract.
- F. The major areas in the scope of work as illustrated on E-series Contract drawings, which includes both the furnishing and installation are:

1. Pull box.
  2. New wire and conduit from Electrical Pump Control Panel to pull box. New conduit and re-used wire from pullbox to intercepted existing conduit. Replace damaged wire as required.
  3. Provide all necessary conduits, junction boxes, grounding system, field interconnection wiring, hardware, fittings, and devices to connect the designated equipment and wiring.
  4. All necessary miscellaneous shut off, sample, and calibration valves to sensors.
  5. Provide trenching, backfilling, and compaction for all underground conduit routes, concrete pads, and pull boxes.
  6. Remove and dispose of all excess dirt, paving, concrete, and other materials from site work.
- G. Contractor shall field verify existing conditions as required to complete the project.
- H. The following specifications incorporate specific equipment and devices that are preferred by the City because of their serviceability, to match existing equipment, because of the local availability of labor, parts and materials, or because of the ability of the City to umbrella the equipment under existing maintenance contracts.
- I. All electrical work shall conform with the National Electric Code (NEC) 2020 issue. Nothing on the Plans or in the Specifications shall be construed to permit work or materials not conforming to these codes and standards.
- J. Contractor shall field verify all existing conditions, equipment, wires, conduit, etc. as required to complete the project.

### **203-1.02 CODES AND STANDARDS**

- A. All electrical/instrumentation equipment and materials, including installation and testing, shall conform to the following applicable codes and standards:
1. ANSI - American National Standards Institute, Inc.
  2. EIA - Electronics Industries Association.
  3. ETL - Electrical Testing Laboratories.
  4. FM - Factory Mutual.
  5. GO128 - General Order No. 128, Rules for Construction of Underground Electrical Supply and Communication Systems, Public Utilities Commission of the State of California.
  6. IEEE - Institute of Electrical and Electronics Engineers.
  7. ICEA - Insulated Power Cable Engineers' Association.
  8. ISA - International Society of Automation (ISA) Standards (formerly Instrument Society of America).
  9. NEC - National Electrical Code, 2020 Edition.
  10. NEMA - National Electrical Manufacturers Association.
  11. NETA - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems, International Electrical Testing Association.
  12. NESC - National Electrical Safety Code.

- 13. NFPA - National Fire Protection Agency & NFPA820
- 14. OSHA - Occupational Safety and Health Act Standards.
- 15. UL - Underwriter's Laboratories, Inc.

- B. The revisions of these codes and standards in effect on the date of issuance of the Contract Documents shall apply.
- C. Codes and standards referenced shall be considered minimum acceptable work.
- D. In instances where two or more codes are at variance, the most restrictive requirements shall apply.
- E. Nothing on the Drawings or in the Specifications shall be construed to permit work or materials not conforming to the preceding codes and standards.
- F. All work shall also be performed in accordance with the State, County, City, and local Utility standards and codes.
- G. The Contractor shall furnish without extra charge any additional material and labor which may be required for compliance with these codes and standards, even though the work is not explicitly mentioned in the Specifications or shown on the Contract E- Series Drawings.

#### **203-1.03 RELATED WORK IN OTHER SECTIONS**

- A. Provide an electrical system that interfaces to work performed under other Mechanical and Equipment Sections of these Specifications.

#### **203-1.04 ELECTRICAL CONTRACTOR QUALIFICATIONS**

- A. It is the intent of this Division that the complete responsibility for management and installation of the electrical and instrumentation required for this project be by a qualified Electrical Contractor. This responsibility includes, but not limited to, supervision and coordination of work performed by all suppliers of Electrical Section.
- B. Uncertified electricians shall not perform electrical work for which certification is required per Labor Code Section 3099. Electricians shall be required to carry proof of certification on their person at all times. Electricians found on the jobsite without proof of certification will be asked to leave, prohibited from working on-site until proof of certification has been provided and may be reported to the Contractors State License Board (CSLB).
- C. Contractor shall submit the proposed Electrical Subcontractor and System Supplier with a complete set of bid documents that will be used on this project.
- D. If the Contractor, Electrical Subcontractor, and System Supplier listed in bid documents are deemed not qualified by the City, they will have their bid rejected at the City's sole discretion and the next qualified bidder selected.
- E. The Electrical Subcontractor shall meet the following minimum qualifications:
  - 1. Has a current C-10 Electrical Subcontractor's License.
  - 2. Has regularly engaged in similar electrical contracting for the Municipal Water and Wastewater Industry.

3. Has successfully performed work of similar or greater complexity on at least two previous projects under one company name and under the present company name.
  4. Has all persons performing work as electricians certified by the California Apprenticeship Council per California Labor Code Section 3099.
  5. Has been actively engaged in the type of electrical and instrumentation work specified in this Division for a minimum of two years.
- F. During the bid review period, the City may request a list of five (5) completed projects of similar size and nature for water or wastewater treatment plants or pump stations that the Electrical Contractor has completed:
1. Provide completion dates of projects.
  2. References of Owner Representative in charge of project, including contact name and telephone number.

### **203-1.05 CONTRACT DOCUMENTS**

- A. The Contract drawings and specifications are intended to be descriptive of the type of electrical system to be provided; any error or omissions of detail in either shall not relieve the Contractor from the obligations thereunder to install in correct detail any and all materials necessary for a complete operational system, at no additional cost.
- B. The Contract drawings are generally diagrammatic; exact locations of existing equipment and proposed location for new electrical products shall be verified in the field with the Engineer. Except where special details on drawings are used to illustrate the method of installation of a particular piece or type of equipment or materials, the requirements or descriptions in this Section shall take precedence in the event of conflict.
- C. Location of equipment, inserts, anchors, panels, pull boxes, conduits, stub-ups, and fittings for the electrical system are to be determined by the Contractor and Engineer at time of installation. Contractor shall make minor adjustments to locations of electrical equipment required by existing conditions and coordination with other trades at no additional cost to City.
- D. The Conduit and Wire Routing Schedule, wire fill, and number of conduits are based on the best information available.
1. It is the Contractor's responsibility to modify the conduit schedule based upon approved Shop Drawings for the actual equipment. Such modifications in conduit sizes and numbers of conductors shall be at no additional cost to the City, if such changes are the direct result of the approved equipment selected by the Contractor.
  2. A copy of the Conduit Schedule and Electrical plans showing conduit routing shall be updated weekly by the Contractor. Progress payments will be withheld if during monthly checks it is found that the Contractor fails to maintain the Conduit Schedule updates.
- E. Electrical & instrumentation, conduit & wire lengths shown on Project Plans are approximate. The Contractor is responsible for determining actual lengths for bidding and installation purposes.
- F. The Contractor shall examine the architectural, mechanical, structural, civil, electrical and instrumentation equipment provided under other Sections of this Contract in order to determine the exact routing and final terminations for all conduits and cables. The exact locations and routing of cables and conduits shall be governed by structural conditions,

physical interferences, and the physical location of wire terminations on equipment. Conduits shall be stubbed up as near as possible to equipment.

- G. All equipment shall be installed and located so that it can be readily accessed for operation and maintenance. The Engineer reserves the right to require minor changes in location of equipment, without incurring any additional costs.
- H. Provide means to furnish equipment and accessories, do the installation, complete connections, submit documentation, perform start-up, and be responsible for the warranty.
- I. Where conduits are shown as "home runs" on the Contract drawings or stated to be furnished, but not explicitly shown, as part of the scope of work; the Contractor shall provide all fittings, boxes, wiring, etc. as required for completion of the raceway system in compliance with the NEC and the applicable specifications in this Section.
- J. No changes from the Contract drawings or specifications shall be made without written approval of the Engineer. Should there be a need to deviate from the Contract documents, submit written details and reasons for all changes to the Engineer for favorable review.
- K. When existing conduits are to be used, it is the Electrical Contractor's responsibility to verify conduit size and routing. This includes all potholing or other location methods. Existing conductors and conduits damaged by Contractor during construction shall be repaired or replaced at no cost to City.
- L. The resolution of conflicting interpretation of the Contract documents shall be determined by the Engineer.
- M. The Contractor shall coordinate with other Suppliers on the project for a complete and operable system.
- N. The Electrical Contractor shall maintain a separate set of neatly and accurately marked set of Record Documents, consisting of spreadsheets, specifications and full size blue-line Electrical (E-Series) Contract Drawings.
  - 1. These documents are to be used specifically for recording the as built locations and layout of all electrical and instrumentation equipment, routing of raceways, junction and pull boxes, and other diagram or document changes.
  - 2. These Record documents shall be kept up-to-date during the progress of the job, with all "change orders", submittal modifications, and construction changes shown and stamped with "As-Built" at end of job.
  - 3. These Record documents shall not be used for daily construction use and shall not contain any mark-ups that are unrelated to as-built corrections.
  - 4. The following lists the record documents shall be as-built by Electrical Contractor:
    - a. E-Series Drawings.
    - b. Conduit and Wire Routing Schedule.
      - 1) A copy of the Conduit and Wire Routing Schedule and Electrical plans showing conduit routing shall be updated weekly by the Contractor. Progress payments will be withheld if during monthly checks it is found that the Contractor fails to maintain the Conduit Schedule updates.
    - c. Duct banks and their routing with offset measurement and indicate changes in depth.

5. Record documents shall be kept current weekly with all "change orders", submittal modifications, and construction changes shown. Record Documents shall be subject to the inspection by the Engineer at all times, progress payments or portions thereof may be withheld if Record Documents are not accurate or current.
6. When documents are changed, they shall be marked with erasable colored pencils using the following coloring scheme:
  - a. Additions - red
  - b. Deletions - green
  - c. Comments - blue
  - d. Dimensions – black
7. Show the following on the Electrical (E-Series) Record Contract Drawings by dimension from readily obtained base lines:
  - a. Exact location, type and function of electrical and instrumentation equipment and devices.
  - b. Precise routing and locations of underground conduits, pullboxes, junction boxes, and appurtenances that make-up the raceway system.
  - c. Show the dimensions, location and routing of electrical work, which will become permanently concealed.
  - d. Show complete routing and sizing of any significant revisions to the systems shown.
8. Prior to acceptance of the work, the Contractor shall deliver to the Engineer one set of record full size drawings neatly marked accurately showing the information required above.

#### **203-1.06 COORDINATION**

- A. The Contractor shall coordinate the electrical work with the other trades, code authorities, utilities, and the Engineer; with due regard to their work, and towards promotion of a rapid completion of the project. If any cooperative work must be altered due to lack of proper supervision of such, or failure to make proper provisions, then the Contractor shall bear expense of such changes as necessary to be made in work of others.
- B. Manufacturer's directions and instructions shall be followed in all cases where such is not shown on the Contract Drawings or herein specified.
- C. The Contractor shall coordinate with the City, Engineer, and Electrician to test the entire system.
- D. The Contractor shall schedule all the required work with the City, including each shutdown period as indicated in Section 121 of these Specifications. Each shutdown shall be implemented to minimize disruption of the existing operations. The work to be provided under this Contract shall not disrupt any of the existing operations without prior approval.
  1. Contractor shall make provisions for portable generators and automatic transfer switches when areas of the lift station will be without power.
  2. The City reserves the right to delay, change, or modify any shutdown at any time, at no additional cost to the City, when the risk of such a shutdown would jeopardize the operation of system.
  3. Contractor is advised that during change out of existing wires, demolition of existing conduits, installation of new conduits, etc., Contractor is responsible to keep equipment running for all necessary station operation. The Contractor shall install temporary

generators, motor controls, panelboards, power panelboards, wiring, etc. to keep all station equipment powered and automatic controls functional.

- E. The Contractor shall cease work at any particular point, temporarily, and transfer his operations to such portions of work as directed, when in the judgment of the Engineer it is necessary to do so.
- F. Prior to commencing construction, the General Contractor shall arrange a conference with the General Contractor, Electrical Contractor, System Supplier, Resident Engineer & City as well as all equipment and system suppliers vital to the current phase of work. During the meeting, the equipment supplier shall verify types, sizes, locations, installation requirements, controls and diagrams of all equipment furnished. The Equipment and System Suppliers shall, in writing, inform the Engineer that all phases of coordination of this equipment have been covered and if there are any unusual conditions, they shall be enumerated at this time.
- G. At the City's discretion, Contractor shall stop work for a period of time (without incurring delay costs) in an event where there is a large storm event and the City had determined they need to continuously monitor the station.

### **203-1.07 SUPERVISION**

- A. The General Contractor shall schedule all activities, manage all technical aspects of the project, coordinate submittals and drawings, and attend all project meetings associated with the electrical work.
- B. The General Contractor shall supervise all electrical work, from the beginning to completion and final acceptance.
- C. The General Contractor shall supervise and coordinate all electrical work to ensure each phase of the project, submittal, delivery, installation, and acceptance testing, etc. is completed within the allowable scheduled time frames.
- D. The General Contractor shall be responsible for obtaining, preparing, completing, and furnishing all paperwork specified in this Section; which shall include transmittals, submittals, forms, documents, manuals, instructions, and procedures.

### **203-1.08 INSPECTIONS**

- A. All work or materials covered by the Contract documents shall be subject to inspection at any and all times by the Engineer. If any material does not conform to the Contract documents, or does not have a favorably reviewed submittal status; then the Contractor shall, within three days after being notified by the Engineer, remove said material from the premises; and if said material has been installed, the entire expense of removing and replacing same, including any cutting and patching that may be necessary, shall be borne by the Contractor.
- B. Work shall not be closed in or covered over before inspection and approval by the Engineer. All costs associated with uncovering and making repairs where non-inspected work has been performed shall be borne by the Contractor.
- C. The Contractor shall cooperate with the Engineer and provide assistance at all times for the inspection of the electrical system under this Contract. The Contractor shall remove covers, provide access, operate equipment, and perform other reasonable work that, in the opinion of the Engineer, will be necessary to determine the quality and adequacy of the work.



- D. Before request for final inspection is made, the Contractor shall submit to the Engineer in writing, a statement that the Contractor has made his own thorough inspection of the entire project enumerating punch list items not complete and that the installation and testing is complete and in conformance with the requirements of this Section.
- E. The City may arrange for a facility inspection by Cal-OSHA Consultation Service at any time. The Contractor shall make the necessary corrections to bring all work in conformance with Cal-OSHA requirements, all at no additional cost to the City.
- F. Contractor will be Responsible for any Additional Cost for Overtime, Weekend Overtime or Differential Time, Expenses for Inspection of Defective Work that has to be re-inspected.

### **203-1.09 JOB CONDITIONS**

- A. The Contractor shall make all arrangements and pay the costs thereof for temporary services required during construction of the project, such as temporary electrical power and telephone service. Upon completion of the project, remove all temporary services, equipment, material and wiring from the site as the property of the Contractor.
- B. The Contractor shall provide adequate protection for all equipment and materials during shipment, storage and construction. Equipment and materials shall be completely covered with two layers of plastic and set on cribbing six inches above grade so that they are protected from weather, wind, dust, water, or construction operations. Equipment shall not be stored outdoors without the approval of the Engineer. Where equipment is stored or installed in moist areas, such as unheated buildings, etc., provide an acceptable means to prevent moisture damage, such as a uniformly distributed heat source to prevent condensation.
- C. The normal outdoor, not in direct sunlight, ambient temperature range of the job site will vary between 0 to 110 degrees Fahrenheit. All equipment shall be rated to operate in these temperature ranges or provisions for adequate heating and cooling shall be installed, at no additional cost to City.
- D. The jobsite is prone to vandalism and theft. Contractor shall be responsible for securing all materials and equipment against theft and vandalism for the duration of the project.
- E. Contractor & Subcontractors shall utilize temporary services during construction of the project.

### **203-1.10 SUBMITTAL AND DRAWING REQUIREMENTS**

- A. Electrical submittals shall be submitted by the General Contractor for review by the Engineer per this subsection. They shall be complete giving all details of connections, wiring, instruments, enclosures, materials and dimensions. Standard sales literature will not be acceptable.
- B. A copy of the appropriate Specification Sections, with addendum updates included and with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements.
  - 1. Check marks (✓) shall denote full compliance with a paragraph as a whole. If deviations from the specifications are indicated and, therefore, requested by the Contractor, each deviation shall be underlined and denoted by a unique number in the margin to the right of the identified paragraph. The remaining portions of the paragraph not underlined will signify compliance on the part of the Contractor with the Specifications.

2. The submittal shall be accompanied by a detailed, written justification for each numbered item explaining variance or non-compliance with specifications.
  3. Failure to include a copy of the marked-up specification sections, along with justification(s) for any requested deviations to the specification requirements, with the submittal shall be sufficient cause for rejection of the entire submittal with no review.
- C. The electrical submittals shall include but not be limited to data sheets and drawings for each product together with the technical bulletin or brochure. No FAX copies of documents are allowed. The electrical submittals shall include:
1. Product (item) name used herein and on the Contract Drawings.
  2. The manufacturer's model or other designation.
  3. Tag name/number per the drawings or schedules.
  4. Complete documentation with full description of operation.
  5. Complete catalog cuts with full description of equipment. General sales literature will not be acceptable. The part or model number with options to be provided shall be clearly identified. Where more than one item or catalog number appears on a catalog cut, the specific item(s) or catalog numbers(s) proposed shall be clearly identified.
  6. Location of assembly at which it is installed.
  7. Input-output characteristics.
  8. Range, size, and graduations as required.
  9. Physical size with dimensions and mounting details.
  10. Enclosure layout and elevation drawings to scale.
  11. Quantity and quality requirements for electric power, air, and/or water supply.
  12. Materials of construction of components.
  13. Nameplate schedule.
  14. Failure to provide submittals with heavy duty permanent plastic labeled index tabs may be grounds for immediate rejection without review.
  15. A complete Bill of Materials list shall be provided at the inside of the front cover.
    - a. The Contractor shall provide Bill of Material formatted as shown in Appendix "A." A separate set of Material Listing forms shall be provided for each MCC bucket, control panel and another listing all field equipment.
    - b. Generic names or part numbers used by a distributor or Systems House are not acceptable; originating manufacturer's name and part number shall be listed.
  16. A separate instrument data sheet shall be provided for each instrument per ISA S20 standards or approved equal. Provide an index with proper identification and cross-referencing of each data sheet.
  17. For each resubmittal, provide a copy of submittal comments and a separate letter, on Company letterhead, identifying how each submittal comment has been addressed in the resubmittal.
  18. Electronic PDF version of submittals shall be provided with table of contents regardless of hard copy format of submittal. PDF shall be "bookmarked" at each index, subtab, transmittal letter, copy of appropriate check marked Specification Section, bill of materials, copy of submittal comments (for resubmittals), Contractor's response to submittal comments (for resubmittals), drawings, etc. Bookmarks shall be descriptive of actual

document, tab, etc. Failure to bookmark PDF or broken bookmarks may be grounds for immediate rejection without review. Bookmarks shall not be out of order; the English description shall match that listed in the Submittal's Table of Contents.

19. Electronic submissions of submittals may be provided for submittals less than 40 pages and without drawings. Submittals equal to or over 40 pages or those that contain drawings shall be provided in a hardcopy format. Drawings shall be printed at 11 inches by 17 inches. Hardcopy submittals shall be provided in binders as specified herein. The Owner reserves the right to reject submittals that fail to be organized as described herein.

D. Submittal Format.

1. An index shall be provided at the inside of the front cover. This index shall itemize the contents of each tab and sub tab section. Also, list the project name, contract number and equipment supplier's name, address, phone number, and contact person on the index page. Index dividers (tabs) shall be provided to separate each section.
2. All copies shall be clear and legible. Data sheets shall be provided for each instrument, with an index and proper identification and cross-referencing.
3. Exceptions to the Contract specifications or drawings shall be clearly defined by the equipment supplier.
  - a. Data shall contain sufficient details so a proper evaluation may be made by the Engineer. Contractor shall provide separate letter (located in the front of the submittal) detailing specific exceptions to the Contract Specifications or Drawings.
  - b. Exceptions that are noted in the marked-up Drawings or Specifications, but not listed on the Exceptions/Clarifications letter, will be considered as non-responsive and not accepted as changes to the Contract Documents.
4. Request for information (RFIs) shall not be included in submittals. RFIs shall be submitted separately in its individual submittal number.
5. Resubmittals shall be provided with a copy of the previous submittal comments and a separate letter, on company letterhead, identifying how each submittal comment has been addressed in the resubmittal.
6. Failure to provide submittals with heavy duty permanent plastic labeled index tabs may be grounds for immediate rejection without review.

- E. Field equipment shop documents, panel equipment shop documents, drawings, and bill of materials shall be grouped under separate tabs. Catalog cuts shall be ordered in the same sequence as their corresponding Contract specification subsection.

- F. Catalog cuts shall be submitted grouped together by material and not scattered throughout the submittal intermingled with other material cut sheets (i.e. do not submit cut sheet for specific size conduit followed by cut sheet for specific size wire, and then cut sheet for different size conduit and different size wire. Group conduits together, group wires together, etc.)

- G. Catalog cuts shall be submitted for all devices and components in the electrical system.

- H. The Supplier shall coordinate submittals with the work so that project will not be delayed. This coordination shall include scheduling the different categories of submittals, so that one will not be delayed for lack of coordination with another.

- I. No submittal documents shall be labeled as proprietary. Labeling documents as proprietary will be sufficient cause for rejection of entire submittal. The City reserves the right to copy or

duplicate any and all portions of the documents provided for the project including copyrighted documents as desired.

- J. Approval of submittals shall not relieve Contractor of their obligation to perform the work in strict accordance with this Contract and the Contract Documents or of their responsibility to provide a complete and reliable system.
- K. No material or equipment shall be allowed at the job site until the submittal for such items has been favorably reviewed by the Engineer and marked "No Exceptions Taken" or "Make Corrections Noted."
- L. Identify all submittals by submittal number on letter of transmittal. Submittals shall be numbered consecutively and resubmittals shall have a letter suffix. For example:
  - 1. 1st submittal: 1.
  - 2. 1st resubmittal: 1A.
  - 3. 2nd resubmittal: 1B, etc.
- M. The equipment specifications have prepared on the basis of the equipment first named in the Specifications. The Supplier shall note that the second named equipment, if given, is considered acceptable and equal equipment, but in some cases additional design, options, or modifications may be required, at no additional cost, to meet Specifications.
- N. The decision of the Engineer governs what is acceptable as a substitution. If the Engineer considers it necessary, tests to determine equality of the proposed substitution shall be made, at the Supplier's expense, by an unbiased laboratory satisfactory to the Engineer.
- O. Electrical submittals shall be complete giving all details of connections, wiring, instruments, enclosures, materials and dimensions. Standard sales literature will not be acceptable.

## **203-2 PRODUCTS**

### **203-2.01 QUALITY**

- A. It is the intent of the Contract specifications and drawings to secure the highest quality in all materials and equipment in order to facilitate operation and maintenance of the facility. All equipment and materials shall be new and the products of reputable suppliers having adequate experience in the manufacture of these particular items. For uniformity, only one manufacturer will be accepted for each type of product.
- B. All equipment shall be designed for the service intended and shall be of rugged construction, of ample strength for all stresses that may occur during fabrication, transportation, erection, and continuous or intermittent operation. All equipment shall be adequately stayed and braced and anchored and shall be installed in a neat and workmanlike manner. Appearance and safety, as well as utility shall be given consideration in the design of details. All components and devices installed shall be standard items of industrial grade, unless otherwise noted, and shall be of sturdy and durable construction suitable for long, trouble free service. Light duty, fragile and competitive grade devices of doubtful durability shall not be used.
- C. Products that are specified by manufacturer, trade name or catalog number established a standard of quality and do not prohibit the use of equal products of other manufacturers provided they are favorably reviewed by the Engineer prior to installation.

- D. Underwriters Laboratories (UL) listing is required for all substituted equipment when such a listing is available for the first named equipment.
- E. When required by the Contract specifications or requested by the Engineer, the Contractor shall submit equipment or material samples for test or evaluation. The samples shall be furnished with information as to their source and prepared in such quantities and sizes as may be required for proper examination and tests, with all freight and charges prepaid. All samples shall be submitted before shipment of the equipment or material to the job site and in ample time to permit the making of proper tests, analyses, examinations, rejections, and resubmissions before incorporated into the work.
- F. All equipment shall be designed and constructed so that in the event of a power interruption, the equipment specified hereunder shall resume normal operation without manual resetting or operator interaction when power is restored.
- G. Signal transmission from remote or field electric and electronic devices shall be 4-20 mA, sourced by a 12 VDC or 24 VDC loop supply from the panel that is to receive the signal. Nonstandard transmission methods such as impulse duration, pulse rate, and voltage regulated will not be permitted except where specifically noted.
- H. Outputs of equipment that are not of the standard signals as outlined, shall have the output immediately raised and/or converted to compatible standard signals for remote transmission.
- I. It is the System Supplier's responsibility to visit jobsite to collect and document existing conditions and equipment device part numbers in order for all similar called out new equipment to match existing.

### **203-2.02 WIRE**

- A. This section applies to all wires or conductors used internal for all electrical equipment or external for field wiring. All wires shall be properly fused or protected by a breaker at the amperage rating allowed by the NEC.
- B. Material - Wire shall be new, plainly marked with UL label, gauge, voltage, type of insulation, and manufacturer's name. All wire shall conform to the following:
  - 1. Conductors shall be copper, with a minimum of 98% conductivity.
  - 2. Wire shall be Class B stranded.
  - 3. Insulation of all conductors and cables shall be rated 600 volt.
  - 4. Insulation type for conductors smaller than #10 AWG shall be moisture and heat resistant thermoplastic THWN, rated 90 °C in dry locations and 75 °C in wet locations, or approved equal aboveground. Conductors #10 AWG and larger shall be RHW-XLP insulation rated unless otherwise noted 90 °C in dry locations and 75 °C in wet locations.
  - 5. Field wire minimum AWG sizes:
    - a. #12 for wires used for individual conductor circuits 100 volt and above.
    - b. #14 for wires used for individual conductor circuits below 100 volt.
  - 6. Nonfield or equipment wire minimum AWG sizes:
    - a. #14 for wires used for individual conductor circuits 100 volt and above.
    - b. #18 for wires used for individual conductor circuits below 100 volt.

7. Instrument wiring:

- a. General: Instrument cables shall have 600V rated insulation and 100% individual shielded twisted pair #18 conductors with drain wire. Single twisted shielded pair (T.S.PR.) cables shall be Belden, or approved equal.

C. Color code - color code of all wire shall conform with the following table:

**WIRES COLOR CODE TABLE**

| DESCRIPTION        | PHASE/CODE LETTER | FIELD WIRE WIRE OR TAPE COLOR | NON-FIELD WIRE COLOR              |
|--------------------|-------------------|-------------------------------|-----------------------------------|
| 480 V, 3 PHASE     | A                 | BROWN                         | BROWN                             |
|                    | B                 | ORANGE                        | ORANGE                            |
|                    | C                 | YELLOW                        | YELLOW                            |
| 240 V or 208 V, 3P | A                 | BLACK                         | -                                 |
|                    | B                 | RED (ORANGE if high leg)      | -                                 |
|                    | C                 | BLUE                          | -                                 |
| 240 / 120 V, 1 P   | L1                | BLACK                         | BLACK                             |
|                    | L2                | RED                           | -                                 |
| 12V POSITIVE       | 12P               | DARK BLUE                     | DARK BLUE                         |
| 12V NEGATIVE       | 12N               | BLACK/RED STRIPE              | BLACK/RED STRIPE                  |
| 24V POSITIVE       | 24P               | PINK                          | PINK                              |
| 24V NEGATIVE       | 24N               | BLACK/WHITE STRIPE            | BLACK/WHITE STRIPE                |
| AC CONTROL         |                   | RED                           | RED (YELLOW FOR FOREIGN CIRCUITS) |
| DC CONTROL         |                   | BLUE                          | BLUE                              |
| NEUTRAL            | N                 | WHITE                         | WHITE                             |
| GROUND             | G                 | GREEN                         | GREEN                             |
| SHIELDED PAIR      | +                 | BLACK                         | RED                               |
|                    | -                 | CLEAR (WHITE)                 | BLACK                             |

1. High leg of open delta shall be colored orange per NEC 110.15.
2. The same color shall be connected to the same phase throughout the panel.
3. All wires shall be properly fused or protected by a breaker at the amperage rating allowed by the NEC.
4. Neutral used for AC Control shall be white.

5. Phase color insulation shall be provided for complete length of #8 wire or smaller; colored phase tape is not allowed on #8 and smaller wire.

D. Wire Marking:

1. Wire identification: All wire terminations including field interconnect as well as wiring interior MCC cubicles, switchboard, panels, equipment, junction panels and boxes shall be identified with machine printed labels. Hand lettered labels are not acceptable and shall be replaced at the Contractor's expense. The wire identification code for all field interconnect and panel interior wiring, shall be similar to the designations shown on the Contract example drawings.
2. Wire Labels: The labels shall be machine printed with indelible ink, heat shrink type capable of accepting a minimum of 23 machine printed characters per sleeve label by Brady "Bradysleeve" or equal. Labeling shall be neatly installed for visibility and shall be clearly legible. Each wire and conductor shall be labeled with wire label as shown on approved loop, elementary and interconnect Drawings. Labels shall not be wrap-around or snap-on type.
3. Where there is insufficient space for labels on locally interconnected neutral wires such as jumpers between adjacent auxiliary relay coil neutral terminals, these labels may be omitted. "Locally" is defined as wires no longer than 8".
4. Wire labels for lighting and receptacles shall be installed and consist of the panelboard and circuit number (i.e., Panelboard "LP1", circuit breaker #3 would have wire label line "LP1-L3" and neutral "LP1-N3").
5. All spare wires shall be labeled with equipment number followed by SP1, SP2, etc. (i.e. P11001-SP1 for first spare wire).
6. All control and signal wiring terminations shall have the correct wire label applied prior to making connection.

E. SPECIAL PURPOSE WIRING

1. Manufacturer Supplied Cables (MNFR CBL): Cables and wiring for special systems shall be provided by the manufacturer with the equipment and installed per the manufacturer's recommendations.

**203-2.03 CONDUIT, RACEWAYS, AND WIREWAYS**

- A. GENERAL - Conduit, raceways, and wireways, wiring methods, materials, installation shall meet all requirements of the NEC, be UL labeled for the application, and meet the minimum following specifications.
1. All wiring shall be installed in conduits, raceways, or wireways when interconnecting equipment and devices.
  2. The Contractor shall use special conduit, raceways, wireways, construction methods, and materials as shown on the Contract drawings; which shall take precedence over any general methods and materials specified in this Section.
  3. The minimum size conduit shall be ¾-inch unless indicated otherwise on the Drawings or for special connections to equipment. Buried, encased, or conduits located in walls shall be 1-inch minimum.
  4. Conduit stubs for future use shall be capped with coupling, nipple, plug and cap and each end identified with conduit labels.

5. Conduits to be abandoned that protrude above graded shall be cut flush and filled with grout
6. Conduits shall not be filled to more than 50% of their total cross – sectional area.

7. CONDUIT MARKING

- a. All conduits and raceways listed in Conduit & Wire Routing Schedule shall have conduit tags at both ends of each conduit segment. This includes all conduits in pullboxes and vaults.
- b. Tag material shall be aluminum with machine stamped lettering. The size of the tag shall be 2" diameter. No letters are allowed smaller than 7/16". Securely fasten tags in place using 316 stainless steel 0.048 inch diameter wire of the type normally used for this purpose (catalog cut sheet shall be submitted). Stainless steel wire shall be crimp connected. Twisting ends together is not acceptable. Engrave the tags with the conduit number as listed in the conduit schedule on the Contract "E"-series Drawings. Labeling shall be neatly installed for visibility and shall be clearly legible.
- c. Prior to encasement, concealment, backfilling of conduits, temporary conduit labels shall be provided at each end of conduit. Temporary conduit labels shall have ½-inch (minimum) lettering at all transition points. After encasement and concealment temporary conduit labels shall be placed at each exposed end.

8. WARNING TAPES

- a. Plastic tape shall be colored for particular underground service, 3-inch minimum width, utilize tape made of material resistant to corrosive soil. Tape shall have aluminum backing to facilitate locating it underground using a non-ferrous locator. Use red tape for "Electric" service and orange tape for "Communication" service. Use tape with printed wording listing type of service. Manufacturers and types: Seton, Blackburn, Griffolyn Co., Terra-Tape, Brady or equivalent.

B. GALVANIZED RIGID STEEL CONDUIT - PVC COATED (GRS-PVC)

1. Standard weight, galvanized rigid steel conduit with a 40-mil thick polyvinylchloride coating bonded to both the outside and urethane interior coating. Conduit shall be hot-dip galvanized conforming to NEMA RN 1. GRS-PVC conduit and fittings to be Robroy Plasti-bond Red or approved equal.
2. Provide PVC coated galvanized rigid steel factory ells for 90 degree transitions.
3. Fittings and boxes shall be stainless steel or galvanized cast ferrous metal with a PVC 40 mils thick coating. Provide threaded-type fittings, couplings, and connectors; set-screw type and compression-type are not acceptable.
4. All junction boxes shall be galvanized with exterior surfaces PVC coated to 40 mils thickness, except where stainless steel boxes are called out.
5. Conduits entering enclosures shall be fitted with insulated grounding bushing; O-Z "HBLG", Appleton "GIB", or approved equal. All grounding bushings shall be tied to the grounding system with properly sized bonding conductors per the NEC code.
6. Support channel and pipe straps shall be PVC coated. Exposed metal/nuts, all-thread rod shall be 316 stainless steel.
7. PVC coating patching material shall be as provided by the manufacturer.
8. PVC coated Aluminum conduit is not acceptable.

C. PVC CONDUIT, (PVC-80)



1. Shall be high impact polyvinylchloride suitable for use underground, direct burial and for use with 90 C wires, and shall conform to UL 651. Shall be UL listed and labeled for "direct" burial. PVC-40 is unacceptable.
2. A copper bonding conductor shall be pulled in each raceway and bonded to equipment at each end with approved lugs.
3. Each underground run shall be placed in a trench with a minimum of four (4) inch sand bed evenly compacted on all sides, top and bottom.
4. Bends, elbows, and risers shall be made with galvanized rigid steel (GRS) conduit using threaded adapters. Bond each metallic portion to each other and to equipment connected at each end of conduit run.
5. PVC fittings shall have solvent-weld-type conduit connections.
6. PVC conduit shall be stored on a flat surface and shielded from the sun.
7. PVC conduit shall not be used above grade.
8. PVC-40 conduit shall not be used in place of PVC-80 conduit.

#### **203-2.04 ELECTRICAL ENCLOSURES AND BOXES**

- A. Enclosures and boxes to be wall mounted, minimum 14 gauge, type 316 stainless steel with seams continuously welded & ground smooth, and fast access door latches. A copper ground bus shall be provided in the enclosure. Outer door shall have provisions for locking enclosure with standard padlock. Provide white backpan in box.
- B. Provide larger enclosure as required to accommodate the supplied equipment at no additional cost to the City.
- C. Provide accessories consisting of breaker to disconnect incoming power, heater, fan, louvers, ground bus, and thermostats.
- D. Provide metal data pocket within each enclosure and box to hold as-built drawings.
- E. All panel doors shall be installed with ground straps.
- F. Panels shall be provided with engraved nameplate identifying name of panel, voltage and location of power source feeding it (i.e. MCC-100, Panelboard LP-1, etc.).
- G. Enclosure shall be Hoffman, Circle AW or approved equal.

#### **203-2.05 GROUNDING SYSTEM**

- A. Ground clamps shall be bolt-on type as manufactured by ILSCO type AGC, O-Z Gedney Type GRC, Burndy Type GAR or GP, or approved equal.
- B. Ground buses shall be provided in all electrical enclosures. Each ground bus shall be sized as shown on the Contract drawings or specified herein. The ground bus shall be adequately sized for the connection of all grounding conductors required per NEC. Screw type lugs shall be provided on all ground busses for connection of grounding conductors.
- C. Grounding conductors shall be sized as shown on the Plans or in accordance with NEC table 250.122, whichever is larger.

- D. Conduit grounding bushings shall be installed on all metallic conduits. Conduit grounding bushings shall be set screw locking type electra-galvanized malleable iron with insulation collar and shall be provided with a feed through compression lug for securing the ground bonding wire.
- E. Bonding wires shall be installed on all conduits with grounding bushings, expansion joints and for continuity of raceways transitions. Bonding wires shall be solid bare copper sized and installed per NEC 250.102. Bonding wires at endpoints shall be connected to enclosure ground bus or equipment grounding lug.
- F. Each ground bus shall be copper. Screw type fasteners shall be provided on all ground busses for connection of grounding conductors. Ground bus shall be a Challenger GB series, ILSCO D-167 series or approved equal.
- G. Attachment of the grounding conductor to equipment or enclosures shall be by connectors specifically provided for grounding. Mounting, support, or bracing bolts shall not be used as an attachment point for ground conductors.
- H. All raceway systems, supports, enclosures, panels, motor frames, and equipment housings shall be permanently and effectively grounded.
- I. One side of the secondary on all transformers shall be grounded to the ground bus.
- J. The system neutral conductor and all equipment and devices required to be grounded by the National Electrical Code shall be grounded in a manner that satisfies the requirements of the National Code.
- K. The system neutral (grounded conductor) shall be connected to the system's grounding conductor at only a single point in the system. This connection shall be made by a removable bonding jumper sized in accordance with the applicable provisions of the National Electrical Code if the size is not shown on the Drawings. The grounding of the system neutral shall be in the enclosure that houses the service entrance main overcurrent protection.
- L. All receptacles shall have their grounding contact connected to a grounding conductor.
- M. Branch circuit grounding conductors for receptacles or other electrical loads shall be arranged such that the removal of a lighting fixture, receptacle, or other load does not interrupt the ground continuity to any other part of the circuit.
- N. Negative side of all VDC power supplies shall be grounded.

### **203-3 EXECUTION**

#### **203-3.01 WORKMANSHIP**

- A. All work in this Section shall conform to the codes and standards outlined herein.
- B. The Contractor shall employ personnel that are skilled and experienced in the installation and connection of all elements, equipment, devices, instruments, accessories, and assemblies. All installation labor shall be performed by qualified personnel who have had experience on similar projects. Provide first class workmanship for all installations.
- C. Ensure that all equipment and materials fit properly in their installations.

- D. Perform any required work to correct improper installations at no additional expense to the City.
- E. The Engineer reserves the right to halt any work that is found to be substandard or being installed by unqualified personnel.

### **203-3.02 ELECTRICAL CONSTRUCTION METHODS, GENERAL**

- A. All wiring shall be neatly bundled and laced with plastic tie-wraps, anchored in place by screw attached retainer. Where space is available, such as in electrical cabinets, all wiring shall be run in slotted plastic wireways or channels with dust covers. Wireways or channels shall be sized such that the wire fill does not exceed 60%. Wires carrying 100 volts and above shall be physically separated from lower voltage wiring by using separate bundles or wireways with sufficient distance to minimize the introduction of noise, crossing only at 90 degree angles. Tie-wraps shall be T & B TY-RAP's or approved equal.
- B. All devices shall be permanently labeled and secured in accordance with subsections labeled "NAMEPLATES AND TAGS."
- C. All field wires and panel wires have wire markers as specified in the "WIRE" subsection.
- D. All components associated with a particular compartment's or enclosure's function shall be mounted in that compartment or enclosure.
- E. Spacing and clearance of components shall be in accordance with UL, and NEC standards.
- F. Wires shall not be spliced except where shown. Devices with pigtails, except lighting fixtures, shall be connected at terminal blocks. Equipment delivered with spliced wires shall be rejected and the Contractor required to replace all such wiring, at no additional cost to the City.
- G. No wires shall be spliced without prior approval by the Engineer.
- H. Where splices are allowed or approved by the Engineer they shall conform with the following:
  - 1. Splices in underground pullboxes shall be insulated and moisture sealed with 3M "Scotchcast" cast resin splice kits and shall have a date marking for shelf life. Do not use splice kits with a date marking for shelf life that has expired.
  - 2. Wire splicing devices shall be sized according to manufacturer's recommendations.
  - 3. Split-bolt splice connectors are not acceptable.
- I. Tapes shall conform to the requirements of UL 510 and be rated: 105 degrees C, 600V, flame retardant, hot and cold weather resistant. Vinyl plastic electrical tape shall be 7 mil black. Phase tape shall be 7 mil vinyl plastic, color coded as specified. Electrical insulation putty shall be rubber-based, elastic putty in tape form. Varnished cambric shall not be used.
- J. Connections to terminals shall be as follows:
  - 1. Use connector or socket type terminals furnished with component.
  - 2. Connections to binding post screw, stud or bolt use:
    - a. For #10 and smaller wire, T & B "Sta-Kon", Buchanan "Termend" or approved equal, self-insulated locking forked tongue lug.
    - b. For #8 to #4/0 wire, T & B "Locktite," Burndy QA or approved equal lug of shape best suited.

3. Use ratchet type crimping tool which does not release until proper crimp pressure has been applied.
  4. Connections for all terminals shall be made with insulation stripped per manufacturer's instructions.
- K. Equipment shall be wired and piped by the manufacturer or supplier. Major field modifications or changes are not allowed without the written "change order" authority by the Engineer. When field changes are made, the components, materials, wiring, labeling, and construction methods shall be identical to that of the original supplied equipment. Contractor's cost to replace or rework the equipment to match original manufacturer or supplier methods shall be done at no additional cost to the City.
- L. Mating fittings, bulkhead fittings, plugs, lugs, connectors, etc. required to field interface to the equipment and panels shall be provided by the supplier when the equipment is delivered.
- M. All electrical and instrumentation factory as-built drawings associated with the equipment shall be provided with the equipment when it is delivered to the job site. Drawings for each piece of equipment shall be placed in clear plastic packets of sufficient strength that will not tear or stretch from drawing removal and insertion.
- N. A ground bus shall be provided in each enclosure or cabinet. It shall have provisions for connecting a minimum of ten grounding conductors. Screw type lugs shall be provided for connection of grounding conductors. All grounding conductors shall be sized as shown on plans or in accordance with NEC Table 250.122, whichever is larger.

### **203-3.03 DELIVERY**

- A. Contractor shall inspect each electrical and instrumentation item delivered to the jobsite.
- B. Contractor shall unpack each item for inspection within two (2) days of arrival.
- C. Complete written inventory shall be produced by Contractor and submitted to Engineer within (2) days after arrival on jobsite for record keeping prior to any payment for the item.

### **203-3.04 DAMAGED PRODUCTS**

- A. Damage products will not be accepted. All damaged products shall be replaced with new products at no additional cost to the City.

### **203-3.05 FASTENERS & LUGS**

- A. All wire & cable lugs shall be copper; aluminum or aluminum alloy lugs shall not be used. The Electrical Contractor shall supply all lugs to match the quantity & size of wire listed in the conduit & wire routing schedule.

### **203-3.06 INSTALLATION, GENERAL**

- A. System:
1. Install all products per manufacturer's recommendations and the Drawings.
  2. Contract Drawings are intended to show the basic functional requirements of the electrical system and instrumentation system and do not relieve the Contractor from the responsibility to provide a complete and functioning system.

- B. Provide all necessary hardware, conduit, wiring, fittings, and devices to connect the electrical equipment provided under other Sections. The following shall be done by the Contractor at no additional cost to the City:
1. Provide additional devices, wiring, conduits, relays, signal converters, isolators, boosters, and other miscellaneous devices as required to complete interfaces of the electrical and instrumentation system.
  2. Changing normally open contacts to normally closed contacts or vice versa.
  3. Adding additional relays to provide more contacts as necessary.
  4. Installing additional terminal blocks to land wires.
- C. Coordinate with the City and setup all alarm, process, and operation setpoints.
- D. Conduits and Ducts:
1. Bury detectable warning tapes approximately 12 inches above all underground conduit runs of two or more outside of building. Align parallel to and within 3 inches of the centerline of the conduit or duct bank.
  2. Care shall be exercised to avoid interference with the work of other trades. This work shall be planned and coordinated with the other trades to prevent such interference. Pipes shall have precedence over conduits for space requirements. Exposed conduits shall be neatly arranged with runs perpendicular or level and parallel to walls. Bends shall be concentric.
  3. Install conduit free from dents and bruises.
  4. All conduits shall be labeled on all ends; at junction boxes, pull boxes, enclosures, stub-outs, or other terminations.
  5. A maximum of three equivalent 90 degree elbows are allowed in any continuous runs. Install pull boxes where required to limit bends in conduit runs to not more than 270 degrees or where pulling tension would exceed the maximum allowable for the cable.
  6. Route all above grade outdoor conduits or conduits in rated areas parallel or perpendicular to structure lines and/or piping.
  7. Conduits installed outdoor or in NEMA 4X rated areas above grade shall be braced in place with stainless steel Unistrut stanchions or PVC coated clamps with backplates.
  8. Duct-taping conduits together is not acceptable. Conduits, installed into concrete pads, shall be installed with a minimum of 2" distance between conduits to allow installation of bushings.
  9. Conduit entrances: Seal each conduit entrance from below grade into the Panels, and other electrical enclosures with plugging compound sealant to prevent the entrance of insects and rodents.
  10. Special "Soft-Jaw" type pipe clamps shall be used to prevent damage to PVC-coated conduits while field threading, cutting to length, and coupling sections.
  11. Conduits shall be painted to match the color of surface attached to as directed by Engineer.
  12. All spares shall be mandrelled and have pull ropes installed.
  13. Conduits shall be painted to match the color of surface attached to as directed by Engineer.

14. All existing conduits that are reused shall have a mandrel pulled through the entire conduit run to prove the length contains no blockages or obstructions. Mandrelling shall be witness by the Engineer.

E. Conduit and Wire Routing Schedule:

1. Conduit material, wire size, and quantity listed in Schedule take precedence over Electrical Section Specifications.
2. All of the entries for each line in the conduit schedule apply to each conduit when multiple quantity of conduits (quantity of which are indicated by number entered in conduit no. column in schedule) are listed in the schedule.
3. Wire sizes listed are in AWG or Kcmil and are copper conductors.
4. Extra wire was intentionally placed in the "Conduit & Wire Routing Schedule," which shall be labeled on both ends with a unique wire label. "Spare" to be on separate tag or included in wire label.
5. Contractor to supply and install all conduits and wiring as shown on Utility Engineered Design drawings. Utility primary and secondary conduit and wiring shown in "Conduit and Wire Routing Schedule" is for bid purposes only.
6. All control and signal wiring terminations shall have the correct wire label applied prior to making connection.
7. Conduit entries listed as "GRS-PVC" in the Conduit & Wire Routing Schedule are to be "Galvanized Rigid Conduits with PVC coating" the entire length.
8. Vertical offsets and sloping of conduits are not detailed on plans; the Electrical Contractor shall include in his bid the price for the complete conduit run utilizing the civil and mechanical plans to measure vertical & slope distances.
9. Exposed conduits runs shall not be run directly on the ground. Secure conduits to stainless steel unistrut.

F. Excavation and Back Filling:

1. The Electrical Contractor shall provide the excavation for equipment foundations and trenches for conduits or buried cables.
2. Trenches for all underground utility lines shall be excavated to the required depths.
3. Repave any area that was paved prior to excavation. Backfill and surface all areas as shown on the Drawings or where not shown to the original condition that was present prior to the excavation.
4. Underground conduits outside of structures shall have a minimum cover of 24 inches except for utility conduits depth shall be as required by the governing utility requirements. Back filling shall be done only after conduits have been inspected.
5. Contractor shall uncover any uninspected covered conduit trenches, at no additional cost to City, to verify proper installation.
6. Excavation and back fill conduit trenches shall conform to the requirements of the Earthwork Section of these Specifications, unless modified on plans, and to other entities as required. Backfill shall consist of 3/4 inch class 2 aggregate base material, unless otherwise noted.
7. At all times during the installation of the electrical distribution system, the Contractor shall provide barricades, fences, guard rails, etc., to safeguard all personnel, including small children, from excavated trenches.

- G. Wiring, Grounding, and Shielding - It is important to observe good grounding and shielding practices in the generally noisy environment in this application. The shield of shielded cables shall be terminated to ground at one end only (source end), the shield at the other end (receive end) shall be encased in an insulated material to isolate it from ground.
- H. Cutting and Patching - The Contractor shall do all core drilling, cutting and patching required to install his work. Any cutting which may impair the structure shall require prior approval by the Engineer. Cutting and patching shall be done only by skilled labor of the respective trades. All surfaces shall be restored to their original condition after cutting and patching. Paint patched surfaces to match the original color.
- I. Seals
1. Seal around all conduits, wires, and cables penetrating between walls, ceilings, and floors in all buildings with a fire stop material. Seal shall be made at both ends of the conduit with a fire-stop putty. Seal shall have a minimum two hour rating. Fire stop sealing shall be International Protective Coatings Flamesafe, or approved equal.
  2. Seal around conduits entering outside to inside structures and around bottom of free standing enclosures to maintain watertight integrity of structure.
  3. Place conduit seal inside each underground conduit riser into panels and enclosures to prevent entrance of insects and rodents.
  4. Conduit entrances: Seal each conduit entrance from below grade into the panel and other electrical enclosures with plugging compound sealant to prevent the entrance of insects and rodents. Conduits between the enclosures shall be sealed with plugging compound sealant on each end. Plugging compound sealant shall be PRC-DeSoto (formerly Courtaulds) Aerospace Semco PR-868 or approved equal.
- J. Cleaning and Touch up:
1. Prior to startup and at completion of the work prior to final acceptance, all parts of the installation, including all equipment, exposed conduit, devices, and fittings shall be cleaned and given touch up by Contractor, as follows:
    - a. Remove all grease and metal cuttings.
    - b. Any discoloration or other damage to parts of the building, the finish, or the furnishings, shall be repaired.
    - c. Thoroughly clean any of his exposed work requiring same.
    - d. Vacuum and clean the inside of all MCC and electrical and instrumentation enclosures prior to applying power and a second time immediately prior to the final acceptance inspection.
    - e. Clean all above and below ground pull boxes, junction boxes, and vaults from all foreign debris prior to final acceptance.
    - f. Paint all scratched or blemished surfaces with the necessary coats of quick drying paint to match adjacent color, texture, and thickness. This shall include all prime painted electrical equipment, including enclosures, panels, poles, boxes, devices, etc.
    - g. Remove all decals and lettering from both sides of support plates.
    - h. Repair damage to factory finishes with repair products recommended by Manufacturer.
    - i. Repair damage to PVC or paint finishes with matching touchup coating recommended by Manufacturer.

## **203-3.07 ELECTRICAL TESTING**

### **A. GENERAL REQUIREMENTS**

1. It is the intent of these tests to assure that all equipment is operational within industry and manufacturer's tolerances and is installed in accordance with design plans and specifications.
2. All equipment setup and assembled by the Contractor shall be in accordance with the design plans and Drawings and the manufacturer's recommendations and instructions and shall operate to the Engineer's satisfaction.
  - a. Follow all manufacturer's instructions for handling, receiving, installation, and pre-check requirements prior to energization.
  - b. After energization, follow manufacturer's instructions for programming, set-up and calibration of equipment.
  - c. The Contractor shall be responsible for, and shall correct by repair or replacement, at his own expense, equipment which, in the opinion of the Engineer, has been caused by faulty mechanical or electrical assembly by the Contractor.
  - d. Necessary tests to demonstrate that the electrical and mechanical operation of the equipment is satisfactory and meets the requirements of these Specifications shall be made by the Contractor at no additional cost to the City.
3. The testing shall not be started until the manufacturer has completed fabrication, wiring, and setup; performed satisfactory checks and adjustments; and can demonstrate the system is complete and operational. Certification of completion of Contractor's in-house tests shall be submitted prior to scheduling of testing.
4. The first Pre-Energization tests shall be performed to determine the suitability for energization and shall be completed with all power turned off and complete prior to the start of any of the Post-Energization Tests. The Electrical Contractor shall have qualified personnel on the job site for all Pre-Energization and Post-Energization tests.
5. All tests shall be witnessed by the Engineer and/or City personnel. The test forms shall be completed by the testing person for field checkout, testing, and calibration of all equipment and instruments.
  - a. All filled in test forms shall be given to the Engineer and/or City the day of the test. Fill in two sets of test forms if Contractor wants to keep a copy.
  - b. All tests shall be documented in writing by the supplier and signed by the Engineer as satisfactory completed. The supplier shall keep a detailed log of all tests that failed or did not meet specifications, including date of occurrence and correction.
  - c. Completed forms with proper signatures and dates shall be included and become a component of the Operations and Maintenance Manual for each of the respective systems.
6. The Contractor shall notify the Engineer of the Supplier's readiness to begin all factory and field tests in writing (a minimum of ten working days prior to start), and shall schedule system checkout on dates agreed to by the Engineer in order that the testing be scheduled and witnessed.
7. The Contractor shall fill in & submit for approval the "Scheduled Test Request Form" located in Appendix "A" for each requested inspection, factory and field test.
8. The supplier shall submit for approval, the proposed factory & field testing sheets at least 2 weeks prior to the start of the tests. Each testing sheet shall have a title giving the type of test and entry spaces for the name of the person who performed the test, name of the



person who witnessed the test, and the date. Tests performed without approved forms shall be retested at no additional cost to City.

9. Separate test procedures in separate binders shall be submitted for approval for the Factory and Field Tests. Testing shall not commence until the test procedures have been reviewed and approved by the Engineer. Tests forms shall be similar to those shown on Appendix "A."

#### B. FAILURE-TO-MEET TEST

1. If the results of any of tests are unacceptable to the Engineer, the Contractor shall make corrections and perform the tests again until they are acceptable to the Engineer; these additional tests shall be done at no additional cost to the City.
2. Any system material or workmanship which is found defective on the basis of acceptance tests shall be reported to the Engineer. The Contractor shall replace the defective material or equipment and have tests repeated until test proves satisfactory to the Engineer without additional cost to the City.

#### C. SAFETY

1. Testing shall conform to the respective manufacturer's recommendations. All manufacturers' safety precautions shall be followed.
2. The procedures stated herein are guidelines for the intended tests, the Contractor shall be responsible to modify these tests to fit the particular application and ensure personnel safety. Absolutely no tests shall be performed that endanger personal safety.
3. The Contractor shall have two or more personnel present at all tests.
4. Two non-licensed portable radios are to be made available by the Contractor for the testing organization to conduct tests.
5. California Electrical Safety Orders (ESO) and Occupational Safety and Health Act (OSHA): The Contractor is cautioned that testing and equipment shall comply with ESO and OSHA as to safety, clearances, padlocks and barriers around electrical equipment energized during testing.
6. Field inspections and pre-energization tests shall be completed prior to applying power to equipment.

#### D. ELECTRICAL FIELD TESTS

1. Prior to any field testing, Interconnection Drawings and Operation & Maintenance Manuals shall have been submitted by the Contractor and approved by the Engineer.
2. The Contractor shall engage and pay for the services of an approved qualified testing company for the purpose of performing inspections and tests as herein specified. The testing company shall provide all material, equipment, labor and technical supervision to perform such tests and inspections. The Electrical Contractor shall be present on site for all field tests.
3. The Electrical Contractor shall complete and submit "Schedule Test Request Form" as illustrated in Appendix "A" for each electrical field test.
4. Vacuum and clean the inside of all electrical and instrumentation enclosures prior to pre-energization tests and again prior to energization tests.
5. The Electrical Contractor shall be at the jobsite to assist with all Electrical Field Tests.

6. **PRE-ENERGIZATION TESTS:** These tests shall be completed prior to applying power to any equipment.

a. **INSPECTIONS**

- 1) Visual and mechanical inspections:
  - a) Inspect for physical damage, proper anchorage and grounding.
  - b) Compare equipment nameplate data with design plans and starter schedule.
  - c) Compare overload setting with motor full load current for proper size.
- 2) Performed NETA acceptance testing for each piece of equipment.
- 3) The Contractor shall compile, by visual inspection of equipment installed for each motor, the following data in neatly tabulated form:
  - a) Equipment driven
  - b) Motor horsepower
  - c) Nameplate amperes
  - d) Service factor
  - e) Temperature rating
  - f) Overload catalog number
  - g) Overload current range and setting
  - h) Circuit breaker rating
  - i) Circuit breaker trip setting, for magnetic only circuit breakers.
- 4) The Contractor shall fill in, for each piece of equipment, Test Form TF4 located in Appendix "A."

b. **TORQUE CONNECTIONS**

- 1) All electrical, mechanical and structural threaded connections inside equipment shall be tightened in the field after all wiring connections have been completed. Every worker tightening screwed or bolted connections shall be required to have and utilize a torque screwdriver/wrench at all times. Torque connections to the value recommended by the equipment manufacturer. If they are not available, use NEC Annex I for torque values as guidelines.

c. **WIRE INSULATION & CONTINUITY TESTS**

- 1) All devices that are not rated to withstand the 500V megger potential shall be disconnected prior to the megger tests.
- 2) Megger insulation resistances of all 600 volt insulated conductors using a 500 volt megger for 10 seconds. Make tests with circuits installed in conduit and isolated from source and load. Each field conductor shall be meggered conductor to conductor and conductor to ground. These tests shall be made on cable after installation with all splices made up and terminators installed but not connected to the equipment.
- 3) Each megger reading shall not be less than 10 Meg-ohms resistive. Corrective action shall be taken if values are recorded less than 10 Meg-ohms. Values of different phases of conductors in the same conduit run showing substantially different Meg-ohm values, even if showing above 10 Meg-ohms shall be replaced.
- 4) Each instrumentation conductor twisted shielded pair shall have the conductor and shield continuity measured with an ohmmeter. Conductors with high ohm values, that do not match similar lengths of conductors the same size, shall be replaced at

no additional cost to the City.

- 5) The Contractor shall fill in test forms Power and Control Conductor Test Form TF1 and Instrumentation Conductor Test Form TF2 located in Appendix "A."

d. GROUNDING SYSTEM TESTS

1) Visual and Mechanical Inspection:

- a) Verify ground system is in compliance with Drawings and Specifications.

2) Electrical Tests:

- a) Before backfilling trenches, and placement of sidewalks, landscape and paving, measure the resistance of each electrode to ground using a ground resistance tester. Perform the test not less than two days after the most recent rainfall and in the afternoon after any ground condensation (dew) has evaporated.
- b) After all individual ground electrode readings have been made, interconnect as required and measure the system's ground resistance.
- c) The grounding test shall be in conformance with IEEE Standard 81.
- d) Measurements shall be made at 10 feet intervals beginning 25 feet from the test electrode and ending 75 feet from it in a direct line between the system being tested and the test electrode.
- e) Point-to-Point: Perform point-to-point tests to determine the resistance between the main grounding system and all major electrical equipment frames, system neutral, and/or derived neutral points.

3) Test Values:

- a) The resistance between the main grounding electrode and equipment ground shall be no greater than five ohms per IEEE Standard 142.
- b) Investigate point-to-point resistance values that exceed 0.5 ohms.
- c) Plots of ground resistance shall be made and submitted to the Engineer for approval.

- 4) The Contractor shall fill in Grounding System Test Form TF3 located in Appendix "A."

e. BREAKER TEST

- 1) All breakers shall be checked for proper mounting, conductor size, and feeder designation. Operate circuit breaker to ensure smooth operation. Inspect case for cracks or other defects. Check tightness of connection with torque wrench in accordance with manufacturer's recommendations.
- 2) All breakers 100 amps and above shall be tested. Time current characteristic tests shall be performed bypassing three hundred percent (300%) rated current through each pole separately. Trip amps and time shall be measured. Instantaneous pickup current shall be determined by run up or pulse method. Clearing times should be within four (4) cycles or less. All trip times shall fall within NETA Table values. Instantaneous pickup current levels should be within 20% of manufacturer's published values. Certification stickers, listing date and company who performed the tests, shall be attached to the inside of the breaker compartment door right after the breaker has passed all tests.
- 3) Contact and Insulation Resistance: Contact resistance shall be measured and be compared to adjacent poles and similar breaker. Deviations of more than 50% shall be reported to Engineer. Insulation resistance shall be measured and shall not be

less than 50 megohms.

- 4) At end of test the all breakers trip settings shall be set by Contractor to values listed in protective device coordination study to properly protect equipment.
- 5) The Contractor shall fill in MCC Device Test Form TF8 and Breaker Test Form TF9 located in Appendix "A."

## 7. POST ENERGIZATION TESTS

### a. PANELS AND ENCLOSURE TESTS

- 1) During these tests, test all local and remote control operations and interlocks.
- 2) Electrical Tests:
  - a) Perform operational tests by initiating control devices to affect proper operation.
  - b) The Contractor shall fill in Operational Device Checks and Tests Form TF6.

### b. PHASE ROTATION TESTS

- 1) Check connections to all equipment for proper phase relationship. During this test, disconnect all devices which could be damaged by the application of voltage or reversed phase sequence. Three phase equipment shall be tested for the phase sequence "ABC" front to back, left to right, and top to bottom.
- 2) All three phase motors shall be tested for proper phase rotation. Revise wire color codes to indicate correct phase color if wires are swapped.
- 3) The Contractor shall fill in Phase Rotation Test Form TF7 located in Appendix "A."

### c. MOTOR TESTING

- 1) Prior to start-up, record low ohm phase to phase and phase to ground readings for future baseline.
- 2) Record the amperage draw on all phases of each motor operating under full load. Ensure that these values do not exceed the motor nameplate full load amperage.
- 3) Record the voltage between all phases of each motor operating under full load. If the voltage balance is not within plus or minus 5 percent of nominal, request the Utility power company or other responsible party to correct the problem.
- 4) The Contractor shall compile, by visual inspection of equipment installed for each motor, the following data in neatly tabulated form and provided to Owner:
  - a) Equipment driven.
  - b) Motor horsepower.
  - c) Nameplate amperes.
  - d) Service factor.
  - e) Temperature rating.
  - f) Overload catalog number.
  - g) Overload current range and setting.
  - h) Circuit breaker rating.
  - i) Circuit breaker trip setting, for magnetic only circuit breakers.
- 5) The Contractor shall fill in Motor Test Form TF10, located in Appendix "A."
- 6) Additional motor testing requirements per Division 11.

## 8. TRIAL OPERATIONS:

- a. The entire electrical installation shall be either tested or trial operated to verify Contract compliance. That is, controls, heaters, fans, light switches, convenience receptacles, lights, etc. shall be trial operated. Contractor shall conduct trial operations in the presence of the Engineer and Operations and Maintenance personnel.

#### **E. OPERATIONAL TESTING**

1. After all the previous tests in this subsection are complete, the Contractor shall conduct operational testing.
2. The Contractor shall demonstrate operation of each part of the control and instrumentation system to the satisfaction of the Engineer. Tests shall be repeated by the Contractor at no additional cost to the City and at the discretion of the Engineer to resolve whether the system has been demonstrated that it will operate under all modes of operations and varying conditions.
3. For the operational testing the new equipment shall be activated to automatically run for 5 days, Monday through Friday 24 hours a day. During this five day period the City will run the different combinations of the pump control options. If equipment failure occurs during the 5 days of operational testing, the Contractor shall repair or replace the defective equipment and shall begin another 5 day operational test, Monday through Friday 24 hours a day. This shall be continued until the new equipment functions acceptably for 5 consecutive days.
4. The Electrical Contractor, testing firm and System Supplier shall re-visit the jobsite as often as necessary until all field tests, start-up and operation tests are completed and approved.

#### **203-3.08 WARRANTY**

- A. The Contractor shall have a staff of experienced personnel available to provide service on 2 working days' notice during the warranty period. Such personnel shall be capable of fully testing and diagnosing the hardware, software and implementing corrective measures.
- B. If the Contractor "fails to respond" in 2 working days, the City at its option will proceed to have the warranty work completed by other resources; the total cost (direct and indirect) for these other resources shall be reimbursed in full by the Contractor.
  1. "Fail to respond" shall be defined as: The Contractor has not shown a good faith effort and has not expended adequate resources to correct the problem.
  2. The use of other resources, as stated above, shall not change or relieve the Contractor from fulfilling the remainder of the warranty requirements.
- C. Each time the Supplier's repair person responds to a system malfunction during the warranty period, he or she must contact the City Project Manager for scheduling of the work, access to the jobsite, and permission to make repairs. Operation of facilities necessary to test equipment shall only be performed by or under the direction of City staff. City reserves the right at its sole discretion to deny operations requested by the Supplier. A written description of all warranty work performed shall be documented on a field service report to be given to City prior to the repair person leaving job site. This field service report shall detail and clearly state problem, corrective actions taken, additional work that needs to be done, date, repair person name and company.

### **203-3.09 FINAL ACCEPTANCE**

- A. Final acceptance will be given by the Engineer after the equipment has passed the "operational testing trial period," each deficiency has been corrected, final documentation has been provided, and all the requirements of design documents have been fulfilled.
- B. Upon completion of the project, prior to final acceptance, remove all temporary services, equipment, material, and wiring from the site.
- C. At the end of the project, following the completion of the field tests, and prior to final acceptance, the Supplier shall provide the following to the City:
  - 1. Verify Service equipment has been legibly marked in field with the maximum available fault current per NEC 110.24 (A). Field marking shall include date the fault current calculation was performed and be weather & UV rated. Service equipment shall not be hand labeled
  - 2. Listing of warranty information.
  - 3. Each "operation and maintenance" manual shall be modified or supplemented by the Supplier to reflect all field changes and as-built conditions.
  - 4. Four (4) USB drives with copies of all final documentation to reflect as-built conditions.
  - 5. Two sets of all keys for locks supplied on this project. Wire all keys for each lock securely together. Tag and plainly mark with lock number or equipment identification, and indicate physical location, such as panel or switch number.
  - 6. Verify that as-installed drawings have been placed in all new or modified panels in reinforced clear plastic pockets.
  - 7. Resubmit all Electrical System Analysis studies with all calculations rerun, data and graphs updated to reflect as-left conditions. Provide new Arc Flash labels to reflect as-constructed equipment and as-left circuit breaker settings.
  - 8. Record full size drawings neatly marked accurately showing the information required herein

### **203-4 PAYMENT**

- A. **General Electrical Work** shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, material, tools, equipment, and incidentals, and doing all the work involved in providing a complete and working electrical system, including, but not limited to, miscellaneous enclosures, pull boxes, lighting, underground conduits and conductors, ground rods and underground grounding connections, receptacles, power feeders, control wire, wiring connections, all necessary modifications and testing to the City's SCADA system, and all other miscellaneous work, complete and in place as specified herein and in accordance with the Project Plans and as specified in these Special Provisions, and no additional compensation will be made therefor.

## **APPENDIX "A"**

### **TEST FORMS**

#### Index of Forms:

Bill of Materials

Schedule Test Request Form

TF1      Power and Control Conductor Test Form

TF2      Instrumentation Conductor Test Form

TF3      Grounding System Test Form

TF4      Visual and Mechanical Inspection Form

TF6      Operational Device Checks and Tests Form

TF7      Phase Rotation Test Form

TF8      MCC Device Test Form

TF9      Breaker Device Test Form

## **A - FEES AND PERMITS**

The Contractor shall obtain all necessary and required permits for the project. All permits issued by the City Building Department will be issued at no cost to the Contractor; these fees will be paid by an appropriate City department. All other required permits shall be obtained at the Contractor's expense.

The City has obtained a permit from the City of Santa Rosa Water Department for a one-time groundwater discharge permit into the City sewer system. Payment of the permit fee and any other fees for discharge into the sewer system shall be paid for by the City. A copy of the Authorization to Discharge is included herein. Any required water sampling will be the responsibility of the City. The phone number for the Environmental Compliance Section is (707) 543-3369.

The Contractor shall obtain a permit from the State of California Division of Industrial Safety. Attention is directed to Section 5-1.02A, "Trench Excavation Safety Plans" of these Special Provisions.

Full compensation for securing, complying, and the cost of all permits shall be considered as included in the contract prices paid for the various contract items of work and no additional allowance will be made therefor.

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