

**SPECIFICATION AND CONTRACT
DOCUMENTS FOR
2025 PAVEMENT REHABILITATION
PROJECT**



**MORGAN HILL, CALIFORNIA
ENGINEERING DEPARTMENT**

**PREPARED BY
ENGINEERING DEPARTMENT**

APRIL 2025

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NOTICE INVITING BIDS

- 1. Bid Submission.** The City of Morgan Hill ("City"), will accept sealed bids for its 2025 Pavement Rehabilitation Project ("Project"), by or before April 22, 2025, at 2:00 p.m., at its DEVELOPMENT SERVICES CENTER, located at 17575 PEAK AVENUE MORGAN HILL, California, at which time the bids will be publicly opened and read aloud.
- 2. Project Information.**

2.1 Location and Description. The Project is located at various locations within the City of Morgan Hill, CA 95037, and is described as follows:

3" Pavement Milling and Filling, 2" Pavement Milling and Filling, Full Depth Asphalt Concrete Pavement Repairs, Crack Sealing, Detector Loops, Replacement of all Existing Traffic Delineation and markings, Utility Adjustments, and all other related work at various streets within the City Limits.

2.2 Time for Final Completion. The Project must be fully completed within 60 calendar days from the start date set forth in the Notice to Proceed. City anticipates that the Work will begin on or about June 15, 2025, but the anticipated start date is provided solely for convenience and is neither certain nor binding.

2.3 Estimated Cost. The estimated construction cost is \$2.6 million Dollars.

- 3. License and Registration Requirements.**

3.1 License. This Project requires a valid California contractor's license for the following classification(s): Class A License.

3.2 DIR Registration. City will not accept a Bid Proposal from or enter into the Contract with a bidder, without proof that the bidder and its Subcontractors are registered with the California Department of Industrial Relations ("DIR") to perform public work pursuant to Labor Code Section 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 obtained from the City of Morgan Hill, at 17575 Peak Avenue, Morgan Hill, CA, (408) 778-6480. Electronic copies of the Contract Documents are available on USB thumb drive for twenty-five dollars (\$25.00). If mailing by USPS, a ten-dollar (\$10.00) charge will be added. To download plans and specifications at no charge, register at www.publicpurchase.com.

- 5. Bid Proposal and Security.**

5.1 Bid Proposal Form. Each Bid must be submitted using the Bid Proposal form provided with the Contract Documents.

5.2 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 of Morgan Hill, 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 (10) days after City issues the Notice of Award, the successful bidder will execute the Contract and submit 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 the Notice of Award.

6. Prevailing Wage Requirements.

6.1 General. Pursuant to California Labor Code Section 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 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 California Department of Industrial Relations, pursuant to Labor Code Section 1771.4.

- 7. Performance and Payment Bonds.** The successful bidder will be required to provide performance and payment bonds each for one hundred percent of the Contract Price as further described 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 Section 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 and DIR registration number and percentage of the Work to be performed (based on the base bid price) for each Subcontractor who will perform Work or service or fabricate or install Work for the prime contractor in excess of one-half (1/2) of one percent (1%) of the bid price, using the Subcontractor List form included with the Contract Documents. For street or highway construction, this requirement applies to any subcontract of \$10,000 or more.

- 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.

By: Michelle Bigelow

Date: March 14, 2024

Publication Dates: 1) March 21, 2025

2) March 28, 2025

END OF NOTICE INVITING BIDS

INSTRUCTIONS TO BIDDERS

Each Bid Proposal submitted to the City of Morgan Hill ("City") for its 2025 PAVEMENT REHABILITATION PROJECT ("Project") must be submitted in accordance with the following instructions and requirements:

1. Bid Submission.

1.1 General. Each Bid Proposal must be signed, sealed and submitted to City, using the form provided in the Contract Documents, by or 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 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, materials, supplies, and equipment and all other direct or indirect costs such as applicable federal, state and local taxes, insurance and overhead.

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

BID PROPOSAL
Morgan Hill Development Services Center
2025 PAVEMENT REHABILITATION PROJECT
City of Morgan Hill
17575 Peak Avenue
Morgan Hill, CA 95037
Attention: Bid Opening
Bid Date: _____
Bid Time: _____

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 sections 1725.5 and 1771.1):

[Contractor company name]
[Street address]
[City, state, zip code]
DIR Registration No. _____

1.3 DIR Registration. Subject to limited legal exceptions for joint venture bids and federally-funded projects, City will 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 Section 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 Section 1725.5 and 1771.1(a)).

2. Bid Proposal Form and Enclosures. Each Bid Proposal must be completed in ink 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 NonCollusion Declaration using the forms included with the Contract Documents, and any other required enclosures, as 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 limited liability company (LLC) must be signed in the name of the LLC by a member or manager with authority to bind the LLC. A Bid Proposal submitted by a corporation must be signed with the legal name of the corporation, followed by the signature and title of an officer of the corporation with full authority to bind the corporation to the terms of the Bid Proposal.

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 after issuance of the 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.

4.1 Withdrawal of Bid Proposals. A Bid Proposal may not be withdrawn for a period of 90 days after the bid opening without forfeiture of

the bid security, except as authorized for material error under Public Contract Code Section 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 Nolen Ugalde, Project Engineer, nolen.ugalde@morganhill.ca.gov. 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 or omissions, inconsistencies, or conflicts it discovers in the Contract Documents prior to submitting a Bid Proposal, subject to the limitations of Public Contract Code Section 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 Project 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 section 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. Each bidder is solely responsible for ensuring it has received and reviewed all addenda prior to submitting its bid. Bidders should check City's website periodically for any addenda or updates on the Project at: <http://www.publicpurchase.com>.

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 or service desired, and bidders may request use of any equal material, product, thing, or service. All data substantiating the proposed substitute as an "equal" item or service must be submitted with the written request for substitution. 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 Section 3400(c).

9.1 Pre-Bid Requests. Any request for submission made before the Contract is awarded must be submitted to the City Engineer at least ten (10)

days before the opening of bids so that all interested bidders may be notified of any approved alternative.

9.2 Post-Award Requests. After the Contract is awarded, Contractor may submit a substitution within fourteen (14) days after the date of award of the Contract, or as specified in the Special Conditions.

10. Bid Protest. Any bid protest against another bidder must be submitted in writing and received by City at the City Attorney's Office at 17575 Peak Avenue, Morgan Hill, CA, (Fax: (408) 779-1592 or Email to cityattorney@morganhill.ca.gov), 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. If required by City, the protesting bidder must submit a non-refundable fee in the amount specified by City, based upon City's reasonable costs to administer the bid protest. Any such fee must be submitted to City no later than the Bid Protest Deadline, unless otherwise specified. 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 Section 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 Section 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 include 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 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. 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 ninety 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 City's issuance of the Notice of Award to the apparent low bidder, the 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).** 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 license within ten days following City's issuance of the Notice of Award. Subcontractors must also obtain a City business license before performing any Work.
14. **Ineligible Subcontractor.** Any Subcontractor who is ineligible to perform work on a public works project under Labor Code Sections 1777.1 or 1777.7 is prohibited from performing work on this Project.
15. **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 City's issuance of the Notice of Potential Award to the successful bidder, the 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.
16. **Subcontractor Work Limits.** The prime contractor must perform at least 50% of the Work on the Project, calculated as a percentage of the base bid price, with its own forces, except for any Work identified as "Specialty Work" in the Contract Documents. The total bid amount for any such Specialty Work, as shown on the Bid Schedule, may be deducted from the base bid price before computing the 50% self-performance requirement. The remaining Work may be performed by qualified Subcontractor(s).
17. **Additive and Deductive Alternates.** As required by Public Contract Code Section 20103.8, if this bid solicitation includes additive or deductive items, the method checked below will be used to determine the lowest bid. If no method is checked, subparagraph (a) will be used to determine the lowest bid. City retains the right to add to or deduct from the Contract any of the additive or deductive alternates included in the Bid Proposal.
 - (a) The lowest bid will be the lowest bid price on the base contract without consideration of the prices on the additive or deductive items.

18. **Bidder's Questionnaire.** A completed, signed Bidder's Questionnaire using the form provided with the Contract Documents and including all required attachments must be submitted within 48 hours following a request by City. A bid that does not fully comply with this requirement may be rejected as nonresponsive. A bidder who submits a Bidder's Questionnaire which is subsequently determined to contain false or misleading information, or material omissions, may be disqualified as non-responsible.
19. **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.
 - 19.1 **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.
 - 19.2 **Estimated Quantities.** 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.

END OF INSTRUCTIONS TO BIDDERS

BID PROPOSAL

2025 PAVEMENT REHABILITATION PROJECT

____ ("Bidder") hereby submits this Bid Proposal to the City of Morgan Hill ("City") for the above-referenced project ("Project") in response to the Notice Inviting Bids and in accordance with the Contract Documents referenced therein.

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"):
\$ _____.

- 1A. **Bid Alternates.** Bidder submits the following prices for the specified bid alternates:

Alternate #1: _____
Add: \$ _____

2. **Addenda.** Bidder agrees that it has confirmed receipt of or access to, and reviewed, all addenda issued for this Bid. Bidder waives any claims it might have against the City based on its failure to receive, access, or review any addenda for any reason. Bidder specifically acknowledges receipt of the following addenda:

Addendum: #01	Date Received: _____	Addendum: #05	Date Received: _____
#02	_____	#06	_____
#03	_____	#07	_____
#04	_____	#08	_____

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 Section 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 certifies that it is not identified on a list created under the Iran Contracting Act, Public Contract Code Section 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 Bidder is awarded the Contract for the Project, then within ten days following issuance of the Notice of Award to Bidder, 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 one hundred percent (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. (See Section 16 of the Instructions to Bidders.)

5. Wage Theft Prevention. All Bidders are expected to have read and understand the "Wage Theft Prevention Policy" adopted by the City Council on July 26, 2017 as further described in Section 9.6 of the General Conditions.

The undersigned Bidder certifies that neither Bidder nor its principals have been found by a final court judgement or final administrative action of an investigatory agency to have violated federal, state or local wage and hour laws within the past five years from the date of the submitted bid. Bidder or its principals who are unable to so certify, must disclose wage and hour violations, and shall provide a copy of (i) the court order and judgment and/or final administrative decision; and (ii) documents demonstrating either that the order/judgment has been satisfied, or if the order/judgment has not been fully satisfied, a written and signed description of Bidder's efforts to date to satisfy the order/judgment. Signing this bid shall constitute signature of this Certification.

The City, at its sole discretion, may disqualify a bidder based on one or more disclosed judgments consistent with the criteria set forth in the Policy.

6. 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 (10%) of its maximum bid amount in one of the following forms (check one):

A cashier's check or certified check payable to City of Morgan Hill and issued by _____ Bank in the amount of \$_____.

A bid bond, using the Bid Bond form included with the Contract Documents, payable to City of Morgan Hill 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 [print]

Company Name

License # and Classification

DIR Registration #

Address

Phone

City, State, Zip

Fax

END OF BID PROPOSAL

BID SCHEDULE I – WOODLAND ACRES & LLAGAS ROAD

2025 PAVEMENT REHABILITATION PROJECT

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. Quantities shown are required for bid purposes and may or may not be final pay quantities. Actual quantities, if different, must be substantiated during the Project by the Contractor (either by field measurement, trucking tags, or other means acceptable to the Engineer).

AL = Allowance CF = Cubic Feet CY = Cubic Yard EA = Each LB = Pounds
LF = Linear Foot LS = Lump Sum SF = Square Feet TON = Ton (2000 lbs.)

Bid Item No.	Description of Bid Item	Estimated Quantity/Unit of Measure	Unit Price	Extended Total Amount
1	Mobilization (up to 5%)	1 LS	\$	\$
2	Traffic Control Systems	1 LS	\$	\$
3	2" Full Pavement Grind/Mill	224,951 SF	\$	\$
4	4" Full Pavement Grind/Mill	63,530 SF	\$	\$
5	2" Fill (1/2" Asphalt Concrete)	2,947 TON	\$	\$
6	4" Fill (1/2" Asphalt Concrete)	1,663 TON	\$	\$
7	4" Full Depth Pavement Repair (Revokable)	13,737 SF	\$	\$
8	6" Full Depth Pavement Repair (Revokable)	10,000 SF	\$	\$
9	Crack Sealing (Revokable)	100,000 LF	\$	\$
10	Remove and Replace Existing AC Berm	4,443 LF	\$	\$
11	Locate, Lower and Raise Water Valve Box and Cover	61 EA	\$	\$
12	Locate, Lower and Raise Meter Box	1 EA	\$	\$
13	Yield Markings Caltrans STD Plan A24G	3 EA	\$	\$
14	12" Striping White (Limit Lines)	35 LF	\$	\$
15	White Word Marking "STOP"	2 EA	\$	\$
16	Caltrans Detail 2	5,255 LF	\$	\$

17	Caltrans Detail 22	2,954 LF	\$	\$
18	Caltrans Detail 27B	5,667 LF	\$	\$
19	Two-Way Blue Fire Hydrant Marker	19 EA	\$	\$
26	Supplemental Work (Revokable)	1 LS	\$ 100,000	\$ 100,000

Bid Schedule I Total	
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END OF BID SCHEDULE

BID SCHEDULE II – EAST MAIN AVENUE
2025 PAVEMENT REHABILITATION PROJECT

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. Quantities shown are required for bid purposes and may or may not be final pay quantities. Actual quantities, if different, must be substantiated during the Project by the Contractor (either by field measurement, trucking tags, or other means acceptable to the Engineer).

AL = Allowance CF = Cubic Feet CY = Cubic Yard EA = Each LB = Pounds
 LF = Linear Foot LS = Lump Sum SF = Square Feet TON = Ton (2000 lbs.)

Bid Item No.	Description of Bid Item	Estimated Quantity/Unit of Measure	Unit Price	Extended Total Amount
1	Mobilization (up to 5%)	1 LS	\$	\$
2	Traffic Control Systems	1 LS	\$	\$
3	3" Full Pavement Grind/Mill	128,311 SF	\$	\$
4	3" Fill (1/2" Asphalt Concrete)	2,520 TON	\$	\$
5	3" Full Depth Pavement Repair (Revokable)	6,230 SF	\$	\$
6	Shoulder Backing	28 TON	\$	\$
7	Locate, Lower and Raise Monument Box and Cover	1 EA	\$	\$
8	Locate, Lower and Raise Manhole Frame and Cover	14 EA	\$	\$
9	Locate, Lower and Raise Water Valve Box and Cover	6 EA	\$	\$
10	Locate, Lower and Raise Hand Hole Box and Cover	1 EA	\$	\$
11	Remove and Replace existing ADA Curb Ramp	1 EA	\$	\$
12	4" White Misc Striping	174 LF	\$	\$
13	High Visibility X-Walk Striping – 12" Yellow	115 LF	\$	\$
14	High Visibility X-Walk Striping – 24" Yellow	150 LF	\$	\$
15	12" Striping White	122 LF	\$	\$

16	Type IV (L) Arrow	2 EA	\$	\$
17	Type IV (R) Arrow	5 EA	\$	\$
18	Type I (10) Arrow	10 EA	\$	\$
19	White Word Marking "ONLY"	3 EA	\$	\$
20	Yellow Word Marking "XING"	2 EA	\$	\$
21	Yellow Word Marking "SCHOOL"	2 EA	\$	\$
22	Yellow Word Marking "SLOW"	2 EA	\$	\$
23	White Word Marking "35"	2 EA	\$	\$
24	Caltrans Detail 2	900 LF	\$	\$
25	Caltrans Detail 22	709 LF	\$	\$
26	Caltrans Detail 27B	1,920 LF	\$	\$
27	Caltrans Detail 29	655 LF	\$	\$
28	Caltrans Detail 38	574 LF	\$	\$
29	Bike Lane Marking Symbol w/ Arrow	4 EA	\$	\$
30	Caltrans Flexible Bikeway Separator Posts	30 EA	\$	\$
31	Type E Traffic Detection Loops	4 EA	\$	\$
32	Type E (Modified) Traffic Detection Loops	2 EA	\$	\$
33	Two-Way Blue Fire Hydrant Marker	6 EA	\$	\$

Bid Schedule II Total	
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*Final Pay Quantity

TOTAL BASE BID: Bid Schedule I and Bid Schedule II 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.

END OF BID SCHEDULE II

BID SCHEDULE III – ADD ALTERNATE #1 TILTON AVEUNE

2025 PAVEMENT REHABILITATION PROJECT

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. Quantities shown are required for bid purposes and may or may not be final pay quantities. Actual quantities, if different, must be substantiated during the Project by the Contractor (either by field measurement, trucking tags, or other means acceptable to the Engineer).

AL = Allowance CF = Cubic Feet CY = Cubic Yard EA = Each LB = Pounds
LF = Linear Foot LS = Lump Sum SF = Square Feet TON = Ton (2000 lbs.)

Bid Item No.	Description of Bid Item	Estimated Quantity/Unit of Measure	Unit Price	Extended Total Amount
1	Mobilization (up to 5%)	1 LS	\$	\$
2	Traffic Control Systems	1 LS	\$	\$
3	3" Full Pavement Grind/Mill	40,554 SF	\$	\$
4	3" Fill (1/2" Asphalt Concrete)	796 TON	\$	\$
5	Locate, Lower and Raise Manhole Frame and Cover	6 EA	\$	\$
6	Locate, Lower and Raise Water Valve Box and Cover	3 EA	\$	\$
7	6" Striping White	100 LF	\$	\$
8	12" Striping White	50 LF	\$	\$
9	Yellow Word Marking "XING"	1 EA	\$	\$
10	Yellow Word Marking "SCHOOL"	1 EA	\$	\$
11	Yellow Word Marking "SLOW"	1 EA	\$	\$
12	White Word Marking "STOP"	3 EA	\$	\$
13	White Word Marking "AHEAD"	1 EA	\$	\$
14	Caltrans Detail 2	250 LF	\$	\$
15	Caltrans Detail 22	680 LF	\$	\$
16	Caltrans Detail 27B	2,000 LF	\$	\$
17	Caltrans Detail 39	618 LF	\$	\$
18	Caltrans Detail 39A	95 LF	\$	\$

19	Two-Way Blue Fire Hydrant Marker	1 EA	\$	\$
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Bid Schedule III Total	
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END OF BID SCHEDULE III

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,¹ 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.

Bidders: Please print legibly. Illegible forms may be rejected.

Bidders: Please print legibly. Illegible forms may be rejected.

END OF SUBCONTRACTOR LIST

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

2 A Subcontractor is considered local if its principal place of business is within the city limits of Morgan Hill.

NONCOLLUSION DECLARATION

(To be executed by bidder and submitted with bid)

State of California)	
County of _____)	ss.
)	

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]

BID BOND

____ ("Bidder") has submitted a bid, dated _____, 20____ ("Bid"), to the City of Morgan Hill ("City") for work on the _____ ("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 (10%) 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 issuance of the Notice of Award to Bidder, 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; and
 - 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 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 endorsements, 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 ninety days following the bid opening or until this Bid Bond is returned to Bidder, whichever occurs first. Surety waives the provisions of Civil Code Sections 2819 and 2845.

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

SURETY:

s/ _____

Name: _____

Title: _____

(Attach Acknowledgement, Notary Seal, and Attorney-In-Fact Certificate)

CONTRACTOR:

s/ _____

Name: _____

Title: _____

APPROVED AS TO FORM:

By: _____
Donald A. Larkin, City Attorney

Date: _____

BIDDER'S QUESTIONNAIRE

2025 PAVEMENT REHABILITATION PROJECT

Within forty-eight (48) hours following a request by City, a bidder must submit to City a completed, signed Bidder's Questionnaire using this form and all required attachments, including clearly labeled additional sheets as needed. City may request the Questionnaire from one or more of the apparent low bidders following the bid opening, and may use the completed Questionnaire as part of its investigation to evaluate a bidder's qualifications for this Project. The Questionnaire must be filled out completely, accurately, and legibly. Any errors, omissions, or misrepresentations in completion of the Questionnaire may be grounds for rejection of the bid or termination of a Contract awarded pursuant to the bid.

Part 1: General Information

Bidder Business Name: _____ ("Bidder")

Check One: Corporation State of Incorporation _____
 Limited Liability Company/State of Formation _____
 Partnership _____
 Sole Proprietorship _____
 Joint Venture of: _____
 Other: _____

Main Office Address:

Phone: _____

Fax: _____

Local Office Address and Phone: _____

Website address: _____

Owner of Business: _____

Contact Name and Title: _____

Contact phone and email: _____

Bidder's California Contractor's License Number(s): _____

Bidder's DIR Registration Number: _____

Part 2: Bidder Experience

1. How many years has Bidder been in business under its present business name?
_____ years

2. Has Bidder completed projects similar in type and size to this Project as a general contractor? Yes No

3. Has Bidder ever been disqualified from a bid on grounds that it is not responsible, or otherwise disqualified or debarred from bidding under state or federal law?

Yes No

If yes, provide additional information on a separate sheet regarding the disqualification or debarment, including the name and address of the agency or owner of the project, the type and size of the project, the reasons that Bidder was disqualified or debarred, and the month and year in which the disqualification or debarment occurred.

4. Has Bidder ever been terminated for cause, alleged default, or legal violation from a construction project, either as a general contractor or as a subcontractor?

Yes No

If yes, provide additional information on a separate sheet regarding the termination, including the name and address of the agency or owner of the subject project, the type and size of the project, whether Bidder was under contract as a general contractor or a subcontractor, the reasons that Bidder was terminated, and the month and year in which the termination occurred.

5. Provide information about Bidder's past projects performed as general contractor as follows:

5.1 Six most recently completed public works projects within the last three years;

5.2 Three largest completed projects within the last three years; and

5.3 Any project which is similar to this Project including scope and character of the work.

6. Use separate sheets to provide all of the following information for each project identified in response to the above three categories:

- 6.1 Project name
- 6.2 Location
- 6.3 Owner
- 6.4 Owner contact (name, address, email, and phone number)
- 6.5 Prime contractor, if applicable (name, address, email, and phone number);
- 6.6 Architect or engineer name
- 6.7 Architect or engineer contact (name, email and phone number)
- 6.8 Project and/or construction manager (name and current phone number)
- 6.9 Description of project, scope of work performed
- 6.10 Initial contract value (at time of bid award)
- 6.11 Final cost of construction (including change orders)
- 6.12 Original scheduled completion date
- 6.13 Time extensions granted (number of days)
- 6.14 Actual date of completion
- 6.15 Number and amount of stop notices or mechanic's liens filed
- 6.16 Amount of liquidated damages assessed against Bidder
- 6.17 Nature and resolution of any project-related claim, lawsuit, mediation and/or arbitration involving Bidder.

Part 3: Safety

1. Provide Bidder's Experience Modification Rate (EMR) for the last three years:

Year	EMR

2. Complete the following, based on information provided in Bidder's CalOSHA Form 300 or Form 300A, Annual Summary of Work-Related Illnesses and Injuries, from the most recent past calendar year:

- 2.1 Number of lost workday cases: _____
- 2.2 Number of medical treatment cases: _____
- 2.3 Number of deaths: _____

3. Has Bidder ever been cited, fined, or prosecuted by any local, state, or federal agency, including OSHA, CalOSHA, or EPA, for violation of any law, regulation, or requirements pertaining to health and safety?

Yes No

If yes, provide additional information on a separate sheet regarding each such citation, fine, or prosecution, including the name and address of the agency or owner of the project, the type and size of the project, the reasons for and nature of the citation, fine, or prosecution, and the month and year in which the incident giving rise to the citation, fine, or prosecution occurred.

4. Name, title, and email for person responsible for Bidder's safety program:

Name	Title	Email
------	-------	-------

Name	Title	Email
------	-------	-------

Part 4: Verification

In signing this document, I, the undersigned, declare that I am duly authorized to sign and submit this Bidder's Questionnaire on behalf of the named Bidder, and that all responses and information set forth in this Bidder's Questionnaire and accompanying attachments are, to the best of my knowledge, true, accurate and complete as of the date of submission. **I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.**

Signature: _____

Date: _____

By [name, title]: _____

END OF BIDDER'S QUESTIONNAIRE

CONTRACT

This public works contract ("Contract") is entered into by and between the City of Morgan Hill ("City") and _____ a (State of formation) type of entity ("Contractor") for work on the 2025 PAVEMENT REHABILITATION 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 on 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:
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; and
 - 2.13 The following: City Standard Detail
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 _____ Dollars (\$_____) (the "Contract Price"), for all of Contractor's direct and indirect costs to perform the Work, including all labor, materials, supplies, equipment, federal, state and local 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 calendar 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 Twenty-Five Hundred Dollars (\$2500.00) 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. Contract Price will be reduced accordingly.

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 will 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 Section 1725.5, subject to limited legal exceptions.

8. **Workers' Compensation Certification.** Pursuant to Labor Code Section 1861, by signing this Contract, Contractor certifies as follows: "I am aware of the provisions of Labor Code Section 3700 which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and 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 Section 1090 *et seq.*, or the Political Reform Act, as set forth in Government Code Section 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 or County and are not entitled to participate in any health, retirement, or any other employee benefits from City or County.
11. **Notice.** Any notice required by 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 unless otherwise specified. Notice for each party must be given as follows:

City:

City of Morgan Hill
17575 Peak Avenue
Morgan Hill, CA 95037
Phone: (409) 779-7259
Attn: City Clerk
Email: michelle.bigelow@morganhill.ca.gov
Copy to: yat.cho@morganhill.ca.gov

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. Santa Clara County is an intended third-party beneficiary to this contract.

12.3 Governing Law and Venue. This Contract will be governed by California law and venue will be in the Superior Court of Santa Clara County, and no other place. Contractor waives any right it may have pursuant to Code of Civil Procedure Section 394, to file a motion to transfer any action arising from or relating to this Contract to a venue outside of Santa Clara 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 Section 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 Section 313. If Contractor is a partnership, signature by a general partner with authority to bind the partnership is required. If Contractor is a limited liability company (LLC), a signature by a member or manager with authority to bind the LLC is required.

12.9 Electronic Signatures. Unless otherwise prohibited by law or City policy, the Parties agree that an electronic copy of a signed contract, or an electronically signed contract, has the same force and legal effect as a contract executed with an original ink signature. The term “electronic copy of a signed contract” refers to a transmission by facsimile, electronic mail, or other electronic means of a copy of an original signed contract in a portable document format. The term “electronically signed contract” means a contract that is executed by applying an electronic signature using technology approved by the City.

12.10 Notice of Security and/or Privacy Incident. If Contractor, or its subcontractor, suspect, discover or are notified of a data security incident or potential breach of security and/or privacy relating to City PII, PHI and/or PCI, Contractor shall immediately, but in no event later than forty-eight (48) hours from suspicion, discovery or notification of the incident or potential breach, notify City of such incident or potential breach. Contractor shall, upon City's request, investigate such incident or potential breach, inform the City of the results of any such investigation, and assist the City in maintaining the confidentiality of such information. In addition to the foregoing, Contractor shall provide City with any assistance necessary to comply with any state and/or federal laws requiring the provision of notice of any privacy incident or security breach with respect to any City PII, PHI and/or PCI to the affected or impacted individuals and/or organizations, in addition to any notification to applicable state and federal agencies. Contractor agrees that it shall reimburse City for all expenses, costs, attorneys' fees, and resulting fines, penalties, and damages associated with such incident, breach, investigation and/or notification.

[Signatures are on the following page.]

AS SET FORTH IN CA. CORP. CODE § 313, TWO SIGNATURES ARE REQUIRED FOR CALIFORNIA CORPORATIONS:

(1) CHAIRPERSON OF THE BOARD, PRESIDENT, OR VICE PRESIDENT; AND
2) SECRETARY, ASSISTANT SECRETARY, CHIEF FINANCIAL OFFICER OR ASSISTANT TREASURER.

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

CITY OF MORGAN HILL:

Christina J. Turner
City Manager

Date: _____

Attest:

Michelle Bigelow
City Clerk

Date: _____

Approved as to Form:

Donald A. Larkin
City Attorney

Date: _____

CONTRACTOR:
[CONTRACTOR NAME]

Signature

Name/Title [print]

Date: _____

Corporate entities must provide a second signature:

Signature

Name/Title [print]

Date: _____

Contractor's License Number(s)

Expiration Date(s)

Seal:

Contractor's DIR Registration Number(s)

Expiration Date

END OF CONTRACT

PAYMENT BOND

The City of Morgan Hill ("City") and _____ ("Contractor") have entered into a contract for work on the 2025 PAVEMENT REHABILITATION 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 _____ Dollars (\$_____) ("Bond Sum"), under California Civil Code Section 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 Section 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 Section 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 Section 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 Sections 2819 and 2845. City waives the requirement of a new bond for any supplemental contract under Civil Code Section 9550. 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: _____
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 Superior Court of Santa Clara County, 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.
7. **Effective Date; Execution.** This Bond is entered into and is effective on _____, 20___.

SURETY:

s/ _____

Name: _____

Title: _____

CONTRACTOR:

s/ _____

Name: _____

Title: _____

(Attach Acknowledgment with Notary Seal and Power of Attorney)

APPROVED AS TO FORM:

By: _____
Donald A. Larkin, City Attorney

Date: _____

END OF PAYMENT BOND

PERFORMANCE BOND

The City of Morgan Hill ("City") and [CONTRACTOR NAME] ("Contractor") have entered into a contract for work on the 2025 PAVEMENT REHABILITATION 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 _____ Dollars (\$_____) (the "Bond Sum") to ensure Contractor's faithful performance of its obligations under the Contract. By executing this Bond, Contractor and Surety bind themselves and their respective heirs, executors, administrators, successors and assigns, jointly and severally, to the provisions of this Bond.
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 under this bond 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 Sections 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 that Contractor is in 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 delivered or transmitted 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 Superior Court of Santa Clara County, 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.]

9. Effective Date; Execution. This Bond is entered into and effective on _____, 20____.

SURETY:

s/ _____

Name: _____

Title: _____

CONTRACTOR:

s/ _____

Name: _____

Title: _____

(Attach Acknowledgment with Notary Seal and Power of Attorney)

APPROVED AS TO FORM:

By: _____
Donald A. Larkin, City Attorney

Date: _____

END OF PERFORMANCE BOND

GENERAL CONDITIONS

Article 1 - Definitions

1.1 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 Work that may or may not be included in the Project, depending on conditions that will not become known until after bids are opened. If the Contract Price includes an Allowance and the cost of performing the Work covered by that Allowance is greater or less than the Allowance, the Contract Price will be increased or decreased accordingly.

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 Morgan Hill, 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 delegate(s).

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 that 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. The Contract Price is deemed to include all applicable federal, state, and local taxes.

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

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

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 Morgan Hill and his or her authorized delegate(s).

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.

Inspector means the individual(s) or firm(s) retained or employed by City to inspect the workmanship, materials, and manner of construction of the Project and its components to ensure compliance with the Contract Documents and all Laws.

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.

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.

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 delegate(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 includes subcontractors, suppliers, fabricators, and equipment lessors 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.

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 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, including Public Contract Code section 7105.

(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, 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 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 or to investigate Contractor's plant or equipment 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.

2.3 Subcontractors.

(A) **General.** All Work which is not performed by Contractor with its own forces must be performed by Subcontractors, subject to the 50% limitation set forth in the Instructions to Bidders. 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 adequately trained workforce. Each Subcontractor must obtain a City business license 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 and Santa Clara County are deemed to be a third-party beneficiaries of the contract between Contractor and each Subcontractor. Copies of subcontracts must be available to the Engineer upon request. Before a Subcontractor commences Work on the Project, Contractor must provide the Engineer a written statement with the name of the Subcontractor, a description of each portion of the Work performed by the Subcontractor, and the percentage of the overall Work to be performed by the 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 Section 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 Section 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 Section 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 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 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 or material, 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, or Inspector.

(G) **Excessive RFIs.** An RFI will be considered excessive or unnecessary if the 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 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.

2.8 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 Plan(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 the 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) Contractor's Bid Proposal and attachments;
- (P) The City's standard specifications, as applicable; and
- (Q) Any generic documents prepared by and on behalf of a third party, that were not prepared specifically for this Project, such as 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.*** None of the “General Provisions” of the Caltrans Standard Specifications, i.e., sections 1 through 9, applies 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” 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.

3.4 For Reference Only. Contractor is responsible for the careful review of any document, study, or report provided by the 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 the Contract is signed.

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 issuance 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 percent 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, and Santa Clara County, its officials, officers, employees, and agents (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, and fees and costs of litigation or arbitration) (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 this Contract. City will timely notify Contractor upon receipt of any third-party claim relating to the Contract, as required by Public Contract Code Section 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 issuance 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, and 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. The coverages 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 herein. 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. Contractor further understands that City reserves the right to modify the insurance requirements set forth herein, with thirty (30) days' notice provided to Contractor, at any time as deemed necessary to protect the interests of City. The procurement of the required insurance will not be construed to limit Contractor's liability under this Contract or to fulfill Contractor's indemnification obligations under this Contract.

(A) **Deductibles and Self-Insured Retentions.** Any deductibles or self-insured retentions must be declared to and approved by City. If the City's Risk Manager determines that the deductibles and/or self-insured retentions are unacceptably high, at City's option, Contractor must either reduce or eliminate the deductibles and/or self-insured retentions 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.

(B) **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 Insurance (“CGL”).** Contractor shall maintain CGL and must include coverage for liability arising from Contractor's or its Subcontractor's acts or omissions in the performance of the Work against claims and liabilities for personal injury, death, or property damage providing protection in the minimum amount of: (i) two million dollars (\$2,000,000.00) combined single limit each occurrence and either a general aggregate limit of four million dollars (\$4,000,000.00) or a general aggregate limit of two million dollars (\$2,000,000.00) as applied on a “per project” or “per location” basis, or (ii) the maximum amount of such insurance available to Contractor under Contractor's combined insurance policies (including any excess or “umbrella” policies), whichever is greater.
 - a. CGL policy may not exclude explosion, collapse, underground excavation hazard, or removal of lateral support.
 - b. CGL policy must include contractor's protected coverage, blanket contractual, and completed operations.
- (4) **Workers' Compensation Insurance and Employer's Liability:** Contractor shall maintain Workers Compensation coverage, as required by law. The policy must comply with the requirements of the California Workers' Compensation Insurance and Safety Act and provide protection in the minimum amount of: (i) One Million Dollars (\$1,000,000.00) for any one accident or occurrence, or (ii) the maximum amount of such insurance available to Contractor under Contractor's combined insurance policies (including any excess or “umbrella” policies), whichever is greater. If Contractor is self-insured, Contractor must provide its Certificate of Permission to Self-Insure, duly authorized by the Department of Industrial Relations.
- (5) **Automobile Liability:** Contractor shall maintain Automobile Liability covering all owned, non-owned and hired automobiles (if Contractor does not own automobiles, then Contractor shall maintain Hired/Non-owned Automobile Liability) against claims and liabilities for personal injury, death, or property damage providing protection in the minimum amount of: (i) Two Million Dollars (\$2,000,000.00) combined single limit, or (ii) the maximum amount of such insurance available to Contractor

under Contractor's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

(6) **Pollution (Environmental) Liability:** If the performance of Contractor's work or service under this Contract involves hazardous materials, contaminated soil disposal, and/or a risk of accidental release of fuel oil, chemicals or other toxic gases or hazardous materials, Contractor shall procure and maintain Pollution Liability covering Contractor's liability for bodily injury, property damage and environmental damage resulting from pollution and related cleanup costs arising out of the work or services to be performed under this Contract. Coverage shall be provided for both work performed on site, as well as during the transport of hazardous materials. Such coverage shall be in the minimum amount of: (i) One Million Dollars (\$1,000,000.00) for any one accident or occurrence, or (ii) the maximum amount of such insurance available to Contractor under Contractor's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

(7) **Professional Liability:**

- a. If the performance of Contractor's work or service under this Contract involves professional and/or technical services (examples include, but are not limited to, architects, engineers, land surveyors, legal services, and appraisers), Contractor shall procure and maintain either a claims made or occurrence Errors and Omission liability insurance in the minimum amount of: (i) One Million Dollars (\$1,000,000.00) each claim, or (ii) the maximum amount of such insurance available to Contractor under Contractor's combined insurance policies (including any excess or "umbrella" policies), whichever is greater. Further, if Contractor maintains a claims-made policy, Contractor shall provide written evidence of such insurance to City for at least five (5) years after the completion of work performed under this Contract.
- b. If the performance of Contractor's work or service under this Contract relates to Information Technology or related services (examples include, but are not limited to computer programmers, hardware engineers, or other systems consultants), Contractor shall procure and maintain a claims made Errors and Omission liability insurance, including Cyber Liability and Data Breach, in the minimum amount of: (i) One Million Dollars (\$1,000,000.00) each claim, or (ii) the

maximum amount of such insurance available to Contractor under Contractor's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

(C) Required Endorsements. Contractor must provide proof of the following endorsements, listed for each policy for which endorsements are required, as outlined below:

- (1) For all Policies except Professional Liability:
 - a. "Waiver of Subrogation" endorsements providing that the carrier agrees to waive any right of subrogation it may have against the City of Morgan Hill and the City's elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers.
- (2) General Liability, Automobile, and Pollution Liability:
 - a. "Additionally Insured" - The City of Morgan Hill, its elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers, and the County of Santa Clara, its officials, officers, employees, and agents, are named as additional insureds on a form at least as broad as ISO Form CG 20 10 for ongoing operations and at least as broad as ISO Form CG 20 37 for completed operations.
 - b. "Primary and Non-Contributing" - Insurance shall be endorsed to be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 01.
- (3) General Liability:
 - a. "Separation of Insureds" endorsements stating that 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.

(D) 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. Contractor must confirm that each Subcontractor has complied with requirements as outlined herein. The insurance requirements for Subcontractors do not replace or limit the Contractor's insurance

obligations.

(E) **Qualification of Insurers.** All insurance required pursuant to this Contract must be issued by a company licensed and admitted, or otherwise legally authorized to carry out insurance business in the State of California, and each insurer must have a current A.M. Best's financial strength rating of "A" or better and a financial size rating of "VIII" or better.

(F) **Certificates.** Contractor must furnish City with copies of all certificates as outlined herein, whether new or modified, promptly upon receipt. In the event of a claim or legal action, Contractor shall promptly furnish City of Morgan Hill with copies of all policies outlined herein. No policy subject to Contractor's Contract with City shall be reduced, canceled, allowed to expire, or materially changed except after thirty (30) days' notice by the insurer to City, unless due to non-payment of premiums, in which case ten (10) days written notice must be made to City. Certificates, including renewal certificates, may be mailed electronically to riskmgmt@morganhill.ca.gov or delivered to the Certificate Holder address as follows:

City of Morgan Hill
Attn: Risk Management
17575 Peak Avenue
Morgan Hill, CA 95037

(G) **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.

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 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 Section 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 City-observed holidays, during City's normal business hours, except as expressly 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 the 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 Section 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 the Contractor believes it is entitled to Recoverable Costs for Compensable Delay, the request must specify the amount of 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 Section 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 section 7203, if Contractor fails to achieve Final Completion within the Contract Time 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 delegatee.

(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 Work 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 intent of 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 Section 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 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 request 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 only 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 previously 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 percent markup;
 - (2) All direct material costs provided by the Contractor, including sales tax, plus 15 percent markup;
 - (3) All direct plant and equipment rental costs provided by the Contractor, plus 15 percent markup;
 - (4) All direct additional subcontract costs plus ten percent markup for Work performed by Subcontractors; and
 - (5) Increased bond or insurance premium costs computed at 1.5% percent of the 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, Business License, and Taxes.

(A) **Permits, Fees, and City Business License.** Contractor must obtain and pay for all permits, fees, and licenses required to perform the Work, including a City business license and including work associated with the portion of the Work in the County of Santa Clara. 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 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 may 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, including the piping, wiring, internet and Wi-Fi connections, and any related equipment necessary to maintain the temporary facilities.

(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. 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.

(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 Engineer. The Engineer's written response will be final and binding on Contractor. If 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. 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.

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. 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. 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.

(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, at Contractor's sole cost, the equality of the proposed substitution. 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 the 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 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 Inspector 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 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.

(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. 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 wastewater 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, waste, 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 all existing improvements that are damaged or removed during the Work, both on and off the Project site, including curbs, sidewalks, driveways, fences, signs, landscaping, 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. 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 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 the 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 City 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 Section 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 such 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 such delay was caused by City's failure to provide for removal or relocation of the utility facilities.

7.13 **Notice of Excavation.** Contractor must comply with all applicable requirements in Government Code Sections 4216 through 4216.5, which are incorporated by reference herein. Government Code Section 4216.2 requires that, except in an emergency, Contractor must contact the appropriate regional notification center, or Underground Services Alert, at least two working days, but not more than fourteen calendar days before starting any excavation if the excavation will be conducted in an area that is known, or reasonably should be known, to contain subsurface installations. Contractor may not begin excavation until it has obtained and submitted to Engineer an inquiry identification number from Underground Services Alert.

7.14 Trenching and Excavations of Four Feet or More. As required by Public Contract Code Section 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 Section 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 the 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 Section 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. 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 the permit 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 must also 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 Section 2710 *et seq.*), unless the 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>

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 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. **Each application for payment shall be accompanied by completed "Contract Balance Form," a copy of which is provided at the end of Article 8.**

(B) ***Payment of Undisputed Amounts.*** City will pay the undisputed amount due within thirty days after Contractor has submitted a complete and accurate payment application, subject to Public Contract Code Section 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 City-accepted Shop Drawings, 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 recordation of the Notice of Completion, subject to the terms of Public Contract Code § 7107..

(A) **Substitution of Securities.** As provided by Public Contract Code Section 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 Section 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 Section 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 donee 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 Section 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 Section 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 to 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 Section 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.

CONTRACT BALANCE FORM

Note: A detailed invoice MUST be attached to this Contract Balance Form.

CONTRACTOR NAME: _____ DATE: _____
MAILING ADDRESS: _____ TELEPHONE NO.: _____

FAX NO.: _____

PROJECT NO.: _____

INVOICE NO.: _____

1. ORIGINAL CONTRACT AMOUNT:	\$ _____
2. APPROVED CHANGE ORDERS TOTAL:	\$ _____
3. REVISED CONTRACT AMOUNT:	(1+2) \$ _____
4. PREVIOUS BALANCE PAID:	\$ _____
5. REMAINING BALANCE:	(3-4) \$ _____
6. CURRENT PROGRESS PAYMENT DUE:	\$ _____ <i>(before retention)</i>
7. 5% RETENTION FROM WORK DONE:	(-) \$ _____
8. CURRENT BALANCE DUE:	(6-7) \$ _____
9. REMAINING BALANCE OF REVISED	(5-8) \$ _____ <i>(including retention)</i>

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 (Government Code Section 12900 *et seq.*), Government Code Section 11135, and Labor Code Sections 1735, 1777.5, 1777.6, and 3077.5.

9.2 Labor Code Requirements.

(A) ***Eight Hour Day.*** Pursuant to Labor Code Section 1810, eight hours of labor constitute a legal day's work under this Contract.

(B) ***Penalty.*** Pursuant to Labor Code Section 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 Section 1815.

(C) ***Apprentices.*** Contractor is responsible for compliance with the requirements governing employment and payment of apprentices, as set forth in Labor Code Section 1777.5, which is fully incorporated by reference.

(D) ***Notices.*** Pursuant to Labor Code Section 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 Sections 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 Sections 1771 and 1774 of the Labor Code. The prevailing wage rates are 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 Section 1775, Contractor and any Subcontractor will forfeit to City as a penalty up to \$200.00 for each calendar day, or portion of a day, 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 Sections 1771.4, 1776, and 1812 and all implementing regulations, which are fully incorporated by this reference, including requirements for 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 Subcontractor has complied with the requirements of Labor Code Sections 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 Section 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 of a day, 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 Section 1771.4, the Contract for this Project is subject to compliance monitoring and enforcement by the DIR.

9.6 Wage Theft Prevention. Compliance with Wage and Hour Laws: Contractor, and any subcontractor it employs to complete work under this Agreement, shall comply with all applicable federal, state and local wage and hour laws. Applicable laws may include, but are not limited to, the Federal Fair Labor Standards Act and the California Labor Code.

Final Judgments, Decisions, and Orders: For purposes of this Section, a “final judgment, decision, or order” refers to one for which all appeals have been exhausted or the time to appeal has expired. Relevant investigatory government agencies include: the federal Department of Labor, the California Division of Labor Standards Enforcement, or any other governmental entity or division tasked with the investigation and enforcement of wage and hour laws.

Prior Judgments against Contractor and/or its Subcontractors: BY SIGNING THIS AGREEMENT, CONTRACTOR AFFIRMS THAT IT HAS DISCLOSED ANY FINAL JUDGMENTS, DECISIONS OR ORDERS FROM A COURT OR INVESTIGATORY GOVERNMENT AGENCY FINDING – IN THE FIVE (5) YEARS PRIOR TO EXECUTING THIS AGREEMENT – THAT CONTRACTOR OR ITS SUBCONTRACTOR(S) HAS VIOLATED ANY APPLICABLE WAGE AND HOUR LAWS. CONTRACTOR FURTHER AFFIRMS THAT IT OR ITS SUBCONTRACTOR(S) HAS SATISFIED AND COMPLIED WITH – OR HAS REACHED AGREEMENT WITH THE CITY REGARDING THE MANNER IN WHICH IT WILL SATISFY – ANY SUCH JUDGMENTS, DECISIONS OR ORDERS.

Judgments or Decisions During Term of Contract: If at any time during the term of this Agreement, a court or investigatory government agency issues a final judgment, decision or order finding that Contractor or an subcontractor it employs to perform work under this Agreement has violated any applicable wage and hour law, or Contractor learns of such a judgment, decision, or order that was not previously disclosed, Contractor shall inform the City Attorney, no more than fifteen (15) days after the judgment, decision or order becomes final or of learning of the final judgment, decision or order. Contractor and its subcontractors shall promptly satisfy and comply with any such judgment, decision, or order, and shall provide the City Attorney with documentary evidence of compliance with the final judgment, decision or order within five (5) days of satisfying the final judgment, decision or order. The City reserves the right to require Contractor to enter into an agreement with the City regarding the manner in which any such final judgment, decision, or order will be satisfied.

City’s Right to Withhold Payment: Where Contractor or any subcontractor it employs to perform work under this Agreement has been found in violation of any applicable wage and hour law by a final judgment, decision or order of a court or government agency, the City reserves the right to withhold

payment to Contractor until such judgment, decision or order has been satisfied in full.

Material Breach: Failure to comply with any part of this Section constitutes a material breach of this Agreement. Such breach may serve as a basis for immediate termination of this Agreement and/or any other remedies available under this Agreement and/or law.

Notice to City Related to Wage Theft Prevention: Notice provided to the City Attorney as required under this Section shall be addressed to: City Attorney, City of Morgan Hill, 17575 Peak Avenue, Morgan Hill, CA 95037. The Notice provisions of this Section are separate from any other notice provisions in this Agreement and, accordingly, only notice provided to the above address satisfies the notice requirements in this Section.

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 Section 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 Law, 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.

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 the 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 City Council action during a public meeting to accept the Project, unless the Engineer is authorized to accept the Project, in which case 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 expressly 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.

City will notify Contractor in writing of its intent to occupy or make use of the Project or any portions of the Project, pursuant to this provision.

(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 Section 9204

and Sections 20104 *et seq.*, which are incorporated herein by this reference.

(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 a 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. Contractor understands that submission of a Claim which has no basis in fact or which Contractor knows to be false may violate the False Claims Act (Government Code Section 12650 *et seq.*).

(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, above.

(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 Section 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 of the dispute, and demand an informal conference to meet and confer City 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 that 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 Section 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. It is expressly agreed, under Code of Civil Procedure Section 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 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 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, 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 the 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; 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 Section 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. Section 15) or under the Cartwright Act (Chapter 2 (commencing with Section 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

1.0 Shop Drawings. Whenever Shop Drawings are required by the Contract Documents or by the Engineer, Contractor must submit five (5) prints of each shop drawing to the Engineer.

(A) If three (3) prints of the drawing are returned to Contractor marked "NO EXCEPTIONS TAKEN," further revision of the drawings will not be required. If one (1) print of the drawing is returned to Contractor marked "REVISE AND RESUBMIT," Contractor must revise the drawing and resubmit five (5) copies of the revised drawing to the Engineer. City reserves the right to withhold payment due Contractor to cover additional costs of the Engineer's review beyond the second submission.

(B) Fabrication of an item may not commence before the Engineer has reviewed the pertinent shop drawings and returned copies to Contractor marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."

(C) Revisions indicated on shop drawings are deemed necessary to meet the existing requirements of the Contract Documents and may not be taken as the basis of claims for extra Work. Contractor is not entitled to claim for damages or extension of time due to any delay resulting from making the required revisions to shop drawings. The Engineer's review of the shop drawings does not relieve Contractor of responsibility for any errors or omissions contained in the shop drawings nor will such review operate to waive or modify any provision contained in the Contract Documents.

2.0 Waste Water. City will provide water required for performance of the Work. Contractor is responsible for the appropriate disposal of waste water in coordination with City personnel. Contractor must provide a backflow preventer on all point of connections to City's Water System. All backflow preventers must be checked and approved by City's Public Works Water Division. Contractor must provide a deposit (refundable) and make necessary arrangements to pick up a hydrant meter at City's Public Works Office. At the completion of the Project, if the hydrant meter is not returned promptly or if it is damaged, Contractor shall forfeit its deposit.

3.0 Equipment. Contractor must provide and use equipment and plants suitable to produce the quality of Work and materials required by the Contract Documents. Contractor may be required to remove equipment which the Engineer deems unsuitable for the Work. Contractor must ensure that equipment is operated by trained, experienced operators, and at a speed or rate of production not to exceed that recommended by the manufacturer. Any vehicles used to haul materials over existing streets and highways must be equipped with pneumatic

tires.

4.0 Lines and Grades. The Engineer will set the stakes or marks necessary to establish the lines and grades required for the completion of the Work in accordance with the Contract Documents. Contractor must give at least two (2) working days' notice to the Engineer of the need for setting any lines and grades.

(A) **Measurements.** Distances and measurements are given and will be made in a horizontal plane. Grades are given from the top of stakes or nail unless otherwise noted. Three (3) consecutive points shown on the same rate of slope must be used in common in order to detect any variation from a straight grade. Any variation from a straight grade, straight slope or line, must be reported to the Engineer. If such discrepancy is not reported to the Engineer, Contractor is responsible for any error in the finished work.

(B) **Stakes.** Contractor must preserve all stakes and points set for lines, grades or measurements of the Work in their proper places until authorized by the Engineer to remove them. All expense incurred by replacing stakes that have been removed without proper authority may be deducted from any payment due to Contractor.

5.0 Disposal of Materials Outside of Street Right-of-Way. Unless otherwise specified in the Specifications or Special Conditions, Contractor is solely responsible for disposing of materials outside the street right-of-way and for all associated costs. Before disposing materials outside the street right-of-way, Contractor must 1) obtain a written release from the property owner releasing City from any and all responsibility in connection with the disposal of material on that property; and 2) obtain permission from the Engineer to dispose of the material at the permitted location.

6.0 Emergency Contact. Prior to the commencement of Work on the Project, Contractor must provide contact information to the Engineer for the person designated by Contractor to respond to any emergency that arises on the Worksite during the course of the Project. That person will be responsible for responding to the Worksite within thirty (30) minutes following notification of an emergency by City's Police or Fire Department, regardless of the time of day.

7.0 Right-of-Way. City will provide the right-of-way for performance of the Work. Contractor is solely responsible for any additional area required outside of the designated the right-of-way, unless otherwise provided in the Contract Documents.

(A) **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 and its subcontractors shall at all times in the performance of the Work comply with all applicable

federal, state, and local laws and regulations concerning pollution of waterways.

8.0 Authorized Work Days and Hours

(A) **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 to Friday

(B) **Authorized Work Hours.** Except as expressly authorized in writing by City, Contractor is limited to performing Work on the Project during the following hours:

7:00am to 5pm

9.0 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, and Contractor must present City with the following information or documents at the meeting for City's review and acceptance before the Work commences:

- 9.1** Name, 24-hour contact information, and qualifications of the proposed on-site superintendent;
- 9.2** List of all key Project personnel and their complete contact information, including email addresses and telephone numbers during regular hours and after hours;
- 9.3** 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;
- 9.4** If required, traffic control plans associated with the staging plans that are signed and stamped by a licensed traffic engineer;
- 9.5** 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;
- 9.6** Breakdown of lump sum bid items, to be used for determining the value of Work completed for future progress payments to Contractor;

- 9.7 Schedule with list of Project submittals that require City review, and list of the proposed material suppliers;
- 9.8 Plan for coordination with affected utility owner(s) and compliance with any related permit requirements;
- 9.9 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;
- 9.10 If requested by City, Contractor's cash flow projections; and
- 9.11 Any other documents specified in the Special Conditions or Notice of Award.

10.0 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.

- (A) **Weather Delay Day.** A Weather Delay Day is a Working Day during which Contractor and its forces, including Subcontractors, are unable to perform more than forty percent (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 Worksite 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.
- (B) **Normal Weather Delay Days.** 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	13
March	5
April	3
May	3
June	1
July	1
August	1

September	2
October	3
November	7
December	12

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.

END OF SPECIAL CONDITIONS

TECHNICAL SPECIFICATIONS

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Technical Specifications shall be used in conjunction with the City of Morgan Hill's Standard Details for Construction and the California Department of Transportation (CalTrans) Standard Specifications, most recent edition. City Standard Details for Construction can be found at <https://www.morganhill.ca.gov/641/Construction-Standard-Details>.

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BID ITEM DESCRIPTIONS

BID SCHEDULE I – WOODLAND ACRES & LLAGAS ROAD

Bid Item 1 - Mobilization (Up to 5%)

1. This bid item shall be lump sum. The maximum allowable bid price under this item shall be in conformance with **Section 06 - Mobilization** of these Technical Specifications. Any amount beyond the maximum allowable amount shall not be paid until the final progress payment.

Bid Item 2 - Traffic Control Systems

This bid item shall be lump sum. Work and payment for this bid item shall be in conformance with **Section 07 – Traffic Control Systems** of these Technical Specifications.

Bid Item 3 - 2" Full Pavement Grind/Mill

1. This bid item shall be measured and paid per square foot. Work and payment for this bid item shall be in conformance with **Section 12 – Pavement Milling/Grinding** of these Technical Specifications.

Bid Item 4 - 4" Full Pavement Grind/Mill

1. This bid item shall be measured and paid by the square foot. Work and payment for this bid item shall be in conformance with **Section 12 – Pavement Milling/Grinding** of these Technical Specifications.

Bid Item 5 - 2" Fill (1/2" Asphalt Concrete)

1. This bid item shall be measured and paid by the ton, compacted in place. Work and payment for this bid item shall be in conformance with **Section 14 – Asphalt Concrete Fill / Overlay** of these Technical Specifications.

Bid Item 6 - 4" Fill (1/2" Asphalt Concrete)

1. This bid item shall be measured and paid by the ton, compacted in place. Work and payment for this bid item shall be in conformance with **Section 14 – Asphalt Concrete Fill / Overlay** of these Technical Specifications

Bid Item 7 - 4" Full Depth Pavement Repair (Revokable)

1. This bid item shall be measured and paid by the square foot. Work and payment for this bid item shall be in conformance with **Section 15 – Full Depth Asphalt Pavement Repair** of these Technical Specifications.

Bid Item 8 - 6" Full Depth Pavement Repair (Revokable)

1. This bid item shall be measured and paid by the square foot. Work and payment for this bid item shall be in conformance with **Section 15 – Full Depth Asphalt Pavement Repair** of these Technical Specifications.

Bid Item 9 - Crack Sealing (Revokable)

1. This bid item shall be measured and paid by the lineal foot. Work and payment for this bid item shall be in conformance with **Section 19 – Crack Seal** of these Technical Specifications.

Bid Item 10 - Remove and Replace Existing AC Berm

1. This bid item shall be measured and paid by the lineal foot as installed in place. Work and payment for this bid item shall be in conformance with **Section 13 – Asphalt Concrete Pavement** of these Technical Specifications.

Bid Item 11 - Locate, Lower, and Raise Water Valve Box and Cover

1. This bid item shall be measured and paid by each utility unit box lowered and raised. Work and payment for this bid item shall be in conformance with **Section 18 – Existing Utility Facilities' Adjustment** of these Technical Specifications.

Bid Item 12 - Locate, Lower, and Raise Meter Box

1. This bid item shall be measured and paid by each utility unit box lowered and raised. Work and payment for this bid item shall be in conformance with **Section 18 – Existing Utility Facilities' Adjustment** of these Technical Specifications.

Bid Item 13 - Yield Markings (Caltrans Standard Plan A24G)

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 14 - 12" Striping White (Limit Lines)

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 15 - Caltrans Striping Detail 2

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 16 - Caltrans Striping Detail 22

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 17 - Caltrans Striping Detail 27B

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 18 - Two-Way Blue Fire Hydrant Marker

1. This bid item shall be measured and paid by each marker installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 19 - Supplemental Work (Revokable)

1. Supplemental scope of work and price shall be agreed to prior to authorization and shall be paid out of this bid item.
2. The work shall include any new or unforeseen work not specified for in the Plans and Specifications. The lump sum dollar amount listed in the bid schedule for Supplemental Work shall be included in each bidder's proposal. Supplemental work shall be performed only upon direct written authorization from the Engineer. The agreed price may be used as an alternate method of payment, if directed by the Engineer.

****END OF BID SCHEDULE I****

BID SCHEDULE II – EAST MAIN AVENUE

Bid Item 1 - Mobilization (Up to 5%)

1. This bid item shall be lump sum. The maximum allowable bid price under this item shall be in conformance with **Section 06 - Mobilization** of these Technical Specifications. Any amount beyond the maximum allowable amount shall not be paid until the final progress payment.

Bid Item 2 - Traffic Control Systems

1. This bid item shall be lump sum. Work and payment for this bid item shall be in conformance with **Section 07 – Traffic Control Systems** of these Technical Specifications.

Bid Item 3 - 3" Full Pavement Grind/Mill

1. This bid item shall be measured and paid per square foot. Work and payment for this bid item shall be in conformance with **Section 12 – Pavement Milling/Grinding** of these Technical Specifications.

Bid Item 4 - 3" Fill (1/2" Asphalt Concrete)

1. This bid item shall be measured and paid by the ton, compacted in place. Work and payment for this bid item shall be in conformance with **Section 14 – Asphalt Concrete Fill / Overlay** of these Technical Specifications.

Bid Item 5 - 3" Full Depth Pavement Repair (Revokable)

1. This bid item shall be measured and paid by the square foot. Work and payment for this bid item shall be in conformance with **Section 15 – Full Depth Asphalt Pavement Repair** of these Technical Specifications.

Bid Item 6 - Shoulder Backing

1. This bid item shall be measured and paid by the ton, compacted in place. Work and payment for this bid item shall be in conformance with **Section 16 – Shoulder Backing** of these Technical Specifications.

Bid Item 7 - Locate, Lower, and Raise Monument Box and Cover

1. This bid item shall be measured and paid by each utility unit box lowered and raised. Work and payment for this bid item shall be in conformance with **Section 18 – Existing Utility Facilities' Adjustment** of these Technical Specifications.

Bid Item 8 - Locate, Lower, and Raise Manhole Frame and Cover

1. This bid item shall be measured and paid by each utility unit box lowered and raised. Work and payment for this bid item shall be in conformance with **Section 18 – Existing Utility Facilities' Adjustment** of these Technical Specifications.

Bid Item 9 - Locate, Lower, and Raise Water Valve Box and Cover

1. This bid item shall be measured and paid by each utility unit box lowered and raised. Work and payment for this bid item shall be in conformance with **Section 18 – Existing Utility Facilities' Adjustment** of these Technical Specifications.

Bid Item 10 - Locate, Lower, and Raise Traffic Hand Hole Box

1. This bid item shall be measured and paid by each utility unit box lowered and raised. Work and payment for this bid item shall be in conformance with **Section 18 – Existing Utility Facilities' Adjustment** of these Technical Specifications.

Bid Item 11 - Remove and Replace Existing ADA Curb Ramp

1. This bid item shall be measured and paid by each curb ramp removed and replaced. Work and payment for this bid item shall be in conformance with **Section 17 – Cast-In-Place Concrete** of these Technical Specifications.

Bid Item 12 - 4" White Misc Striping

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 13 - High Visibility X-Walk Striping – 12" Yellow

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 14 - High Visibility X-Walk Striping – 24" Yellow

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 15 - 12" Striping White

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 16 - Type IV (L) Arrow

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 17 - Type IV (R) Arrow

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 18 - Type I (10) Arrow

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 19 - White Word Marking “ONLY”

This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 20 - Yellow Word Marking “XING”

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 21 - Yellow Word Marking “SCHOOL”

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 22 - Yellow Word Marking “SLOW”

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 23 - White Word Marking “35”

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 24 - Caltrans Striping Detail 2

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 25 - Caltrans Striping Detail 22

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 26 - Caltrans Striping Detail 27B

This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 27 - Caltrans Striping Detail 29

This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 28 - Caltrans Striping Detail 38

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 29 - Bike Lane Marking Symbol w/ Arrow

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 30 - Caltrans Flexible Bikeway Separator Posts

1. This bid item shall be measured and paid by each post installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 31 - Type E Traffic Detection Loops

1. This bid item shall be measured and paid by each replaced loop. Work and payment for this bid item shall be in conformance with **Section 21 – Traffic Signal Detector Loops** of these Technical Specifications.

Bid Item 32 - Type E (Modified) Traffic Detection Loops

1. This bid item shall be measured and paid by each replaced loop. Work and payment for this bid item shall be in conformance with **Section 21 – Traffic Signal Detector Loops** of these Technical Specifications.

Bid Item 33 - Two-Way Blue Fire Hydrant Marker

1. This bid item shall be measured and paid by each marker installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

****END OF BID SCHEDULE II****

BID SCHEDULE III – ADD ALTERNATE #1 TILTON AVENUE

Bid Item 1 - Mobilization (Up to 5%)

1. This bid item shall be lump sum. The maximum allowable bid price under this item shall be in conformance with **Section 06 - Mobilization** of these Technical Specifications. Any amount beyond the maximum allowable amount shall not be paid until the final progress payment.

Bid Item 2 - Traffic Control Systems

1. This bid item shall be lump sum. Work and payment for this bid item shall be in conformance with **Section 07 – Traffic Control Systems** of these Technical Specifications.

Bid Item 3 - 3" Full Pavement Grind/Mill

1. This bid item shall be measured and paid per square foot. Work and payment for this bid item shall be in conformance with **Section 12 – Pavement Milling/Grinding** of these Technical Specifications.

Bid Item 4 - 3" Fill (1/2" Asphalt Concrete)

1. This bid item shall be measured and paid by the ton, compacted in place. Work and payment for this bid item shall be in conformance with **Section 14 – Asphalt Concrete Fill / Overlay** of these Technical Specifications.

Bid Item 5 - Locate, Lower, and Raise Manhole Frame and Cover

1. This bid item shall be measured and paid by each utility unit box lowered and raised. Work and payment for this bid item shall be in conformance with **Section 18 – Existing Utility Facilities' Adjustment** of these Technical Specifications.

Bid Item 6 - Locate, Lower, and Raise Water Valve Box and Cover

1. This bid item shall be measured and paid by each utility unit box lowered and raised. Work and payment for this bid item shall be in conformance with **Section 18 – Existing Utility Facilities' Adjustment** of these Technical Specifications.

Bid Item 7 - 6" Striping White (Limit Lines)

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 8 - 12" Striping White

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 9 - Yellow Word Marking "XING"

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 10 - Yellow Word Marking "SCHOOL"

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 11 - Yellow Word Marking "SLOW"

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 12 - White Word Marking "STOP"

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 13 - White Word Marking "AHEAD"

1. This bid item shall be measured and paid by each marking installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 14 - Caltrans Striping Detail 2

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 15 - Caltrans Striping Detail 22

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 16 - Caltrans Striping Detail 27B

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 17 - Caltrans Striping Detail 39

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 18 - Caltrans Striping Detail 39A

1. This bid item shall be measured and paid by actual number of lineal foot installed as measured in the field. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

Bid Item 19 - Two-Way Blue Fire Hydrant Marker

1. This bid item shall be measured and paid by each marker installed. Work and payment for this bid item shall be in conformance with **Section 20 – Traffic Stripes, Pavement Markings, and Delineation** of these Technical Specifications.

****END OF BID SCHEDULE III****

SECTION 01 - PROJECT RECORDS AND SUBMITTALS

Part 1 - DESCRIPTION

Description: This section delineates the procedure the Contractor is to adhere to in the submission of documentation for material approval, and covers the records required of the Contractor prior to, during, and following completion of the work.

Part 2 - SUBMITTALS

2.01. PROGRESS SCHEDULE

A tentative schedule shall be provided at the time of the pre-construction meeting.

Within 7 days after receiving the Notice to Proceed and before any work is begun, the Contractor shall submit four copies of a Progress Schedule complying with 2.5 and 5.2 of the General Provisions. The first progress payment will not be issued until the progress schedule is submitted. Subsequent progress payments will not be issued until updated progress schedules are provided.

2.02. SUPERVISORY PERSONNEL

The Contractor shall submit a list of supervisory personnel who will be responsible for the performance of the Contract. The Contractor shall designate one (1) person who will have full decision' making authority to represent the Contractor on a daily basis at the project site. The list will include phone numbers where the personnel may be reached by the Engineer.

2.03. SHOP DRAWINGS

- A. The term "shop drawings" includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the Contractor to explain in detail specific portions of the work required by the Contract. City shall have up to 20 calendar days to review the shop drawings.
- B. At least 15 working days prior to ordering of any materials, the Contractor shall forward to Engineer, for approval, all submittals required by the individual sections of the specifications. Unless a different number is called for by an individual section, six (6) copies of each shop drawing, material description, and specification literature and three specimens of each sample are required, all of which will be retained or distributed by the Engineer. The Contractor shall submit whatever additional number of shop drawings and literature, in addition

to the above requirements, that the Contractor wants returned. The Engineer may require the Contractor to submit a legible reproducible print in addition to the above copies. Contractor shall number each type of material separately and identify the use of each material.

C. All submittals shall be transmitted to the Engineer by mail, in person, or electronically with the letter of transmittal included in these documents. The Engineer will return all reviewed submittals to the Contractor within 14 calendar days.

D. Contractor shall coordinate all such drawings, and review them for legibility, accuracy, completeness, and compliance with contract requirements, and shall indicate approval thereon as evidence of such coordination and review. Shop drawings submitted to the Engineer without evidence of the Contractor's approval will be returned for resubmission.

E. Approval by the Engineer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with requirements of this Contract, except with respect to variations described and approved in accordance with the Paragraph below.

F. If shop drawings show variations from contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at time of submission. All such variation must be approved by the Engineer.

2.04. ENGINEER'S APPROVAL

A. The Engineer will indicate approval or disapproval of each submittal, and the reasons for disapproval.

- i. If no corrections are required, the copies will be returned marked "NO EXCEPTIONS TAKEN" and work may begin immediately incorporating the material and equipment covered by the submittal into the project.
- ii. If limited corrections are required, the copies will be returned marked "MAKE CORRECTIONS NOTED." Work may begin immediately on incorporating the material and equipment covered by the corrected submittal into the project.
- iii. If insufficient or incorrect data has been submitted, the copies will be returned marked "AMEND & RESUBMIT." No work incorporating the material and equipment covered by this submittal into the project may begin until the submittal has been revised, resubmitted, and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."

- iv. If the submittal is unacceptable, the copies will be returned marked "REJECTED - SEE REMARKS." No work incorporating the material and equipment covered by this submittal into the project may begin until a new submittal has been made and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."
- B. The Contractor shall not change any drawing after it has been marked "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED" or change any approved equipment or material without written permission of Engineer.
- C. If more than three submittals for a single item are required because of incorrect or insufficient data, or the submittal is unacceptable, or because the Contractor wishes to change previously approved material, then all costs incurred by the Engineer for the additional review shall be deducted from monies due the Contractor.
- D. If submittals include cut sheets or drawings with details of more than one item which could be used, the Contractor shall clearly denote the specific material, size, or product proposed for use on the project.
- E. Resubmittals shall include a listing of the Reviewer's comments from the previous submittal with associated Contractor's response to each comment.

2.05. CERTIFICATES

- A. For those items called for in individual sections, the Contractor must furnish certificates from manufacturers, suppliers, or others certifying that materials or equipment being furnished under the Contract comply with the requirements of these specifications.
- B. Certificates of compliance shall conform to the provisions in Section 6-2.03C "Certificates of Compliance" of the Caltrans Standard Specifications and these specifications.
- C. Certificates of compliance from the Contractor, suppliers, and/or manufacturers, shall clearly indicate that the material to be delivered to the jobsite will meet all requirements of the specifications. A certificate of compliance shall include, but not be limited to the project title, delivery location, date (or approximate date) of delivery, name of the material with appropriate classification or model numbers, quantity, name of the manufacturer, statement of compliance with all requirements of the specifications, and certifier's name, title and signature. In addition, a factory or mill certification (laboratory test report), if required by the specifications, shall be submitted with certificate of compliance. The factory or mill shall not substitute the certificate of compliance, unless it contains all information required for a certificate of compliance as described above.

D. Insufficient, incomplete, or unclear certificates shall be rejected and shall be resubmitted. The Contractor shall be responsible for all delays caused by the resubmittals.

2.06. SAMPLES

- A. For those items called for in individual sections, the Contractor must furnish samples. Samples shall be of sufficient size to clearly illustrate functional characteristics and full range of color, texture, and pattern.
- B. The Contractor shall notify the Engineer at least one (1) week prior to commencement of the construction and shall furnish the Engineer at least two (2) day notice when inspections are required, unless otherwise noted.

2.07. RECORDS

- A. The Contractor shall provide, prior to acceptance of all work, all records as herein specified and as specified in the individual sections of the contract documents. Six (6) sets of all records shall be furnished to the Engineer for review, approval, and distribution to the interested parties.
- B. All submitted records shall be contained in a manual or manuals consisting of 8-1/2 x 11-inch hardback 3 ring binders. Included in each manual shall be catalog data on each item, together with parts lists, description of operation, maintenance information, shop drawings, wiring and riser diagrams, along with all test data.
- C. Catalogs and data in the manual shall be neat, clean copies. Drawings shall be accordion folded to letter size and installed in an envelope within the manual. An index shall be provided, which shall list all contents in an orderly manner, with the respective equipment suppliers' name, address, and telephone number. The manufacturer's recommended servicing instructions shall also be included. Diagrams shall be complete for each system installed. Provide divider sheets with identifying tabs between each category.

2.08. AS-BUILT DRAWINGS

- A. The Contractor shall maintain a separate, neat, and legible set of construction drawings showing as-built conditions of all constructed facilities. Changes shall be shown to scale in red on the appropriate Drawings. The locations of installed underground and hidden utilities will be shown and dimensioned to appropriate reference points. No work shall be permanently concealed until the required information has been recorded.

- B. Where the Drawings are not of sufficient size, scale, or detail, the Contractor shall furnish his/her own drawings for incorporation of details and dimension. In such cases, the Contractor shall provide a reproducible set of his/her drawings, suitability cross referenced to the Contract Drawings.
- C. The as-built drawings shall be maintained up to date at all times. Prior to any progress payments, the Engineer shall review the status of the as-built construction drawings. The Engineer shall withhold approval of progress payments until the as-built drawings are up to date.
- D. Upon completion of the Contract, the Contractor shall furnish two satisfactory sets of as-built construction drawings. Drawings shall be certified that conditions shown are as-built. Final payment shall be withheld until the as-built construction drawings are received and accepted by the Engineer.

Part 3 - EXECUTION

NOT USED

Part 4 - MEASUREMENT AND PAYMENT

Full compensation for Project Records and Submittals shall be considered as included in the contract price paid for various items of work involved and no additional compensation will be allowed therefor.

****END OF SECTION****

SECTION 02 – SCOPE OF WORK

Part 1 - GENERAL

1.01. DESCRIPTION

The Project's Scope of Work is described as follows, but not limited to: Pavement Milling and Filling, Hot Mix Asphalt Concrete Overlay, Full Depth Asphalt Concrete Pavement Repairs, Crack Sealing, Replacement of all Existing Traffic Delineation and Markings and Posts, Utility Adjustments, Traffic Signal Loop Restorations, and all related work on various streets within the City Limits. The City in advance of the work will mark all work limits as required by the plans and specifications.

1.02. REQUIREMENTS

The requirements of this section shall be used in coordination with all related technical specification sections, the Contract Documents, and City of Morgan Hill requirements.

1.03. SCHEDULE CONSTRAINTS

The Scope of Work for this project shall not conflict with the typical schedule for Live Oak High School or Central High School.

Live Oak High School

Construction along E Main Avenue shall not be allowed while Live Oak High School is in Spring or Fall instruction sessions. The Spring semester is scheduled to end on June 6, 2025. The Fall Semester is scheduled to begin on August 14, 2025.

- Work shall be scheduled so construction activity on E Main Avenue begins on or after June 9, 2025, and is completed by no later than August 13, 2025.

Central High School

Construction along Tilton Avenue shall not be allowed while Central High School is in Spring or Fall instruction sessions. The spring Semester is scheduled to end on June 6, 2025. The Fall Semester is scheduled to begin on August 14, 2025.

- Work shall be scheduled so construction activity on Tilton Avenue begins on or after June 9, 2025, and is completed by no later than August 13, 2025.

It shall be the responsibility of the Contractor to verify there are no changes to the planned dates listed above, and schedule work accordingly.

Part 2 - PRODUCTS

Not Used

Part 3 - EXECUTION

Not Used

Part 4 - MEASUREMENT AND PAYMENT

Full compensation for Scope of Work shall be considered as included in the contract price paid for various items of work involved and no additional compensation will be allowed therefor.

****END OF SECTION****

SECTION 03 - PUBLIC AND AGENCY NOTIFICATIONS

Part 1 - GENERAL

1.01. DESCRIPTION

This section describes the requirements for providing advanced notification of construction activities to City departments, local agencies, residents, and businesses.

1.02. GENERAL

The requirements of this section shall be used in coordination with all related Technical Specification sections, the Contract Documents, and City of Morgan Hill requirements.

1.03. RELATED SECTIONS

- A. Section 04 – Temporary Controls
- B. Section 05 – Scheduling
- C. Section 07 – Traffic Control Systems
- D. Section 08 – Construction Area Traffic Control Devices

1.04. PROJECT REQUIREMENTS

- A. Provide labor, materials, and supervision as required to prepare, deliver, and post professionally prepared construction notices to affected residents and businesses.
- B. Contractor shall maintain a local telephone number of contact person for inquiries or complaints.

1.05. SUBMITTALS

- A. The Contractor shall submit a detailed Public and Agency Notification Plan to the Engineer consisting of schedules, sample notices, contact personnel, contact phone numbers, and a detailed timeframe of when notices will be delivered.
- B. At the time of the pre-construction meeting, the Contractor shall submit a sample of the written notification to be supplied to affected residents and businesses.

Part 2 - PRODUCTS

Not Used

Part 3 - EXECUTION

3.01. PUBLIC NOTIFICATION

- A. The Contractor shall notify individual residents and businesses who will be adversely affected by the work in writing via fliers or door hangers seven (7) business days prior to the start of the work. The Contractor shall submit for approval by the Engineer a sample of the written notification to be supplied to residents. This sample shall be submitted at the time of the pre-construction meeting. Any expenses incurred by delays caused by the failure of the Contractor to adhere to the approved schedule or to properly notify residents shall be borne solely by the Contractor.
- B. In addition to specific project notifications as required in other sections of the project Technical Specifications and Contract Documents, the Contractor shall give seven (7) days and 48-hour Advanced Project Construction Notification to entities and individuals that will be affected by project construction. The following entities and individuals shall be notified in writing of the general construction activities:
 - i. All residents on City blocks where work will be occurring.
 - ii. All businesses on City blocks where work will be occurring.
 - iii. City of Morgan Hill Public Works Department (Project Manager and Inspector).
 - iv. City of Morgan Hill Police Department (408) 779-2101.
 - v. City of Morgan Hill Fire Department (408) 778-3259.
 - vi. City of Morgan Hill Garbage and Recycling: Recology South Valley (408) 842-3358.
 - vii. Affected School Districts.
 - viii. If an emergency or urgent street closure is required, the Contractor shall immediately notify:
 - a. City of Morgan Hill Public Works Department (Project Manager and Inspector).
 - b. City of Morgan Hill Police Department (408) 779-2101.
 - c. City of Morgan Hill Fire Department (408) 778-3259.

- C. Contractor shall submit a Construction Access Permit to Santa Clara Valley Transportation Authority at least three weeks prior to any work that will disrupt transit service or affect a bus stop.
- D. Public Notification Program:
 - i. Deliver written notices on the Contractor's letterhead to each home, business, agency, or department one week before commencement of construction activities.
 - ii. Notices shall include a project name, a summary of the work to be completed, the location of the work, the expected duration of the work, the hours of work, and a telephone number of Contractor contact for inquiries or complaints.
 - iii. A second notice shall be delivered to each home, business, agency, or department 48 hours before commencement of construction activities providing the same information detailed in the above item.
- E. Address City correspondence to: 17575 Peak Avenue, Morgan Hill, CA 95037-4128.

Part 4 - MEASUREMENT AND PAYMENT

Full compensation for Public and Agency notifications shall be considered as included in the contract price paid for various items of work involved and no additional compensation will be allowed therefor.

****END OF SECTION****

SECTION 04 – TEMPORARY CONTROLS

Part 1 - GENERAL

1.01. DESCRIPTION

This Section describes the requirements for temporary controls, such as dust, rubbish, drainage, erosion and sediment, and pollution control in order to execute work expeditiously.

1.02. DUST CONTROL

- A. Dust control shall conform to the provisions in Section 18, Dust Palliatives, of the State Standard Specifications and these Technical Specifications. No separate payment will be made for any work performed or material used to control dust resulting from public traffic within the right-of-way.
- B. The Contractor shall furnish all labor, equipment and means required and shall carry out effective measures wherever and as often as necessary to prevent its operation from producing dust in amounts damaging to property or causing nuisance as defined by the Engineer.
- C. The Contractor shall be responsible for any damage resulting from any dust originating from its operations.
- D. The dust abatement measures shall be continued until the Contractor is relieved of further responsibility by the Engineer.
- E. The use of water shall not be permitted as a substitute for sweeping or other methods of dust control. Only dry sweeping is allowed.
- F. Contractor shall broom sweep daily. The work area shall be left in a neat and presentable condition at the end of each workday.
- G. Contractor shall street sweep.

1.03. RUBBISH CONTROL

- A. Through all phases of construction, including suspension of work and until final acceptance of the project, the Contractor shall keep the worksite and other areas used by it in a neat and clean condition, and free from any accumulation of rubbish and debris.
- B. Contractor shall properly dispose of all excess earth, concrete, asphaltic concrete, and debris off job site and clean up the work area at the end of each workday. The work area shall be left in a neat and presentable condition.

- C. The Contractor shall keep its haul roads free from dirt, rubbish, and unnecessary obstructions resulting from its operations. Care shall be taken to prevent spillage on haul routes. Contractor shall obtain all required truck route permits. Any such spillage shall be removed immediately, and the area cleaned by the Contractor.
- D. Disposal of all rubbish and surplus materials shall be off the site of construction, at the Contractor's expense, all in accordance with local codes and ordinances governing locations and methods of disposal, and in conformance with all applicable safety laws, and the requirements of the OSHA Safety and Health Standards for Construction.

1.04. DRAINAGE CONTROL

- A. Provide for the drainage of stormwater and any water applied or discharged on the site in performance of the work.
- B. All stormwater discharged to storm drains shall be clean. Washing mud into storm drains will not be allowed.
- C. Provide adequate drainage facilities to prevent damage to the work, the site, and adjacent property.
- D. Maintain excavations free of water to prevent puddling or running water.
- E. Supplement existing drainage channels and conduits as necessary to carry all increased runoff from construction operations.
- F. Contractor is responsible for the flooding of property due to his work under this project. Contractor is also responsible to make right any damages to work in progress that is caused by flooding. The means and methods the Contractor employs to meet the above requirements are at his discretion.

1.05. EROSION AND SEDIMENT CONTROL

- A. Plan and execute construction by methods to control surface drainage. Minimize the amount of bare soil exposed at one time.
- B. Provide temporary measures such as berms, dikes, silt fences, sediment traps, and drains, to prevent water flow.
- C. Periodically inspect earthwork to detect evidence of erosion and sedimentation. Promptly apply corrective measures should erosion and sedimentation be detected.

- D. Perform control in accordance with State and local rules and regulations.
- E. If erosion occurs to trenches or work areas prior to restoration by the Contractor, the Contractor shall be responsible for repair of eroded areas.

1.06. POLLUTION CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by the construction operations.
- B. Do not permit sanitary wastes to enter any drain or watercourse other than sanitary sewer.
- C. Do not permit sediment, debris, or other substances to enter sanitary or storm sewer.

1.07. WATER POLLUTION CONTROL

- A. Water Pollution Control work shall conform to the provisions in Section 13, "Water Pollution Control", of the CSS and these Technical Provisions.
- B. Water pollution control work shall conform to the requirements in the "Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual" and the "Construction Site Best Management Practices (BMPs) Manual," and addenda thereto issued up to, and including, the date of advertisement of the project. These manuals are hereinafter referred to respectively as the "Preparation Manual" and the "Construction Site BMPs Manual," and collectively, as the "Manuals." Copies of the Manuals may be obtained from the Caltrans Construction webmaster at Construction.webmaster@dot.ca.gov, and from the Department's Internet website at <https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control/manuals-and-and-handbooks>.
- C. The Contractor shall know and fully comply with applicable provisions of the Manuals, and Federal, State, and local regulations and requirements that govern the Contractor's operations and storm water and non-storm water discharges from both the project site and areas of disturbance outside the project limits during construction. Attention is directed to Sections 7-1.02, "Laws," and 7-1.05, "Indemnification," of the CSS.
- D. Water pollution control requirements shall apply to storm water and non-storm water discharges from areas outside the project site which are directly related to construction activities for this contract including, but not limited to, asphalt batch plants, material borrow areas, concrete plants, staging areas, storage yards and access roads. **The Contractor shall comply with the Manuals for**

those areas and shall implement, inspect and maintain the required water pollution control practices.

- E. The Contractor shall be responsible for penalties assessed or levied on the Contractor or the City as a result of the Contractor's failure to comply with the provisions in this section "Water Pollution Control" including, but not limited to, compliance with the applicable provisions of the Manuals, and Federal, State and local regulations and requirements as set forth therein.
- F. Penalties as used in this section shall include fines, penalties and damages, whether proposed, assessed, or levied against the City or the Contractor, including those levied under the Federal Clean Water Act and the State Porter-Cologne Water Quality Control Act, by governmental agencies or as a result of citizen suits. Penalties shall also include payments made or costs incurred in settlement for alleged violations of the Manuals, or applicable laws, regulations, or requirements. Costs incurred could include sums spent instead of penalties, in mitigation or to remediate or correct violations.

1.08. BEST MANAGEMENT PRACTICES

- A. Contractor shall implement best management practices identified in SWPPP or Water Pollution Control Plan to meet the specifications listed in these Contract Documents.
- B. Contractor shall provide, inspect, and maintain acceptable BMPs appropriate for the work, as necessary to control and prevent stormwater pollution for the duration of the project.
- C. Contractor shall properly dispose of all wastes and excess materials in a legal manner to the satisfaction of the Engineer.
- D. Upon completion of the project, Contractor shall remove all BMPs to the satisfaction of the Engineer.

Part 2 - PRODUCTS

Not Used.

Part 3 - EXECUTION

Not used.

Part 4 - MEASUREMENT AND PAYMENT

Full compensation for Temporary Controls, including the water pollution control work shall be considered as included in the contract price paid for various items of

work involved and no additional compensation will be allowed therefor. The Contractor shall install the BMPs as called out in the WPCP and doing all work involved in compliance with the CSS, these Technical Provisions, and as directed by the Engineer.

****END OF SECTION****

SECTION 05 - SCHEDULING

Part 1 - GENERAL

1.01. SUMMARY

- A. The Contractor shall submit a complete, tentative project schedule at the time of the pre-construction meeting. A minimum of five (5) working days prior to beginning work on any of the streets, the Contractor shall submit to the Engineer for approval a detailed written schedule of work listing the dates on which individual streets shall be surfaced. Following approval, the Contractor shall adhere diligently to the approved written schedule in the prosecution of the work.

1.02. SCHEDULE CONSTRAINTS

- A. The Contractor shall schedule the work to adhere to the following requirements, as specified throughout these Contract Documents.
 - i. Construction along E Main Avenue shall not be allowed while Live Oak High School is in Spring or Fall sessions. The Spring semester is scheduled to end on June 6, 2025. The Fall semester is scheduled to start on August 14, 2025.
 - a. Work shall be scheduled so construction activity on E Main Avenue begins on or after June 9, 2025, and is completed by no later than August 13, 2025.
 - ii. Construction along Tilton Avenue shall not be allowed while Central High School is in Spring or Fall sessions. The Spring semester is scheduled to end on June 6, 2025. The Fall semester is scheduled to start on August 14, 2025.
 - a. Work shall be scheduled so construction activity on Tilton Avenue begins on or after June 9, 2025, and is completed by no later than August 13, 2025.
 - iii. **Failure to meet these milestones will result in Liquidated Damages being charged to the Contractor, as further specified in Section 5.4 of the General Conditions. The Contractor shall pay the City liquidated damages of \$500 for each calendar day the Contractor continues to perform any construction or contract work along E Main Avenue and Tilton Avenue beyond the specified date.**

1.03. SUBMITTALS

Submit to the Engineer the following in accordance with the contract documents.

- A. At the time of the pre-construction meeting: A tentative project schedule.
- B. At the time of the pre-construction meeting: A sample of the written notification to be supplied to affected residents and businesses.
- C. A minimum of five (5) working days prior to beginning work: A detailed written schedule of work listing the dates on which individual streets shall be surfaced / paved. Following approval, the Contractor shall adhere diligently to the approved written schedule in the prosecution of the work.
- D. Prior to issuance of each progress payment: An updated progress schedule listing dates of completed work and schedule of remaining work to be completed.

1.04. RELATED SECTIONS

- A. Section 01 – Project Records and Submittals
- B. Section 03 – Public and Agency Notifications
- C. Section 07 – Traffic Control Systems
- D. Section 08 – Construction Area Traffic Control Devices

Part 2 - PRODUCTS

Not Used

Part 3 - EXECUTION

3.01. “No Parking” Signs

The Contractor shall post “No Parking” signs on affected streets indicating the date of work at least three (3) calendar days prior to the actual work. The “No Parking” signs shall be posted on Type 1 barricades with the dates and times of the parking restriction(s); the signs shall also legibly list the Contractor’s company name and phone number. The signage shall be posted every 25’ and the Contractor shall notify the City of all “No Parking” postings for City verification. The Contractor may propose an alternative plan if it provides reasonable alternative parking locations for residents and businesses; the alternative plan is subject to City review and approval prior to any parking restriction posting.

3.02. Public Notification

The Contractor shall notify individual residents and businesses who will be adversely affected by the work in writing via fliers or door hangers seven (7) business days prior to the start of the work. The Contractor shall submit for approval by the Engineer a sample of the written notification to be supplied to

residents. This sample shall be submitted at the time of the pre-construction meeting. Any expenses incurred by delays caused by the failure of the Contractor to adhere to the approved schedule or to properly notify residents shall be borne solely by the Contractor.

Part 4 - MEASUREMENT AND PAYMENT

Full compensation for scheduling shall be considered as included in the contract price paid for various items of work involved and no additional compensation will be allowed therefor.

****END OF SECTION****

SECTION 06 - MOBILIZATION

Part 1 - GENERAL

1.01. DESCRIPTION

A. Mobilization shall include, but not be limited to the following items:

- i. Preparatory work and operations, including but not limited to, that necessary for the movement of personnel, equipment, supplies, and incidentals to the project site, and for all other work and operations which must be performed or for costs incurred prior to beginning work and in the course of work on various contract items at the project site. Mobilization shall be in accordance with Section 9-1.16D "Mobilization" of the Standard Specifications of the State of California, Department of Transportation (CSS)
- ii. Locating a Construction Staging area at the Contractor's expense.
- iii. Moving on to the site all of Contractor's equipment required for first month operations.
- iv. Having all OSHA required notices and establishment of safety programs.
- v. Having the Contractor's superintendent at the job site full time.
- vi. Walking the project site with the Engineer prior to the start of construction and taking sufficient preconstruction digital photos or DVDs to document existing improvements and provide same to the City. At a minimum, one photograph must be obtained for each 100 feet of construction area with special attention given to environmentally critical areas and areas outside of the public right-of-way. Additional photographs shall be taken as necessary to adequately document the condition of existing improvements to remain. Photographs shall be labeled by station so that upon completion of the construction, or during construction, if necessary, subsequent photographs can be taken from the same control points.
- vii. Conducting a site inspection and construction survey staking prior to construction to check that the proposed manhole locations and elevations conform to the Contract Drawings and to become familiar with all site conditions, and identify potential obstructions caused by other underground utilities. This also includes locating existing utilities by calling Underground Service Alert at 811 or 800-227-2600.

B. Mobilization shall not exceed five (5%) percent of the contract total compensation amount for all improvements as defined in the Contract Documents.

Part 2 - PRODUCTS

Not Used.

Part 3 - EXECUTION

Not Used.

Part 4 - MEASUREMENT AND PAYMENT

Mobilization shall be measured on a lump sum basis. The contract lump sum price paid for "Mobilization" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all work involved in compliance with the CSS and these Technical Provisions including, but not limited to, all mobilization, remobilization, demobilization, moving to new locations, and replacing and disposing of material, as specified in the CSS and these Technical Provisions, and as directed by the Engineer. The contract lump sum price paid for "Mobilization" shall not exceed 5% of the total of all other bid items.

****END OF SECTION****

SECTION 07 – TRAFFIC CONTROL SYSTEMS

Part 1 - GENERAL

1.01. SUMMARY

- A. This Section includes requirements for traffic control and traffic control systems. A traffic control system shall consist of closing traffic lanes in conformance the provisions in Section 12, "Temporary Traffic Control," of the CSS, the provisions under "Traffic Control Systems" and "Construction Area Signs" of these Technical Provisions. Attention is also directed to Sections 7-1.03, "Public Convenience," and 7-1.04, "Public Safety," of the CSS.

1.02. RELATED SECTIONS

- A. Section 01 – Project Records and Submittals
- B. Section 03 – Public Agency Notifications
- C. Section 05 – Scheduling
- D. Section 08 – Construction Area Traffic Control Devices
- E. Section 09 – Temporary Pavement Markings

1.03. REFERENCES

- A. City of Morgan Hill General Provisions
- B. CalTrans:
 - i. Standard Plans and Specifications (latest edition)
- C. California Manual on Uniform Traffic Control Devices (latest edition)
- D. City Encroachment Permit

1.04. DEFINITIONS

- A. Traffic Control Devices: Signs, signals, markings, and other devices placed on or adjacent to a road to regulate, warn or guide traffic.
- B. Traffic Control Measures: Elements of the Traffic Control Plan including traffic control devices, personnel, materials, and equipment used to control traffic through the Work Zone.
- C. Traffic Control Plan: A written and drawn plan for handling traffic on a specific roadway through the Work Zone.

D. Work Zone: A traveled area within the construction used by vehicles, bicyclists, and pedestrians.

1.05. TRAFFIC CONTROL REQUIREMENTS

- A. Provide and maintain temporary traffic control measures to provide for the safe passage of vehicular and pedestrian traffic through and within the Project site.
- B. Under some circumstances, construction may temporarily prevent access into private driveways. The Traffic Control Plan shall specifically identify these occurrences and provide a plan for minimizing the temporary condition.

1.06. TRAFFIC CONTROL PLAN

- A. Prepare and submit detailed Traffic Control Plans to the Engineer for approval. The Traffic Control Plans shall show proposed traffic control measures, signage and other traffic control devices, barricade locations, lane width reductions and lane shutdowns that will be implemented by the Contractor to maintain a safe work site.
- B. The traffic control plans shall be site specific for each street and in accordance with City standards and applicable requirements in the CSS and the latest version of the California Manual on Uniform Traffic Control Devices (CA MUTCD).
- C. Traffic Control Plans shall be prepared and signed by a Traffic Engineer registered in the State of California if the street is an arterial.
- D. Selection of protective devices and directional measures that will be used, including the timing for their use and specific locations, is the responsibility of the Contractor.
- E. The Contractor shall not start work within a Work Zone until the Traffic Control Plans have been accepted and approved by the Engineer.

1.07. PUBLIC NOTICE

- A. The Contractor shall notify the City of the Contractor's intent to begin work at least ten (10) days before work is to begin.**
- B. The Contractor shall provide a preliminary notice to all affected residents/business owners seven (7) business days prior to the start of work. A separate notice shall also be provided to affected residents/business at least three (3) business days prior to the start of milling and paving operation. The contractor shall cooperate with the City relative to handling traffic through the

area and shall make all arrangements relative to keeping the working area clear of parked vehicles.

C. Roads shall not be closed unless authorized by the Engineer in writing at least one (1) week prior to the requested date. If the road closure is approved, Contractor shall notify the following 48 hours prior to the street closure:

- i. All residents on City blocks where work will be occurring.
- ii. All businesses on City blocks where work will be occurring.
- iii. City of Morgan Hill Public Works Department (Project Manager and Inspector).
- iv. City of Morgan Hill Police Department (408) 779-2101.
- v. City of Morgan Hill Fire Department (408) 778-3259.
- vi. City of Morgan Hill Garbage and Recycling: Recology South Valley (408) 842-3358.
- vii. Affected School Districts.

D. If emergency or urgent street closures are required, the Contractor shall immediately notify:

- i. City of Morgan Hill Public Works Department (Project Manager and Inspector).
- ii. City of Morgan Hill Police Department (408) 779-2101.
- iii. City of Morgan Hill Fire Department (408) 778-3259.

1.08. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)

A. PCMS shall be in accordance with section 12-3.32, "portable changeable message signs" of the CSS. The contractor shall provide a minimum of one PCMS at each end of each street at least seven (7) calendar days prior to the start of construction operations and remain in place for the duration of the construction. **The contractor shall submit the PCMS locations and messages for city review and approval.** The contractor shall be responsible for updating the PCMS messages and locations.

1.09. TEMPORARY BARRICADES

- A. Temporary barricades in good condition, as approved by the Engineer, are required to protect vehicles from areas with drop-offs.
- B. Use pin-and-loop type concrete barriers conforming to the CSS.
- C. Wooden Barricades shall follow industry standard with reflective devices and an 8-inch diameter amber flashing light using one, 50-watt, 12-volt, battery operated incandescent lamp. The flash shall be visible for 1,200 feet. Failed bulbs shall be promptly replaced.

1.10. FLAGGERS

- A. Use of flaggers to direct travel shall conform with Part 6 "Temporary Traffic Control" of the CA-MUTCD.
- B. The Contractor's flaggers must wear orange, yellow, or yellow-green reflective vests and orange, yellow, yellow-green or white hardhats at all times.
- C. Utilize highly visible STOP/SLOW sign paddles with reflective sheeting.
- D. Utilize portable, self-contained two-way radios when more than one flagger is required for traffic control.
- E. Employ properly trained persons that have completed an approved traffic control and flagging course. Traffic control submittal shall include flagman certifications.

Part 2 - PRODUCTS

2.01. TRUCK MOUNTED ATTENUATORS (TMA)

- A. TMAs for use in moving lane closures shall be any of the following approved models, or equal:
 - i. Hexfoam TMA Series 3000, Alpha 1000 TMA Series 1000 and Alpha 2001 TMA Series 2001, manufactured by Energy Absorption Systems, Inc., One East Wacker Drive, Chicago, IL 60601-2076, Telephone (312) 467-6750.
 - a. Distributor (Northern): Traffic Control Service, Inc., 8585 Thys Court, Sacramento, CA 95828, Telephone 1-800-884-8274, FAX (916) 387-9734.
 - b. Distributor (Southern): Traffic Control Service, Inc., 1881 Betmor Lane, Anaheim, CA 92805, and Telephone 1-800-222-8274.
 - ii. Cal T-001 Model 2 or Model 3, manufacturer and distributor: Hexcel Corporation, 11711 Dublin Boulevard, P.O. Box 2312, Dublin, CA 94568, Telephone (510) 828-4200.

- iii. Renco Rengard Model Nos. CAM 8-815 and RAM 8-815, manufacturer and distributor: Renco Inc., 1582 Pflugerville Loop Road, P.O. Box 730, Pflugerville, TX 78660-0730, Telephone 1-800-654-8182.

Part 3 - EXECUTION

3.01. GENERAL

- A. Construction operations shall be limited to the hours between 7:00 AM to 6:00 PM and as specified in the Special Conditions and these Technical Specifications.
- B. The contractor must maintain one lane of traffic in both directions of travel at all times on arterials, high traffic volume streets, and other areas specified in these Contract Documents. Construction operations in these areas shall be limited to non-peak, non-commute hours, as approved by the Engineer.
- C. The Contractor may close residential and low traffic volume streets only with advance approval of the Engineer.
- D. Minor deviations from the requirements of this section concerning hours of work, which do not significantly change the cost of the work, maybe permitted upon the written request of the Contractor if, in the opinion of the Engineer, public traffic will be better served and the work expedited. These deviations shall not be adopted by the Contractor until the Engineer has approved them in writing. All other modifications will be made by contract change order.
- E. Install, operate, and maintain temporary traffic control devices in accordance with the Traffic Control Plan.
- F. Traffic control devices shall be promptly moved as construction progresses and removed when no longer required.
- G. Turn, cover, or remove existing permanent traffic control devices when these devices conflict with approved temporary devices.
- H. If components in the traffic control system are displaced or cease to operate or function as specified from any cause during the progress of the work, the Contractor shall immediately repair the components to the original condition or replace the components and shall restore the components to the original location.

3.02. SHOULDER CLOSURES

A. Whenever vehicles or equipment are parked on the shoulder within 6' (1.8 m) of a traffic lane, the shoulder area shall be closed with fluorescent traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 25' (7.5 m) intervals to a point not less than 25' (7.5 m) past the last vehicle or piece of equipment. A minimum of 9 cones or portable delineators shall be used for the taper. A C23 (Road Work Ahead) or C24 (Shoulder Work Ahead) sign shall be mounted on a portable sign stand with flags. The sign shall be placed where directed by the Engineer.

3.03. LANE CLOSURES

- A. The provisions in this section will not relieve the Contractor of responsibility for providing additional devices or taking measures as may be necessary to comply with the provisions in Section 7-1.04, "Public Safety," of the CSS.
- B. During traffic striping operations and pavement marker placement operations using bituminous adhesive, traffic shall be controlled, at the option of the Contractor, with either stationary or moving lane closures. During other operations, traffic shall be controlled with stationary lane closures. Attention is directed to the provisions in Section 84-1.04, "Protection from Damage," and Section 85-1.06, "Placement," of the CSS.
- C. Do not close any lane until the area is signed in accordance with the approved Traffic Control Plan.
- D. Two-way traffic shall be maintained whenever possible. When one lane must be closed, one-way traffic must be controlled by a flagger in each direction of traffic at all times.
- E. At the end of each workday, restore conditions to allow two-way traffic. Install temporary paving or cover open excavations with heavy steel trench plates, as appropriate for the conditions, to provide a minimum 11-foot wide traveled roadway in both directions. Provide signs indicating rough road conditions when using temporary pavement.
- F. Do not stop or hold vehicles for more than ten (10) minutes.
- G. Emergency Vehicle Access shall be maintained at all times.
- H. Access to Live Oak High School on E Main Avenue and Central High School on Tilton Avenue shall be maintained at all times during construction.

3.04. STATIONARY LANE CLOSURE

A. When lane closures are made for work periods only, at the end of each work period, components of the traffic control system, except portable delineators placed along open trenches or excavation adjacent to the traveled way shall be removed from the traveled way and shoulder. If the Contractor so elects, the components may be stored at selected central locations, designated by the Engineer within the limits of the City right of way.

3.05. MOVING LANE CLOSURES

A. Flashing arrow signs used in moving lane closures shall be truck-mounted. Changeable message signs used in moving lane closure operations shall conform to the provisions in Section 12-3.32, "Portable Changeable Message Signs," of the CSS, except the signs shall be truck-mounted and the full operation height of the bottom of the sign may be less than 2.1 m {7 feet} above the ground but should be as high as practicable.

B. Truck Mounted Attenuators (TMA) shall be individually identified with the manufacturer's name, address, TMA model number, and a specific serial number. The names and numbers shall each be a minimum 13 mm {1/2 inch} high and located on the left (street) side at the lower front corner. The TMA shall have a message next to the name and model number in 13 mm {1/2 inch} high letters which states, "The bottom of this TMA shall be 305 mm \pm 153 mm {12 inches \pm 6 inches} above the ground at all points for proper impact performance." Any TMA which is damaged or appears to be in poor condition shall not be used unless recertified by the manufacturer. The Engineer shall be the sole judge as to whether used TMAs supplied under this contract need recertification. Each unit shall be certified by the manufacturer to meet the requirements for TMA in conformance with the standards established by the Transportation Laboratory.

C. Approvals for new TMA designs proposed as equal to the above approved models shall be in conformance with the procedures (including crash testing) established by the Transportation Laboratory. For information regarding submittal of new designs for evaluation contact: Transportation Laboratory, 5900 Folsom Boulevard, Sacramento, California 95819.

D. New TMAs proposed as equal to approved TMAs or approved TMAs determined by the Engineer to need recertification shall not be used until approved or recertified by the Transportation Laboratory.

3.06. TEMPORARY BARRICADES

A. Concrete Barriers shall be installed as follows:

i. Flare the leading end at a flare rate of 14:1.

- ii. When placing concrete barriers, maintain a minimum of 24-inches from face of barrier to edge of traffic lane.
- B. Concrete Barriers, K-Rail, or other equivalent temporary traffic control devices shall be crashworthy and comply with CA-MUTCD Part 6, and AASHTO's "Roadside Design Guide".

3.07. FLAGGERS

- A. Provide flaggers to safely control movement of vehicles and pedestrians around areas disrupted by the Work.
- B. Flaggers shall be located in positions that provide sufficient time for motorists to respond to the flagger's instructions, and these positions shall be designated on the traffic control plan.

Part 4 - MEASUREMENT AND PAYMENT

The contract lump sum price paid for "Traffic Control Systems" shall include full compensation for furnishing all labor, materials (including signs), tools, equipment, and incidentals, and for doing all the work involved with the traffic control plans' preparation; traffic control systems' and its components' placement, removal, storage, maintenance, relocation, replacement and disposal, as specified in the CSS and these Technical Provisions, and as directed by the Engineer.

The adjustment provisions in Section 4-1.05, "Changes and Extra Work," of the CSS shall not apply to the item of traffic control system for lane closures. Adjustments in compensation for traffic control systems will be made only for increased or decreased traffic control system required by changes ordered by the Engineer and will be made on the basis of the cost of the increased or decreased traffic control necessary.

****END OF SECTION****

SECTION 08 – CONSTRUCTION AREA TRAFFIC CONTROL DEVICES

Part 1 - GENERAL

1.01. SUMMARY

- A. Flagging, signs, and all other traffic control devices furnished, installed, maintained, and removed when no longer required shall conform to the provisions in Section 12, "Construction Area Traffic Control Devices," of the CSS and these Technical Provisions.

1.02. RELATED SECTIONS

- A. Section 07 – Traffic Control Systems

Part 2 - PRODUCTS

2.01. CATEGORY 1 TRAFFIC CONTROL DEVICES

Category 1 traffic control devices are defined as those devices that are small and lightweight (less than 45 kg {100 pounds}) and have been in common use for many years. The devices shall be known to be crashworthy by crash testing, crash testing of similar devices, or years of demonstrable safe performance. Category 1 traffic control devices include traffic cones, plastic drums, portable delineators, and channelizers.

If requested by the Engineer, the Contractor shall provide written self-certification for crashworthiness of Category 1 traffic control devices. Self-certification shall be provided by the manufacturer or Contractor and shall include the following: date, Federal Aid number (if applicable), expenditure authorization, district, county, route and kilometer post{post mile} of project limits; company name of certifying vendor, street address, city, state and zip code; printed name, signature and title of certifying person; and an indication of which Category 1 traffic control devices will be used on the project. The Contractor may obtain a standard form for self-certification from the Engineer.

2.02. CATEGORY 2 TRAFFIC CONTROL DEVICES

Category 2 traffic control devices are defined as those items that are small and lightweight (less than 45 kg {100 pounds}), and that are not expected to produce significant vehicular velocity change but may otherwise be potentially hazardous. Category 2 traffic control devices include: barricades and portable sign supports.

Category 2 devices purchased on or after October 1, 2000 shall be on the Federal Highway Administration (FHWA) Acceptable Crashworthy Category 2

Hardware for Work Zones list. This list is maintained by FHWA and can be located at the following internet address:
https://safety.fhwa.dot.gov/roadway_dept/countermeasures/reduce_crash_severity/listing.cfm?code=workzone

The Department maintains a secondary list at the following internet address:
<http://www.dot.ca.gov/trafficops/tcd/links.html>

Category 2 devices that have not received FHW acceptance, and were purchased before October 1, 2000, shall not be used on the project. Category 2 devices in use that have received FHWA acceptance shall be labeled with the FHWA acceptance letter number and the name of the manufacturer by the start of the project. The label shall be readable. All Category 2 devices without a label shall not be used on the project.

If requested by the Engineer, the Contractor shall provide a written list of Category 2 devices to be used on the project at least 5 days prior to beginning any work using the devices. For each type of device, the list shall indicate the FHWA acceptance letter number and the name of the manufacturer.

2.03. CONSTRUCTION AREA SIGNS

Construction area signs shall be furnished, installed, maintained, and removed when no longer required in accordance with the provisions in Section 12, "Temporary Traffic Control," of the CSS.

The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least two (2) working days, but not more than fourteen (14) calendar days, prior to commencing any excavation for construction area signposts. The regional notification centers include but are not limited to the following:

Notification Center	Telephone Number
Underground Service Alert-Northern California (USA)	811

All excavations required to install construction area signs shall be performed by hand methods without the use of power equipment, except that power equipment may be used if it is determined there are no utility facilities in the area of the proposed post holes. Sign substrates for stationary mounted construction area signs may be fabricated from fiberglass-reinforced plastic.

The term "construction area signs" shall also include temporary object markers required for the direction of public traffic through or around the work during construction. Object markers listed or designated on the plans as construction area signs shall be considered to be signs and shall be furnished, erected,

maintained, and removed by the Contractor in the same manner specified for construction area signs and the following:

Object markers shall be stationary mounted on wood or metal posts in accordance with the requirements in Section 82, "Markers and Delineators," of the CSS.

Marker panels for Type N, Type P, and Type R object markers shall conform to the requirements for sign panels for stationary mounted signs.

Target plates for Type K and Type L object markers, and posts, reflectors, and hardware shall conform to the requirements in Section 82 "Markers and Delineators" of the CSS but need not be new.

Part 3 - EXECUTION

Construction Area Traffic Control Devices and Signs shall be placed in accordance with Section 07 "Traffic Control Systems" of these Technical Specifications, the CSS, CA-MUTCD, and City of Morgan Hill Standards.

Part 4 - MEASUREMENT AND PAYMENT

Full compensation for furnishing, placing, maintaining, and removing construction area traffic control devices and signs shall be considered as included in the contract price paid for various items of work involved and no additional compensation will be allowed therefor.

****END OF SECTION****

SECTION 09 - TEMPORARY PAVEMENT MARKINGS

Part 1 - GENERAL

1.01. DESCRIPTION

- A. The Contractor shall furnish all tools, equipment, materials, and supplies and shall perform all labor required to apply temporary pavement markings.
- B. Lane line or centerline pavement delineation shall be provided at all times for travel lanes open to public traffic. Whenever the work causes obliteration of pavement delineation, temporary pavement delineation or permanent traffic stripes shall be in place prior to opening the traveled way to public traffic.
- C. The Contractor shall perform all work necessary to establish satisfactory alignment for temporary pavement delineation.
- D. Temporary pavement markings that are damaged from any cause during the progress of the work shall be immediately repaired or replaced by the Contractor at his/her expense.

1.02. RELATED SECTIONS

- A. Section 07 – Traffic Control Systems
- B. Section 20 – Traffic Stripes, Pavement Markings, and Delineation

Part 2 - PRODUCTS

2.01. GENERAL

- A. “Scrub seal Marker,” as distributed by MV Plastics, Inc., 533 W. Collings Avenue, Orange, CA 714-532-1522, or approved equal, shall be used for temporary traffic stripes and shall be installed at 24' spacing, immediately after obliteration of any existing striping.
- B. All other traffic control and safety markings such as crosswalks, arrows, lane tapers, etc. shall be marked using paint or reflective tape.

2.02. TEMPORARY TRAFFIC STRIPE AND PAVEMENT MARKING TAPE

- A. Removable traffic stripe tape shall be the temporary removable type traffic stripe tape.
- B. Except where existing pavements are to remain in place or on the top layer of new pavements, the Contractor may use painted traffic stripes and pavement markings for temporary traffic stripe and temporary pavement marking.

Painted traffic stripes and pavement markings, if used, shall conform to 84-2.03C(3), Painted Traffic Stripes and Pavement Markings, of the State Standard Specifications, except for payment and for the number of coats of paint which shall be, at the option of the Contractor, either one or two coats.

2.03. TEMPORARY PAVEMENT MARKERS

- A. The use of temporary pavement markers shall conform to the traffic control plans and as determined by the City.
- B. Temporary pavement markers shall be, one of the temporary reflective pavement markers for long-term day/night use (6 months or less).
- C. Reflective pavement markers conforming to the requirements of these Technical Specifications may be used in place of temporary reflective pavement markers for long-term day/night use (6 months or less) except at locations to simulate patterns of broken traffic stripe.

Part 3 - EXECUTION

3.01. TEMPORARY PAVEMENT MARKING TAPE

- A. Tape shall be applied to a clean dry surface and rolled slowly with a rubber-tired vehicle or roller to ensure complete contact with the pavement surface in accordance with the manufacturer's recommendations. Installation procedures for application of tape when the air temperature and pavement temperature is less than 50° F shall be approved by the City prior to beginning the installation of tape. Tape shall not be applied over existing stripes or markings. Completed stripes shall be straight on tangent alignments and shall be on a true arc on curved alignments.

3.02. TEMPORARY PAVEMENT MARKERS

- A. Temporary pavement markers shall be applied in accordance with the manufacturer's instructions and shall be cemented to the surfacing with the adhesive recommended by the manufacturer. Epoxy adhesive shall not be used in areas where removal of the pavement markers will be required.
- B. Placement of the reflective pavement markers used for temporary pavement markers shall conform to these Technical Specifications except that the waiting period requirements before placing the pavement markers on new asphalt concrete surfacing as specified in Section 81-3.03, "Construction," of the State Standard Specifications shall not apply and epoxy adhesive shall not be used to place pavement markers in areas where removal of the pavement markers will be required.

3.03. TEMPORARY PAVEMENT DELINEATION

- A. Temporary pavement delineation shall be placed, maintained, and removed in accordance with the provisions in Section 12-3.01, General, of the State Standard Specifications and these Technical Specifications.
- B. Surfaces on which temporary pavement delineation is to be applied shall be cleaned of all dirt and loose material and shall be dry when the pavement delineation is applied.

Part 4 - MEASUREMENT AND PAYMENT

Full compensation for furnishing, placing, maintaining, and removing Temporary Pavement Markings shall be considered as included in the contract price paid for various items of work involved and no additional compensation will be allowed therefor.

****END OF SECTION****

SECTION 10 – PROJECT APPEARANCE

Part 1 - GENERAL

1.01. DESCRIPTION

- A. The Contractor shall maintain a neat appearance at the work site in all areas visible to the public. Broken concrete, asphalt concrete, soil, and debris developed during construction shall be disposed of concurrently with its removal. Stockpiling shall be permitted only with the approval of the Engineer and only in approved locations.
- B. The Contractor shall sweep the streets daily within the project area as directed by the Engineer for the duration of the project. The Contractor shall not sweep construction materials or other debris onto private properties.
- C. The Contractor shall be responsible for any and all damage to public and private property (including trees, plants, shrubs, fences, etc.) and shall replace with new material or correct any damaged property to the satisfaction of the Engineer.

1.02. PROPERTY AND FACILITY PRESERVATION

- A. The Contractor shall be responsible to preserve and protect any existing facilities, adjacent properties, utilities, survey monuments, and other items as specified in Section 5-1.36 "Property and Facility Preservation" of the CSS.
- B. The Contractor shall immediately report any damage to the Engineer.

Part 1 - PRODUCTS

NOT USED

Part 2 - EXECUTION

2.01. GENERAL CLEAN-UP

- A. Contractor shall clean-up each street location after the completion of all work and remove all debris/material generated during the course of construction. This includes street sweeping each street location in its entirety. Commercial heavy duty sweeping truck(s) should follow immediately behind the milling operation and street sweeping shall include truck routes during both milling and paving operations.

B. Contractor shall also perform minor surface grading, as necessary or as directed by the Engineer or his designated representative, to ensure the smooth pavement transition with existing ADA ramps, driveway approaches, and other city streets.

Part 3 - MEASUREMENT AND PAYMENT

Full compensation for maintaining an acceptable project appearance shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.

****END OF SECTION****

SECTION 11 – CLEARING AND GRUBBING

Part 1 - GENERAL

1.01. DESCRIPTION

- A. Clearing and grubbing shall conform to the requirements of the City of Morgan Hill and to the provisions of Section 16, "Temporary Facilities", 17-2, "Clearing and Grubbing", and 37-6, "Crack Treatments" of the CSS and these Technical Provisions, and the plans.
- B. This work shall consist of removing existing facilities and all objectionable material, including existing concrete and/or asphalt from within the limits of the project as specified. The limits of clearing and grubbing shall be of sufficient area and depth to complete the work as shown on the plans or described in these Technical Provisions and will include excavation and grading as necessary to complete the work. Work shall also include removal and disposal of unsuitable material within and along the edge of pavement and trimming of trees as needed for operation of equipment. Also included is removal of traffic bars, thermoplastic striping four (4)-inches and wider and raised pavement markers from areas to receive slurry sealing and asphalt concrete overlay and as shown on the plans or directed by the Engineer. If, in the opinion of the Engineer, the pavement surface has been damaged as a result of pavement marker removal, the Contractor shall repair said damage in a manner acceptable to the Engineer at the Contractor's expense.
- C. For crack sealing, the Contractor shall allow seven (7) days after spray of weeds within or at edges of pavement to ensure successful eradication prior to crack seal operations. If unsuccessful, Contractor shall respray until the cracks are clean and dry to receive crack and/or slurry seal treatments.
- D. All striping, markings or pavement markers within areas to be removed by milling, grinding, and/or base repair as specified on the plans shall be removed and disposed of as part of the contract items of work involved. If the existing striping and/or markings cannot be accessed by the Contractor's mechanical equipment, the striping and markings shall be removed with equipment and/or tools that are capable of accessing the striping and markings.
- E. All trees, tree branches/limbs that may be in conflict with any equipment use shall be trimmed by a certified tree arborist and tree trimmer prior to the start of any work. The work will need to be approved by the project engineer/inspection team prior to any tree trimming.

1.02. RELATED SECTIONS

- A. Section 10 – Project Appearance
- B. Section 12 – Pavement Milling / Grinding
- C. Section 15 – Full Depth Pavement Repair
- D. Section 19 – Crack Seal

Part 2 - PRODUCTS

NOT USED

Part 3 - EXECUTION

NOT USED

Part 4 - MEASUREMENT AND PAYMENT

Compensation for clearing, grubbing, tree trimming, removal, hauling and disposal of items is included in the contract items of work involved and no additional compensation will be allowed therefor.

****END OF SECTION****

SECTION 12 – PAVEMENT MILLING/GRINDING

Part 1 - GENERAL

1.01. DESCRIPTION:

- A. Pavement milling, and profile grind shall consist of cold milling existing asphalt concrete in areas to receive asphalt concrete full depth repairs, asphalt concrete fill, and asphalt concrete overlay treatments as shown on the plans and described in these technical specifications. Milling shall be in conformance with Section 39-3.04 "Cold Planing Asphalt Concrete Pavement" of the CSS.
- B. The work to be completed consist of furnishing all labor, equipment, materials, and performing all operations necessary for the cold milling of existing asphalt concrete in areas to receive asphalt concrete full-depth repairs, asphalt concrete fill, and asphalt concrete overlay treatments as shown on the plans and described in these technical specifications.
- C. Milling shall be in conformance with Section 39-3.04 "Cold Planing Asphalt Concrete Pavement" of the CSS.
- D. Pavement milling/grinding may encounter existing paving fabric on previously overlaid streets. No additional payment will be made for this condition.
- E. When applicable, the Contractor shall measure and confirm the pay quantities of the wedge and conform grinding with the Engineer prior to the resurfacing operation.

1.02. RELATED SECTIONS

- A. Section 01 – Project Records and Submittals
- B. Section 03 – Public and Agency Notifications
- C. Section 04 – Temporary Controls
- D. Section 07 – Traffic Control Systems
- E. Section 09 – Temporary Pavement Markings
- F. Section 11 – Clearing and Grubbing
- G. Section 13 – Asphalt Concrete Pavement
- H. Section 14 – Asphalt Concrete Fill / Overlay
- I. Section 15 – Full Depth Asphalt Pavement Repair
- J. Section 18 – Existing Utility Facilities' Adjustment

1.03. REFERENCES

- A. City of Morgan Hill
 - i. Standard Specifications and Details (latest edition)

- B. California Department of Transportation (CalTrans)
 - i. CalTrans Standard Specifications Section 39-3.04 "Cold Planing Asphalt Concrete Pavement"

Part 2 - PRODUCTS

- A. Any milling and profile grind at corners, returns, driveways, pavers, adjacent to existing utility boxes that are not to be adjusted, and hard to get areas shall be done with special grinding equipment capable of grinding in such areas without damaging the existing conditions

Part 3 - EXECUTION

3.01. GENERAL

- A. Pavement milling and profile grind shall not be allowed more than 48 hours prior to scheduled overlay (fill) operation without written authorization from the Engineer.
- B. If the milled/grinded pavement surfaces are not paved with asphalt concrete on the same day, the Contractor shall post and maintain "UNEVEN PAVEMENT" signage in advance of the milled areas, along the milled street, adjoining side streets, and driveway approaches. The signage shall be placed on Type 1 barricades with working flashing beacons. The Contractor shall remove all signage upon completing of paving operations.
- C. Cold milling machines shall be operated so as to not produce fumes or smoke. They shall be capable of planing/milling the pavement without requiring the use of a heating device to soften the pavement during, or prior to, the cutting operation.
- D. The Contractor shall be responsible for maintaining all milled surfaces in order to prevent tire and suspension damage to vehicles and to prevent hazards to bicyclists and pedestrians.
- E. Debris from the grinding operations shall be removed from the roadway by a commercial, heavy-duty vacuum sweeping truck immediately after grinding operations and to the satisfaction of the inspector/project engineer prior to, during, and after pavement milling operation. Street sweeping shall include truck routes during both milling and paving operations.
- F. The material collected from pavement gridding operations shall be immediately removed from the site of the work. The removal crews shall follow within fifty

(50) feet of the milling/wedge cutting machine, unless otherwise directed by the Engineer.

- G. All pavement edges shall be cut to a vertical edge to the specified milled depth. The Contractor may use milling machine, saw cutting, or jackhammer equipment to cut the vertical edge in the pavement.
- H. Where lanes are open to traffic, the drop-off between adjacent travel lanes must not be more than 0.15 feet.
- I. No drop-off shall remain between the existing pavement and the milled/grind area when the pavement is open to the public traffic at all transverse joints. No drop-off shall remain between all adjoining driveway approaches on arterial streets and the milled pavement area when the pavement is open to public traffic. If asphalt concrete has not been placed to the level of existing pavement before the pavement is open to public traffic, a temporary asphalt concrete taper shall be constructed. Asphalt concrete for temporary tapers shall be placed to the level of the existing pavement and tapered on a slope of 12:1 or flatter to the level of the milled area. The same method shall be used on all structures, which includes utility structures, that are left above the traveled asphalt surface.
- J. Asphalt concrete for temporary tapers may be spread and compacted by any method that will produce a smooth transition in the riding surface. Asphalt concrete tapers shall be completely removed, including removing all loose material from the underlying surface, before placing the permanent surfacing. Kraft paper, or other approved bond breaker, may be placed under the conform tapers to facilitate the removal of the taper.
- K. All milling operation for all overlay work and pavement milling shall have multiple sensors for profile grinding.
- L. Contractor/Subcontractor shall provide a milling machine that mills a level surface. Gouging of the pavement surface caused by the mill such as unlevel teeth or worn out drums is unacceptable and will need to be repaired by the contractor prior to any further work through a leveling course prior to any further paving work.
- M. Milled surface shall be swept, blown off, cleaned, inspected, and approved by City Project Manager or Inspector prior to tack oil application.
- N. All pavement repairs designated to be performed within the areas to receive pavement grinding and/or milling shall be dug out after the pavement grinding, to the depth specified in the plans, and replaced up to the surrounding grade.

- O. Pavement milling and grinding at corners, returns, driveways, pavers, hard to access areas, and other existing conditions shall be done with special grinding equipment capable of grinding such areas without damaging existing conditions.
- P. The contractor shall be responsible to correct any damages created to any existing conditions, and no additional compensation will be allowed therefor.

3.02. WEDGE GRIND

- A. Wedge gridding shall be parallel to the direction of traffic and be triangular wedge of the width specified in these Technical Specifications and of the depth at the lip of gutter pan, at driveway approaches, at concrete median curbs, at storm drain inlets, and any other structures at the roadway edges, as specified in these Technical Specifications below the structure edge.
- B. Any sections of asphalt that become loose after wedge gridding shall be removed and disposed of by the Contractor at their own expense.

3.03. CONFORM GRINDING

- A. Conform grinding shall provide a gradual transition of the width and depth specified in these Technical Specifications and shown on the Plans to conform the new pavement section to the existing pavement.

Part 4 - MEASUREMENT AND PAYMENT

The contract unit price per square feet for "2" Full Pavement Grind/Mill", "3" Full Pavement Grind/Mill", and "4" Full Pavement Grind/Mill", includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved, complete in place, including street sweeping, off haul of grindings, as shown on the plans, as specified in the CSS and these Technical Provisions, and as directed by the Engineer.

NO ADDITIONAL COMPENSATION SHALL BE MADE FOR PAVEMENT GRINDING IN EXCESS OF THE WIDTH SPECIFIED IN THESE TECHNICAL SPECIFICATIONS AND SHOWN ON THE PLANS UNLESS SO DIRECTED BY THE ENGINEER.

PAVEMENT GRINDING MAY ENCOUNTER EXISTING PAVING FABRIC ON PREVIOUSLY OVERLAID STREETS. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS CONDITION.

THE CONTRACTOR SHALL MEASURE AND CONFIRM THE PAY QUANTITIES OF THE WEDGE AND CONFORM GRINDING WITH THE ENGINEER PRIOR TO THE RESURFACING OPERATION.

****END OF SECTION****

SECTION 13 – ASPHALT CONCRETE PAVEMENT

Part 1 - GENERAL

1.01. DESCRIPTION:

- A. Asphalt concrete shall be used as an overlay and full depth AC pavement repair and the fill portion of work after milling of asphalt concrete. New pavement shall be furnished, placed, and compacted in accordance with Section 39 "Asphalt Concrete" of the CSS. Asphalt Concrete shall be compacted to a minimum 95 percent of Maximum Rice Value/Density as determined by American Society of Testing Materials (ASTM) D-2041.
- B. The work to be completed consist of furnishing all labor, equipment, materials, and performing all operations necessary for the placement of asphalt concrete used in full depth asphalt concrete, full-depth asphalt concrete repair, asphalt concrete overlay, the fill portion of work after milling of asphalt concrete, Type B Asphalt Concrete Berms, or the asphalt concrete portion of utility cover adjustments.
- C. New pavement shall be in accordance with Section 39 "Asphalt Concrete" of the CSS.
- D. Asphalt Concrete shall be compacted to a minimum of 95 percent of Maximum Theoretical Density as determined by American Society of Testing Materials (ASTM) D-2041. Finished asphalt concrete pavements which do not conform to the specified relative compaction requirements, will be paid for using the following pay factors:

In-Place Relative Compaction	Pay Factor
95% or greater	100%
90%-94.9%	20% Reduction in Unit Price
89.9% or less	Remove and Replace as directed

- E. Asphalt shall conform to these Technical Provisions and not Section 92 "Asphalts" of the CSS.
- F. **NO PERCENTAGE OF RAP (RECLAIMED ASPHALT PAVEMENT) SHALL BE PERMITTED IN THE ASPHALT CONCRETE PLACED AS THE FINAL LIFT/WEARING COURSE ON ANY OF THE CITY STREETS TO BE OVERLAYED WITH THIS PROJECT.**

1.02. REFERENCES

- A. City of Morgan Hill

- i. Standard Specifications and Details (latest edition)

B. California Department of Transportation (CalTrans)

- i. CalTrans Standard Specifications Section 39-4.01 "Subgrade";
- ii. CalTrans Standard Specifications Section 93 "Liquid Asphalts";
- iii. CalTrans Standard Specifications Section 94 "Asphaltic Emulsions";
- iv. CalTrans Standard Specifications Section 39-8.01 "Measurement";
- v. CalTrans Standard Specifications Section 39-5.01 "Spreading Equipment";
- vi. CalTrans Standard Specifications Section 39 "Asphalt Concrete";
- vii. California Test Method 304 – Method of Preparation of HMA for Test Specimens
- viii. California Test Method 339A – Determination of Distributor Spread Rate.

C. American Society of Testing Materials (ASTM)

- i. ASTM C136 - Sieve Analysis of Fine and Coarse Aggregates.
- ii. ASTM D1557 - Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10-lb (4.54-kg) Rammer and 18-in. (457-mm) Drop.
- iii. ASTM D2041 – Standard Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures.
- iv. ASTM D2172 - Quantitative Extraction of Bitumen from Bituminous Paving Mixtures.
- v. ASTM D-2041 – Maximum Theoretical Density

1.03. RELATED SECTIONS

- A. Section 01 – Project Records and Submittals
- B. Section 03 Public and Agency Notifications
- C. Section 04 – Temporary Controls
- D. Section 07 – Traffic Control Systems
- E. Section 11 – Clearing and Grubbing
- F. Section 12 – Pavement Milling / Grinding
- G. Section 14 – Asphalt Concrete Fill / Overlay
- H. Section 15 – Full Depth Asphalt Pavement Repair

I. Section 18 – Existing Utility Facilities' Adjustment

1.04. SUBMITTALS

A. Submit the following in accordance with the Contract Documents.

- i. Job-mix formula for each type of asphaltic concrete fourteen (14) days before asphalt concrete placement. Ensure formula is within the specified design range.
- ii. Copies of weighmaster's certificates or certified delivery tickets for each truck load of material.

B. Certificates of Compliance:

- i. Aggregates for base course and asphalt concrete.
- ii. Asphalt cement.
- iii. Liquid asphalt.
- iv. Asphaltic emulsion.
- v. Paint.

1.05. QUALITY ASSURANCE

A. In the presence of the Engineer, the Contractor shall take two (2) one-liter samples per operating day. The Contractor shall provide round friction top containers with one-liter capacity for storing samples.

B. The sampling device shall include a valve:

- i. With a diameter between 10 and 20 mm.
- ii. Manufactured in a manner that a one-liter sample may be taken slowly at any time during the plant operations.
- iii. Maintained in good condition.

iv. The Contractor shall replace failed valves.

C. The Contractor shall provide a sampling device in the asphalt feed line connecting the plant storage tanks to the asphalt weighing system or spray bar. The sampling device shall be accessible between 600 and 750 mm above the platform. The contractor shall provide a receptacle for flushing the sampling device.

1.06. TESTING

- A. Testing will be conducted by the Contractor to determine compliance with the specified degree of compaction and moisture content.

Part 2 - PRODUCTS

2.01. AGGREGATES

- A. Base Course: In accordance with Section 26 of State Standard Specifications, Class 2, 3/4-inch maximum size gradation.

2.02. ASPHALT CONCRETE

- A. The asphalt concrete used for final lift/wearing course, including overlays, shall be Type A, 12.5 mm (1/2") medium maximum gradation.
- B. The asphalt concrete used for base lifts on full-depth asphalt concrete pavement and full-depth asphalt concrete repair shall be Type A, 19 mm (3/4") medium maximum gradation.
- C. The asphalt concrete used for Type B Asphalt Concrete Berms and utility cover adjustments shall be Type A, 3/8" medium maximum gradation.
- D. The use of Recycled Asphalt Pavement (RAP) shall not be permitted in the asphalt concrete placed as the final lift/wearing course on any of the City streets to be overlayed with this project.

2.03. ASPHALT

- A. Asphalt shall consist of refined petroleum or a mixture of refined liquid asphalt and refined solid asphalt, prepared from crude petroleum.
- B. Asphalt will be:
 - i. Free from residues caused by the artificial distillation of coal, coal tar, or paraffin;
 - ii. Free from water;
 - iii. Homogeneous;
- C. The Contractor shall furnish asphalt in conformance with CalTrans' "Asphalt Supplier Certification Program." CalTrans maintains the program requirements, procedures, and a list of approved suppliers at <https://mets.dot.ca.gov/aml/AsphaltBindersList.php>.

D. The Contractor shall ensure the safe transportation, storage, use, and disposal of asphalt.

2.04. ASPHALT BINDER

A. Asphalt Binder shall be PG 64-10

B. Performance Graded (PG) asphalt binder shall conform to the following:

Property	AASHTO Test Method	Specification Grade				
		PG 58-22a	PG 64-10	PG 64-16	PG 64-28	PG 70-10
Flash Point, Min. °C	T48	230	230	230	230	230
Solubility, Min. % ^b	T44	99	99	99	99	99
Viscosity at 135 °C, ^c Max., Pa s	T316	3.0	3.0	3.0	3.0	3.0
Dynamic Shear, Test Temp. at 10 rad/s, °C min. G*sin(delta), kPa	T315	58 1.00	64 1.00	64 1.00	64 1.00	70 1.00
RTFO Test Mass Lost, Max. %	T240	1.00	1.00	1.00	1.00	1.00
RFFTQ Test Aged Binder						
Dynamic Shear, Test Temp. at 10 rad/s, °C min. G*sin(delta), kPa	T315	58 2.20	64 2.20	64 2.20	64 2.20	70 2.20
Ductility at 25 °C Min., cm	T51	75	75	75	75	75
PAV I Aging Temp., °C	R28	100	100	100	100	100
RTFO Test and PAV Aged Binder						
Dynamic Shear, Test Temp. at 10 rad/s, °C min. G*sin(delta), kPa	T315	22 ^a 5000	31 ^a 5000	28 ^a 5000	22 ^a 5000	34 ^a 5000
Creep Stiffness, Test Temp, °C Sax. S-value, MPa Min. M-value	T313	-12 300 0.30 0	0 300 0.30 0	-6 300 0.30 0	-18 300 0.30 0	0 300 0.30 0

Notes:

- a. For use as asphalt rubber base stock for high mountain and high desert areas.
- b. The Engineer will waive this specification if the supplier is a Quality Supplier as defined by the CalTrans' "Asphalt Supplier Certification Program."
- c. The Engineer will waive this specification if the supplier certifies the asphalt binder can be adequately pumped and mixed at temperatures meeting applicable safety standards.
- d. Test the sample at 3°C higher if it fails at the specified test temperature. G*sin(delta) shall remain 5,000 kPa maximum.
- e. "RTFO Test" means the asphaltic residue obtained using the Rolling Thin Film Oven Test, AASHTO Test Method T240 or ASTM Designation: D2827
- f. "PAV" means Pressurized Aging Vessel.

C. Performance Based Asphalt (PBA) binder shall conform to the following:

Property	AASHTO Test Method	Specification Grade			
		PBA 6a	PBA 6a(mod)	PBA 6b	PBA 7
Absolute Viscosity (60°C), Pa·s(x10 ⁻¹) ^a	T202				
Original Binder, Minimum		2,000	2,000	2,000	1,100
RTFO Test Aged Residue ^b , Minimum		5,000	5,000	5,000	3,000
Kinematic Viscosity (135°C), m ² /s(x10 ⁻⁶)	T201				
Original Binder, Maximum		2,000	2,000	2,000	2,000
RTFO Test Aged Residue, Minimum		275	275	275	275
Absolute Viscosity Ratio (60°C), Maximum RTFO Test Visc./Orig. Visc.	—	4.0	4.0	4.0	4.0
Flash Point, Cleveland Open Cup, °C Original Binder, Minimum	T48	232	232	232	232
Mass Loss After RTFO Test, %	T240	0.60	0.60	0.60	0.60
Solubility in Trichloroethylene, % ^c Original Binder, Minimum	T44	Report	Report	Report	Report
Ductility (25°C, 5 cm/min), cm	T51				
RTFO Test Aged Residue ^b , Minimum		60	60	60	75
On RTFO Test Aged Residue, °C 1 to 10 rad/sec: SSD ^e □ 0 and Phase Angle (at 1 rad/sec) < 72°	F	—	35	—	—
On Residue from: PAV 9 at temp., °C	R28	100	100	100	110
Or Residue from Tilt Oven ^f (@113°C), Hours		36	36	36	72
e SSD □ -115(SSV)-50.6, °C	F	—	—	—	25
Stiffness, Test Temperature, °C	T313	-24	-24	-30	-6
Maximum S-value, MPa		300	300	300	300
Minimum M-value		0.300	0.300	0.300	0.300

Notes:

- Absolute viscosity (60°C) will be determined at one sec⁻¹ using ASTM Designation: D 4957 with Asphalt Institute vacuum capillary viscometers.
- “FTFO Test Aged Residue” means the asphalt residue obtained using the Rolling Thin Film Oven Test (FTFO Test), AASHTO Test Method T240 or ASTM Designation: D 2827.
- There is no requirement; however, results of the test shall be part of the copy of test results furnished with the Certificate of Compliance.
- “Residue from Tilt Oven” means the asphalt obtained using California Test 374, Method B, “method for Determining Asphalt Durability Using the California Tilt-Oven Durability Test.”
- “SSD” means Shear Susceptibility of Delta; “SSV” means Shear Susceptibility of Viscosity.
- California Test 381.

g. PAV means Pressurized Aging Vessel.

2.05. MIXING PLANTS

- A. Mixing plants and construction equipment shall comply with Section 39 of the CSS.

Part 3 - EXECUTION

3.01. GENERAL

- A. The Contractor shall prevent the formation of carbonized particles caused by overheating asphalt during manufacturing or construction.
- B. Unless otherwise specified, the Contractor shall heat and apply asphalt in conformance with the provisions in Section 93 "Liquid Asphalts" of the CSS.
- C. The Contractor shall apply paving asphalt at temperatures between 120°C and 190°C. The Engineer will determine the exact temperature of paving asphalt.
- D. Paint binder (Tack Coat) shall be applied to all horizontal and vertical surfaces to receive asphalt concrete surfacing. Paint binder shall be furnished and applied in accordance with Sections 39-4.01 "Subgrades", 93 "Liquid Asphalts", and 94 "Asphaltic Emulsions".
- E. Type B Asphalt Concrete Berm and Equipment: Asphalt Concrete Berms shall be constructed using a self-propelled, mechanical berm machine. The machine shall be approved by the Engineer. Type B Asphalt Concrete Berm shall be constructed per City Standard Drawing A-25.
- F. Contractor shall install new asphalt concrete pavement to conform to adjacent existing facilities, structures, driveways, and others that are not identified to be adjusted to grade.
- G. Equipment used for compaction shall not cause any damage to existing facilities.
- H. Asphalt concrete shall be installed to not create any areas nuisance flooding or ponding.

3.02. PREPARATION

- A. Subgrade:
 - i. If encountered, subgrade shall be prepared per City Standard. Special care shall be taken by the contractor to achieve an evenly compacted subgrade.

The relative compaction shall be 95%, as determined by CSS TM-231, for at least the top 8" of subgrade.

- ii. Prior to construction of base course, clean previously constructed subgrade or subbase of foreign substances.

B. Asphalt Concrete Preparation:

- i. Uniformly mix mineral aggregate with bituminous material in a central plant in accordance with Section 39 of State Standard Specifications.
- ii. The percentage of asphalt cement binder shall be between five and seven percent.

3.03. INSTALLATION

A. The Contractor shall place final asphalt concrete following completion of the Work at each project site in accordance with City Standard Detail "Trench Restoration" and approval from the City.

B. When Base and Subbase Course Installation and preparation is required:

- i. Place aggregate base in accordance with requirements of Sections 25 and 26 of State Standard Specifications.
- ii. Grade and compact in 3-inch layers to at least ninety-five percent (95%) of maximum density, ASTM D 1557 Method D.
- iii. Maintain base course in proper condition until asphaltic concrete is in place, including drainage, rolling, shaping, and watering.
- iv. Maintain sufficient moisture at the surface to prevent a dusty condition by light sprinkling with water.
- v. Recondition, reshape, and recompact areas of completed base course damaged by freezing in accordance with the specified requirements.

C. Prime Coat:

- i. Prior to application of asphaltic concrete, apply a prime coat.
- ii. Apply by pressure distributors.
- iii. Allow sufficient time before placing asphalt concrete to permit prime coat to penetrate base.

- D. Asphalt Emulsion Application: Apply emulsion at a rate of 0.10 gallon per square yard.
- E. Paint Binder (Tack Coat): Paint binder shall be applied to all horizontal and vertical surfaces to receive asphalt concrete surfacing. Paint binder shall be furnished and applied in accordance with Section 39-4.01, "Subgrade", Section 93 "Liquid Asphalts", and Section 94 "Asphaltic Emulsions".
- F. Asphalt Concrete Installation:
 - i. Placing - Deliver bituminous mixtures to the roadbed at temperatures specified in Section 39 of State Standard Specifications. Spread in accordance with Section 39 of State Standard Specifications.
 - ii. Compaction - Initial or breakdown rolling and the final rolling of the uppermost layer of the asphalt concrete shall be in accordance with Section 39 of State Standard Specifications. Compaction by vehicular traffic shall not be permitted.
 - iii. Joining Pavement - Carefully make joints between old and new pavements and of successive days' work in such manner as to ensure a continuous bond between old and new sections of the course. Expose and clean edges of existing pavement. Cut edge to straight, vertical surfaces. Paint joints with a uniform coat of tack coat before the fresh mixture is placed. Prepare joints in the new pavement in accordance with Section 39-6 of State Standard Specifications.

3.04. FIELD QUALITY CONTROL

All field quality control tests shall be performed by the Contractor. Testing frequency may differ from condition listed below. Where finished work does not meet specified requirements and follow up testing is required, Contractor will be responsible for all follow up testing costs for that item.

- A. Base Course Finish Surface:
 - i. Surface tolerance shall conform to Section 26 of State Standard Specifications.
 - ii. When base course is constructed in more than one layer, specified smoothness requirements apply only to top surface.
- B. Pavement Smoothness:
 - i. Test wearing course in accordance with Section 39 of State Standard Specifications.

ii. Make one test for each 300 square yards of pavement.

C. Pavement Thickness:

- i. Pavement thickness shall be as shown on the Contract Documents.
- ii. One test for each 300 square yards of completed pavement will be taken.
- iii. Contractor shall replace pavement where samples are removed.

D. Gradation:

- i. Base Course Gradation
 - a. Base course gradation tests will be completed in accordance with ASTM C 136.
 - b. One test for each 100 tons of material will be taken.
- ii. Asphalt Concrete Gradation:
 - a. Asphalt concrete gradation tests will be completed in accordance with ASTM C136.
 - b. One test for each 50 tons of material will be taken.

E. Base Course Density:

- i. ASTM D 1557, Method D. In place density tests will be performed in accordance with ASTM D 1556.
- ii. One maximum density test for each gradation will be taken.
- iii. One set of two tests each for in place density for each three hundred (300) square yards of surface area will be taken.

F. Asphalt Content of Asphalt Concrete:

- i. Percent asphalt content by extraction will be measured in accordance with ASTM D 2172, Method A.
- ii. One test for each fifty (50) tons of material will be taken.

3.05. PROTECTION OF PAVEMENT

A. After final rolling, the Contractor shall not permit vehicular traffic on the pavement until pavement has cooled and hardened and in no case less than six (6) hours.

B. Additional requirements are as shown in the Contract Documents.

3.06. TEMPORARY PAVEMENT

- A. Temporary asphalt concrete shall be provided on all backfilled trenches. Overnight plating of backfilled trenches is not acceptable. Only HMA may be used for asphalt paving at the conclusion of each day for backfilled trenches.
- B. Temporary pavement restoration shall be as shown on the Contract Documents.
- C. Temporary asphalt concrete section shall be as shown on the Contract Documents.
- D. Before the trenching area is opened for traffic, all excess dirt, rock and debris shall be removed and the street surface shall be swept clean.
- E. Temporary surfacing shall be maintained. At no time shall there be any mudholes.
- F. The surface shall not settle below one inch (1") or be raised more than one inch (1") from the existing pavement grade.

Part 4 - MEASUREMENT AND PAYMENT

- A. Full compensation for asphalt concrete shall be considered as included in the contract prices paid for "2" Fill (1/2" Asphalt Concrete), "3" Fill (1/2" Asphalt Concrete), "4" Fill (1/2" Asphalt Concrete), "3" Full Depth Pavement Repair, "4" Full Depth Pavement Repair (Revokable)", and "6" Full Depth Pavement Repair (Revokable)", and no additional payment will be made therefor.
- B. "Remove and Replace Existing Type B Asphalt Concrete Berm" shall be measured by the lineal foot as installed in place and no payment shall be made for materials placed outside of the limits shown on the plans and/or marked in the field by the Engineer. The contract unit prices to "Remove and Replace Existing Type B Asphalt Concrete Berm" shall include full compensation for furnishing all labor, material, equipment, tools, and incidentals and for doing all work involved in removal and disposal of existing Asphalt Concrete Berm, installing asphalt concrete, complete in place, including staged construction, temporary conforms, traffic control, flagging, temporary striping and

delineation, prime coats, tack coats and paint binders as described above, as shown on the plans, as specified herein and as directed by the Engineer.

****END OF SECTION****

SECTION 14 – ASPHALT CONCRETE FILL / OVERLAY

Part 1 - GENERAL

1.01. DESCRIPTION:

- A. The work to be completed consist of furnishing all labor, equipment, materials, and performing all operations necessary for the overlay of milled/grinded areas with asphalt concrete. Thickness of the overlay shall be as noted in these Technical Specifications and on the Plans.
- B. The Contractor shall be responsible for temporary pavement delineation and markings as required by the Engineer for the maintenance of a safe traveled way. The Contractor shall be responsible for providing a safe and well-marked roadway. This shall include providing temporary striping during evening and weekend hours as specified by the Engineer.
- C. The edges of the existing road or where designated shall be wedge ground, conform ground, or cold-planed to their specified depths, then overlain with asphalt concrete; thickness for overlay shall be 50 mm (2" or .17'), 2" for 2" Fill $\frac{1}{2}$ ", 3" for 3" Fill $\frac{1}{2}$ " and 4" for 4" Fill $\frac{1}{2}$ ". See Section 12 "Pavement Milling/Grinding" of these Technical Specifications for additional information on milling.
- D. The Contractor shall have a qualified quality control personnel on site during the paving operation and will be required to furnish compaction testing results to the City.
- E. When paving any roadway without backed edges, the contractor will be responsible to add a new aggregate base edge or asphalt sweeping (up to 4' wide) from the street sweeping operation.

1.02. REFERENCES

- A. City of Morgan Hill
 - i. Standard Specifications and Details (latest edition)
- B. California Department of Transportation (CalTrans)
 - i. CalTrans Standard Specifications Section 39-4.01 "Subgrade";
 - ii. CalTrans Standard Specifications Section 93 "Liquid Asphalts";
 - iii. CalTrans Standard Specifications Section 94 "Asphaltic Emulsions";
 - iv. CalTrans Standard Specifications Section 39-8.01 "Measurement";
 - v. CalTrans Standard Specifications Section 39-5.01 "Spreading Equipment";

- vi. CalTrans Standard Specifications Section 39 "Asphalt Concrete";
- C. American Society of Testing Materials (ASTM)
 - i. ASTM D-2041 – Maximum Theoretical Density

1.03. RELATED SECTIONS

- A. Section 01 – Project Records and Submittals
- B. Section 03 – Public and Agency Notifications
- C. Section 04 – Temporary Controls
- D. Section 07 – Traffic Control Systems
- E. Section 09 – Temporary Pavement Markings
- F. Section 11 – Clearing and Grubbing
- G. Section 13 – Asphalt Concrete Pavement
- H. Section 14 – Asphalt Concrete Fill / Overlay
- I. Section 15 – Full Depth Asphalt Pavement Repair
- J. Section 18 – Existing Utility Facilities' Adjustment

Part 2 - PRODUCTS

2.01. MATERIALS

- A. The asphalt concrete overlay shall be Type A, 12.5 mm (1/2") medium maximum gradation, in accordance with the CSS.
 - i. Note: No percentage of Reclaimed Asphalt Pavement (RAP) shall be permitted in the asphalt concrete placed as the final lift/wearing course on any City streets to be overlayed with this project.
- B. Asphalt binder shall be PG 64-10.
- C. Paint binder (tack coat) shall be applied to all horizontal and vertical surfaces to receive asphalt concrete surfacing. The paint binder shall be furnished and applied in accordance with Sections 39-4.01 "Subgrade", 93 "Liquid Asphalts", and 94 "Asphaltic Emulsions" of the CSS.

2.02. EQUIPMENT

- A. In addition to the requirements of Section 39-5.01 "Spreading Equipment" of the CSS, asphalt paving equipment shall be equipped with automatic screed controls and a sensing device(s). When placing asphalt concrete, the automatic controls shall control the longitudinal grade and transverse slope of the screed. Grade and slope references shall be furnished, installed, and maintained by the Contractor.

B. Ski devices shall be a minimum length of at least 30 feet with a rigid one-piece unit whereby the entire length activates the sensor.

Part 3 - EXECUTION

3.01. GENERAL

- A. The compacted surface shall be smooth, dense, well bonded, and of uniform texture and appearance. The compacted surface course of asphalt concrete shall be free from ruts, humps, depressions, or irregularities. When a straightedge 3.6 meters (12 feet) long is laid on the finished surface and parallel with the centerline of the road or driveway, the surface shall not vary more than 0.006 meters (0.02 feet) from the lower edge of the straightedge.
- B. The transverse slope of the finished surface shall be uniform to a degree such that no depressions greater than 0.02 feet 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 3.05-meter (10-foot) pass.
- C. Any ridges, indentations, or other objectionable marks left in the surface of the asphalt concrete 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. Asphalt concrete pavement shall include the application of a paint binder / tack oil.
- D. When placing continuously with previously placed mats, the end of the screed adjacent to the previously placed mat shall be controlled by a sensor that responds to grade of the previously placed mat and will reproduce the grade in the new mat within a 0.01-foot tolerance.
- E. Should the method and equipment furnished by the contractor fail to produce a layer of asphalt concrete conforming to the above requirements, including straightedge tolerance of Section 39-6.03, the paving operations shall be discontinued upon notice of the Engineer, and the Contractor shall modify his equipment or furnish substitute equipment within three (3) working days of such notice of the Engineer.
- F. The area to which the paint binder has been applied shall be closed to public traffic. All possible care shall be taken to avoid tracking binder material onto existing pavement surfaces or other surfaces beyond the limits of construction. A drop-off of more than 0.10-foot will not be allowed at any time between adjacent lanes open to public traffic.
- G. Contractor shall install new asphalt concrete pavement to conform to adjacent existing facilities, structures, driveways, and others that are not identified to be adjusted to grade.

- H. Equipment used for compaction shall not cause any damage to existing facilities.
- I. Asphalt concrete shall be installed to not create any areas nuisance flooding or ponding.

Part 4 - MEASUREMENT AND PAYMENT

The contract unit prices paid per ton of "2" Fill ½" Asphalt Concrete", "3" Fill ½" Asphalt Concrete", and "4" Fill ½" Asphalt Concrete, shall be measured by the ton compacted in place in accordance with Section 39-8.01 "Measurement" of the CSS. No payment shall be made for materials placed outside of the limits marked by the Engineer. for compensation for furnishing all labor, material, equipment, tools, and incidentals and for doing all work involved in installing asphalt concrete, complete in place, including staged construction, temporary conforms, traffic control, flagging, temporary striping and delineation, prime coats, tack coats and paint binders as described above, as shown on the plans, as specified herein and as directed by the Engineer.

****END OF SECTION****

SECTION 15 - FULL DEPTH ASPHALT PAVEMENT REPAIR

Part 1 - GENERAL

1.01. SUMMARY

- A. The work to be done consists of furnishing all labor, equipment and materials and performing all operations necessary for the full-depth asphalt concrete repair in all areas designated by the plans and the Engineer.
- B. The streets to receive 3", 4" and 6" Full Depth, Asphalt Concrete pavement repairs shall include areas designated by the Engineer and as specified on the plans shall be dug out to the depth(s) specified on the plans and in these technical provisions, (pavement milling is recommended and preferred) removed, and replaced with full-depth AC, unless otherwise directed by the Engineer. The AC shall be placed in two with the uppermost lift of not less than 0.15 ft. or more than 0.20 ft. The minimum width of any repair shall be as field marked.
- C. The Contractor shall make all arrangements for disposal of excavated materials.
- D. All edges shall be saw-cut unless otherwise approved by the Engineer. Asphalt concrete in repair sections shall be placed in lifts in accordance with Section 39-6 "Spreading and Compacting", and shall be Type A, 3/4" maximum, medium gradation per Section 39-2, "Materials" of the CSS, and Section 13 – Asphalt Concrete Pavement, of these Technical Specifications. Removed materials shall be disposed of legally.
- E. Additional street digouts/asphalt pavement repair may be added by the Engineer anywhere within the City Limits.

1.02. RELATED SECTIONS

- A. Section 01 – Project Records and Submittals
- B. Section 03 – Public and Agency Notifications
- C. Section 04 – Temporary Controls
- D. Section 07 – Traffic Control Systems
- E. Section 09 – Temporary Pavement Markings
- F. Section 11 – Clearing and Grubbing
- G. Section 12 – Pavement Milling / Grinding
- H. Section 13 – Asphalt Concrete Pavement
- I. Section 14 – Asphalt Concrete Fill / Overlay
- J. Section 18 – Existing Utility Facilities' Adjustment

1.03. REFERENCES

- A. City of Morgan Hill
 - i. Standard Specifications and Details (latest edition)
- B. California Department of Transportation (CalTrans)
 - i. CalTrans Standard Specifications Section 39-4.01 "Subgrade";
 - ii. CalTrans Standard Specifications Section 93 "Liquid Asphalts";
 - iii. CalTrans Standard Specifications Section 94 "Asphaltic Emulsions";
 - iv. CalTrans Standard Specifications Section 39-8.01 "Measurement";
 - v. CalTrans Standard Specifications Section 39-5.01 "Spreading Equipment";
 - vi. CalTrans Standard Specifications Section 39 "Asphalt Concrete";
- C. American Society of Testing Materials (ASTM)
 - i. ASTM D-2041 – Maximum Theoretical Density

Part 2 - PRODUCTS

2.01. GENERAL

- A. The asphalt concrete overlay shall be Type A, 12.5 mm (1/2") medium maximum gradation, in accordance with the CSS.
 - i. Note: No percentage of Reclaimed Asphalt Pavement (RAP) shall be permitted in the asphalt concrete placed as the final lift/wearing course on any City streets to be overlayed with this project.
- B. Asphalt binder shall be PG 64-10.
- C. Paint binder (tack coat) shall be applied to all horizontal and vertical surfaces to receive asphalt concrete surfacing. The paint binder shall be furnished and applied in accordance with Sections 39-4.01 "Subgrade", 93 "Liquid Asphalts", and 94 "Asphaltic Emulsions" of the CSS.

2.02. EQUIPMENT

- A. In addition to the requirements of Section 39-5.01 "Spreading Equipment" of the CSS, asphalt paving equipment shall be equipped with automatic screed controls and a sensing device(s). When placing asphalt concrete, the automatic controls shall control the longitudinal grade and transverse slope of the screed. Grade and slope references shall be furnished, installed, and maintained by the Contractor.

B. Ski devices shall be a minimum length of at least 30 feet with a rigid one-piece unit whereby the entire length activates the sensor.

2.03. UNSUITABLE MATERIAL

A. Unsuitable material is defined as material the Engineer determines to be:

- Of such unstable nature as to be incapable of being compacted to specified density using ordinary methods at optimum moisture content.
- Too wet to be properly compacted and circumstances prevent suitable in-place drying prior to incorporation into the work; or
- Otherwise unsuitable for the planned use.

Part 3 - EXECUTION

3.01. GENERAL

A. The asphalt concrete shall be placed in two lifts with the uppermost lift thickness not less than 0.15 feet and not more than 0.20 feet.

B. The minimum width of any repair shall be marked in the field.

C. All edges shall be saw-cut, unless otherwise approved by the Engineer.

D. The material remaining in place, after removing surfacing and base to the required depth, shall be graded to a plane, watered, and compacted to 95% relative compaction. After compaction and prior to placing of asphalt concrete, the vertical edges of the existing pavement shall receive a tack coat.

E. The finished surface of the remaining material shall not extend above the grade established by the Engineer.

F. The compacted surface shall be smooth, dense, well bonded, and of uniform texture and appearance. The compacted surface course of asphalt concrete shall be free from ruts, humps, depressions, or irregularities. When a straightedge 3.6 meters (12 feet) long is laid on the finished surface and parallel with the centerline of the road or driveway, the surface shall not vary more than 0.006 meters (0.02 feet) from the lower edge of the straightedge.

G. The transverse slope of the finished surface shall be uniform to a degree such that no depressions greater than 0.02 feet 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 3.05-meter (10-foot) pass.

H. All pavement edges shall be cut to a vertical edge to the specified milled depth. The Contractor may use milling machine, saw cutting, or jackhammer equipment to cut the vertical edge in the pavement.

- I. Any ridges, indentations, or other objectionable marks left in the surface of the asphalt concrete 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. Asphalt concrete pavement shall include the application of a paint binder.
- J. When placing continuously with previously placed mats, the end of the screed adjacent to the previously placed mat shall be controlled by a sensor that responds to grade of the previously placed mat and will reproduce the grade in the new mat within a 0.01-foot tolerance.
- K. Should the method and equipment furnished by the contractor fail to produce a layer of asphalt concrete conforming to the above requirements, including straightedge tolerance of Section 39-6.03, the paving operations shall be discontinued upon notice of the Engineer, and the Contractor shall modify his equipment or furnish substitute equipment within three (3) working days of such notice of the Engineer.
- L. The area to which the paint binder has been applied shall be closed to public traffic. All possible care shall be taken to avoid tracking binder material onto existing pavement surfaces beyond the limits of construction. A drop-off of more than 0.10-foot will not be allowed at any time between adjacent lanes open to public traffic.
- M. All pavement repairs designated to be performed within the areas to receive pavement grinding and/or milling shall be dug out after the pavement grinding, to the depth specified in the plans, and replaced up to the surrounding grade.
- N. Pavement milling and grinding at corners, returns, driveways, pavers, adjacent to existing utility structures not to be adjusted, hard to access areas, and other existing conditions shall be done with special grinding equipment capable of grinding such areas without damaging existing conditions.
- O. The contractor shall be responsible to correct any damages created to any existing conditions, and no additional compensation will be allowed therefor.

3.02. UNSUITABLE MATERIAL

- A. In the event that underlying subbase material is unsuitable, it shall be excavated below the depth required above and disposed of. The limits of removal shall be designated by the Engineer and shall be in one-inch increments.

B. Compensation shall be at per inch price based on the bid for 6-inch deep pavement repair divided by 6 inches for each additional inch of depth.

C. The resulting space shall be filled with a single lift of asphalt.

3.03. EXISITNG TREE ROOTS

A. In the event existing tree roots are encountered, the Contractor shall stop all work adjacent to the exposed roots and notify the City. The Contractor or City shall contact a certified tree arborist to inspect any exposed roots and evaluate the health of the tree.

Part 4 - MEASUREMENT AND PAYMENT

A. 3" Full Depth Pavement Repair (Revokable), 4" Full Depth Pavement Repair (Revokable), and 6" Full Depth Pavement Repair (Revokable) shall be measured by the square foot as marked in the field by the Engineer. No payment shall be made for materials placed outside of the limits marked by the Engineer. The contract unit prices paid per square foot for "3" Full Depth Pavement Repair" (Revokable), "4" Full Depth Pavement Repair (Revokable)," "6" Full Depth Pavement Repair (Revokable)" shall include full compensation for furnishing all labor, material, equipment, tools, and all other incidentals and for doing all work involved in furnishing and placing full depth AC pavement repair, complete in place, including staged construction, temporary conforms, traffic control, flagging, temporary striping and delineation, prime coats, tack coats, and paint binders, as specified herein and as directed by the Engineer.

B. ADDITIONAL DEPTH OR REPAIR SHALL BE COMPENSATED AT A "PER INCH" PRICE OBTAINED BASED ON DIVIDING THE 6-INCH FULL DEPTH AC PAVEMENT REPAIR UNIT PRICE BY 6-INCHES LIKEWISE, THE REDUCTION IN DEPTH OR REPAIR SHALL BE CREDITED TO THE CITY ON A "PER INCH" BASIS. THERE WILL BE NO PRICE NEGOTIATIONS ON THE CONTRACT UNIT PRICE PAID FOR THE BID ITEMS FOR FULL-DEPTH AC PAVEMENT REPAIR OR ADDITIONAL 1" REPAIR OR 2" REDUCTION IN REPAIR THICKNESS EVEN IF THE ACTUAL AMOUNT OF WORK IS DIFFERENT FROM THE ENGINEER'S ESTIMATE BY 25% OR GREATER.

****END OF SECTION****

SECTION 16 – SHOULDER BACKING

Part 1 - GENERAL

1.01. DESCRIPTION

- A. The edges of existing road or where designated on the plans and these technical documents shall cleared and grubbed, ground to the specified depth, and placed back with an approved shoulder backing material per Section 19-9 "Shoulder Backing", of the CSS and Caltrans Standard Plan P75.

1.02. RELATED SECTIONS

- A. Section 04 – Temporary Controls
- B. Section 07 – Traffic Control Systems
- C. Section 11 – Clearing and Grubbing
- D. Section 12 – Pavement Milling / Grinding
- E. Section 13 – Asphalt Concrete Pavement

Section 14 – Asphalt Concrete Fill / Overlay

1.03. SUBMITTAL

Contractor shall submit a shoulder backing mix design confirming that the mix meets the requirements of this Section.

Part 2 - PRODUCTS

2.01. MATERIALS

- A. Shoulder Backing material shall conform to Section 19-9.02 "Materials", of the CSS.
- B. Any recycled asphalt pavement (RAP) used in the shoulder backing shall not be used as the final lift for any Asphalt Concrete used in the roadway, as specified in these Technical Specifications.

Part 3 - EXECUTION

3.01. CONSTRUCTION

- A. Placement of all shoulder backing shall conform to Section 19-9.03 "Construction" of the CSS and Caltrans Standard Plan P75.

Part 4 - MEASUREMENT AND PAYMENT

The contract unit price paid per ton of "Shoulder Backing" shall be measured by the ton compacted in place as marked by the Engineer. No payment shall be made for materials placed outside of the limits marked by the Engineer. The contract unit price shall include full compensation for furnishing all labor, material, equipment, tools, and all other incidentals and for doing all work involved in installing shoulder backing, complete in place, including clearing and grubbing, scarifying basement material, compaction, staged construction, temporary conforms, traffic control, flagging, as shown on the plans, as specified herein and as directed by the Engineer.

****END OF SECTION****

SECTION 17 - CAST-IN-PLACE CONCRETE

Part 1 - GENERAL

1.01. SUMMARY

- A. This Section specifies cast-in-place concrete for pavements, sidewalks, curbs, gutters, curb ramps, encasements, utility cover collars, and miscellaneous structures.
- B. Cast-in-place concrete used for pavements, sidewalks, curbs, gutters, curb ramps, encasements, utility cover collars, and other miscellaneous structures shall comply with Section 73 "Concrete Curbs and Sidewalks" and Section 90 "Concrete" of the CSS, and the City of Morgan Hill Standard Specifications and Details, except as modified by these technical provisions.
- C. Curb Ramp replacement work includes, removal and disposal of existing sidewalk, sawcutting, expansion joints if required, score joints, removal/replacement & compaction of base material, formwork, curing compound, rebar doweling, the new detectable warning surface, removal and replacement of up to five (5) feet of sidewalk beyond the ramp's limits for any necessary conform, and up to two (2) feet of asphalt concrete conform, as identified on the plans and these technical provisions or as directed by the Engineer.

1.02. RELATED SECTIONS

- A. Section 04 – Temporary Controls
- B. Section 07 – Traffic Control Systems
- C. Section 13 – Asphalt Concrete Pavement
- D. Section 18 – Existing Utility Facilities' Adjustment

1.03. REFERENCES

- A. City of Morgan Hill:
 - i. Standard Specifications and Details (latest edition).
- B. American Concrete Institute (ACI):
 - i. ACI MCP – Manual of Concrete Practice.
 - ii. ACI 211.1 – Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete.
 - iii. ACI 301 - Specifications for Structural Concrete.

- iv. ACI 304 – Guide for Measuring, Mixing, Transporting, and placing Concrete.
- v. ACI 305R – Guide to Hot Weather Concreting.
- vi. ACI 306R – Guide to Cold Weather Concreting.
- vii. ACI 318 – Building Code Requirements for Structural Concrete (ACI 318-11) and Commentary.
- viii. ACI 347 – Guide to Formwork for Concrete.

C. American Society for Testing and Materials (ASTM):

- i. ASTM C31 - Standard Practice for Making and Curing Concrete Test Specimens in the Field.
- ii. ASTM C33 - Standard Specification for Concrete Aggregates.
- iii. ASTM C39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
- iv. ASTM C42 - Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.
- v. ASTM C67 - Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile.
- vi. ASTM C94 - Standard Specification for Ready-Mixed Concrete.
- vii. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
- viii. ASTM C143 - Standard Test Method for Slump of Hydraulic-Cement Concrete.
- ix. ASTM C150 - Standard Specification for Portland Cement.
- x. ASTM C172 - Standard Practice for Sampling Freshly Mixed Concrete.
- xi. ASTM C260 - Standard Specification for Air-Entraining Admixtures for Concrete.
- xii. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.

- xiii. ASTM C467 - Standard Classification of Mullite Refractories
- xiv. ASTM C494 - Standard Specification for Chemical Admixtures for Concrete.
- xv. ASTM D1751 – Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
- xvi. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection and/or Testing.

D. Caltrans Standard Specifications

1.04. QUALITY ASSURANCE

A. Quality Control by Contractor:

- i. To verify conformance with the specified requirements for cast-in-place concrete, the Contractor shall engage the services of an independent testing laboratory which complies with the requirements of ASTM E329.
- ii. Costs of testing laboratory services shall be the responsibility of the Contractor in accordance with the Contract Documents.

B. Basis for Quality:

- i. Cast-in-place concrete shall conform to the requirements of ACI 301, except as modified.
- ii. Unless specified otherwise, all formwork shall conform to ACI 347.

1.05. SUBMITTALS

A. Submit concrete, mix designs, recent test data for the submitted mixes, and test data for mix components confirming that the mixes meet the requirements of this Section.

B. Submit data on concrete accessories specified herein that the Contractor intends to install in the work.

C. Submit the following in accordance with the Contract Documents:

- i. MANUFACTURER'S DATA: Copies of manufacturer's data shall be provided for the following:

- a. Waterstops.
- b. Retardants.
- c. Curing compounds.
- d. Bonding compounds.
- e. Admixtures.

- ii. Certificates of Compliance
- iii. TEST REPORTS: Three copies of reports from the concrete supplier shall be provided certifying that all concrete materials comply with the specifications and all test requirements.
- iv. READY-MIXED CONCRETE TRUCK DELIVERY TICKETS: Each load of ready-mixed concrete delivered to the job site shall be accompanied by a delivery ticket showing the information listed in ASTM C94, Section 14.

Part 2 - PRODUCTS

2.01. MATERIALS

- A. Concrete must be composed of cementitious material, fine aggregate, coarse aggregate, admixtures if used, and water.
- B. Cement: Portland cement shall be ASTM C150, Type II or Type V, low alkali, containing less than 0.60 percent alkalis.
- C. Aggregates:
 - i. GENERAL: Fine and coarse aggregates shall conform to ASTM C33. Fine and nonreactive and shall be washed before use.
When sources of aggregates are changed, test reports shall be provided for the new material. The tests specified shall be performed prior to commencing concrete work.
 - ii. FINE AGGREGATE: Fine aggregate shall be hard, dense, durable particles of either sand or crushed stone regularly graded from coarse to fine. Gradation shall conform to ASTM C33.
 - iii. COARSE AGGREGATE: Coarse aggregate shall be hard, dense and durable gravel or crushed rock free from injurious amounts of soft and friable particles, alkali, organic matter and other deleterious substances. Gradation of each coarse aggregate size specified in this Section and shall conform to ASTM C33-Table 3.

D. Admixtures:

- i. GENERAL: All admixtures shall be compatible with the concrete. Calcium chloride or admixtures containing calcium chloride are not acceptable. Admixtures shall be used in accordance with the manufacturer's recommendations and shall be added separately to the concrete mix.
- ii. WATER REDUCING RETARDER: Water reducing retarder shall be ASTM C494, Type D, and shall be BASF MasterSet R 300; Sika Chemical Corp., Plastiment; or equal.
- iii. AIR ENTRAINING AGENT: Air entraining agent shall be BASF, MasterAir AE 90; W. R. Grace and Co., DaraVair; or equal. The air entraining agent added shall produce, in accordance with ASTM C260, an entrained air content specified in this Section for each class of concrete.
- iv. Water: Water for washing aggregate, for mixing and for curing shall be free from oil and deleterious amounts of acids, alkalis, and organic materials.

2.02. CONCRETE CHARACTERISTICS

A. Mix Proportioning:

Concrete shall be normal weight concrete composed of specified cement, admixtures, aggregates, and water proportioned and mixed to produce a workable, strong, dense, and impermeable concrete.

- i. Concrete shall be provided in accordance with the following:

Concrete Class	ASTM Coarse Aggregate Size	Min. Cement Content, Sacks per Cy of Concrete	Max. Water/Cement Ratio by Weight	Pozzolan Percent by Weight of Portland Cement	Air/Entraini ng	Maximum Slump in Inches	Minimum 28-day Compressive Strength, PSI
B	#57	5.25	0.45	18-20	Yes	3-1/2	4000
C	#67	5.25	0.45	18-20	Yes	4	4000
E	#57	5.25	0.55	0	No	6	2000

Notes for table:

Compressive strength shall be determined at the end of 28 days based on test cylinders made and tested in accordance with ASTM C39.

- iii. Concrete mix for sidewalk, curb, and gutter, and curb ramps shall include 1 pound of Lamp Black color admixture per one cubic yard of concrete.

B. Concrete shall be provided by class for the corresponding use listed as follows:

Types of Use	Class of Concrete
Concrete 12 inches thick and greater	B
Concrete less than 12 inches thick	C
Conduit Encasement (Duct banks) and concrete fill	E

C. Control: Before beginning concrete work, the Contractor shall determine the proper proportions of materials for class of concrete B and C. Methods for selecting and adjusting proportions of the ingredients shall be in accordance with ACI 211.1. Reports from the concrete supplier of each mix design shall state whether the items reported comply with the specifications and shall show (1) the expected strength, (2) corresponding slump, (3) expected drying shrinkage, (4) weights and test results of the ingredients on the basis of field experience and/or trial mixtures in accordance with ACI 318, Chapter 5 with at least 30 tests, and (5) other physical properties necessary to check each mix design. Copies of the reports shall be submitted in accordance with the Contract Documents.

2.03. WATERSTOPS

Waterstops in construction or expansion joints shall be Greenstreak PVC waterstop by Sika Corporation; or approved equal.

2.04. EXPANSION JOINT MATERIALS

Expansion joint material shall be $\frac{1}{4}$ -inch thick pre-molded expansion joint filler in conformance with ASTM D1751. Expansion joint material shall be shaped to fit the cross section of concrete being placed.

2.05. BONDING COMPOUNDS

- A. Epoxy resin bonding compounds shall be used for wet areas and shall Master Builders Technologies, Concrese series as applicable; Sika Chemical Corporation, Sikadur 35, Hi-Mod LV, Sikadur 32, Hi-Mod, or Sikadur 31, Hi-Mod Gel as applicable; or equal.
- B. Non-epoxy bonding compounds shall be used for dry areas and shall be Acrylic Bondcrete; Imperial Chemical Industrial, Inc., Thoro System Products, Acryl 60; Thorobond; or equal. Bonding compounds shall be applied in accordance with the manufacturer's instructions.

2.06. RETARDANT

Retardant for exposing aggregates for non-formed surfaces in construction joints shall be Sika Rugasol-S, Horn Aggretex-H, or equal. Retardant shall be

applied in accordance with manufacturer's instructions sufficient to assure a minimum penetration of 1/8 inch.

2.07. CURING AND SEALING COMPOUNDS

Curing and sealing compound shall be BASF, Masterseal; A. C. Horn Inc., Horn Clearseal EM180; Burke Company Spartan-Cote WB Cure Seal Hardener; or equal; conforming to ASTM C309. Curing compounds shall be clear and shall be applied in accordance with the manufacturer's instructions, except as otherwise specified.

2.08. DETECTABLE WARNING SURFACES

- A. Detectable Warning Surface panels shall be of vitrified polymer composite construction, embedded type, manufactured by Armor Tile Tactile Systems, Buffalo, New York, or approved equal.
- B. The dimensions and interval of the truncated domes within the panel shall conform to Caltrans Standard Plan RNSP A88 and Division of the State Architect Accessibility Reference Manual, Figure No. 31-23A.
- C. The orientation of the dome pattern for all panels shall be parallel with the panel edges, not diagonal as shown in the preceding referenced details.

2.09. ASPHALT CONCRETE

- A. Asphalt Concrete used shall be Type A, $\frac{1}{2}$ " medium in accordance with Section 39 of the CSS and Section 13 of these Technical Specifications.

Part 3 - EXECUTION

3.01. GENERAL

- A. Construction of cast-in-place concrete shall be in accordance with the pertinent recommendations contained in ACI Manual of Concrete Practice of 300 Group.
- B. Curb and gutter shall not be poured monolithically with any adjacent attached sidewalk or curb ramp.
- C. ADA curb ramps shall be constructed per City Standard Drawing A-1 and A-2

3.02. CONCRETE

- A. Concrete shall be truck-mixed, ready-mixed concrete conforming to the applicable portions of ASTM C94. Materials shall be proportioned by weighing. The Contractor shall be responsible for producing concrete of the specified characteristics.
- B. Concrete shall be delivered to the site of work, and discharge shall be completed within 1-1/2 hours after introduction of the water to the mixture.

3.03. CONVEYING AND PLACING CONCRETE

- A. Conveying Concrete: Concrete shall be conveyed from the mixer to the forms in accordance with ACI 301, Chapter 8. Concrete which has segregated in conveying shall be removed from the site of the work.
- B. Placing Concrete:
 - i. GENERAL: Concrete shall be placed in accordance with ACI 301, Chapter 8, and ACI 304, Chapter 6. Pumped concrete shall be the class and consistency specified in the Contract Documents.
 - ii. PLACING CONCRETE IN HOT WEATHER: In hot weather (above 85 degrees F), concrete shall be placed in accordance with ACI 305R.
 - iii. PLACING CONCRETE IN COLD WEATHER: In cold weather (below 45 degrees F), concrete shall be placed in accordance with ACI 306R.

3.04. CONCRETE FORMWORK

Formwork shall be installed in accordance with ACI 347.

3.05. CURING AND SEALING

- A. General
 - i. Concrete curing shall be completed by water curing or by using a clear membrane curing compound or by a combination of both methods. Repairs or treatment of concrete surfaces shall be coordinated so that interruption of the curing will not be necessary.
 - ii. Concrete surface temperature shall be maintained between 50 degrees F and 80 degrees F for at least 5 days. Curing concrete in hot weather (above 85 degrees F) shall be in accordance with ACI 305R. Curing concrete in cold weather (below 45 degrees F) shall be in accordance with ACI 306R.

B. Water Curing: When water curing is used, concrete shall be kept wet continuously for a minimum of ten (10) days after placement. Burlap mats or fabric may be used to retain moisture during the curing period.

C. Curing Compound:

- i. When curing compound is used, it shall be applied as soon as the concrete has set sufficiently so as not to be marred by the application or immediately following form removal for vertical and other formed surfaces. Preparation of surfaces, quantities used, application procedures, and installation precautions shall be followed in strict compliance with the manufacturer's instructions.
- ii. Curing compound shall not be used on concrete surfaces to be coated, waterproofed, or moisture-proofed.

3.06. PROTECTION

Concrete shall be protected from injurious action by sun, rain, flowing water, frost, and mechanical injury.

3.07. CONSTRUCTION JOINTS

- A. Construction joints shall be located and formed as specified. A rough surface of exposed concrete aggregates shall be produced using a surface retardant at construction joints. The limit of the treated surfaces shall be 1 inch away from the joint edges. Within 24 hours after placing, retarded surface mortar shall be removed either by high pressure water jetting or stiff brushing or combination of both so as to expose coarse aggregates. A rough surface of exposed aggregate may also be produced by sandblasting followed by high pressure water jetting. Sandblasting, if used, shall remove 1/8 inch of laitance film and shall expose coarse aggregate to insure adequate bond.
- B. Reinforcing steel and welded wire fabric shall be continued across construction joints. Waterstops shall be provided in construction joints at locations as specified.

3.08. INSERTS AND EMBEDMENTS

A. Inserts:

- i. Where pipes, castings or conduits are to pass through structures, the Contractor shall place such pipes or castings in the forms before placing the concrete, or they may provide openings in the concrete for subsequent insertion of such pipes, castings or conduits. Such openings shall be provided with waterstops and V-shaped construction joint as shown and

shall have a slight flare to facilitate grouting and permit the escape of entrained air during grouting

- ii. Additional reinforcement shall be provided around large openings as shown on the Drawings. The grout shall be non-shrink grout as specified in the Contract Documents.

B. Embedments: Gate frames, gate thimbles, special castings, channels, or other miscellaneous metal parts that are to be embedded in the concrete shall be set and secured in the forms prior to concrete placement. Unless otherwise specified, anchor bolts and inserts shall be embedded in concrete as shown. The Contractor shall provide inserts, anchors, or other bolts necessary for the attachment of piping, valves, metal parts, and equipment. Operators or sleeves for gate or valve stems shall be positioned to clear reinforcing steel, conduit and other embedments, and to align accurately with equipment.

3.09. EXPANSION JOINTS

Expansion joints shall be as specified. Reinforcement or other embedded metal items bonded to the concrete shall not extend through expansion joints. Waterstops shall be provided in expansion joints as specified in this Section.

3.10. WATERSTOPS

Waterstops shall be provided at the specified locations. Waterstops shall be securely held in position during placing of concrete. If, after placing concrete, waterstops are materially out of position or shape, the surrounding concrete shall be removed, the waterstop reset, and concrete replaced in accordance with this Section.

3.11. MODIFICATION OF EXISTING CONCRETE

Existing concrete shall be removed, and the remaining surfaces resurfaced as specified. The remaining concrete shall be protected from damage. Clean lines shall be made by sawing through the existing concrete. The concrete may be broken out after initial saw cuts in the event thickness prevents cutting through. Where it is not possible to use a saw, the initial cuts shall be made with chipping hammers. These cuts shall be sufficient to prevent damage to the remaining concrete. In general, an opening in existing concrete shall be oversized 1 inch on all sides and built back to the correct dimension with an epoxy grout. Where oversized openings cannot be made, the concrete shall be cut to the correct dimension, with the exposed reinforcing cut back an additional 1 inch and the resulting hole filled with epoxy grout. Cut or broken concrete surfaces shall be resurfaced with an epoxy grout. Concrete surfaces to be coated shall be dry. Where new concrete adjoins existing concrete surfaces or surfaces which have been cut, such surfaces shall be cleaned by sandblasting to remove laitance,

loose coatings, and foreign materials, and coated with the bonding compound just prior to the placement of the new concrete. Bonding compounds shall be as specified in this Section. Unless otherwise specified, continuity of reinforcing steel shall be obtained across the joint either by exposing existing bars to provide sufficient laps with new bars or by welding existing bars with new bars. Dowels shall be drilled and set with epoxy grout into existing concrete.

3.12. FORMED SURFACE FINISHES

- A. Repair of Surface Defects: Surface defects, including tie holes, minor honeycombing or otherwise defective concrete shall be repaired in accordance with ACI 301, Chapter 9. Areas to be patched shall be cleaned. Patches on exposed surfaces shall be finished to match the adjoining surfaces after they have set. Patches shall be cured as specified for the concrete.
- B. Finishing:
 - i. FINISH A: Finish A shall be a grout clean finish in accordance with ACI 301, Section 10.3.2. Surfaces shall be lightly sandblasted prior to sacking. For interior areas not exposed to moisture or weather, water used in the mortar shall be mixed with a PVA bonding compound as recommended by the manufacturer. Unless otherwise specified, Finish A shall be provided for all surfaces exposed to view, both painted and unpainted.
 - ii. FINISH B: Finish B shall be the same as Finish A, except that the final burlap rubbing may be omitted, providing the steel trowel scraping removes the loose buildup from the surface. Finish B shall be provided for waterproof and moisture-proof coated surfaces.
 - iii. FINISH C: Finish C shall be a finish which has surface imperfections less than 3/8 inch in any dimension. Surface imperfections greater than 3/8 inch shall be repaired or removed and the affected areas neatly patched. Finish C or smoother shall be provided for interior surfaces of tanks and channels from 1 foot below minimum water surfaces and down and otherwise unfinished interior surfaces.
 - iv. FINISH D: Unless otherwise specified, Finish D shall be the finish for surfaces not exposed to view in the finish work or by other construction, which may be left as they come from the forms, except that tie holes shall be plugged and defects greater than 1/2 inch in any dimension shall be repaired.

3.13. ASPHALT CONCRETE CONFORM

- A. Asphalt concrete conform along any newly constructed gutter or concrete surface adjacent to new pavement shall be constructed per City Standard Drawing A-12.
- B. Contractor shall allow any new concrete to cure a minimum of 72 hours prior to placement of any asphalt concrete conform or any paving work.

3.14. SLAB FINISHES

- A. General: Where finish is not specified, floor slabs shall receive steel troweling. Dry cement shall not be used on new concrete surfaces to absorb excess moisture. Edges shall be rounded to a radius of 1/2 inch. Joints shall be grooved to a radius and depth of 1/4 inch each.
- B. Float Finish: Float finish shall conform to ACI 301, Section 11.7.2. Floating shall be performed with a hand or power-driven float. Floating of any one area shall be the minimum necessary to produce the finish specified. Floating shall compact and smooth the surface and close any cracks and checking of surfaces. Float finish shall be applied to surfaces of channel and tank bottom slabs and to footings.
- C. Steel Trowel Finish: Steel trowel finish shall conform to ACI 301, Section 11.7.3. Immediately after final troweling, the surface shall be cured and protected as specified in this Section. Steel trowel finish shall be provided on floors unless specified otherwise.
- D. Broomed Finish: Broomed finish shall conform to ACI 301, Section 11.7.4. Broomed finish shall be provided for walks, tops of walls, slabs on grade exposed to atmosphere, and where otherwise specified.

3.15. FIELD SAMPLING AND TESTING OF CONCRETE

- A. General: Field sampling and testing shall be performed by the independent testing laboratory specified in this Section. Samples of concrete shall be taken at random locations and at such times to represent the quality of the materials and work throughout the project. The laboratory shall provide the necessary labor, materials and facilities for sampling, casting, handling, and storing the concrete samples at the site of work. The minimum number of samples and tests are specified in this Section.
- B. Sampling: Concrete shall be sampled as follows and tested in accordance with this Section. Samples of plastic concrete shall be obtained in accordance with ASTM C172. Samples for pumped concrete shall be taken at the hose discharge point. Samples for other concrete shall be taken at the hopper of transit mix truck.

C. Testing: Services of a certified concrete testing laboratory shall be provided at the City's expense to confirm compliance of cast-in-place concrete and CLSM with these Specifications. Failure of the concrete to meet the specified requirements shall be grounds for removal and replacement of the failing concrete, and re-testing at the Contractor's expense.

- i. STRENGTH TESTS: The strengths specified for the design mix shall be verified by the testing laboratory during placement of the concrete. Verification shall be accomplished by testing standard cylinders of concrete samples taken at the job site.

Standard cylinders shall represent the concrete placed in the forms. One set of three standard cylinders shall be cast for each 50 cubic yards, or fraction thereof, for concrete placed in structures, building slabs and footings, but at least three cylinders shall be taken from any one batch. Casting, handling, and curing of cylinders shall be in accordance with ASTM C31. Additional cylinders shall be provided when an error in batching is suspected. For the first 24 hours after casting, the cylinders shall be kept moist in a storage box constructed and located so that its interior air temperature will be between 60- and 80-degrees Fahrenheit. At the end of 24 hours, the cylinders shall be transported to the testing laboratory.

Testing of specimens for compressive strength shall be in accordance with ASTM C39. Tests shall be made at 7 and 28 days from the time of casting. One test cylinder from each group of three shall be tested at the end of 7 days, and two shall be tested at the end of 28 days. Each strength test result shall be the average of the strengths of two test cylinders at 28 days, except that if one cylinder in a set of two shows evidence of low strength due to improper sampling, casting, handling, or curing, the result of the remaining one cylinder shall be used.

The average of any three consecutive 28-day strength test results of the cylinders representing each class of concrete shall be equal to or greater than the specified strength and not more than 10 percent of the strength test results shall have values less than the specified 28-day strength for the total job concrete. No individual strength test results shall be less than the specified strength by more than 500 pounds per square inch.

Certified reports of the test results shall be provided directly to the Engineer. Test reports shall include sufficient information to identify the mix used, the stationing or location of the concrete placement, and the quantity placed. Slump and ambient temperature shall be noted.

If the 28-day test results fall below the specified compressive strength for the class of concrete required for any portion of the work, adjustment in the proportions, water content, or both, shall be made as necessary at the

Contractor's expense. Changes and adjustments shall be reported in writing to the Engineer.

If compressive test results indicate concrete in place may not meet structural requirements, tests shall be made to determine if the structure or portion thereof is structurally sound. Tests may include, but not be limited to, cores in accordance with ASTM C42 and any other analyses or load tests acceptable to the Engineer. The costs of such tests shall be borne by the Contractor.

- ii. **TESTS FOR CONSISTENCY OF CONCRETE:** The slump shall be as specified when measured in accordance with ASTM C143. Samples for slump determination shall be taken from the concrete during placing. Slump tests shall be performed whenever standard cylinders are cast.
- D. **Final Laboratory Report:** A final report, prepared by the testing laboratory, shall be provided at the completion of all concreting. This report shall summarize the findings concerning concrete used in the project and provide totals of concrete used by class and structure.

3.16. CLEANUP

Upon completion of the work and prior to final inspection, clean all concrete surfaces, except outside sidewalks or paved areas and those having curing and sealing compounds.

Part 4 - MEASUREMENT AND PAYMENT

Curb Ramp Removal and Replacement shall be measured by each curb ramp, which shall include sawcutting, removal and disposal of existing sidewalk, curb and gutter, and curb ramp, expansion joints if required, score joints, removal/replacement and compaction of base material, formwork, curing compound, rebar doweling, fine grading, the new detectable warning surface, removal and replacement of up to five (5) feet of sidewalk beyond the ramp's limits for any necessary conform, and up to two (2) feet of asphalt concrete conform per City Standard Drawing A-12. No additional or separate payment shall be made therefor. The contract unit price paid for "Remove and Replacement of Existing Curb Ramp" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all work involved in compliance with the CSS and these Technical Provisions.

****END OF SECTION****

SECTION 18 – EXISTING UTILITY FACILITIES’ ADJUSTMENT

Part 1 - GENERAL

1.01. DESCRIPTION

- A. This work shall consist of lowering and/or raising all manholes, water valve covers, traffic handholes, monuments, and other similar utility facilities within the project scope. The Contractor shall notify the Engineer on the utility adjustment schedule and coordinate with the affected utility owners accordingly.
- B. All utility facilities within the milling sections shall be lowered to a depth that will not conflict with and not be damaged by the subsequent grind/mill and AC overlay operations.
- C. The Contractor shall provide an emergency contact to the City for emergency/after-hours excavation and access to the City-owned lowered and covered utility facilities. The Contractor shall coordinate all utility adjustment work with the respective non-City utility owners.
- D. All covered utility facilities must be exposed within 24 hours and the structures raised to grade and paved within 72 hours of being covered by the final AC overlay pavement treatment.

1.02. SUBMITTALS

- A. Contractor shall submit a schedule for the lowering and raising of existing utility facility covers.
- B. Type A, 3/8-inch medium maximum gradation Asphalt Concrete Mix.
- C. Concrete mix design for concrete collar per City Standards
- D. GPS Coordinate Data of adjusted utility covers.
- E. Emergency contact for emergency/after-hours excavation and access of lowered/covered utility facilities.

1.03. RELATED SECTIONS

- A. Section 04 – Temporary Controls
- B. Section 07 – Traffic Control Systems
- C. Section 09 – Temporary Pavement Markings
- D. Section 11 – Clearing and Grubbing
- E. Section 13 – Asphalt Concrete Pavement

- F. Section 14 – Asphalt Concrete Fill / Overlay
- G. Section 15 – Full Depth Asphalt Pavement Repair
- H. Section 17 – Cast-In-Place Concrete

Part 2 - PRODUCTS

2.01. GENERAL

- A. Materials shall be furnished in conformance with City Standards and Drawings and the appropriate sections of the Caltrans Standard Specifications
- B. Composition: The following parameters shall be within the indicated limits and as necessary to produce the indicated compressive strengths.
 - i. Mix proportions as necessary.
 - ii. Entrained air content shall be between 10 to 20 percent.
 - iii. Water reducing agent content as necessary.
- C. Properties:
 - i. Density shall be between 120 PCF minimum and 145 PCF maximum.
 - ii. Slump shall be 5 to 8 inches.
 - iii. CLSM shall have a compressive strength not less than 100 psi or greater than 200 psi at 28 days.

2.02. CEMENT

Cement shall be Type II Modified in accordance with ASTM C 150 - Portland Cement. Mineral admixtures shall not be substituted for Portland cement.

2.03. ASPHALT CONCRETE

Asphalt Concrete mix used shall be Type A, 3/8-inch medium maximum gradation in accordance with Section 13.00, "Asphalt Concrete", of these Technical Specifications.

Part 3 - EXECUTION

3.01. GENERAL

- A. Determine the condition of existing utility cover. Pre-existing damage must be brought to the City's attention prior to commencement of any work.
- B. At least one working day prior to the utility adjustment operation, the Contractor shall locate and provide two offset reference points for all lowered/covered utility facilities. All paint markings on curbs, driveways, and other improvements shall be removed by the Contractor at the end of the project.
- C. The Contractor shall provide an emergency contact to the City for emergency/after-hours excavation and access to the City-owned lowered and covered utility facilities. The Contractor shall coordinate all utility adjustment work with the respective non-City utility owners.
- D. All utility facilities within the milling sections shall be lowered to a depth that will not conflict with and not be damaged by the subsequent grind/mill and AC overlay operations. The Contractor shall provide and place temporary, traffic-rated plates over the opening of the lowered utility facility. The plate shall be sized and placed as to not interrupt the utility's operations for the construction duration.
- E. The Contractor shall backfill all lowered utilities with Type A, 3/8-inch medium maximum gradation, in accordance with Section 13.00, "Asphalt Concrete", of these Technical Specifications.**
- F. All covered utility facilities must be exposed within 24 hours and the structures raised to grade and paved within 72 hours of being covered by the final AC overlay pavement treatment. The Contractor shall pay the City liquidated damages of \$500 for each calendar day the Contractor fails to raise the structures to grade after a three-calendar day period after being covered during the Contractor's operations. Any damage to the utility facilities caused by the Contractor shall be repaired in a timely manner at the expense of the Contractor.
- G. The Contractor shall survey the location of all utility covers within the project's limits with survey-grade global positioning system (GPS) equipment/units. The Contractor shall furnish the utility covers' GPS coordinate data to the City. The GPS coordinate data shall be in a format compatible with the City's geographic information system (GIS).

3.02. MANHOLE FRAME AND COVER

- A. Prior to work on adjusting manhole facilities, the channels in the manhole base shall be covered with a properly sized plywood or a similar material and then the entire base shall be covered with a heavy piece of canvas. This temporary

debris cover shall be kept in place during all work and, upon completion, the debris cover, and any debris shall be removed. The canvas and the plywood shall be removed to prevent any debris to fall or remain in the manhole's channel and/or bench. Any debris remaining in the manhole after removal of the canvas and plywood will be removed by the Contractor immediately.

- B. The existing manhole castings (i.e. frame and cover) shall be reused whenever possible. If either or both the frame and cover are not reusable, the Contractor shall provide and install new castings per the City Standards and Drawings at no cost to the City. City-owned manhole facilities shall be raised to finished grade in accordance with the following City Standard Drawings (available for download at <https://www.morgan-hill.ca.gov/641/Standard-Details>):
 - i. Sanitary Sewer Manhole: S-4
 - ii. Storm Drain: SD-1

3.03. WATER VALVE BOX AND COVER

- A. Prior to work on adjusting water valve facilities, the valve risers shall be plugged with clean cloth rags to prevent grinding and paving debris from filling the valve risers. After the final AC overlay operations, the valve riser shall be cleaned of loose grindings, asphalt concrete debris, and all other construction debris.
- B. The existing water valve riser, box and cover shall be reused whenever possible. If any or all the riser, box and cover are not reusable, the Contractor shall provide and install a new riser, box and/or cover per the and City Standards at no cost to the City.
- C. The water valve riser, box and cover shall be raised to finished grade in accordance with City Standard Drawing W-12.

3.04. WATER METER BOX AND COVER

- A. Prior to work on adjusting water meter facilities, the meter shall be plugged with clean cloth rags to prevent grinding and paving debris from filling the meter risers. After the final AC overlay operations, the meter riser shall be cleaned of loose grindings, asphalt concrete debris, and all other construction debris.
- B. The existing water meter riser, box and cover shall be reused whenever possible. If any or all the riser, box and cover are not reusable, the Contractor shall provide and install a new riser, box and/or cover per the and City Standards at no cost to the City.
- C. The water meter riser, box and cover shall be raised to finished grade in accordance with City Standard Drawing W-1. Concrete collar and traffic rated box and lid shall be installed in accordance with City Standard Drawing E-5.

3.05. TRAFFIC SIGNAL HANDHOLE BOX AND COVER

- A. The existing traffic signal handhole box and cover shall be reused whenever possible. If either or both the box and cover are not reusable, the Contractor shall provide and install new box and/or cover per the Caltrans and City Standards at no cost to the City.
- B. The traffic signal handhole box and cover shall be raised to finished grade in accordance with Caltrans Standard Plan ES-5D with a two-inch thick asphalt concrete section between the top of the concrete collar and finished pavement grade.

3.06. SURVEY MONUMENT BOX AND COVER

- A. The existing monument box and cover shall be reused whenever possible. If either or both the box and cover are not reusable, the Contractor shall provide and install new box and/or cover per the Caltrans and City Standards at no cost to the City.
- B. Contractor shall provide pictures with location of each monument prior to the lowering of any monument boxes. Inspector and/or project manager shall be notified of any issues with the lowering of existing boxes prior to any work.
- C. The Contractor shall notify the Engineer if any existing City survey monument will be disturbed by the utility lowering operations. Prior to disturbance of an existing City survey monument, the survey monument shall be located and referenced by or under the direction of a California-licensed Land Surveyor. The monuments shall be reset after the final AC overlay is placed. All corner records for reset survey monuments must be recorded with the County of Santa Clara prior to City project acceptance. All work to protect and preserve the City's survey monumentation shall be in accordance with the Professional Land Surveyors Act, State of California.
- D. Contractor is responsible for notifying the Engineer of any monuments not shown on the plans that will be disturbed during construction.
- E. Monuments and boxes shall be installed to the finished street grade. The Contractor shall bear the cost and responsibility for obtaining the services of a California registered Surveyor or Civil Engineer to tie out the existing monument, remark, and reset the monument. The Contractor shall be responsible for filing the appropriate Corner Records and shall provide a copy of all recorded documentation to the City prior to project acceptance.
- F. The survey monument box and cover shall be raised to finished grade in accordance with City Standard Drawing A-31.

Part 4 - MEASUREMENT AND PAYMENT

- A. Utility facilities' adjustments shall be measured by each utility unit lowered and/or raised, which shall include the new concrete collar, grouting, asphalt concrete conform paving and grouting, and collection and furnishing of the utility facilities' GPS location survey data. No additional or separate payment shall be made therefor. The contract unit price for "Locate, Lower and Raise Manhole Frame and Cover", "Locate, Lower, and Raise Valve Box and Cover or Monument Box and Cover", "Locate, Lower and Raise Handhole Box and Cover", and "Locate, Lower, and Raise Water Meter Box", shall include full compensation for furnishing all labor, materials, equipment, tools and incidentals, and for doing all work involved in adjusting the utility facilities as shown on the plans, as specified herein and as directed by the Engineer.
- B. **The Contractor shall pay the City liquidated damages of \$500 for each calendar day the Contractor fails to raise the structures to grade after a three-calendar day period after being covered during the Contractor's operations. Any damage to the utility facilities caused by the Contractor shall be repaired in a timely manner at the expense of the Contractor.**

****END OF SECTION****

SECTION 19 – CRACK SEAL

Part 1 - GENERAL

1.01. DESCRIPTION:

- A. The work to be done consists of furnishing all labor, equipment and materials and performing all operations necessary for the application of crack treatment material to seal cracks as directed by the Engineer.
- B. This work shall include sealing all pavement cracks up to 3/8-inch in width or as directed by the Engineer, for the full length visible including cracking around all manholes, water valve boxes, monuments and traffic signal loops.
- C. Crack sealing shall be performed after the following item of work has been performed: clearing and grubbing and full depth AC pavement repair and pavement micro-milling.
- D. If wet pavement conditions exist, the Contractor shall reschedule with the Engineer an appropriate time to crack seal.
- E. The Engineer shall make final determination of the crack seal schedule to be followed.**
- F. Locations to receive crack treatment / crack sealing shall be within the City of Morgan Hill limits. Locations may be outside of the project limits.

1.02. REFERENCES

- A. City of Morgan Hill
 - i. Standard Specifications and Details (latest edition)
- B. California Department of Transportation (CalTrans)
 - i. CalTrans Standard Specifications Section 37-6 – Crack Treatment

1.03. RELATED SECTIONS

- A. Section 07 – Traffic Control Systems
- B. Section 11 – Clearing and Grubbing

1.04. SUBMITTALS

- A. The Contractor shall submit a signed mix design covering the specific materials to be used on the project. The mix design submittal shall comply with Section 37-6.01C "Submittals" of the CSS.

Part 2 - PRODUCTS

- A. Crack sealing material shall be hot applied asphalt sealing compound, type 3 crack treatment material complying with the requirements of Section 37-6, "Crack Treatment" of the CSS. The material shall be heated and applied in accordance with the manufacturer's specifications. Material shall be of a type so as to not track, string or in any way be transferred to traffic after initial setting of the material. All due care and diligence shall be used to ensure the proper placing and setting of the material prior to allowing traffic on it.

Part 3 - EXECUTION

3.01. GENERAL

- A. Contractor shall allow seven (7) days after spray of any weeds within or at edges of pavement to ensure successful eradication prior to crack seal operations. If unsuccessful, the Contractor shall respray until the cracks are clean and dry to receive crack treatment.
- B. The street shall be swept with a power broom before start of application of crack seal.
- C. Cracks in the street pavements shall be sealed with hot applied sealing compound after cleaning of the cracks with a hot air lance.
- D. Routing of the cracks is not required, but cracks shall be blown out by compressed air prior to sealing operations.
- E. The crack sealant shall be applied in such a manner that it shall not protrude above the surface more than 1/4 inch. Any material more than 1/4 inch above the crack shall be spread with a squeegee to obtain a level surface over the filled crack.
- F. All cracks shall be free of moisture prior to sealing. No moisture shall be visible on the street at the time of sealant placement.
- G. In the event the material is transferred to vehicles prior to the opening of the street to traffic, the Contractor shall be responsible for cleaning those vehicles to the satisfaction of the Engineer and the vehicle owner.

Part 4 - MEASUREMENT AND PAYMENT

Crack sealing (revokable) shall be measured per lineal foot of crack receiving sealant. Payment for the crack seal work shall be per linear foot of sealant applied as necessary to seal all cracks and shall include furnishing all labor, materials, and equipment for transporting and placement of crack seal including all clearing and grubbing and preliminary and subsequent operations for the pavement cracks in accordance with Caltrans specifications and as modified by these special provisions and no additional payment shall be made therefore.

****END OF SECTION****

SECTION 20 - TRAFFIC STRIPES, PAVEMENT MARKINGS, AND DELINEATION

Part 1 - GENERAL

1.01. DESCRIPTION

- A. The Contractor shall furnish all tools, equipment, materials, and supplies and shall perform all labor required to apply traffic stripes and pavement markings at all locations where existing striping is disturbed or removed or where designated by the Engineer, and as specified in these Specifications.
- B. This work shall be done in accordance with Section 84 of the CSS and the CA-MUTCD as modified by these Technical Provisions. Traffic stripes, pavement marking, and delineation items shall include replacing all existing traffic stripes, words, and symbols, reflective and non-reflective pavement markers, fire hydrant blue marker, and other delineation as required on the streets to be resurfaced. Included also is any necessary removal, temporary delineation, site survey of existing layout and traffic control. It may be necessary to phase the construction of the striping in the interest of public safety. This work includes creating as-builts of the existing striping layout and replacing said striping back to the original layout unless otherwise directed by the Engineer in writing.
- C. All existing traffic stripes, pavement markings, and delineation shall be replaced in kind unless otherwise specified. Equipment, mixing, surface preparation, application, and tolerances for painting traffic stripes and pavement markings shall conform to Section 84 of the State of California, Department of Transportation Standard Specifications, except as amended by these Technical Specifications. Temporary layout marks and "cat tracking" (premarking) shall be placed by the Contractor for all striping (including limit lines and stop bars).
- D. Pavement markers shall be placed as they existed prior to trenching or application of the asphalt concrete overlay. All traffic stripes, pavement markings (legends) and pavement markers covered by any asphalt concrete overlay shall be replaced by the Contractor.
- E. Protection from Damage: All pavement markers in place (outside the limits of the work) at the time of the asphalt overlay shall be protected from damage and shall be clean and undamaged after completion of asphalt concrete overlay. Any damaged pavement markers shall be replaced in accordance with Section 81-3 of the State Standard Specifications at the Contractor's expense.
- F. Unless otherwise stated, striping widths shall be 4" for centerlines and lane lines as allowed for local agencies in Part 3 of the CA-MUTCD.

1.02. RELATED SECTIONS

- A. Section 07 – Traffic Control Systems
- B. Section 09 – Temporary Pavement Markings
- C. Section 21 – Traffic Signal Detector Loops

1.03. SUBMITTALS

- A. Specifications of primer to be used for application.
- B. Manufacturer's recommendation for type of epoxy to be used when installing markers.
- C. Samples of each thermoplastic pavement marking.
- D. Material submittals with Certificates of Compliance.
- E. Request for City Engineer field review and approval of Contractor applied "cat-tracking" of pavement traffic striping and markings.

Part 2 - PRODUCTS

2.01. GENERAL

- A. Unless otherwise stated, all striping shall be hot liquid thermoplastic.
- B. Materials shall be in conformance with CSS Section 84-2 "Traffic Stripes and Pavement Markings" and Section 81-3 "Pavement Markers".
- C. Thermoplastic material for traffic stripes shall be applied at a minimum thickness of 0.060 inch, except crosswalks shall be applied at a minimum thickness of 0.12 inch. All crosswalks and bike lane striping shall be non-skid. Thermoplastic material for pavement markings shall be applied at a thickness of .100-.150 inch. All streets are to receive thermoplastic stripes and pavement markings.
- D. Templates or stencils for pavement markings shall be of "English unit" dimensions and shall be approved by the Engineer prior to application.

2.02. AUTHORIZED MATERIAL LIST (AML)

- A. The Department of Transportation (Caltrans) maintains a list of materials authorized for use on Caltrans Construction projects. The Engineer shall not be precluded from sampling and testing products on the list of Authorized

Materials. The AML can be accessed via the following link:
<https://dot.ca.gov/programs/engineering-services/authorized-materials-lists>

- B. The manufacturer of products on the list of Authorized Materials shall furnish the Engineer a Certificate of Compliance in conformance with the provisions in Section 6-2.03C "Certificates of Compliance" for each type of traffic product supplied.
- C. For those categories of materials included in the AML for Signing and Delineation Materials, only those products shown within the listing may be used in the work. Other categories of products, not included in the AML, may be used in the work provided they conform to the requirements of the CSS and these Technical Specifications.

2.03. TRAFFIC STRIPES, PAVEMENT MARKINGS (LEGENDS), AND PAVEMENT MARKERS

- A. Pavement markers shall conform to the provisions in Section 81-3, Pavement Markers, of the State Standard Specifications and these Technical Specifications.
- B. All traffic stripes and markings (legends) shall be thermoplastic. Specifications are as follows:

DESCRIPTION	EXTRUSION MATERIAL		SPRAY MATERIAL	
	White	Yellow	White	Yellow
Glass Beads, AASHTO M247, Type 1, percent by weight	30 min.	30 min.	30 min.	30 min.
Titanium Dioxide (TiO_2), percent by weight	10 min.		10 min.	
Lead Chromate, medium heat stabilized, percent by weight	2.5 min.		2.5 min.	
Binder, percent by weight	18 min.	18 min.	18 min.	18 min.
Specific Gravity	2.15 max.	2.15 max.	2.15 max.	2.15 max.
Daylight Luminous Reflectance	75 min.	45 min.	75 min.	45 min.
Yellowness Index	0.13 max		0.13 max.	
Bond Strength to Concrete, psi	180 min.	180 min.	150 min.	150 min.
Ring & Ball Softening Point, degrees F	210 – 240	210 – 240	200 – 240	200 – 240

Impact Resistance, inch-pounds	10 min.	10 min.	10 min.	10 min.
Flowability, percent residue, stirred	18 max.	18 max.	15 max.	15 max.
Low Temperature Stress Cracking Resistance at 30 degrees F	No Crack	No Crack	No Crack	No Crack
Indentation	4575	4575	4575	4575
Color Match	Fed. Std. No. 595a, Color No. 13538		Fed. Std. No. 595a, Color No. 13538	
Bond Strength to Concrete with Manufacturer's Primer, psi	120 min.	120 min.	120 min.	120 min.

C. A maximum 4 percent by weight, of the total thermoplastic material mixture may be additives passing the 100-mesh sieve. Pigment, other than titanium dioxide or lead chromate, shall be calcium carbonate.

D. Legends, crosswalks, and stop bars, shall be thermoplastic unless otherwise stated. When thermoplastic is applied for crosswalks or bike lane striping, the following composition shall be used with a maximum thickness of 0.12 inches (3.0 mm):

- i. Binder 20% (18% min)
- ii. Glass Beads 20% (15% min)
- iii. TiO₂ Pigment 10% (7% min)
- iv. Filler 35% (37% max)
- v. Cullet 15% (10% min)

vi. The crushed glass cullet in such mixture shall be produced from cullet of clear glass, with a maximum size of 850 micrometers (100% passing by weight) and a minimum size of 425 micrometers (0-5% passing by weight). The skid resistance shall be a minimum of 55 BPN.

E. Yellow thermoplastic material shall closely match Color No. 13538 of Federal Standard No. 595a, after being heated for 4 hours at 425 degrees Fahrenheit, and then cooled to 77 degrees Fahrenheit.

F. Thermoplastic material for traffic stripes shall be applied at a minimum thickness of 0.100 inch.

G. Glass beads to be applied to the surface of the molten thermoplastic materials shall conform to the requirements of Section 84-2.02B of the CSS, State Specification 81-010-22L-22 (Type II), or AASHTO Designation: M247 (Type

- 1). Copies of State Specification 8010-22L-22 are available at the Transportation Laboratory located in Sacramento, California.

2.04. FLEXIBLE BIKEWAY SEPARATOR POSTS

- A. Flexible Bikeway Separator Posts shall be MASH compliant, with retroreflective sheeting, and comply with the CSS and the CA-MUTCD Parts 3 and 9.
- B. Flexible Bikeway Separator Posts shall be selected from the Authorized Material List or be an approved equal.

Part 3 - EXECUTION

3.01. GENERAL

- A. Construction and installation shall be per Sections 81 and 84 of the CSS. Removal of existing facilities shall be per Sections 84-9.01 and 84-9.03 of the CSS.
- B. The Contractor shall install striping, where possible, prior to opening the roadway to traffic and when indicated by the public's safety or convenience. If required, removal of existing striping shall be by wet sand blasting. All traffic stripes and pavement markings, new or existing, within or adjacent to the work limits, which become defaced or damaged during the Contractor's operations, shall be replaced by the Contractor at its expense concurrently with other traffic marking operations in the immediate area. The Engineer shall be the sole judge as to which stripes or legends are defaced or damaged. All new traffic striping shall include the reflective markers in conformance with the Caltrans Traffic Manual.
- C. Temporary Traffic Striping and Pavement Markings shall comply with Section 09 – Temporary Pavement Markings, of these Technical Specifications.

3.02. CONSTRUCTION EQUIPMENT

- A. Use equipment manufactured for pavement marking. Use workers experienced in operating such equipment.
- B. Locate bead applicator directly behind and synchronized with marking applicator.
- C. For thermoplastic paint materials, use equipment that is designed to agitate the paint to prevent scorching, discoloration, or excessive high temperatures.

3.03. PREPARATION

- A. Broom or flush the surface to remove dirt, loose stones, or other foreign material immediately prior to applying.
- B. Begin pavement painting and marking operations not later than 24 hours after receipt of written order by Engineer.
- C. Apply all materials in accordance with manufacturer's and Engineer's directions.
- D. Temporary layout marks and "cat tracking" (premarking) shall be placed by the Contractor for all striping (including limit lines and stop bars). Layout marks shall be approved by the Engineer prior to "cat tracking". Temporary "cat tracks" shall be approved by the Engineer prior to final striping.

3.04. THERMOPLASTIC PAINT STRIPING

- A. Clean off dirt, glaze, and grease before prestriping.
- B. Do not use materials which produce fumes that are toxic, obnoxious, or injurious to persons or property.
- C. Apply so that finish lines have well-defined edges free of waviness.

3.05. WORDS AND OTHER MARKINGS

When no longer required for the direction of public traffic, as determined by the City, the temporary traffic stripe and pavement marking tape and temporary pavement markers, applied to existing pavement, the top layer of new pavements or any other paved surface where the previously placed pavement delineation conflicts with the new traffic pattern, shall be removed and disposed of in accordance with the provisions of Section 12, Temporary Traffic Control, of the State Standard Specifications, and all lines and marks used to establish the alignment for the temporary traffic stripes, pavement markings and temporary pavement markers shall be removed from the pavement.

3.06. RAISED PAVEMENT MARKERS

- A. All raised pavement markers, removed or destroyed during construction, including blue markers for fire hydrants, shall be replaced per Caltrans standards and manufacturers recommendations.

3.07. FLEXIBLE BIKEWAY SEPARATOR POSTS

- A. Flexible Bikeway Separator Posts shall be installed in the roadway per the manufacturer's specifications.
- B. Contractor shall submit a cutsheet of the Flexible Bikeway Separator Post, including the manufacturer's installation procedure for City's review and approval.

3.08. LAYOUT

- A. All layout and cat tracking shall be performed by and at the expense of the Contractor, and shall be approved by the Engineer prior to placement of the permanent striping, markings, and markers. Schedule cat tracking with the City at least 48 hours in advance of the actual cat tracking work. Unless otherwise noted on the project plans and prior to obliteration of the existing striping for grinding and paving construction, the Contractor shall be responsible for documenting the existing roadway striping, markers, and markings configuration for restoration of the final striping treatment.
- B. Temporary "cat tracks" shall be placed for all striping (including limit lines) immediately after completing slurry sealing or asphalt concrete overlay of any street. Upon approval of the Contractor's cat tracking, all streets shall receive the first coat of permanent centerline, lane lines, stop limit lines, and crosswalks no sooner than seven (7) calendar days following the final resurfacing of the street. The Contractor shall maintain all temporary traffic striping, markings, and markers until the final striping, markings, and markers are installed and to the City's satisfaction.
- C. At locations with traffic loop detector restoration, the Contractor shall schedule the work such that the traffic loop detector restoration will occur prior to the permanent striping, markings, and marker installation.

3.09. PLACEMENT OF STRIPING, PAVEMENT MARKINGS, AND RAISED PAVEMENT MARKERS

- A. Permanent traffic stripes and pavement markings shall be installed no sooner than two (2) days, and no later than fourteen (14) days after paving.
- B. Raised pavement markers shall be installed no sooner than seven (7) days, and no later than fourteen (14) days after paving.

Part 4 - MEASUREMENT AND PAYMENT

- A. The quantity for pavement striping bid items shall be measured and paid by the actual number lineal feet as measured in the field. For striping requiring multiple lines, the composite section will count as a lineal foot of striping for

payment, not the total length of the individual component lines. Pavement markers used in traffic striping shall not be measured and paid separately. The bid items for pavement striping are "4" White Misc Striping", "6" Striping White", "12" Striping White", "High Visibility X-Walk Striping – 12" Yellow", "High Visibility X-Walk Striping – 24" Yellow", "Caltrans Detail 2", "Caltrans Detail 22", "Caltrans Detail 27B", "Caltrans Detail 29", "Caltrans Detail 38", "Caltrans Detail 39", and "Caltrans Detail 39A".

- B. The quantity for "YIELD LINE TRIANGLES - WHITE", "TYPE I Arrow", "TYPE IV (L) Arrow", 'TYPE IV (R) Arrow", 'TYPE VII (L) Arrow", "TYPE I (10) Arrow", "YELLOW WORD MARKING XING", "YELLOW WORD MARKING SCHOOL", YELLOW WORD MARKING "SLOW", "WHITE WORD MARKING STOP", "WHITE WORD MARKING AHEAD", "WHITE WORD MARKING 35", "BIKE LANE SYMBOL & BIKE LANE ARROW", "RAISED WHITE MARKERS", shall be measured and paid per marking/legend installed, as specified in the bid schedule.
- C. The quantity for the "Two-Way Blue Hydrant Reflectors" shall be measured and paid by each reflector installed.
- D. The quantity for the "Flexible Bikeway Separator Posts' shall be measured and paid by each post installed.
- E. The contract price paid for the bid items related to traffic stripes, pavement markings, raised reflective markers, and flexible bikeway separator posts as specified herein shall include full compensation for furnishing all labor, material, equipment, tools, and incidentals to install the traffic stripes, pavement markings, pavement markers, and flexible bikeway separator posts, complete in place, including removal of existing pavement striping and markings, removal of existing flexible bikeway separator posts, referencing existing striping and markings, layout and cat-tracking, and temporary pavement delineation, as shown on the plans, as specified herein and as directed by the Engineer.

****END OF SECTION****

SECTION 21 – TRAFFIC SIGNAL DETECTOR LOOPS

Part 1 - GENERAL

1.01. DESCRIPTION

- A. The Contractor shall furnish all tools, equipment, materials, and supplies and shall perform all labor required to replace/install traffic signal detector loops or where designated by the Engineer, and as specified in these Specifications.
- B. Traffic Signal Detector Loops shall conform to Section 86-5, "Detectors" of the CSS and these Technical Provisions.
- C. Loop configuration shall be Type E or Type E modified
- D. Contractor shall notify the City 72 hours in advance of work that affects any existing traffic signal detector loops.

1.02. REFERENCES

- E. California Department of Transportation (Caltrans)
 - i. Caltrans Standard Specifications Section 86-5 "Detectors"

Part 2 - PRODUCTS

2.01. DETECTORS

- A. Detectors shall be Type E or Type E modified per Caltrans Standard Plans ES-5B.

2.02. WIRE

- A. Detector lead-in cable shall be Type B.
- B. No splices shall be permitted in lead-in cables.
- C. Loop wire shall be Type 2 or match existing.

2.03. SEALANT

- A. Loop sealant shall be hot-melt type.

2.04. DETECTOR HANHOLE DETAIL

- A. Detector Handhole Details shall conform to Caltrans Standard Plans ES-5D.

Part 3 - EXECUTION

3.01. INSTALLATION

- A. Loops shall be centered within traffic lanes unless otherwise specified.
- B. If any iron (manhole, valve, monument, etc.) is located within two (2) feet of the planned location for home runs or the detector loop, the Contractor shall contact the Engineer for an alternate location for the detector loop or home run prior to cutting any of the loops or home runs in the affected lane(s).
- C. If any part of the loop conductor, including the portion leading to the adjacent pull box, is damaged by the Contractor's operations, the entire detector loop shall be replaced. If any adjacent loop is damaged during such work, that loop shall be replaced within seven (7) calendar days. The Contractor shall pay the City liquidated damages of \$500 per calendar day, for each day the Contractor fails to replace a damaged loop after the seven-calendar day period.
- D. The Contractor shall identify loop wires by lane number, loop number, and start/finish using tie wraps and permanent marker.
- E. At locations with permanent striping restoration work, the Contractor shall schedule the work such that the traffic loop detector restoration will occur prior to the permanent striping, markings, and marker installation but after cat-tracking (premarking) approval.

3.02. TESTING

- A. The Contractor shall test all individual loops and all DLC prior to splicing. The Contractor shall test loop sensitivity with either an approved lightweight motorcycle or an Engineer-approved wind wand.

Part 4 - MEASUREMENT AND PAYMENT

- A. Detector loops shall be measured by each replaced loop from actual count. The contract unit price paid per each for "Type E Traffic Detection Loops" and "Type E (Modified) Traffic Detection Loops" shall include full compensation for furnishing all labor, materials, equipment, tools and incidentals and for doing all the work involved in furnishing and installing traffic loops, complete in place, including lead- in cables, home-runs and functionality testing of new loop systems, sealing loops in place, and as described herein and as directed by the Engineer.
- B. If any adjacent loop is damaged by the Contractor during construction work, that loop shall be replaced within seven (7) calendar days. The Contractor shall

pay the City liquidated damages of \$500 per calendar day, for each day the Contractor fails to replace a damaged loop after the seven-calendar day period.

****END OF SECTION****

SECTION 22– SUPPLEMENTAL WORK

Part 1 - GENERAL

1.01. DESCRIPTION

- A. The work shall include any new or unforeseen work not specified for on the plans and specifications. The lump sum dollar amount listed in the bid schedule will be included in each bidder's proposal. Supplemental work shall be performed only upon direct written authorization from the Project Engineer. Agreed price may be used as an alternate method of payment, if directed by the Project Engineer.

Part 2 - PRODUCTS

Not Used

Part 3 - EXECUTION

Not Used

****END OF SECTION****

****END OF TECHNICAL SPECIFICATIONS****