

**CONTRACT DOCUMENTS AND
SPECIFICATIONS FOR
MAIN STREET BIKE PATH, SIDEWALK & CURB
INFILL PROJECT**



**CITY OF ESCALON
DEVELOPMENT SERVICES
2060 MCHENRY AVENUE
ESCALON, CA 95320**

SEPTEMBER 2023

TABLE OF CONTENTS

	<u>Page</u>
00 11 16 – NOTICE INVITING BIDS	1
00 21 13 – INSTRUCTIONS TO BIDDERS	4
ARTICLE 1. SECURING DOCUMENTS	4
ARTICLE 2. EXAMINATION OF SITE AND CONTRACT DOCUMENTS.....	4
ARTICLE 3. INTERPRETATION OF DRAWINGS AND DOCUMENTS	4
ARTICLE 4. PRE-BID CONFERENCE	5
ARTICLE 5. ADDENDA	5
ARTICLE 6. ALTERNATE BIDS	5
ARTICLE 7. COMPLETION OF BID FORMS	5
ARTICLE 8. MODIFICATIONS OF BIDS	6
ARTICLE 9. SUBCONTRACTORS.....	6
ARTICLE 10. LICENSING REQUIREMENTS	6
ARTICLE 11. BID GUARANTEE (BOND)	6
ARTICLE 12. IRAN CONTRACTING ACT OF 2010	7
ARTICLE 13. NONCOLLUSION DECLARATION	7
ARTICLE 14. PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION	7
ARTICLE 15. BIDDER INFORMATION AND EXPERIENCE FORM.....	7
ARTICLE 16. WORKERS' COMPENSATION CERTIFICATION	7
ARTICLE 17. SIGNING OF BIDS	8
ARTICLE 18. SUBMISSION OF SEALED BIDS	8
ARTICLE 19. OPENING OF BIDS	8
ARTICLE 20. WITHDRAWAL OF BID.....	9
ARTICLE 21. BIDDERS INTERESTED IN MORE THAN ONE BID	9
ARTICLE 22. SUBSTITUTION OF SECURITY	9
ARTICLE 23. PREVAILING WAGES	9
ARTICLE 24. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS	10
ARTICLE 25. INSURANCE REQUIREMENTS	10
ARTICLE 26. PERFORMANCE BOND AND PAYMENT BOND REQUIREMENTS.....	10
ARTICLE 27. SALES AND OTHER APPLICABLE TAXES, PERMITS, LICENSES AND FEES	10
ARTICLE 28. PERMIT AND INSPECTION FEE ALLOWANCE	10
ARTICLE 29. FILING OF BID PROTESTS	10
ARTICLE 30. BASIS OF AWARD; BALANCED BID	11

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
ARTICLE 31. AWARD PROCESS	11
ARTICLE 32. EXECUTION OF CONTRACT	11
ARTICLE 33. QUESTIONS.....	12
00 41 43 – BID FORMS	13
ARTICLE 1. INFORMATION ABOUT BIDDER	28
ARTICLE 2. LIST OF CURRENT PROJECTS (BACKLOG).....	31
ARTICLE 3. LIST OF COMPLETED PROJECTS – LAST THREE YEARS.....	32
ARTICLE 4. EXPERIENCE AND TECHNICAL QUALIFICATIONS QUESTIONNAIRE	33
ARTICLE 5. VERIFICATION AND EXECUTION.....	34
00 52 13 – CONTRACT	39
MAIN STREET BIKE PATH, SIDEWALK, & CURB INFILL PROJECT	39
00 61 13 – BOND FORMS	43
00 72 13 – GENERAL CONDITIONS.....	52
ARTICLE 1. DEFINED TERMS	52
ARTICLE 2. CONTRACT DOCUMENTS	56
ARTICLE 3. PRECONSTRUCTION AND CONSTRUCTION COMMUNICATION.....	56
ARTICLE 4. CONTRACT DOCUMENTS: COPIES & MAINTENANCE	57
ARTICLE 5. EXAMINATION OF DRAWINGS, SPECIFICATIONS AND SITE OF WORK	57
ARTICLE 6. MOBILIZATION	57
ARTICLE 7. EXISTENCE OF UTILITIES AT THE WORK SITE.....	58
ARTICLE 8. SOILS INVESTIGATIONS	59
ARTICLE 9. CONTRACTOR’S SUPERVISION	60
ARTICLE 10. WORKERS	60
ARTICLE 11. INDEPENDENT CONTRACTORS	60
ARTICLE 12. SUBCONTRACTS	60
ARTICLE 13. VERIFICATION OF EMPLOYMENT ELIGIBILITY	61
ARTICLE 14. REQUESTS FOR SUBSTITUTION.....	61
ARTICLE 15. SHOP DRAWINGS	62
ARTICLE 16. SUBMITTALS	63
ARTICLE 17. MATERIALS	63
ARTICLE 18. PERMITS AND LICENSES.....	64
ARTICLE 19. TRENCHES.....	64

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
ARTICLE 20. TRAFFIC CONTROL	65
ARTICLE 21. DIVERSION OF RECYCLABLE WASTE MATERIALS	66
ARTICLE 22. REMOVAL OF HAZARDOUS MATERIALS	66
ARTICLE 23. SANITARY FACILITIES	66
ARTICLE 24. AIR POLLUTION CONTROL	66
ARTICLE 25. LAYOUT AND FIELD ENGINEERING	67
ARTICLE 26. TESTS AND INSPECTIONS.....	67
ARTICLE 27. PROTECTION OF WORK AND PROPERTY.....	67
ARTICLE 28. CONTRACTOR'S MEANS AND METHODS.....	68
ARTICLE 29. AUTHORIZED REPRESENTATIVES	68
ARTICLE 30. HOURS OF WORK.....	68
ARTICLE 31. PAYROLL RECORDS; LABOR COMPLIANCE	69
ARTICLE 32. PREVAILING RATES OF WAGES	70
ARTICLE 33. PUBLIC WORKS CONTRACTOR REGISTRATION	71
ARTICLE 34. EMPLOYMENT OF APPRENTICES	71
ARTICLE 35. NONDISCRIMINATION/EQUAL EMPLOYMENT OPPORTUNITY	72
ARTICLE 36. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS	72
ARTICLE 37. LABOR/EMPLOYMENT SAFETY	73
ARTICLE 38. INSURANCE.....	73
ARTICLE 39. FORM AND PROOF OF CARRIAGE OF INSURANCE	76
ARTICLE 40. TIME FOR COMPLETION AND LIQUIDATED DAMAGES	77
ARTICLE 41. COST BREAKDOWN AND PERIODIC ESTIMATES	78
ARTICLE 42. PROGRESS ESTIMATES AND PAYMENT	78
ARTICLE 43. SECURITIES FOR MONEY WITHHELD.....	80
ARTICLE 44. CHANGES AND EXTRA WORK.....	80
ARTICLE 45. FINAL ACCEPTANCE AND PAYMENT	94
ARTICLE 46. OCCUPANCY	95
ARTICLE 47. INDEMNIFICATION	95
ARTICLE 48. PROCEDURE FOR RESOLVING DISPUTES	96
ARTICLE 49. CITY'S RIGHT TO TERMINATE CONTRACT	100
ARTICLE 50. WARRANTY AND GUARANTEE OF WORK.....	102
ARTICLE 51. DOCUMENT RETENTION & EXAMINATION	105
ARTICLE 52. SEPARATE CONTRACTS.....	105
ARTICLE 53. NOTICE AND SERVICE THEREOF	106

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
ARTICLE 54. NOTICE OF THIRD PARTY CLAIMS.....	106
ARTICLE 55. STATE LICENSE BOARD NOTICE	106
ARTICLE 56. INTEGRATION	106
ARTICLE 57. ASSIGNMENT OF CONTRACT.....	106
ARTICLE 58. CHANGE IN NAME AND NATURE OF CONTRACTOR'S LEGAL ENTITY	107
ARTICLE 59. ASSIGNMENT OF ANTITRUST ACTIONS.....	107
ARTICLE 60. PROHIBITED INTERESTS	107
ARTICLE 61. CONTROLLING LAW	107
ARTICLE 62. JURISDICTION; VENUE.....	107
ARTICLE 63. LAWS AND REGULATIONS.....	107
ARTICLE 64. PATENTS	108
ARTICLE 65. OWNERSHIP OF CONTRACT DOCUMENTS	108
ARTICLE 66. NOTICE OF TAXABLE POSSESSORY INTEREST	108
ARTICLE 67. SURVIVAL OF OBLIGATIONS	108
00 73 13 – SPECIAL CONDITIONS.....	109
01 00 00 – GENERAL REQUIREMENTS.....	112
EXHIBIT “A” CHANGE ORDER FORM	130
02 00 00 – TECHNICAL SPECIFICATIONS	132

00 11 16 – NOTICE INVITING BIDS

NOTICE IS HEREBY GIVEN that the City of Escalon ("City") invites and will receive sealed Bids up to but not later than **10:00 a.m. on Tuesday December 12, 2023** at the office of the City Clerk, located at 2060 McHenry Avenue, Escalon, California 95320, for the furnishing to City of all labor, equipment, materials, tools, services, transportation, permits, utilities, and all other items necessary for City of Escalon Main Street Bike Path, Sidewalk, & Curb Infill Project (the "Project"). At said time, Bids will be publicly opened and read aloud at City Hal. Bids received after said time shall be returned unopened. Bids shall be valid for a period of 90 calendar days after the Bid opening date.

MAIN STREET BIKE PATH, SIDEWALK, & CURB INFILL PROJECT

The project consists of the installation of sidewalk and improved bike and pedestrian safety along Main Street including ADA curb ramps, improved striping, concrete bulb outs at the intersection with 4th Street and bike lane striping south of the intersection. An asphalt bike path, additional parking and a restroom will be installed in Main Street Park. The improvement of existing facilities of the electrical system and irrigation system.

Bidders must be pre-qualified. Bids must be submitted on the City's Bid Forms. Bidders must obtain an electronic or paper copy of the Contract Documents by email, Public Purchase, or at City Hall. Paper copies from City Hall cost TWENTY-FIVE DOLLARS (\$25.00). All Bidders must pre-register before the bid opening with the City of Escalon Community Development / Public Works Office (Jenny Thompson: jthompson@cityofescalon.org). A non-refundable charge of THIRTY-FIVE DOLLARS (\$35.00) will be required of any bidder who requests that the Contract Documents be mailed within California (costs for out-of-state mailings will be higher).

The City of Escalon requires all bidders on City public works projects requiring a Class A contractor license with a contract value greater than \$100,000, or as determined by the City Engineer, must be prequalified as a condition of bidding on said projects. It is mandatory that all contractors who intend to submit bids fully complete the prequalification questionnaire, provide all materials requested, and be approved by the City to be on the final bidders list. No bid will be accepted from a Contractor that has failed to comply with these requirements. Prequalification packages can be obtained at Escalon City Hall or on our website at http://cityofescalon.org/government/requests_for_proposals

Please visit the City's RFP webpage at http://cityofescalon.org/government/requests_for_proposals to see how to join Public Purchase, an eProcurement system that gives access to bid opportunities for no charge. Bidders are still required to obtain a copy of the Contract Documents from City Hall or an electronic copy email in order to be added to the City's official Plan's Holder's List for said Project. All bidding contractors shall be registered with the City of Escalon. Contractors picking up physical hardcopy plans shall register at the counter with their company name, address, contact person, phone number, and email address. Contractors obtaining plans electronically (public purchase, plan rooms, email) shall contact the City Staff(Jenny Thompson: jthompson@cityofescalon.org) with their company name, address, contact person, phone number, and email address.

Contact is Escalon Community Development / Public Works Office (Jenny Thompson: jthompson@cityofescalon.org).

Each Bid shall be accompanied by cash, a certified or cashier's check, or Bid Bond secured from a surety company satisfactory to the City, the amount of which shall not be less than ten percent (10%) of the submitted Total Bid Price, made payable to City of Escalon as bid security. The bid security shall be provided as a guarantee that within five (5) working days after the City provides the successful bidder the Notice of Award, the successful Bidder will enter into a contract and provide the necessary bonds and certificates of insurance. The bid security will be declared forfeited if the successful Bidder fails to comply within said time. No interest will be paid on funds deposited with City.

The successful Bidder will be required to furnish a Faithful Performance Bond and a Labor and Material Payment Bond each in an amount equal to one hundred percent (100%) of the Contract Price. Each bond shall be in the forms set forth herein, shall be secured from a surety company that meets all State of California bonding requirements, as defined in California Code of Civil Procedure Section 995.120, and that is a California admitted surety insurer.

Pursuant to Section 22300 of the Public Contract Code of the State of California, the successful Bidder may substitute certain securities for funds withheld by City to ensure its performance under the contract.

Pursuant to Labor Code Section 1773, City has obtained the prevailing rate of per diem wages and the prevailing wage rate for holiday and overtime work applicable in San Joaquin County from the Director of the Department of Industrial Relations for each craft, classification, or type of worker needed to execute this contract. A copy of these prevailing wage rates may be obtained via the internet at: www.dir.ca.gov/dlsr/

In addition, a copy of the prevailing rate of per diem wages is available at the City's Development Services Department and shall be made available to interested parties upon request. The successful bidder shall post a copy of the prevailing wage rates at each job site. It shall be mandatory upon the Bidder to whom the Contract is awarded, and upon any subcontractors, to comply with all Labor Code provisions, which include but are not limited to the payment of not less than the said specified prevailing wage rates to all workers employed by them in the execution of the Contract, employment of apprentices, hours of labor and debarment of contractors and subcontractors.

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No Bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a contract, the Bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. In bidding on this Project, it shall be the Bidder's sole responsibility to evaluate and include the cost of complying with all labor compliance requirements under this contract and applicable law in its Bid.

Unless otherwise provided in the Instructions for Bidders, each Bidder shall be a licensed contractor pursuant to sections 7000 et seq. of the Business and Professions Code in the following classification(s) throughout the time it submits its Bid and for the duration of the contract: General Engineering Contractor Class A License.

Substitution requests shall be made within 35 calendar days after the award of the contract. Pursuant to Public Contract Code Section 3400(b), the City may make findings designating that certain additional materials, methods or services by specific brand or trade name other than those listed in the Standard Specifications be used for the Project. Such findings, if any, as well as the materials, methods or services and their specific brand or trade names that must be used for the Project may be found in the Special Conditions.

City shall award the contract for the Project to the lowest responsive, responsible Bidder as determined by the City from the BASE BID ALONE. City reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding process.

For further information, contact NICK PRICHARD, City Engineer, at nprichard@ardurra.com

END OF NOTICE INVITING BIDS

00 21 13 – INSTRUCTIONS TO BIDDERS

ARTICLE 1. SECURING DOCUMENTS

Bids must be submitted to the City on the Bid Forms which are a part of the Bid Package for the Project. Bid and Contract Documents may be obtained from the City at the location(s) and at the time(s) indicated in the Notice Inviting Bids. Prospective bidders are encouraged to telephone in advance to determine the availability of Contract Documents. Any charge for the Contract Documents is stated in the Notice Inviting Bids.

The City may also make the Contract Documents available for review at one or more plan rooms, as indicated in the Notice Inviting Bids. Please Note: Prospective Bidders who choose to review the Contract Documents at a plan room must contact the City to obtain the required Contract Documents if they decide to submit a bid for the Project.

Addenda, if any, issued during the bid period will be sent only to those contractors who have obtained registered with the City. Failure to acknowledge addenda may make a bid nonresponsive and not eligible for award of the contract.

ARTICLE 2. EXAMINATION OF SITE AND CONTRACT DOCUMENTS

At its own expense and prior to submitting its Bid, each Bidder shall visit the site of the proposed work and fully acquaint itself with the conditions relating to the construction and labor required so that the Bidder may fully understand the work, including but not limited to difficulties and restrictions attending the execution of the work under the contract. Each Bidder shall carefully examine the Drawings, and shall read the Specifications, Contract, and all other documents referenced herein. Each Bidder shall also determine the local conditions which may in any way affect the performance of the work, including local tax structure, contractors' licensing requirements, availability of required insurance, the prevailing wages and other relevant cost factors, shall familiarize itself with all federal, state and local laws, ordinances, rules, regulations and codes affecting the performance of the work, including the cost of permits and licenses required for the work, and shall make such surveys and investigations, including investigations of subsurface or latent physical conditions at the site or where work is to be performed as may be required. Bidders are responsible for consulting the standards referenced in the Contract. The failure or omission of any Bidder to receive or examine any contract documents, forms, instruments, addenda, or other documents, or to visit the site and acquaint itself with conditions there existing shall in no way relieve any Bidder from any obligation with respect to its Bid or to the contract and no relief for error or omission will be given except as required under State law. The submission of a Bid shall be taken as conclusive evidence of compliance with this Article.

ARTICLE 3. INTERPRETATION OF DRAWINGS AND DOCUMENTS

Prospective Bidders unclear as to the true meaning of any part of the Drawings, Specifications or other proposed contract documents may submit to the Engineer of the City a written request for interpretation. The prospective Bidder submitting the request is responsible for prompt delivery. Interpretation of the Drawings, Specifications or other proposed contract documents will be made only by a written addendum duly issued and a copy of such addenda will be mailed or delivered to each prospective Bidder who has purchased a set of Drawings and Specifications. The City will not be responsible for any other explanation or interpretations of the proposed documents. If a Prospective Bidders becomes aware of any errors or omissions in any part of the Contract Documents, it is the obligation of the Prospective Bidder to promptly bring it to the attention of the

City.

ARTICLE 4. PRE-BID CONFERENCE

A Non-Mandatory Pre-Bid Conference is scheduled for 10:00 a.m. on Thursday, November 16, 2023 to review the Project's existing conditions at 1771 Main Street, Escalon, CA 95320. Representatives of the City and consulting engineers, if any, will be present. Questions asked by Bidders at the Pre-Bid Conference not specifically addressed within the Contract Documents shall be answered in writing.

ARTICLE 5. ADDENDA

The City reserves the right to revise the Contract Documents prior to the Bid opening date. Revisions, if any, shall be made by written Addenda. All Addenda issued by the City shall be included in the Bid and made part of the Contract Documents. Pursuant to Public Contract Code Section 4104.5, if the City issues an Addendum which includes material changes to the Project less than 72 hours prior to the deadline for submission of Bids, the City will extend the deadline for submission of Bids. The City may determine, in its sole discretion, whether an Addendum warrants postponement of the Bid submission date. Each prospective Bidder shall provide City a name, address, email address, and facsimile number to which Addenda may be sent, as well as a telephone number by which the City can contact the Bidder. Copies of Addenda will be furnished by email, facsimile, first class mail, express mail or other proper means of delivery without charge to all parties who have obtained a copy of the Contract Documents and provided such current information. Please Note: Bidders are responsible for ensuring that they have received any and all Addenda. To this end, each Bidder should contact the Engineering Department to verify that it has received all Addenda issued, if any, prior to the Bid opening. The Bidder shall indicate the Addenda received prior to bidding in the space provided in the Bid Form. Failure to indicate all Addenda may be sufficient cause for rejecting the Bid.

ARTICLE 6. ALTERNATE BIDS

If alternate bid items are called for in the Contract Documents, the time required for completion of the alternate bid items has already been factored into the Contract duration and no additional Contract time will be awarded for any of the alternate bid items. The City may elect to include one or more of the alternate bid items, or to otherwise remove certain work from the Project scope of work. Accordingly, each bidder must ensure that each bid item contains a proportionate share of profit, overhead, and other costs or expenses which will be incurred by the bidder.

ARTICLE 7. COMPLETION OF BID FORMS

Bids shall only be prepared using copies of the Bid Forms which are included in the Contract Documents. The use of substitute Bid Forms other than clear and correct photocopies of those provided by the City will not be permitted. Bids shall be executed by an authorized signatory as described in these Instructions to Bidders. In addition, Bidders shall fill in all blank spaces (including inserting "N/A" where applicable), and initial all interlineations, alterations, or erasures to the Bid Forms. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms nor make substitutions thereon. **USE OF BLACK OR BLUE INK, INDELIBLE PENCIL, OR A TYPEWRITER IS REQUIRED.** Deviations in the Bid Forms may result in the Bid being deemed non-responsive.

ARTICLE 8. MODIFICATIONS OF BIDS

Each Bidder shall submit its Bid in strict conformity with the requirements of the Contract Documents. Unauthorized additions, modifications, revisions, conditions, limitations, exclusions or provisions attached to a Bid may render it non-responsive and may cause its rejection. Bidders shall not delete, modify, or supplement the printed matter on the Bid Forms, or make substitutions thereon. Oral, telephonic and electronic modifications will not be considered.

ARTICLE 9. SUBCONTRACTORS

Bidder shall set forth the name, address of the place of business, and contractor license number of each subcontractor who will perform work, labor, furnish materials or render services to the bidder on said contract and each subcontractor licensed by the State of California who, under subcontract to bidder, specially fabricates and installs a portion of the Work described in the Drawings and Specifications in an amount in excess of one half of one percent (0.5%) of the total bid price, and shall indicate the portion of the work to be done by such subcontractor in accordance with Public Contract Code Section 4104.

ARTICLE 10. LICENSING REQUIREMENTS

Pursuant to Business and Professions Code Section 7028.15 and Public Contract Code Section 3300, all bidders must possess proper licenses for performance of this Contract. Subcontractors must possess the appropriate licenses for each specialty subcontracted. Pursuant to Business and Professions Code Section 7028.5, the City shall consider any bid submitted by a contractor not currently licensed in accordance with state law and pursuant to the requirements found in the Contract Documents to be nonresponsive, and the City shall reject the Bid. The City shall have the right to request, and Bidders shall provide within ten (10) calendar days, evidence satisfactory to the City of all valid license(s) currently held by that Bidder and each of the Bidder's subcontractors, before awarding the Contract.

Notwithstanding anything contained herein, if the Work involves federal funds, the Contractor shall be properly licensed by the time the Contract is awarded, pursuant to the provisions of Public Contract Code section 20103.5.

All Contractors and Subcontractors must obtain a City of Escalon business license prior to starting work.

ARTICLE 11. BID GUARANTEE (BOND)

Each bid shall be accompanied by: (a) cash; (b) a certified or cashier's check made payable to City of Escalon; or (c) a Bid Bond secured from a surety company satisfactory to the City, the amount of which shall not be less than ten percent (10%) of the Total Bid Price, made payable to City of Escalon as bid security. Personal sureties and unregistered surety companies are unacceptable. The surety insurer shall be California admitted surety insurer, as defined in Code of Civil Procedure Section 995.120. The bid security shall be provided as a guarantee that within ten (10) working days after the City provides the successful bidder the Notice of Award, the successful bidder will enter into a contract and provide the necessary bonds and certificates of insurance. The bid security will be declared forfeited if the successful bidder fails to comply within said time, and City may enter into a contract with the next lowest responsive responsible bidder, or may call for new bids. No interest shall be paid on funds deposited with the City. City will

return the security accompanying the bids of all unsuccessful bidders no later than 60 calendar days after award of the contract.

ARTICLE 12. IRAN CONTRACTING ACT OF 2010

In accordance with Public Contract Code Section 2200 *et seq.*, the City requires that any person that submits a bid or proposal or otherwise proposes to enter into or renew a contract with the City with respect to goods or services of one million dollars (\$1,000,000) or more, certify at the time the bid is submitted or the contract is renewed, that the person is not identified on a list created pursuant to subdivision (b) of Public Contract Code Section 2203 as a person engaging in investment activities in Iran described in subdivision (a) of Public Contract Code Section 2202.5, or as a person described in subdivision (b) of Public Contract Code Section 2202.5, as applicable.

The form of such Iran Contracting Certificate is included with the bid package and must be signed and dated under penalty of perjury.

ARTICLE 13. NONCOLLUSION DECLARATION

Bidders on all public works contracts are required to submit a declaration of non-collusion with their bid. This form is included with the bid package and must be signed and dated under penalty of perjury.

ARTICLE 14. PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a contract, the bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. To this end, Bidder shall sign and submit with its Bid the Public Works Contractor Registration Certification on the form provided, attesting to the facts contained therein. Failure to submit this form may render the bid non-responsive. In addition, each Bidder shall provide the registration number for each listed subcontractor in the space provided in the Designation of Subcontractors form.

ARTICLE 15. BIDDER INFORMATION AND EXPERIENCE FORM

Each Bidder shall complete the questionnaire provided herein and shall submit the questionnaire along with its Bid. Failure to provide all information requested within the questionnaire along with the Bid may cause the bid to be rejected as non-responsive. The City reserves the right to reject any Bid if an investigation of the information submitted does not satisfy the Engineer that the Bidder is qualified to properly carry out the terms of the contract.

ARTICLE 16. WORKERS' COMPENSATION CERTIFICATION

In accordance with the provisions of Labor Code Section 3700, Contractor shall secure the payment of compensation to its employees. Contractor shall sign and file with the City the following certificate prior to performing the work under this Contract:

I am aware of the provisions of Section 3700 of the Labor Code, 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 of this contract.

The form of such Workers' Compensation Certificate is included as part of this document.

ARTICLE 17. SIGNING OF BIDS

All Bids submitted shall be executed by the Bidder or its authorized representative. Bidders may be asked to provide evidence in the form of an authenticated resolution of its Board of Directors or a Power of Attorney evidencing the capacity of the person signing the Bid to bind the Bidder to each Bid and to any Contract arising therefrom.

If a Bidder is a joint venture or partnership, it may be asked to submit an authenticated Power of Attorney executed by each joint venturer or partner appointing and designating one of the joint venturers or partners as a management sponsor to execute the Bid on behalf of Bidder. Only that joint venturer or partner shall execute the Bid. The Power of Attorney shall also: (1) authorize that particular joint venturer or partner to act for and bind Bidder in all matters relating to the Bid; and (2) provide that each venturer or partner shall be jointly and severally liable for any and all of the duties and obligations of Bidder assumed under the Bid and under any Contract arising therefrom. The Bid shall be executed by the designated joint venturer or partner on behalf of the joint venture or partnership in its legal name.

ARTICLE 18. SUBMISSION OF SEALED BIDS

Once the Bid and supporting documents have been completed and signed as set forth herein, they shall be placed, along with the Bid Guarantee and other required materials, in a sealed envelope, addressed and delivered or mailed, postage prepaid, to the Engineering Department of the City before the time and day set for the receipt of bids. The envelope shall bear the title of the work and the name of the bidder. No oral or telephonic bids will be considered. No forms transmitted via the internet, e-mail, facsimile, or any other electronic means will be considered unless specifically authorized by the City as provided herein. Bids received after the time and day set for the receipt of bids shall be returned to the bidder unopened. The envelope shall also contain the following in the lower left-hand corner thereof:

Bid of _____ (Bidder's Name)
for the Main Street Bike Path, Sidewalk, & Curb Infill Project

Only where expressly permitted in the Notice Inviting Bids may bidders submit their bids via electronic transmission pursuant to Public Contract Code sections 1600 and 1601. Any acceptable method(s) of electronic transmission shall be stated in the Notice Inviting Bids. City may reject any bid not strictly complying with City's designated methods for delivery.

ARTICLE 19. OPENING OF BIDS

At the time and place set for the opening and reading of bids, or any time thereafter, each and every bid received prior to the time and day set for the receipt of bids will be publicly opened and read. The City will leave unopened any Bid received after the specified date and time, and any such unopened Bid will be returned to the bidder. It is the bidder's sole responsibility to ensure that its Bid is received as specified. Bids may be submitted earlier than the date(s) and time(s)

indicated.

The public reading of each bid will include the following information:

- A. The name and business location of the bidder.
- B. The nature and amount of the bid security furnished by bidder.
- C. The bid amount.

Bidders or their representatives and other interested persons may be present at the opening of the bids. The City may, in its sole discretion, elect to postpone the opening of the submitted Bids. The City reserves the right to reject any or all Bids and to waive any informality or irregularity in any Bid.

ARTICLE 20. WITHDRAWAL OF BID

Any bid may be withdrawn either personally or by written request, incurring no penalty, at any time prior to the scheduled closing time for receipt of bids. Requests to withdraw bids shall be worded so as not to reveal the amount of the original bid. Withdrawn bids may be resubmitted until the time and day set for the receipt of bids, provided that resubmitted bids are in conformance with the instructions herein.

Bids may be withdrawn after bid opening only by providing written notice to City within five (5) working days of the bid opening and in compliance with Public Contract Code Section 5100 *et seq.*, or as otherwise may be allowed with the consent of the City.

ARTICLE 21. BIDDERS INTERESTED IN MORE THAN ONE BID

No Bidder shall be allowed to make, file or be interested in more than one bid for the same work unless alternate bids are specifically called for. A person, firm or corporation that has submitted a sub-proposal to a Bidder, or that has quoted prices of materials to a Bidder, is not thereby disqualified from submitting a sub-proposal or quoting prices to other bidders. No person, firm, corporation, or other entity may submit a sub-proposal to a Bidder, or quote prices of materials to a Bidder, when also submitting a prime Bid on the same Project.

ARTICLE 22. SUBSTITUTION OF SECURITY

The Contract Documents call for monthly progress payments based upon the percentage of the Work completed. The City will retain a percentage of each progress payment as provided by the Contract Documents. At the request and expense of the successful Bidder, the City will substitute securities for the amount so retained in accordance with Public Contract Code Section 22300.

ARTICLE 23. PREVAILING WAGES

The City has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract. These rates are available at the Development Services Department of the City or may be obtained online at <http://www.dir.ca.gov>. Bidders are advised that a copy of these rates must be posted by the successful Bidder at the job site(s).

ARTICLE 24. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS

In accordance with the provisions of the Labor Code, contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Labor Code Sections 1777.1 or 1777.7. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid to a debarred subcontractor by the Contractor for the Project shall be returned to the City. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.

ARTICLE 25. INSURANCE REQUIREMENTS

Prior to commencing work, the successful bidder shall purchase and maintain insurance as set forth in the General Conditions.

ARTICLE 26. PERFORMANCE BOND AND PAYMENT BOND REQUIREMENTS

The successful bidder will be required to furnish a Labor and Material Payment Bond and a Faithful Performance Bond each in an amount equal to one hundred percent (100%) of the contract price. Each bond shall be secured from a surety company that meets all State of California bonding requirements, as defined in California Code of Civil Procedure Section 995.120 and is admitted by the State of California. Each bond shall be accompanied, upon the request of City, with all documents required by California Code of Civil Procedure Section 995.660 to the extent required by law. All bonding and insurance requirements shall be completed and submitted to City within ten (10) working days from the date the City provides the successful bidder with the Notice of Award.

ARTICLE 27. SALES AND OTHER APPLICABLE TAXES, PERMITS, LICENSES AND FEES

Contractor and its subcontractors performing work under this Contract will be required to pay California sales tax and other applicable taxes, and to pay for permits, licenses and fees required by the agencies with authority in the jurisdiction in which the Work will be located, unless otherwise expressly provided by the Contract Documents.

ARTICLE 28. PERMIT AND INSPECTION FEE ALLOWANCE

Notwithstanding anything contained herein, the Bid Form contains an allowance for the Contractor's cost of acquiring traffic control permits and for construction inspection fees that may be charged to the Contractor by the Agency of Jurisdiction. The allowance is included within the Bid Form to eliminate the need by bidders to research or estimate the costs of traffic control permits and construction inspection fees prior to submitting a bid. The allowance is specifically intended to account for the costs of traffic control permits and construction inspection fees charged by the local Agency of Jurisdiction only. No other costs payable by Contractor to the Agency of Jurisdiction are included within the allowance.

ARTICLE 29. FILING OF BID PROTESTS

Bidders may file a "protest" of a Bid with the City's Engineer. In order for a Bidder's protest to be considered valid, the protest must:

- A. Be filed in writing within five (5) calendar days after the bid opening date;
- B. Clearly identify the specific irregularity or accusation;
- C. Clearly identify the specific City staff determination or recommendation being protested;
- D. Specify in detail the grounds for protest and the facts supporting the protest; and
- E. Include all relevant, supporting documentation with the protest at time of filing.

If the protest does not comply with each of these requirements, the City may reject the protest without further review.

If the protest is timely and complies with the above requirements, the City's Engineer, or other designated City staff member, shall review the protest, any response from the challenged Bidder(s), and all other relevant information. The City Engineer will provide a written decision to the protestor.

The procedure and time limits set forth in this Article are mandatory and are the sole and exclusive remedy in the event of a Bid protest. Failure to comply with these procedures shall constitute a failure to exhaust administrative remedies and a waiver of any right to further pursue the Bid protest, including filing a Government Code Claim or legal proceedings.

ARTICLE 30. BASIS OF AWARD; BALANCED BID

The City shall award the Contract to the lowest responsible Bidder submitting a responsive Bid. The lowest Bid will be determined on the basis of the Total Bid Price.

The City may reject any Bid which, in its opinion when compared to other Bids received or to the City's internal estimates, does not accurately reflect the cost to perform the Work. The City may reject as non-responsive any Bid which unevenly weights or allocates costs, including but not limited to overhead and profit to one or more particular bid items.

ARTICLE 31. AWARD PROCESS

Once all Bids are opened and reviewed to determine the lowest responsive and responsible Bidder, the City may award the contract. The apparent successful Bidder should begin to prepare the following documents: (1) the Performance Bond; (2) the Payment Bond; and (3) the required insurance certificates and endorsements. Once the City notifies the Bidder of the award, the Bidder will have ten (10) working days from the date of this notification to execute the Contract and supply the City with all of the required documents and certifications. Regardless of whether the Bidder supplies the required documents and certifications in a timely manner, the Contract time will begin to run twenty (20) working days from the date of the notification. Once the City receives all of the properly drafted and executed documents and certifications from the Bidder, the City shall issue a Notice to Proceed to that Bidder.

ARTICLE 32. EXECUTION OF CONTRACT

As required herein the Bidder to whom an award is made shall execute the Contract in the amount determined by the Contract Documents. The City may require appropriate evidence that the persons executing the Contract are duly empowered to do so. The Contract and bond forms to

be executed by the successful Bidder are included within these Specifications and shall not be detached.

ARTICLE 33. QUESTIONS

Questions regarding this Notice Inviting Bids may be directed to NICK PRICHARD, City Engineer, at nprichard@ardurra.com. No other members of the City's staff or governing body should be contacted about this procurement during the bidding process. Any and all inquiries and comments regarding this Bid must be communicated in writing, unless otherwise instructed by the City. The City may, in its sole discretion, disqualify any Bidder who engages in any prohibited communications.

00 41 43 – BID FORMS

1.1 Bid.

Bids will be received at the City of Escalon, 2060 McHenry Avenue, Escalon, California 95320, until **10:00 a.m. on Tuesday, December 12, 2023.**

NAME OF BIDDER: _____

City of Escalon
2060 McHenry Avenue
Escalon, California 95320

The undersigned hereby declare that we have carefully examined the location of the proposed Work, and have read and examined the Contract Documents, including all plans, specifications, and all addenda, if any for the following Project:

Main Street Bike Path, Sidewalk, & Curb Infill Project

We hereby propose to furnish all labor, materials, equipment, tools, transportation, and services, and to discharge all duties and obligations necessary and required to perform and complete the Project, as described and in strict conformity with the Drawings, and these Specifications for TOTAL BID PRICE indicated herein.

The undersigned acknowledges receipt, understanding, and full consideration of the following addenda to the Contract Documents:

Addenda No. _____

1. Attached is the required Bid Guarantee in the amount of not less than 10% of the Total Bid Price.
2. Attached is the completed Designation of Subcontractors form.
3. Attached is the fully executed Noncollusion Declaration form.
4. Attached is the completed Iran Contracting Act Certification form.
5. Attached is the completed Public Works Contractor Registration Certification form.
6. Attached is the completed Contractor's Certificate Regarding Workers' Compensation form.
7. Attached is the completed Bidder Information and Experience form.

A. BID SCHEDULE

ITEM No.	ITEM	Quantity	Unit of Measure	Unit Price	Amount
1	Mobilization	1	LS		
2	Erosion Control	1	LS		
3	Traffic Control	1	LS		
4	Remove & Off-haul Existing Landscape for Sidewalk	8,249	SF		
5	Remove & Off-haul Existing Shoulder for Sidewalk	6,040	SF		
6	Remove & Off-haul Existing Landscape for Sod	3,102	SF		
7	Remove & Off-haul Existing Landscape for Park Improvements	33,893	SF		
8	Remove & Off-haul Existing Landscape for RR Concrete Foot Pad	4	EA		
9	Remove & Off-haul Existing Drinking Fountain	1	LS		
10	Remove & Off-haul Existing Fountain Concrete Pad	1	LS		
11	Remove & Off-haul Existing Fountain Shade Structure	1	LS		
12	Remove & Off-haul Existing Depressed Sidewalk & Curb	1	LS		
13	Remove & Off-haul Existing Concrete Sidewalk	1,088	SF		
14	Remove & Off-haul Existing Concrete Hardscape	440	SF		
15	Remove & Off-haul Existing Valley Gutter	1	LS		
16	Remove & Off-haul Existing Flag Mount Pipes (±22)	1	LS		
17	Remove & Off-haul Existing Commercial Driveway	2	EA		
18	Remove & Off-haul Existing Rollover Curb & Gutter	80	LF		
19	Remove & Off-haul Existing Vertical Curb & Gutter	194	LF		
20	Remove & Off-haul Existing Vertical Curb	43	LF		
21	Remove & Off-haul Concrete Tree Island	1	EA		
22	Remove & Off-haul Existing ADA Curb Returns, Curb, & Gutter	2	EA		
23	Grind & Remove Existing Traffic Lines & Stencils	1	LS		
24	Remove & Off-haul Existing Asphalt & Subgrade	10,565	SF		
25	Remove Existing Water Valve Box	4	EA		
26	Remove & Retain Commercial Sign	1	EA		
27	Remove & Retain Private Property Sign	1	EA		
28	Remove & Retain RR Sign	1	EA		
29	Remove & Retain Trash/Recycle Can	1	EA		
30	Remove & Off-Haul Trash Can	1	EA		
31	Remove & Retain Metal Bench	3	EA		
32	Remove & Retain Brass Plaque	1	EA		

Continued on next page

33	Remove & Retain Wheel Stops	21	EA		
34	Remove & Off-haul Existing Signs & Posts	9	EA		
35	Remove & Off-haul Existing Curve Arrow Signs	4	EA		
36	Remove & Off-haul Existing Bike Rack	2	EA		
37	Remove & Off-haul Existing RR Concrete Structures	2	EA		
38	Remove & Off-haul RR Concrete Pad	1	EA		
39	Remove Existing Irrigation Lines	1	LS		
40	Remove Overhead Lines	1	LS		
41	Remove & Off-haul Existing Power Pole	5	EA		
42	Remove & Off-haul Underground Electrical Lines	1	LS		
43	Remove & Off-haul Horse Shoe Pits	1	LS		
44	Remove Tree & Root Ball	5	EA		
45	Tree Trimming	1	LS		
46	Sidewalk 5' Width, 4" Depth	1,444	LF		
47	Sidewalk 5' Width, 6" Depth - Bike Path	250	LF		
48	6" Vertical Curb & Gutter	679	LF		
49	4.5" Roll Over to 6" Vertical Curb Transitions	4	EA		
50	4.5" Roll Over Curb & Gutter	62	LF		
51	Concrete Tree Island	8	EA		
52	Shoulder Backing Class II (2,012 SF), 3" Depth - Sidewalk	32	TON		
53	Re-grade Landscape Backing at Sidewalk	1	LS		
54	Type 2 Commercial Entrance - 20' w/ ADA Ramps & Curb/Gutter	1	EA		
55	Type 2 Commercial Entrance - 24' w/ Sidewalk, ADA Ramps & Curb/Gutter	1	EA		
56	Type 2 Commercial Entrance - 30' w/ ADA Ramps & Curb/Gutter	1	EA		
57	Asphalt Concrete Paving (17,309 SF), 4" Depth - Roadway & Parking Lot	419	TON		
58	Base Rock Class II (17,309 SF), 8" Depth - Roadway & Parking Lot	721	TON		
59	4th Street Curb Returns, Sidewalk, Curb, & Gutter, W/ Dual ADA Ramps	2	EA		
60	Roadway Island W/ ADA Path & Concrete Infill	4	EA		
61	4' Wide Valley Gutter	1	EA		
62	Asphalt Concrete Paving (7,214 SF), 2" Depth - Bike Path	87	TON		
63	Base Rock Class II (7,214 SF), 4" Depth - Bike Path	150	TON		
64	Asphalt Concrete Paving (1,862 SF), 3" Depth - Bike Path	34	TON		
65	Base Rock Class II (1,862 SF), 6" Depth - Bike Path	58	TON		
66	Cut to Fill for Park Improvements and Transition Grading	1	LS		

Continued on next page

67	Shoulder Backing Class II (721 SF), 3" Depth - Bike Path	12	TON		
68	Type II Slurry Seal	2,123	SY		
69	Stormwater Drywell & Catch Basin	2	EA		
70	Adjust Storm MH To Grade	1	EA		
71	Adjust Sewer Lamphole to Grade	1	EA		
72	Adjust Utility Box To Grade	2	EA		
73	Install Water Valve Box	4	EA		
74	Electrical Plan	1	LS		
75	Installation of Electrical System - Frontage/Park Improvements	1	LS		
76	Installation of Electrical System - Restroom	1	LS		
77	Solar Lighting W/ 3' Stand	2	EA		
78	Irrigation Plan	1	LS		
79	Irrigation Modification	1	LS		
80	Installation of Restroom	1	LS		
81	Restroom Frontage Concrete Pad, 4" Depth (80 SF)	1	LS		
82	Restroom Access Concrete Pad, 4" Depth (25 SF)	1	LS		
83	Restroom Septic System	1	LS		
84	Install 2" Water Service	140	LF		
85	Water Service Connection	1	LS		
86	Water Meter w/ Valve & Backflow	1	EA		
87	Water Meter Box	1	EA		
88	Flag Mount Pipe & Concrete	26	EA		
89	Bench Concrete Pad, 4" Depth (88 SF)	3	EA		
90	Bike Rack Concrete Pad, 4" Depth (22 SF)	1	EA		
91	RR Concrete Pad, 4" Depth (24 SF)	4	EA		
92	Install Bike Rack - New	1	EA		
93	Re-Install Brass Plaque	1	EA		
94	Re-Install Park Bench	3	EA		
95	Install Park Bench - New	9	EA		
96	Re-Install Trash/Recycle Can	2	EA		
97	Install Trash Can - New	12	EA		
98	Seed, Rake, & Water Landscape at Sidewalk & Bike Path	1	LS		
99	Install Sod	3,232	SF		
100	Install Bark Mulch	3,700	SF		
101	Install Tree	10	EA		
102	Header Board Edging	2,243	LF		
103	Removable Bollard	1	EA		

Continued on next page

104	"ADA Parking", R99C Sign	4	EA		
105	"Bike Lane Ahead", R3-16 Sign	9	EA		
106	"End of Bike Lane", R3-16A Sign	2	EA		
107	"Stop", R1-1 Sign	3	EA		
108	"Stop Ahead", W3-1 Sign	1	EA		
109	"No Parking Bike Lane", R7-9 Sign	5	EA		
110	"25 MHP", R2-1 Sign	3	EA		
111	Radar Speed Sign EV11 w/ Solar Panel	2	EA		
112	Metal Post	24	EA		
113	Re-install RR Sign	1	EA		
114	Re-install Private Property Sign & Post	1	EA		
115	Re-install Commercial Sign & Posts	1	EA		
116	Bike Lane and Arrow Stencil	15	EA		
117	"Stop" Stencil - White	3	EA		
118	Cross Walk, Triple Four - White	3	EA		
119	Detail 21, Double Solid Line - Yellow	100	LF		
120	Detail 24, Single Solid Line - Yellow	50	LF		
121	Detail 39 Stripe Bike Lane Solid Line - White	2,561	LF		
122	1' Wide Stop Bar - White	3	EA		
123	Yellow Curb Paint	200	LF		
124	Green Conflict Zone (5'x5' Box)	500	SF		
125	Paint Striping, Hazard Path	586	SF		
126	Paint Striping, Parking Line 4" Width - White	925	LF		
127	Install Wheel Stop	35	EA		
128	Pickleball Court	1	LS		
129	Install Bocce Ball Court	1	LS		
130	Install Cornhole Court	1	LS		
131	Install Horse Shoe Pit	8	EA		
132	Lawn Games Concrete Pad, 4" Depth (123 SF)	1	LS		
TOTAL:					

The costs for any Work shown or required in the Contract Documents, but not specifically identified as a line item are to be included in the related line items and no additional compensation shall be due to Contractor for the performance of the Work.

In case of discrepancy between the Unit Price and the Item Cost set forth for a unit basis item, the unit price shall prevail and shall be utilized as the basis for determining the lowest responsive, responsible Bidder. However, if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any cause, or is omitted, or is the same amount as the entry in the "Item Cost" column, then the amount set forth in the "Item Cost" column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the Unit Price.

For purposes of evaluating Bids, the City will correct any apparent errors in the extension of unit prices and any apparent errors in the addition of lump sum and extended prices.

The estimated quantities for Unit Price items are for purposes of comparing Bids only and the City makes no representation that the actual quantities of work performed will not vary from the estimates. Final payment shall be determined by the Engineer from measured quantities of work performed based upon the Unit Price.

B. TOTAL BID PRICE:

TOTAL BID PRICE BASED ON BID SCHEDULE TOTAL OF UNIT PRICES FOR MAIN STREET BIKE PATH, SIDEWALK, & CURB INFILL PROJECT	
\$ _____	Total Bid Price in Numbers
\$ _____	Total Bid Price in Written Form
In case of discrepancy between the written price and the numerical price, the written price shall prevail.	

The undersigned agrees that this Bid Form constitutes a firm offer to the City which cannot be withdrawn for the number of calendar days indicated in the Notice Inviting Bids from and after the Bid opening, or until a Contract for the Work is fully executed by the City and a third party, whichever is earlier.

If the Contract Documents specify Alternate Bid items, the following Alternate Bid amounts shall be added to or deducted from the Total Bid Price entered above (please check the appropriate box), in the City's sole discretion. The City can choose to include any, all, or none of the Alternate Bid items in the Work. If the City selects any of the Alternate Bid items, the corresponding Alternate Bid prices shall be added to or deducted from Base Bid Price for the Work. The City can award/select Alternate Bid items at any time(s).

ALTERNATE BIDS	BID PRICE (IN WRITTEN FORM)	BID PRICE (IN NUMBERS)
ALTERNATE #1 <input type="checkbox"/> Add <input type="checkbox"/> Deduct		
ALTERNATE #2 <input type="checkbox"/> Add <input type="checkbox"/> Deduct		
ALTERNATE #3 <input type="checkbox"/> Add <input type="checkbox"/> Deduct		
ALTERNATE #4 <input type="checkbox"/> Add <input type="checkbox"/> Deduct		
ALTERNATE #5 <input type="checkbox"/> Add <input type="checkbox"/> Deduct		
ALTERNATE #6 <input type="checkbox"/> Add <input type="checkbox"/> Deduct		

The successful bidder hereby agrees to sign the contract and furnish the necessary bonds and certificates of insurance within ten (10) working days after the City provides the successful bidder with the Notice of Award.

Upon receipt of the signed contract and other required documents, the contract will be executed by the City, after which the City will prepare a letter giving Contractor Notice to Proceed. The official starting date shall be the date of the Notice to Proceed, unless otherwise specified. The undersigned agrees to begin the Work within ten (10) working days of the date of the Notice to Proceed, unless otherwise specified.

The undersigned has examined the location of the proposed work and is familiar with the Drawings and Specifications and the local conditions at the place where work is to be done.

If awarded the contract, the undersigned agrees that there shall be paid by the undersigned and by all subcontractors to all laborers, workers and mechanics employed in the execution of such contract no less than the prevailing wage rate within San Joaquin County for each craft, classification, or type of worker needed to complete the Work contemplated by this contract as established by the Director of the Department of Industrial Relations. A copy of the prevailing rate of per diem wages are on file at the City's Administration Office and shall be made available to interested parties upon request.

Enclosed find cash, bidder's bond, or cashier's or certified check No. _____ from the _____ Bank in the amount of _____, which is not less than ten percent (10%) of this bid, payable to City of Escalon as bid security and which is given as a guarantee that the undersigned will enter into a contract and provide the necessary bonds and certificates of insurance if awarded the Work.

The bidder furthermore agrees that in case of bidder's default in executing said contract and furnishing required bonds and certificates of insurance, the cash, bidder's bond, or cashier's or certified check accompanying this proposal and the money payable thereon shall become and shall remain the property of the City of Escalon.

Bidder is an individual _____, or corporation _____, or partnership _____, organized under the laws of the State of _____.

Bidder confirms license(s) required by California State Contractor's License Law for the performance of the subject project are in full effect and proper order. The following are the Bidder's applicable license number(s), with their expiration date(s) and class of license(s):

If the Bidder is a joint venture, each member of the joint venture must include the required licensing information.

Sureties that will furnish the Faithful Performance Bond and the Labor and Material Payment Bond, in the form specified herein, in an amount equal to one hundred percent (100%) of the contract price within ten (10) working days from the date the City provides the successful bidder the Notice of Award. Sureties must meet all of the State of California bonding requirements, as

defined in California Code of Civil Procedure Section 995.120 and must be authorized by the State of California.

The insurance company or companies to provide the insurance required in the contract documents must have a Financial Strength Rating of not less than "A-" and a Financial Size Category of not less than "Class VII" according to the latest Best Key Rating Guide. At the sole discretion of the City, the City may waive the Financial Strength Rating and the Financial Size Category classifications for Workers' Compensation insurance.

(signatures continued on next page)

I hereby certify under penalty of perjury under the laws of the State of California that all of the information submitted in connection with this Bid and all of the representations made herein are true and correct.

Executed at _____, on this ____ day of _____, ____.

(Bidders Name – Print or Type)

(Name and Title)

(Corporate Seal)

(Signature)

Names of individual members of firm or names and titles of all officers of corporation and their addresses are listed below:

Name _____ Title _____

Complete Address _____

Phone _____ FAX _____

Name _____ Title _____

Complete Address _____

Phone _____ FAX _____

Name _____ Title _____

Complete Address _____

Phone _____ FAX _____

Name _____ Title _____

Complete Address _____

Phone _____ FAX _____

1.2 Bid Bond

[Note: Not required when other form of Bidder's Security, e.g. cash, certified check or cashier's check, accompanies bid.]

The makers of this bond are, _____, as Principal, and _____, as Surety and are held and firmly bound unto the City of Escalon, hereinafter called the City, in the penal sum of TEN PERCENT (10%) OF THE TOTAL BID PRICE of the Principal submitted to City for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted the accompanying bid dated _____, 20____, for MAIN STREET BIKE PATH, SIDEWALK, & CURB INFILL PROJECT.

If the Principal does not withdraw its Bid within the time specified in the Contract Documents; and if the Principal is awarded the Contract and provides all documents to the City as required by the Contract Documents; then this obligation shall be null and void. Otherwise, this bond will remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents shall in affect its obligation under this bond, and Surety does hereby waive notice of any such changes.

In the event a lawsuit is brought upon this bond by the City and judgment is recovered, the Surety shall pay all litigation expenses incurred by the City in such suit, including reasonable attorneys' fees, court costs, expert witness fees and expenses.

By their signatures hereunder, Surety and Principal hereby confirm under penalty of perjury that surety is an admitted surety insurer authorized to do business in the State of California.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, 20____, the name and corporate seal of each corporation.

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____
Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title _____

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

Name(s) of Signer(s)

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

Title or Type of Document

- ☐ Partner(s) ☐ Limited
☐ General

Number of Pages

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Date of Document

Signer is representing:
Name Of Person(s) Or Entity(ies)

Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

- ☐ Partner(s) ☐ Limited
 ☐ General

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

Title or Type of Document

Number of Pages

Date of Document

Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact. The Power-of-Attorney to local representatives of the bonding company must also be attached.

END OF BID BOND

1.3 List of Subcontractors

In compliance with the Subletting and Subcontracting Fair Practices Act Chapter 4 (commencing at Section 4100), Part 1, Division 2 of the Public Contract Code of the State of California and any amendments thereof, Bidder shall set forth below: (a) the name and the location of the place of business, (b) the California contractor license number, (c) the DIR public works contractor registration number unless exempt pursuant to Labor Code Sections 1725.5 and 1771.1, and (d) the portion of the work which will be done by each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the work or improvement to be performed under this Contract in an amount in excess of one-half of one percent (0.5%) of the Bidder's Total Bid Price. Notwithstanding the foregoing, if the work involves the construction of streets and highways, then the Bidder shall list each subcontractor who will perform work or labor or render service to the Bidder in or about the work in an amount in excess of one-half of one percent (0.5%) of the Bidder's Total Bid Price or \$10,000, whichever is greater. No additional time shall be granted to provide the below requested information.

If a Bidder fails to specify a subcontractor or if a contractor specifies more than one subcontractor for the same portion of work, then the Bidder shall be deemed to have agreed that it is fully qualified to perform that portion of work and that it shall perform that portion itself.

Work to be done by Subcontractor	Name of Subcontractor	Location of Business	CSLB Contractor License No.	DIR Registration Number	% of Work

Work to be done by Subcontractor	Name of Subcontractor	Location of Business	CSLB Contractor License No.	DIR Registration Number	% of Work

(Attach additional sheets if necessary)

Name of Bidder _____

Signature _____

Name and Title _____

Dated _____

1.4 Bidder Information and Experience Form

ARTICLE 1. INFORMATION ABOUT BIDDER

(Indicate not applicable ("N/A") where appropriate.)

NOTE: Where Bidder is a joint venture, pages shall be duplicated and information provided for all parties to the joint venture.

1.0 Name of Bidder: _____

2.0 Type, if Entity: _____

3.0 Bidder Address: _____

Facsimile Number

Telephone Number

Email Address

4.0 How many years has Bidder's organization been in business as a Contractor?

5.0 How many years has Bidder's organization been in business under its present name? _____

5.1 Under what other or former names has Bidder's organization operated? _____

6.0 If Bidder's organization is a corporation, answer the following:

6.1 Date of Incorporation: _____

6.2 State of Incorporation: _____

6.3 President's Name: _____

6.4 Vice-President's Name(s): _____

6.5 Secretary's Name: _____

6.6 Treasurer's Name: _____

7.0 If an individual or a partnership, answer the following:

7.1 Date of Organization: _____

7.2 Name and address of all partners (state whether general or limited partnership):

8.0 If other than a corporation or partnership, describe organization and name principals:

9.0 List other states in which Bidder's organization is legally qualified to do business.

10.0 What type of work does the Bidder normally perform with its own forces?

11.0 Has Bidder ever failed to complete any work awarded to it? If so, note when, where, and why:

12.0 Within the last five years, has any officer or partner of Bidder's organization ever been an officer or partner of another organization when it failed to complete a contract? If so, attach a separate sheet of explanation:

13.0 List Trade References:

14.0 List Bank References (Bank and Branch Address):

15.0 Name of Bonding Company and Name and Address of Agent:

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

ARTICLE 2. LIST OF CURRENT PROJECTS (BACKLOG)

[**Duplicate Page if needed for listing additional current projects.**]

Project	Description of Bidder's Work	Completion Date	Cost of Bidder's Work

ARTICLE 3. LIST OF COMPLETED PROJECTS – LAST THREE YEARS

[**Duplicate Page if needed for listing additional completed projects.**]

Please include only those projects which are similar enough to demonstrate Bidder's ability to perform the required Work.

Project	Description of Bidder's Work	Completion Date	Cost of Bidder's Work

ARTICLE 4. EXPERIENCE AND TECHNICAL QUALIFICATIONS QUESTIONNAIRE

Personnel:

The Bidder shall identify the key personnel to be assigned to this project in a management, construction supervision or engineering capacity.

1. List each person's job title, name and percent of time to be allocated to this project:

2. Summarize each person's specialized education:

3. List each person's years of construction experience relevant to the project:

4. Summarize such experience:

Bidder agrees that personnel named in this Bid will remain on this Project until completion of all relevant Work, unless substituted by personnel of equivalent experience and qualifications approved in advance by the City.

Changes Occurring Since Prequalification

If any substantive changes have occurred since Bidder submitted its prequalification package for this Project, Bidder shall list them below. If none are listed, Bidder certifies that no substantive changes have occurred.

Additional Bidder's Statements:

If the Bidder feels that there is additional information which has not been included in the questionnaire above, and which would contribute to the qualification review, it may add that information in a statement here or on an attached sheet, appropriately marked:

ARTICLE 5. VERIFICATION AND EXECUTION

These Bid Forms shall be executed only by a duly authorized official of the Bidder:

I declare under penalty of perjury under the laws of the State of California that the foregoing information is true and correct:

Name of Bidder_____

Signature_____

Name_____

Title_____

Date_____

1.5 Non-Collusion Declaration

The undersigned declares:

I am the _____ of _____, the party making the foregoing Bid.

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

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

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

Name of Bidder_____

Signature_____

Name_____

Title_____

1.6 Iran Contracting Act Certification.
(Public Contract Code section 2200 et seq.)

As required by California Public Contract Code Section 2204, the Contractor certifies subject to penalty for perjury that the option checked below relating to the Contractor's status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200 *et seq.*) is true and correct:

☐ The Contractor is not:

(1) identified on the current list of person and entities engaged in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or

(2) a financial instruction that extends, for 45 days or more, credit in the amount of \$20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.

☐ The City has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the City will be unable to obtain the goods and/or services to be provided pursuant to the Contract.

☐ The amount of the Contract payable to the Contractor for the Project does not exceed \$1,000,000.

Signature: _____

Printed Name: _____

Title: _____

Firm Name: _____

Date: _____

Note: In accordance with Public Contract Code Section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of \$250,000 or twice the Contract amount, termination of the Contract and/or ineligibility to bid on contracts for three years.

1.7 Public Works Contractor Registration Certification

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See <http://www.dir.ca.gov/Public-Works/PublicWorks.html> for additional information.

No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

Bidder hereby certifies that it is aware of the registration requirements set forth in Labor Code sections 1725.5 and 1771.1 and is currently registered as a contractor with the Department of Industrial Relations.¹

Name of Bidder: _____

DIR Registration Number: _____

DIR Registration Expiration: _____

Small Project Exemption: _____ Yes or _____ No

Unless Bidder is exempt pursuant to the small project exemption, Bidder further acknowledges:

1. Bidder shall maintain a current DIR registration for the duration of the project.
2. Bidder shall include the requirements of Labor Code sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered at the time of bid opening and maintain registration status for the duration of the project.
3. Failure to submit this form or comply with any of the above requirements may result in a finding that the bid is non-responsive.

Name of Bidder _____

Signature _____

Name and Title _____

Dated _____

¹ If the Project is exempt from the contractor registration requirements pursuant to the small project exemption under Labor Code Sections 1725.5 and 1771.1, please mark "Yes" in response to "Small Project Exemption."

1.8 Contractor's Certificate Regarding Workers' Compensation.

I am aware of the provisions of section 3700 of the Labor Code 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 of this Contract.

Name of Bidder _____

Signature _____

Name _____

Title _____

Dated _____

00 52 13 – CONTRACT

This CONTRACT, No. _____ is made and entered into this ____ day of _____, _____, by and between City of Escalon, sometimes hereinafter called "City," and _____, sometimes hereinafter called "Contractor."

WITNESSETH: That the parties hereto have mutually covenanted and agreed, and by these presents do covenant and agree with each other as follows:

a. **SCOPE OF WORK.** The Contractor shall perform all Work within the time stipulated in the Contract, and shall provide all labor, materials, equipment, tools, utility services, and transportation to complete all of the Work required in strict compliance with the Contract Documents as specified in Article 5, below, for the following Project:

Main Street Bike Path, Sidewalk, & Curb Infill Project

The Contractor and its surety shall be liable to the City for any damages arising as a result of the Contractor's failure to comply with this obligation.

a. **TIME FOR COMPLETION.** Time is of the essence in the performance of the Work. The Work shall be commenced on the date stated in the City's Notice to Proceed. The Contractor shall complete all Work required by the Contract Documents within **365** calendar days from the commencement date stated in the Notice to Proceed. By its signature hereunder, Contractor agrees the time for completion set forth above is adequate and reasonable to complete the Work.

b. **CONTRACT PRICE.** The City shall pay to the Contractor as full compensation for the performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, and including all applicable taxes and costs, the sum of _____ Dollars (\$ _____). Payment shall be made as set forth in the General Conditions.

c. **LIQUIDATED DAMAGES.** In accordance with Government Code section 53069.85, it is agreed that the Contractor will pay the City the sum set forth in Section 00 73 13, Article 1.11 for each and every calendar day of delay beyond the time prescribed in the Contract Documents for finishing the Work, as Liquidated Damages and not as a penalty or forfeiture. In the event this is not paid, the Contractor agrees the City may deduct that amount from any money due or that may become due the Contractor under the Contract. This Article does not exclude recovery of other damages specified in the Contract Documents.

d. **COMPONENT PARTS OF THE CONTRACT.** The "Contract Documents" include the following:

- Notice Inviting Bids
- Instructions to Bidders
- Bid Form
- Bid Bond
- Designation of Subcontractors
- Information Required of Bidders

Non-Collusion Declaration Form
Iran Contracting Act Certification
Public Works Contractor Registration Certification
Performance Bond
Payment (Labor and Materials) Bond
General Conditions
Special Conditions
Technical Specifications
Addenda
Plans and Drawings
Standard Specifications for Public Works Construction "Greenbook", latest edition, Except Sections 1-9
Applicable Local Agency Standards and Specifications, as last revised
Approved and fully executed change orders
Any other documents contained in or incorporated into the Contract

The Contractor shall complete the Work in strict accordance with all of the Contract Documents.

All of the Contract Documents are intended to be complementary. Work required by one of the Contract Documents and not by others shall be done as if required by all. This Contract shall supersede any prior agreement of the parties.

e. **PROVISIONS REQUIRED BY LAW AND CONTRACTOR COMPLIANCE.** Each and every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The Contractor shall comply with all requirements of applicable federal, state and local laws, rules and regulations, including, but not limited to, the provisions of the California Labor Code and California Public Contract Code which are applicable to this Work.

f. **INDEMNIFICATION.** Contractor shall provide indemnification and defense as set forth in the General Conditions.

g. **PREVAILING WAGES.** Contractor shall be required to pay the prevailing rate of wages in accordance with the Labor Code which such rates shall be made available at the City's Administrative Office or may be obtained online at <http://www.dir.ca.gov> and which must be posted at the job site.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, this Contract has been duly executed by the above-named parties, on the day and year above written.

CITY OF ESCALON

CONTRACTOR

By: _____
City Manager

By: _____

Its: _____

Printed Name: _____

ATTEST:

By: _____
City Clerk

**(CONTRACTOR'S SIGNATURE MUST BE
NOTARIZED AND CORPORATE
SEAL AFFIXED, IF APPLICABLE)**

END OF CONTRACT

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

- ☐ Partner(s) ☐ Limited
 ☐ General

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

Title or Type of Document

Number of Pages

Date of Document

Signer(s) Other Than Named Above

00 61 13 – BOND FORMS

1.1 Performance Bond.

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the City of Escalon, (hereinafter referred to as "City") has awarded to _____, (hereinafter referred to as the "Contractor") an agreement for **Contract No.** _____, (hereinafter referred to as the "Project").

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, _____, the undersigned Contractor and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the City in the sum of _____ DOLLARS, (\$_____), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one (1) year guarantee of all materials and workmanship; and shall indemnify and save harmless the City, its officials, officers, employees, and authorized volunteers, as stipulated in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees including reasonable attorney's fees, incurred by City in enforcing such obligation.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the above obligation shall hold good for a period of one (1) year after the acceptance of the work by City, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the City from loss or damage resulting from or caused by defective materials or faulty workmanship. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the City's rights or the Contractor or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure Section 337.15.

Whenever Contractor shall be, and is declared by the City to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the City's option:

- i. Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- ii. Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a Contract between such bidder, the Surety and the City, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.
- iii. Permit the City to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the City may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the City, when declaring the Contractor in default, notifies Surety of the City's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project.

By their signatures hereunder, Surety and Contractor hereby confirm under penalty of perjury that surety is an admitted surety insurer authorized to do business in the State of California.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20____.

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____
Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title _____

The rate of premium on this bond is _____ per thousand. The total amount of premium charges is \$_____.
(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of Agent or Representative for service of process in California, if different from above)

(Telephone number of Surety and Agent or Representative for service of process in California)

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

- ☐ Partner(s) ☐ Limited
 ☐ General

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

Title or Type of Document

Number of Pages

Date of Document

Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

Title or Type of Document

- ☐ Partner(s) ☐ Limited
 ☐ General

Number of Pages

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Date of Document

Signer is representing:
Name Of Person(s) Or Entity(ies)

Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact. The Power-of Attorney to local representatives of the bonding company must also be attached.

END OF PERFORMANCE BOND

1.2 Payment Bond (Labor and Materials).

KNOW ALL MEN BY THESE PRESENTS That

WHEREAS, the City of Escalon (hereinafter designated as the "City"), by action taken or a resolution passed _____, 20____, has awarded to _____ hereinafter designated as the "Principal," a contract for the work described as follows: **Contract No.** _____ (the "Project"); and

WHEREAS, said Principal is required to furnish a bond in connection with said contract; providing that if said Principal or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of said Principal and its Subcontractors with respect to such work or labor the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the City in the penal sum of _____ Dollars (\$_____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Civil Code Section 9100, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Revenue and Taxation Code Section 18663, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified, and also, in case suit is brought upon this bond, all litigation expenses incurred by the City in such suit, including reasonable attorneys' fees, court costs, expert witness fees and investigation expenses.

This bond shall inure to the benefit of any of the persons named in Civil Code Section 9100 so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that

this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or City and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Civil Code Section 9100, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned, including but not limited to the provisions of sections 2819 and 2845 of the California Civil Code.

By their signatures hereunder, Surety and Principal hereby confirm under penalty of perjury that surety is an admitted surety insurer authorized to do business in the State of California.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__.

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____
Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title _____

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

- ☐ Partner(s) ☐ Limited
 ☐ General

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

Title or Type of Document

Number of Pages

Date of Document

Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

- ☐ Partner(s) ☐ Limited
 ☐ General

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

Title or Type of Document

Number of Pages

Date of Document

Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact. The Power-of-Attorney to local representatives of the bonding company must also be attached.

END OF PAYMENT BOND

00 72 13 – GENERAL CONDITIONS

ARTICLE 1. DEFINED TERMS

Whenever used in the Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined below, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

- A. Act of God -- An earthquake of magnitude of 3.5 or higher on the Richter scale or a tidal wave.
- B. Addenda -- Written or graphic instruments issued prior to the submission of Bids which clarify, correct, or change the Contract Documents.
- C. Additional Work -- New or unforeseen work will be classified as “Additional Work” when the City’s Representative determines that it is not covered by the Contract.
- D. Applicable Laws -- The laws, statutes, ordinances, rules, codes, regulations, permits, and licenses of any kind, issued by local, state or federal governmental authorities or private authorities with jurisdiction (including utilities), to the extent they apply to the Work.
- E. Bid -- The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices and other terms for the Work to be performed.
- F. Bidder -- The individual or entity who submits a Bid directly to the City.
- G. Change Order (“CO”) -- A document that authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Contract, in accordance with the Contract Documents and in the form contained in the Contract Documents.
- H. Change Order Request (“COR”) -- A request made by the Contractor for an adjustment in the Contract Price and/or Contract Times as the result of a Contractor-claimed change to the Work. This term may also be referred to as a Change Order Proposal (“COP”), or Request for Change (“RFC”).
- I. City -- The City of Escalon.
- J. City’s Representative -- The individual or entity as identified in the Special Conditions to act as the City’s Representative.
- K. Claim -- A demand or assertion by the City or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
- L. Contract -- The entire integrated written agreement between the City and Contractor concerning the Work. “Contract” may be used interchangeably with “Agreement” in the

Contract Documents. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral, and includes all Contract Documents.

- M. Contract Documents -- The documents listed in Section 00 52 13, Article 5. Some documents provided by the City to the Bidders and Contractor, including but not limited to reports and drawings of subsurface and physical conditions are not Contract Documents.
- N. Contract Price -- Amount to be paid by the City to the Contractor as full compensation for the performance of the Contract and completion of the Work, subject to any additions or deductions as provided in the Contract Documents, and including all applicable taxes and costs.
- O. Contract Times -- The number of days or the dates stated in the Contract Documents to: achieve defined Milestones, if any; and to complete the Work so that it is ready for final payment.
- P. Contractor -- The individual or entity with which the City has contracted for performance of the Work.
- Q. Contractor's Designated On-Site Representative -- The Contractor's Designated On-Site Representative will be as identified in Section 00 72 13, Article 3 and shall not be changed without prior written consent of the City.
- R. Daily Rate -- The Daily Rate stipulated in the Contract Documents as full compensation to the Contractor due to the City's unreasonable delay to the Project that was not contemplated by the parties.
- S. Day -- A calendar day of 24 hours measured from midnight to the next midnight.
- T. Defective Work -- Work that is unsatisfactory, faulty, or deficient; or that does not conform to the Contract Documents; or that does not meet the requirements of any inspection, reference standard, test, or approval referenced in the Contract Documents.
- U. Demobilization -- The complete dismantling and removal by the Contractor of all of the Contractor's temporary facilities, equipment, and personnel at the Site.
- V. Drawings -- That part of the Contract Documents prepared by of the Engineer of Record which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
- W. Effective Date of the Contract -- The date indicated in the Contract on which it becomes effective, but if no such date is indicated, it means the date on which the Contract is signed and delivered by the last of the two parties to sign and deliver.
- X. Engineer, whenever not qualified, shall mean the City Engineer of the City, acting either directly or through properly authorized agents, such agents acting severally within the scope of the particular duties entrusted to them. On all questions concerning the acceptance of materials, machinery, the classifications of material, the execution

of work, conflicting interest of the contractors performing related work and the determination of costs, the decision of the Engineer, duly authorized by the City, shall be binding and final upon both parties.

Y. Engineer of Record -- The individual, partnership, corporation, joint venture, or other legal entity named as such in Section 00 73 13, Article 1.1. or any succeeding entity designated by the City.

Z. Green Book -- The current edition of the Standard Specifications for Public Works Construction.

AA. Hazardous Waste -- The term "Hazardous Waste" shall have the meaning provided in Section 104 of the Solid Waste Disposal Act (42 U.S.C. § 6903) as amended from time to time or, 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 provisions of existing law, whichever is more restrictive.

BB. Holiday -- The Holidays occur on:

New Year's Day - January 1
President's Day -- Third Monday in February
Memorial Day - Last Monday in May
Independence Day - July 4
Labor Day - First Monday in September
Veteran's Day - November 11
Thanksgiving Day - Fourth Thursday in November
Friday after Thanksgiving
Christmas Eve -- December 24
Christmas Day - December 25
Day After Christmas -- December 26
New Year's Eve -- December 31

If any Holiday listed above falls on a Saturday, Saturday and the preceding Friday are both Holidays. If the Holiday should fall on a Sunday, Sunday and the following Monday are both Holidays.

CC. Notice of Award -- The written notice by the City to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, the City will sign and deliver the Contract.

DD. Notice of Completion -- The form which may be executed by the City and recorded by the county where the Project is located constituting final acceptance of the Project.

EE. Notice to Proceed -- A written notice given by the City to Contractor fixing the date on which the Contractor may proceed with the Work and when Contract Times will commence to run.

FF. Project -- The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

- GG. Recyclable Waste Materials -- Materials removed from the Site which are required to be diverted to a recycling center rather than an area landfill. Recyclable Waste Materials include asphalt, concrete, brick, concrete block, and rock.
- HH. Schedule of Submittals -- A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to facilitate scheduled performance of related construction activities.
- II. Shop Drawings -- All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
- JJ. Specifications -- That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
- KK. Stop Payment Notice -- A written notice as defined in Civil Code section 8044.
- LL. Subcontractor -- An individual or entity other than a Contractor having a contract with any other entity than the City for performance of any portion of the Work at the Site.
- MM. Submittal -- Written and graphic information and physical samples prepared and supplied by the Contractor demonstrating various portions of the Work.
- NN. Successful Bidder -- The Bidder submitting a responsive Bid to whom the City makes an award.
- OO. Supplier -- A manufacturer, fabricator, supplier, distributor, material man, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment used in the performance of the Work or to be incorporated in the Work.
- PP. Underground Facilities -- All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- QQ. Unit Price Work -- Work to be paid for on the basis of unit prices as provided by the Contractor in its bid or as adjusted in accordance with the Contract Documents.
- RR. Warranty -- A written guarantee provided to the City by the Contractor that the Work will remain free of defects and suitable for its intended use for the period required by the Contract Documents or the longest period permitted by the law of this State, whichever is longer.
- SS. Work -- The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce

such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

ARTICLE 2. CONTRACT DOCUMENTS

- A. **Contract Documents.** The Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all.
- B. **Interpretations.** The Contract Documents are intended to be fully cooperative and complementary. If the Contractor observes that any documents are in conflict, the Contractor shall promptly notify the Engineer in writing. In case of conflicts between the Contract Documents, the order of precedence shall be as follows:
1. Change Orders
 2. Addenda
 3. Special Conditions
 4. Technical Specifications
 5. Plans (Contract Drawings)
 6. Contract
 7. General Conditions
 8. Instructions to Bidders
 9. Notice Inviting Bids
 10. Contractor's Bid Forms
 11. Standard Specifications for Public Works Construction (Sections 1-9 Excluded)
 12. Applicable Local Agency Standards and Specifications
 13. Standard Drawings
 14. Reference Documents

With reference to the Drawings, the order of precedence shall be as follows:

1. Figures govern over scaled dimensions
 2. Detail drawings govern over general drawings
 3. Addenda or Change Order drawings govern over Contract Drawings
 4. Contract Drawings govern over Standard Drawings
 5. Contract Drawings govern over Shop Drawings
- C. **Conflicts in Contract Documents.** Notwithstanding the orders of precedence established above, in the event of conflicts, the higher standard, higher quality, and most expensive shall always apply.
- D. **Organization of Contract Documents.** Organization of the Contract Documents into divisions, sections, and articles, and arrangement of drawings shall not control the Contractor in dividing Project Work among subcontractors or in establishing the extent of Work to be performed by any trade.

ARTICLE 3. PRECONSTRUCTION AND CONSTRUCTION COMMUNICATION

Before any Work at the site is started, a conference attended by the City, Contractor, City's Representative, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to herein, procedures for

handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

At this conference the City and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

ARTICLE 4. CONTRACT DOCUMENTS: COPIES & MAINTENANCE

Contractor will be furnished, free of charge, **three (3)** copies of the Contract Documents. Additional copies may be obtained at cost of reproduction.

Contractor shall maintain a clean, undamaged set of Contract Documents, including submittals, at the Project site.

ARTICLE 5. EXAMINATION OF DRAWINGS, SPECIFICATIONS AND SITE OF WORK

- A. **Examination of Contract Documents.** Before commencing any portion of the Work, Contractor shall again carefully examine all applicable Contract Documents, the Project site, and other information given to Contractor as to materials and methods of construction and other Project requirements. Contractor shall immediately notify the Engineer of any potential error, inconsistency, ambiguity, conflict, or lack of detail or explanation. If Contractor performs, permits, or causes the performance of any Work which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction. In no case shall the Contractor or any subcontractor proceed with Work if uncertain as to the applicable requirements.
- B. **Additional Instructions.** After notification of any error, inconsistency, ambiguity, conflict, or lack of detail or explanation, the Engineer will provide any required additional instructions, by means of drawings or other written direction, necessary for proper execution of Work.
- C. **Quality of Parts, Construction and Finish.** All parts of the Work shall be of the best quality of their respective kinds and the Contractor must use all diligence to inform itself fully as to the required construction and finish.
- D. **Contractor's Variation from Contract Document Requirements.** If it is found that the Contractor has varied from the requirements of the Contract Documents including the requirement to comply with all applicable laws, ordinances, rules and regulations, the Engineer may at any time, before or after completion of the Work, order the improper Work removed, remade or replaced by the Contractor at the Contractor's expense.

ARTICLE 6. MOBILIZATION

- A. When a bid item is included in the Bid Form for mobilization, the costs of Work in advance of construction operations and not directly attributable to any specific bid item will be included in the progress estimate ("Initial Mobilization"). When no bid item is

provided for "Initial Mobilization," payment for such costs will be deemed to be included in the other items of the Work.

- B. Payment for Initial Mobilization based on the lump sum provided in the Bid Form, which shall constitute full compensation for all such Work. No payment for Initial Mobilization will be made until all of the listed items have been completed to the satisfaction of the Engineer. The scope of the Work included under Initial Mobilization shall include, but shall not be limited to, the following principal items:
1. Obtaining and paying for all bonds, insurance, and permits.
 2. Moving on to the Project site of all Contractor's plant and equipment required for the first month's operations.
 3. Installing temporary construction power, wiring, and lighting facilities, as applicable.
 4. Establishing fire protection system, as applicable.
 5. Developing and installing a construction water supply, if applicable.
 6. Providing and maintaining the field office trailers for the Contractor, if necessary, and the Engineer (if specified), complete, with all specified furnishings and utility services.
 7. Providing on-site sanitary facilities and potable water facilities as specified per Cal-OSHA and these Contract Documents.
 8. Furnishing, installing, and maintaining all storage buildings or sheds required for temporary storage of products, equipment, or materials that have not yet been installed in the Work. All such storage shall meet manufacturer's specified storage requirements, and the specific provisions of the specifications, including temperature and humidity control, if recommended by the manufacturer, and for all security.
 9. Arranging for and erection of Contractor's work and storage yard.
 10. Posting all OSHA required notices and establishment of safety programs per Cal-OSHA.
 11. Full-time presence of Contractor's superintendent at the job site as required herein.
 12. Submittal of Construction Schedule as required by the Contract Documents.

ARTICLE 7. EXISTENCE OF UTILITIES AT THE WORK SITE

- A. The City has endeavored to determine the existence of utilities at the Project site from the records of the owners of known utilities in the vicinity of the Project. The positions of these utilities as derived from such records are shown on the Plans.
- B. Unless indicated otherwise on the Plans and Specifications, no excavations were made to verify the locations shown for underground utilities. The service connections

to these utilities are not shown on the Plans. Water service connections may be shown on the Plans showing general locations of such connections. It shall be the responsibility of the Contractor to determine the exact location of all service connections. The Contractor shall make its own investigations, including exploratory excavations, to determine the locations and type of service connections, prior to commencing Work which could result in damage to such utilities. The Contractor shall immediately notify the City in writing of any utility discovered in a different position than shown on the Plans or which is not shown on the Plans.

- C. If applicable, all water meters, water valves, fire hydrants, electrical utility vaults, telephone vaults, gas utility valves, and other subsurface structures shall be relocated or adjusted to final grade by the Contractor. Locations of existing utilities shown on the Plans are approximate and may not be complete. The Contractor shall be responsible for coordinating its Work with all utility companies during the construction of the Work.
- D. Notwithstanding the above, pursuant to section 4215 of the Government Code, the City has the responsibility to identify, with reasonable accuracy, main or trunkline facilities on the plans and specifications. In the event that main or trunkline utility facilities are not identified with reasonable accuracy in the plans and specifications made a part of the invitation for Bids, the City shall assume the responsibility for their timely removal, relocation, or protection.
- E. Contractor, except in an emergency, shall contact the appropriate regional notification center, **California Underground Service Alert** at 811 or 1-800-227-2600 or on-line at www.digalert.org at least two working days prior to commencing any excavation if the excavation will be performed in an area which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the City, and obtain an inquiry identification number from that notification center. No excavation shall be commenced or carried out by the Contractor unless such an inquiry identification number has been assigned to the Contractor or any subcontractor of the Contractor and the City has been given the identification number by the Contractor.

ARTICLE 8. SOILS INVESTIGATIONS

- A. Reports and Drawings. The Special Conditions identify:
 - 1. those reports known to the City of explorations and tests of subsurface conditions at or contiguous to the site; and
 - 2. those drawings known to the City of physical conditions relating to existing surface or subsurface structures at the site (except Underground Facilities).
- B. Limited Reliance by Contractor on Technical Data Authorized. Contractor may rely upon the accuracy of the “technical data” contained in such reports and drawings, which were expressly not created or obtained to evaluate or assist in the evaluation of constructability, and are not Contract Documents. Contractor shall make its own interpretation of the “technical data” and shall be solely responsible for any such interpretations. Except for reliance on the accuracy of such “technical data,” Contractor may not rely upon or make any claim against the City, City’s

Representative, or Engineer of Record, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including without limitation any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions, conclusions and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

ARTICLE 9. CONTRACTOR'S SUPERVISION

Contractor shall continuously keep at the Project site, a competent and experienced full-time Project superintendent acceptable to the City. Superintendent must be able to proficiently speak, read and write in English and shall have the authority to make decisions on behalf of the Contractor. Contractor shall continuously provide efficient supervision of the Project.

ARTICLE 10. WORKERS

- A. Contractor shall at all times enforce strict discipline and good order among its employees. Contractor shall not employ on the Project any unfit person or any one not skilled in the Work assigned to him or her.
- B. Any person in the employ of the Contractor whom the City may deem incompetent or unfit shall be dismissed from the Work and shall not be employed on this Project.

ARTICLE 11. INDEPENDENT CONTRACTORS

Contractor shall be an independent contractor for the City and not an employee. Contractor understands and agrees that it and all of its employees shall not be considered officers, employees, or agents of City and are not entitled to benefits of any kind normally provided employees of City, including but not limited to, state unemployment compensation or workers' compensation. Contractor assumes full responsibility for the acts and omissions of its employees or agents related to the Work.

ARTICLE 12. SUBCONTRACTS

- A. Contractor agrees to bind every subcontractor to the terms of the Contract Documents as far as such terms are applicable to subcontractor's portion of the Work. Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by its subcontractors, as Contractor is for acts and omissions of persons directly employed by Contractor. Nothing contained in these Contract Documents shall create any contractual relationship between any subcontractor and the City.

- B. The City reserves the right to accept all subcontractors. The City's acceptance of any subcontractor under this Contract shall not in any way relieve Contractor of its obligations in the Contract Documents.
- C. Prior to substituting any subcontractor listed in the Bid Forms, Contractor must comply with the requirements of the Subletting and Subcontracting Fair Practices Act pursuant to California Public Contract Code section 4100 et seq.

ARTICLE 13. VERIFICATION OF EMPLOYMENT ELIGIBILITY

By executing this Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time, and shall require all subcontractors, sub-subcontractors and consultants to comply with the same. Each person executing this Contract on behalf of Contractor verifies that he or she is a duly authorized officer of Contractor and that any of the following shall be grounds for the City to terminate the Contract for cause: (1) failure of the Contractor or its subcontractors, sub-subcontractors or consultants to meet any of the requirements provided for in this Article; (2) any misrepresentation or material omission concerning compliance with such requirements; or (3) failure to immediately remove from the Work any person found not to be in compliance with such requirements.

ARTICLE 14. REQUESTS FOR SUBSTITUTION

- A. For the purposes of this provision, the term "substitution" shall mean the substitution of any material, method or service substantially equal to or better in every respect to that indicated in the Standard Specifications or otherwise referenced herein.
- B. Pursuant to Public Contract Code section 3400(b), the City may make a finding that is described in the Notice Inviting Bids that designates certain products, things, or services by specific brand or trade name.
- C. Unless specifically designated in the Special Conditions, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such specifications shall be deemed to be used for the purpose of facilitating the description of the material, process, or article desired and shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer for substitution any material, process, or article which may be substantially equal to or better in every respect to that so indicated or specified in the Contract Documents. However, the City has adopted uniform standards for certain materials, processes, and articles.
- D. The Contractor shall submit substitution requests, together with substantiating data, for substitution of any "or equal" material, process, or article no later than thirty-five (35) calendar days after award of Contract. Provisions regarding submission of substitution requests shall not in any way authorize an extension of time for the performance of this Contract. If a substitution request is rejected by the City, the Contractor shall provide the material, method or service specified herein. The City shall not be responsible for any costs incurred by the Contractor associated with substitution requests. The burden of proof as to the equality of any material, process, or article shall rest with the Contractor. The Engineer has the complete and sole

discretion to determine if a material, process, or article is substantially equal to or better than that specified and to approve or reject all substitution requests.

- E. Substantiating data as described above shall include, at a minimum, the following information:
 - 1. A signed affidavit from the Contractor stating that the material, process, or article proposed as a substitution is substantially equal to or better than that specified in every way except as may be listed on the affidavit.
 - 2. Illustrations, specifications, catalog cut sheets, and any other relevant data required to prove that the material, process, or article is substantially equal to or better than that specified.
 - 3. A statement of the cost implications of the substitution being requested, indicating whether and why the proposed substitution will reduce or increase the amount of the contract.
 - 4. Information detailing the durability and lifecycle costs of the proposed substitution.
- F. Failure to submit all the required substantiating data detailed above in a timely manner so that the substitution request can be adequately reviewed may result in rejection of the substitution request. The Engineer is not obligated to review multiple submittals related the same substitution request resulting from the Contractor's failure to initially submit a complete package.
- G. Time limitations within this Article shall be strictly complied with and in no case will an extension of time for completion of the contract be granted because of Contractor's failure to provide substitution requests at the time and in the manner described herein.
- H. The Contractor shall bear the costs of all City work associated with the review of substitution requests.
- I. If substitution requests approved by the Engineer require that Contractor furnish materials, methods or services more expensive than that specified, the increased costs shall be borne by Contractor.

ARTICLE 15. SHOP DRAWINGS

- A. Contractor shall check and verify all field measurements and shall submit with such promptness as to provide adequate time for review and cause no delay in its own Work or in that of any other contractor, subcontractor, or worker on the Project, six (6) copies of all shop drawings, calculations, schedules, and materials list, and all other provisions required by the Contract Documents. Contractor shall sign all submittals affirming that submittals have been reviewed and approved by Contractor prior to submission to Engineer. Each signed submittal shall affirm that the submittal meets all the requirements of the Contract Documents except as specifically and clearly noted and listed on the transmittal letter of the submittal.
- B. Contractor shall make any corrections required by the Engineer, and file with the Engineer six (6) corrected copies each, and furnish such other copies as may be

needed for completion of the Work. Engineer's acceptance of shop drawings shall not relieve Contractor from responsibility for deviations from the Contract Documents unless Contractor has, in writing, called Engineer's attention to such deviations at time of submission and has secured the Engineer's written acceptance. Engineer's acceptance of shop drawings shall not relieve Contractor from responsibility for errors in shop drawings.

ARTICLE 16. SUBMITTALS

- A. Contractor shall furnish to the Engineer for approval, prior to purchasing or commencing any Work, a log of all samples, material lists and certifications, mix designs, schedules, and other submittals, as required in the Contract Documents. The log shall indicate whether samples will be provided in accordance with other provisions of this Contract.
- B. Contractor will provide samples and submittals, together with catalogs and supporting data required by the Engineer, to the Engineer within a reasonable time period to provide for adequate review and avoid delays in the Work.
- C. These requirements shall not authorize any extension of time for performance of this Contract. Engineer will check and approve such samples, but only for conformance with design concept of work and for compliance with information given in the Contract Documents. Work shall be in accordance with approved samples and submittals.

ARTICLE 17. MATERIALS

- A. Except as otherwise specifically stated in the Contract Documents, Contractor shall provide and pay for all materials, labor, tools, equipment, lights, power, transportation, superintendence, temporary constructions of every nature, and all other services and facilities of every nature whatsoever necessary to execute and complete this Contract within specified time.
- B. Unless otherwise specified, all materials shall be new and the best of their respective kinds and grades as noted and/or specified, and workmanship shall be of good quality.
- C. Materials shall be furnished in ample quantities and at such times as to ensure uninterrupted progress of the Work and shall be stored properly and protected as required by the Contract Documents. Contractor shall be entirely responsible for damage or loss by weather or other causes to materials or Work.
- D. No materials, supplies, or equipment for Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in the Work and agrees upon completion of all work to deliver the Project, to the City free from any claims, liens, or charges.
- E. Materials shall be stored on the Project site in such manner so as not to interfere with any operations of the City or any independent contractor.

- F. Contractor shall verify all measurements, dimensions, elevations, and quantities before ordering any materials or performing any Work, and the City shall not be liable for Contractor's failure to do so. No additional compensation, over and above payment for the actual quantities at the prices set out in the Bid Form, will be allowed because of differences between actual measurements, dimension, elevations and quantities and those indicated on the Plans and in the Specifications. Any difference therein shall be submitted to the Engineer for consideration before proceeding with the Work.

ARTICLE 18. PERMITS AND LICENSES

- A. City will apply and pay for the review of necessary encroachment permits for Work within the public rights-of-way. Contractor shall obtain all other necessary permits and licenses for the construction of the Project, including encroachment permits, and shall pay all fees required by law and shall comply with all laws, ordinances, rules and regulations relating to the Work and to the preservation of public health and safety. Before acceptance of the Project, the Contractor shall submit all licenses, permits, certificates of inspection and required approvals to the City.
- B. The Bid Form contains an allowance for the Contractor's cost of acquiring traffic control permits and for construction inspection fees that may be charged to the Contractor by the Agency of Jurisdiction. The allowance is included within the Bid Form to eliminate the need by bidders to research or estimate the costs of traffic control permits and construction inspection fees prior to submitting a bid. The allowance is specifically intended to account for the costs of traffic control permits and construction inspection fees charged by the local Agency of Jurisdiction only. No other costs payable by Contractor to the Agency of Jurisdiction are included within the allowance. Payment by City to Contractor under the Permit and Inspection Allowance Bid Item shall be made based on actual cost receipts only and in accordance with the provisions of these specifications.

ARTICLE 19. TRENCHES

- A. **Trenches Five Feet or More in Depth.** Contractor shall submit to the Engineer at the preconstruction meeting, a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from hazards of caving ground during the excavation of any trench or trenches five feet or more in depth. If such plan varies from shoring system standards established by the Construction Safety Orders of the California Code of Regulations, Department of Industrial Relations, the plan shall be prepared by a California registered civil or structural engineer. The plan shall not be less effective than the shoring, bracing, sloping, or other provisions of the Construction Safety Orders, as defined in the California Code of Regulations. The Contractor shall designate in writing the "competent person" as defined in Title 8, California Code of Regulations, who shall be present at the Work Site each day that trenching/excavation is in progress. The "competent person" shall prepare and provide daily trenching/excavation inspection reports to the Engineer. Contractor shall also submit a copy of its annual California Occupational Safety and Health Administration (Cal/OSHA) trench/excavation permit.
- B. **Excavations Deeper than Four Feet.** If the Work involves excavating trenches or other excavations that extend deeper than four feet below the surface, Contractor shall

promptly, and before the excavation is further disturbed, notify the City in writing of any of the following conditions:

1. Material that the Contractor believes may be material that is 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 provisions of existing law.
2. Subsurface or latent physical conditions at the site differing from those indicated.
3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract

The City shall promptly investigate the conditions, and if it finds that the conditions do so materially differ, or do 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, shall issue a change order under the procedures described in the Contract Documents.

In the event that a dispute arises between the City and the Contractor as to whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the Work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all Work to be performed under the Contract. Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the parties.

ARTICLE 20. TRAFFIC CONTROL

- A. Traffic control plan(s) for the Work may be required by the Agency(s) of Jurisdiction. Traffic control plans, if required, shall be prepared at Contractor's expense, and traffic control shall be performed at Contractor's expense in accordance with the requirements of the Agency(s) of Jurisdiction. The Permit and Inspection Allowance included within the Bid Form includes the cost of required traffic control permit(s) and construction inspection by the Agency(s) of Jurisdiction only. The Permit and Inspection Allowance does not include costs for preparation of any required traffic control plans, implementation of any traffic control requirements or for any traffic signal services that may be required. Costs for traffic control plans, implementation of traffic control, or traffic signal services required by the Agency(s) of Jurisdiction shall be included in the Contractor's Bid.
- B. All warning signs and safety devices used by the Contractor to perform the Work shall conform to the requirements contained in the State of California, Department of Transportation's current edition of "Manual of Traffic Controls for Construction and Maintenance Work Zones" or to the requirements of the local agency. The Contractor shall also be responsible for all traffic control required by the agency having jurisdiction over the project on the intersecting streets. Contractor must submit a traffic control plan to the agency having jurisdiction over the project for approval prior to starting work.

- C. The Contractor's representative on the site responsible for traffic control shall produce evidence that he/she has completed training acceptable to the California Department of Transportation for safety through construction zones. All of the streets in which the Work will occur shall remain open to traffic and one lane of traffic maintained at all times unless otherwise directed by the agency of jurisdiction. Businesses and residences adjacent to the Work shall be notified forty-eight (48) hours in advance of closing of driveways. The Contractor shall make every effort to minimize the amount of public parking temporarily eliminated due to construction in areas fronting businesses. No stockpiles of pipe or other material will be allowed in traveled right-of-ways after working hours unless otherwise approved by the Engineer.

ARTICLE 21. DIVERSION OF RECYCLABLE WASTE MATERIALS

In compliance with the applicable City's waste reduction and recycling efforts, Contractor shall divert all Recyclable Waste Materials to appropriate recycling centers as required for compliance with the local jurisdiction's waste diversion ordinances. Contractor will be required to submit weight tickets and written proof of diversion with its monthly progress payment requests. Contractor shall complete and execute any certification forms required by City or other applicable agencies to document Contractor's compliance with these diversion requirements. All costs incurred for these waste diversion efforts shall be the responsibility of the Contractor.

ARTICLE 22. REMOVAL OF HAZARDOUS MATERIALS

Should Contractor encounter material reasonably believed to be polychlorinated biphenyl (PCB) or other toxic wastes and hazardous materials which have not been rendered harmless at the Project site, the Contractor shall immediately stop work at the affected Project site and shall report the condition to the City in writing. The City shall contract for any services required to directly remove and/or abate PCBs and other toxic wastes and hazardous materials, if required by the Project site(s), and shall not require the Contractor to subcontract for such services. The Work in the affected area shall not thereafter be resumed except by written agreement of the City and Contractor.

ARTICLE 23. SANITARY FACILITIES

Contractor shall provide sanitary temporary toilet buildings and hand washing facilities for the use of all workers. All toilets and hand washing facilities shall comply with all applicable federal, state and local laws, codes, ordinances, and regulations. Toilets shall be kept supplied with toilet paper and shall have workable door fasteners. Toilets and hand washing facilities shall be serviced no less than once weekly and shall be present in a quantity of not less than 1 per 20 workers as required by Cal/OSHA regulations. The toilets and hand washing facilities shall be maintained in a sanitary condition at all times. Use of toilet and hand washing facilities in the Work under construction shall not be permitted. Any other Sanitary Facilities required by Cal/OSHA shall be the responsibility of the Contractor.

ARTICLE 24. AIR POLLUTION CONTROL

Contractor shall comply with all air pollution control rules, regulations, ordinances and statutes. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate that the contents fully comply with the applicable material requirements.

ARTICLE 25. LAYOUT AND FIELD ENGINEERING

All field engineering required for laying out the Work and establishing grades for earthwork operations shall be furnished by the Contractor at its expense.

ARTICLE 26. TESTS AND INSPECTIONS

- A. If the Contract Documents, the Engineer, or any instructions, laws, ordinances, or public authority requires any part of the Work to be tested or Approved, Contractor shall provide the Engineer at least two (2) working days' notice of its readiness for observation or inspection. If inspection is by a public authority other than the City, Contractor shall promptly inform the City of the date fixed for such inspection. Required certificates of inspection (or similar) shall be secured by Contractor. Costs for City testing and City inspection shall be paid by the City. Costs of tests for Work found not to be in compliance shall be paid by the Contractor.
- B. If any Work is done or covered up without the required testing or approval, the Contractor shall uncover or deconstruct the Work, and the Work shall be redone after completion of the testing at the Contractor's cost in compliance with the Contract Documents.
- C. Where inspection and testing are to be conducted by an independent laboratory or agency, materials or samples of materials to be inspected or tested shall be selected by such laboratory or agency, or by the City, and not by Contractor. All tests or inspections of materials shall be made in accordance with the commonly recognized standards of national organizations.
- D. In advance of manufacture of materials to be supplied by Contractor which must be tested or inspected, Contractor shall notify the City so that the City may arrange for testing at the source of supply. Any materials which have not satisfactorily passed such testing and inspection shall not be incorporated into the Work.
- E. If the manufacture of materials to be inspected or tested will occur in a plant or location greater than sixty (60) miles from the City, the Contractor shall pay for any excessive or unusual costs associated with such testing or inspection, including but not limited to excessive travel time, standby time and required lodging.
- F. Reexamination of Work may be ordered by the City. If so ordered, Work must be uncovered or deconstructed by Contractor. If Work is found to be in accordance with the Contract Documents, the City shall pay the costs of reexamination and reconstruction. If such work is found not to be in accordance with the Contract Documents, Contractor shall pay all costs.

ARTICLE 27. PROTECTION OF WORK AND PROPERTY

- A. The Contractor shall be responsible for all damages to persons or property that occurs as a result of the Work. Contractor shall be responsible for the proper care and protection of all materials delivered and Work performed until completion and final Acceptance by the City. All Work shall be solely at the Contractor's risk. Contractor shall adequately protect adjacent property from settlement or loss of lateral support as necessary. Contractor shall comply with all applicable safety laws and building codes

to prevent accidents or injury to persons on, about, or adjacent to the Project site where Work is being performed. Contractor shall erect and properly maintain at all times, as required by field conditions and progress of work, all necessary safeguards, signs, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created in the course of construction.

- B. In an emergency affecting safety of life or of work or of adjoining property, Contractor, without special instruction or authorization from the Engineer, is hereby permitted to act to prevent such threatened loss or injury; and Contractor shall so act, without appeal, if so authorized or instructed by the Engineer or the City. Any compensation claimed by Contractor on account of emergency work shall be determined by and agreed upon by the City and the Contractor.

ARTICLE 28. CONTRACTOR'S MEANS AND METHODS

Contractor is solely responsible for the means and methods utilized to perform the Work. In no case shall the Contractor's means and methods deviate from commonly used industry standards.

ARTICLE 29. AUTHORIZED REPRESENTATIVES

The City shall designate representatives, who shall have the right to be present at the Project site at all times. The City may designate an inspector who shall have the right to observe all of the Contractor's Work. The inspector shall not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. Contractor shall provide safe and proper facilities for such access.

ARTICLE 30. HOURS OF WORK

- A. As provided in Article 3 (commencing at section 1810), Chapter 1, Part 7, Division 2 of the Labor Code, Contractor stipulates that eight (8) hours of labor shall constitute a legal day's work. The time of service of any worker employed at any time by the Contractor or by any subcontractor on any subcontract under this Contract upon the Work or upon any part of the Work contemplated by this Contract is limited and restricted to eight (8) hours during any one calendar day and 40 hours during any one calendar week, except as hereinafter provided. Notwithstanding the provisions herein above set forth, work performed by employees of Contractor in excess of eight (8) hours per day, and 40 hours during any one week, shall be permitted upon this public work upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half times the basic rate of pay.
- B. The Contractor and every subcontractor shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed in connection with the Work or any part of the Work contemplated by this Contract. The record shall be kept open at all reasonable hours to the inspection of the City and to the Division of Labor Law Enforcement, Department of Industrial Relations of the State of California.
- C. The Contractor shall pay to the City a penalty of twenty-five dollars (\$25.00) for each worker employed in the execution of this Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day and 40 hours in any one calendar

week in violation of the provisions of Article 3 (commencing at section 1810), Chapter 1, Part 7, Division 2 of the Labor Code.

- D. Any work necessary to be performed after regular working hours, or on Saturdays and Sundays or other holidays, shall be performed without additional expense to the City.
- E. City will provide inspection during normal working hours from 7:00 a.m. to 3:30 p.m. Monday through Friday. Inspection before or after this time will be charged to the Contractor as reimbursable inspection time. Inspections on weekends requires two days' notice for review and approval. Upon written request and approval the 8.5 hour working day may be changed to other limits subject to city/county ordinance.
- F. It shall be unlawful for any person to operate, permit, use, or cause to operate any of the following at the Project site, other than between the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, with no Work allowed on the City-observed holidays, unless otherwise approved by the City:
 - 1. Powered Vehicles
 - 2. Construction Equipment
 - 3. Loading and Unloading Vehicles
 - 4. Domestic Power Tools

ARTICLE 31. PAYROLL RECORDS; LABOR COMPLIANCE

- A. Pursuant to Labor Code section 1776, Contractor and all subcontractors shall maintain weekly certified payroll records, showing the names, addresses, Social Security numbers, work classifications, 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 by them in connection with the Work under this Contract. Contractor shall certify under penalty of perjury that records maintained and submitted by Contractor are true and accurate. Contractor shall also require subcontractor(s) to certify weekly payroll records under penalty of perjury.
- B. In accordance with Labor Code section 1771.4, the Contractor and each subcontractor shall furnish the certified payroll records directly to the Department of Industrial Relations ("DIR") on the specified interval and format prescribed by the DIR, which may include electronic submission. Contractor shall comply with all requirements and regulations from the DIR relating to labor compliance monitoring and enforcement. The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.
- C. Any stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor that affect Contractor's performance of Work, including any delay, shall be Contractor's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Contractor caused delay subject to any applicable liquidated damages and shall not be compensable by the City. Contractor

shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor.

- D. The payroll records described herein shall be certified and submitted by the Contractor at a time designated by the City. The Contractor shall also provide the following:
 - 1. A certified copy of the employee's payroll records shall be made available for inspection or furnished to such employee or his or her authorized representative on request.
 - 2. A certified copy of all payroll records described herein shall be made available for inspection or furnished upon request of the DIR.
- E. Unless submitted electronically, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement ("DLSE") of the DIR or shall contain the same information as the forms provided by the DLSE.
- F. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency, the City, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the Contract or performing the contract shall not be marked or obliterated.
- G. In the event of noncompliance with the requirements of this Article, the Contractor shall have ten (10) calendar days in which to comply subsequent to receipt of written notice specifying in what respects the Contractor must comply with this Article. Should noncompliance still be evident after such 10-day period, the Contractor shall pay a penalty of one hundred dollars (\$100.00) to the City for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payment then due.
- H. The responsibility for compliance with this Article shall rest upon the Contractor.

ARTICLE 32. PREVAILING RATES OF WAGES

- A. The Contractor is aware of the requirements of Labor Code sections 1720 *et seq.* and 1770 *et seq.*, as well as California Code of Regulations, Title 8, Section 16000 *et seq.* ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. Since this Project involves an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. The Contractor shall obtain a copy of the prevailing rates of per diem wages at the commencement of this Contract from the website of the Division of Labor Statistics and Research of the Department of Industrial Relations located at www.dir.ca.gov. In the alternative, the Contractor may view a copy of the prevailing rate of per diem wages which are on file at the City's Administration Office and shall be made available to interested parties upon request. Contractor shall make copies of the prevailing rates

of per diem wages for each craft, classification, or type of worker needed to perform work on the Project available to interested parties upon request, and shall post copies at the Contractor's principal place of business and at the Project site. Contractor shall defend, indemnify and hold the City, its officials, officers, employees and authorized volunteers free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or allege failure to comply with the Prevailing Wage Laws.

- B. The Contractor shall forfeit as a penalty to the City not more than Two Hundred Dollars (\$200.00), pursuant to Labor Code section 1775, for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate as determined by the Director of the Department of Industrial Relations for such work or craft in which such worker is employed for any public work done under the Contract by it or by any subcontractor under it. The difference between such prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof, for which each worker was paid less than the prevailing wage rate, shall be paid to each worker by the Contractor.
- C. Contractor shall post, at appropriate conspicuous points on the Project site, a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned.

ARTICLE 33. PUBLIC WORKS CONTRACTOR REGISTRATION

Pursuant to Labor Code sections 1725.5 and 1771.1, the Contractor and its subcontractors must be registered with the Department of Industrial Relations prior to the execution of a contract to perform public works. By entering into this Contract, Contractor represents that it is aware of the registration requirement and is currently registered with the DIR. Contractor shall maintain a current registration for the duration of the Project. Contractor shall further include the requirements of Labor Code sections 1725.5 and 1771.1 in any subcontract and ensure that all subcontractors are registered at the time this Contract is entered into and maintain registration for the duration of the Project. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

ARTICLE 34. EMPLOYMENT OF APPRENTICES

- A. Contractor and all subcontractors shall comply with the requirements of Labor Code sections 1777.5 and 1777.6 in the employment of apprentices.
- B. Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.
- C. Knowing violations of Labor Code section 1777.5 will result in forfeiture not to exceed one hundred dollars (\$100.00) for each calendar day of non-compliance pursuant to Labor Code section 1777.7.
- D. The responsibility for compliance with this Article shall rest upon the Contractor.

ARTICLE 35. NONDISCRIMINATION/EQUAL EMPLOYMENT OPPORTUNITY

Pursuant to Labor Code section 1735 and other applicable provisions of law, the Contractor and its subcontractors shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, or any other classifications protected by law on this Project. The Contractor will take affirmative action to insure that employees are treated during employment or training without regard to their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, or any other classifications protected by law.

Employment Eligibility; Contractor. By executing this Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time. Such requirements and restrictions include, but are not limited to, examination and retention of documentation confirming the identity and immigration status of each employee of the Contractor. Contractor also verifies that it has not committed a violation of any such law within the five (5) years immediately preceding the date of execution of this Contract, and shall not violate any such law at any time during the term of the Contract. Contractor shall avoid any violation of any such law during the term of this Contract by participating in an electronic verification of work authorization program operated by the United States Department of Homeland Security, by participating in an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, or by some other legally acceptable method. Contractor shall maintain records of each such verification, and shall make them available to the City or its representatives for inspection and copy at any time during normal business hours. The City shall not be responsible for any costs or expenses related to Contractor's compliance with the requirements provided for or referred to herein.

Employment Eligibility; Subcontractors, Sub-subcontractors and Consultants. To the same extent and under the same conditions as Contractor, Contractor shall require all of its subcontractors, sub-subcontractors and consultants performing any part of the Work or of this Contract to make the same verifications and comply with all requirements and restrictions provided for herein.

Employment Eligibility; Failure to Comply. Each person executing this Contract on behalf of Contractor verifies that he or she is a duly authorized officer of Contractor, and understands that any of the following shall be grounds for the City to terminate the Contract for cause: (1) failure of Contractor or its subcontractors, sub-subcontractors or consultants to meet any of the requirements provided for herein; (2) any misrepresentation or material omission concerning compliance with such requirements; or (3) failure to immediately remove from the Work any person found not to be in compliance with such requirements.

ARTICLE 36. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS

Contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Labor Code section 1777.1 or 1777.7. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid, or may have been paid to a debarred subcontractor by a contractor on the

project shall be returned to the City. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the project.

ARTICLE 37. LABOR/EMPLOYMENT SAFETY

The Contractor shall comply with all applicable laws and regulations of the federal, state, and local government, including Cal/OSHA requirements and requirements for verification of employees' legal right to work in the United States.

The Contractor shall maintain emergency first aid treatment for his employees which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 *et seq.*), and California Code of Regulations, Title 8, Industrial Relations Division 1, Department of Industrial Relations, Chapter 4. The Contractor shall ensure the availability of emergency medical services for its employees in accordance with California Code of Regulations, Title 8, Section 1512.

The Contractor shall submit the Illness and Injury Prevention Program and a Project site specific safety program to the City prior to beginning Work at the Project site. Contractor shall maintain a confined space program that meets or exceeds the City Standards. Contractor shall adhere to the City's lock out tag out program.

ARTICLE 38. INSURANCE

The Contractor shall obtain, and at all times during performance of the Work of Contract, maintain all of the insurance described in this Article. Contractor shall not commence Work under this Contract until it has provided evidence satisfactory to the City that it has secured all insurance required hereunder. Contractor shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the City that the subcontractor has secured all insurance required under this Article. Failure to provide and maintain all required insurance shall be grounds for the City to terminate this Contract for cause. Contractor shall furnish City with original certificates of insurance and endorsements effective coverage required by this Contract on forms satisfactory to the City. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms acceptable to the City. All certificates and endorsements must be received and approved by the City before Work commences.

- A. **Additional Insureds; Waiver of Subrogation.** The City, its officials, officers, employees, agents and authorized volunteers shall be named as Additional Insureds on Contractor's All Risk policy and on Contractor's and its subcontractors' policies of Commercial General Liability and Automobile Liability insurance using, for Contractor's policy/ies of Commercial General Liability insurance, ISO CG forms 20 10 and 20 37 (or endorsements providing the exact same coverage, including completed operations), and, for subcontractors' policies of Commercial General Liability insurance, ISO CG form 20 38 (or endorsements providing the exact same coverage). Notwithstanding the minimum limits set forth in this Contract for any type of insurance coverage, all available insurance proceeds in excess of the specified minimum limits of coverage shall be available to the parties required to be named as Additional Insureds hereunder. Contractor and its insurance carriers shall provide a Waiver of Subrogation in favor of those parties.
- B. **Workers' Compensation Insurance.** The Contractor shall provide workers' compensation insurance for all of the employees engaged in Work under this Contract,

on or at the Site, and, in case of any sublet Work, the Contractor shall require the subcontractor similarly to provide workers' compensation insurance for all the latter's employees as prescribed by State law. Any class of employee or employees not covered by a subcontractor's insurance shall be covered by the Contractor's insurance. In case any class of employees engaged in work under this Contract, on or at the Site, is not protected under the Workers' Compensation Statutes, the Contractor shall provide or shall cause a subcontractor to provide, adequate insurance coverage for the protection of such employees not otherwise protected. The Contractor is required to secure payment of compensation to his employees in accordance with the provisions of section 3700 of the Labor Code. The Contractor shall file with the City certificates of his insurance protecting workers. Company or companies providing insurance coverage shall be acceptable to the City, if in the form and coverage as set forth in the Contract Documents.

- C. **Employer's Liability Insurance.** Contractor shall provide Employer's Liability Insurance, including Occupational Disease, in the amount of at least one million dollars (\$1,000,000.00) per person per accident. Contractor shall provide City with a certificate of Employer's Liability Insurance. Such insurance shall comply with the provisions of the Contract Documents. The policy shall be endorsed, if applicable, to provide a Borrowed Servant/Alternate Employer Endorsement and contain a Waiver of Subrogation in favor of the City.
- D. **Commercial General Liability Insurance.** Contractor shall provide "occurrence" form Commercial General Liability insurance coverage at least as broad as the most current ISO CGL Form 00 01, including but not limited to, premises liability, contractual liability, products/completed operations, personal and advertising injury which may arise from or out of Contractor's operations, use, and management of the Site, or the performance of its obligations hereunder. The policy shall not contain any exclusion contrary to this Contract including but not limited to endorsements or provisions limiting coverage for (1) contractual liability (including but not limited to ISO CG 24 26 or 21 39); or (2) cross-liability for claims or suits against one insured against another. Policy limits shall not be less than \$1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. Defense costs shall be paid in addition to the limits.
1. Such policy shall comply with all the requirements of this Article. The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Further the limits set forth herein shall not be construed to relieve the Contractor from liability in excess of such coverage, nor shall it limit Contractor's indemnification obligations to the City, and shall not preclude the City from taking such other actions available to the City under other provisions of the Contract Documents or law.
 2. All general liability policies provided pursuant to the provisions of this Article shall comply with the provisions of the Contract Documents.
 3. All general liability policies shall be written to apply to all bodily injury, including death, property damage, personal injury, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse,

under-ground excavation, removal of lateral support, and other covered loss, however occasioned, occurring during the policy term, and shall specifically insure the performance by Contractor of that part of the indemnification contained in these General Conditions relating to liability for injury to or death of persons and damage to property.

4. If the coverage contains one or more aggregate limits, a minimum of 50% of any such aggregate limit must remain available at all times; if over 50% of any aggregate limit has been paid or reserved, the City may require additional coverage to be purchased by Contractor to restore the required limits. Contractor may combine primary, umbrella, and as broad as possible excess liability coverage to achieve the total limits indicated above. Any umbrella or excess liability policy shall include the additional insured endorsement described in the Contract Documents.
5. All policies of general liability insurance shall permit and Contractor does hereby waive any right of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss.

E. **Automobile Liability Insurance.** Contractor shall provide "occurrence" form Automobile Liability Insurance at least as broad as ISO CA 00 01 (Any Auto) in the amount of, at least, two million dollars (\$2,000,000) per accident for bodily injury and property damage. Such insurance shall provide coverage with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by Contractor or for which Contractor is responsible, in a form and with insurance companies acceptable to the City. All policies of automobile insurance shall permit and Contractor does hereby waive any right of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss.

F. **Builder's Risk ["All Risk"]**

1. It is the Contractor's responsibility to maintain or cause to be maintained Builder's Risk ["All Risk"] extended coverage insurance on all work, material, equipment, appliances, tools, and structures that are or will become part of the Work and subject to loss or damage by fire, and vandalism and malicious mischief, in an amount to cover 100% of the replacement cost. The City accepts no responsibility for the Work until the Work is formally accepted by the City. The Contractor shall provide a certificate evidencing this coverage before commencing performance of the Work.
2. The named insureds shall be Contractor, all Subcontractors of any tier (excluding those solely responsible for design work), suppliers, and City, its elected officials, officers, employees, agents and authorized volunteers, as their interests may appear. Contractor shall not be required to maintain property insurance for any portion of the Work following acceptance by City.
3. Policy shall be provided for replacement value on an "all risk" basis. There shall be no coinsurance penalty provision in any such policy. Policy must include: (1) coverage for any ensuing loss from faulty workmanship, nonconforming work, omission or deficiency in design or specifications; (2) coverage against machinery

accidents and operational testing; (3) coverage for removal of debris, and insuring the buildings, structures, machinery, equipment, materials, facilities, fixtures and all other properties constituting a part of the Project; (4) transit coverage, including ocean marine coverage (unless insured by the supplier), with sub-limits sufficient to insure the full replacement value of any key equipment item; and (5) coverage with sub-limits sufficient to insure the full replacement value of any property or equipment stored either on or off the Site. Such insurance shall be on a form acceptable to City to ensure adequacy and sublimit.

4. In addition, the policy shall meet the following requirements:
 - a. Insurance policies shall be so conditioned as to cover the performance of any extra work performed under the Contract.
 - b. Coverage shall include all materials stored on site and in transit.
 - c. Coverage shall include Contractor's tools and equipment.
 - d. Insurance shall include boiler, machinery and material hoist coverage.

ARTICLE 39. FORM AND PROOF OF CARRIAGE OF INSURANCE

- A. Any insurance carrier providing insurance coverage required by the Contract Documents shall be admitted to and authorized to do business in the State of California unless waived, in writing, by the City's Risk Manager. Carrier(s) shall have an A.M. Best rating of not less than an A:VII. Insurance deductibles or self-insured retentions must be declared by the Contractor. At the election of the City the Contractor shall either 1) reduce or eliminate such deductibles or self-insured retentions, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses. If umbrella or excess liability coverage is used to meet any required limit(s) specified herein, the Contractor shall provide a "follow form" endorsement satisfactory to the City indicating that such coverage is subject to the same terms and conditions as the underlying liability policy.
- B. Each insurance policy required by this Contract shall be endorsed to state that: (1) coverage shall not be suspended, voided, reduced or cancelled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City; and (2) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the City, its officials, officers, agents, employees, and volunteers.
- C. The Certificates(s) and policies of insurance shall contain or shall be endorsed to contain the covenant of the insurance carrier(s) that it shall provide no less than thirty (30) days written notice be given to the City prior to any material modification or cancellation of such insurance. In the event of a material modification or cancellation of coverage, the City may terminate the Contract or stop the Work in accordance with the Contract Documents, unless the City receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing coverage's set forth herein and the insurance required herein is in full force and effect. Contractor shall not take possession, or use the Site,

or commence operations under this Contract until the City has been furnished original Certificate(s) of Insurance and certified original copies of endorsements or policies of insurance including all endorsements and any and all other attachments as required in this Article. The original endorsements for each policy and the Certificate of Insurance shall be signed by an individual authorized by the insurance carrier to do so on its behalf.

- D. The Certificate(s) of Insurance, policies and endorsements shall so covenant and shall be construed as primary, and the City's insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory.
- E. City reserves the right to adjust the monetary limits of insurance coverages during the term of this Contract including any extension thereof if, in the City's reasonable judgment, the amount or type of insurance carried by the Contractor becomes inadequate.
- F. Contractor shall report to the City, in addition to the Contractor's insurer, any and all insurance claims submitted by the Contractor in connection with the Work under this Contract.

ARTICLE 40. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- A. **Time for Completion/Liquidated Damages.** Time is of the essence in the completion of the Work. Work shall be commenced within ten (10) Days of the date stated in the City's Notice to Proceed and shall be completed by Contractor in the time specified in the Contract Documents. The City is under no obligation to consider early completion of the Project; and the Contract completion date shall not be amended by the City's receipt or acceptance of the Contractor's proposed earlier completion date. Furthermore, Contractor shall not, under any circumstances, receive additional compensation from the City (including but not limited to indirect, general, administrative or other forms of overhead costs) for the period between the time of earlier completion proposed by the Contractor and the Contract completion date. If the Work is not completed as stated in the Contract Documents, it is understood that the City will suffer damage. In accordance with Government Code section 53069.85, being impractical and infeasible to determine the amount of actual damage, it is agreed that Contractor shall pay to the City as fixed and liquidated damages, and not as a penalty, the sum stipulated in the Contract for each calendar day of delay until the Work is fully completed. Contractor and its surety shall be liable for any liquidated damages. Any money due or to become due the Contractor may be retained to cover liquidated damages.
- B. **Inclement Weather.** Contractor shall abide by the Engineer's determination of what constitutes inclement weather. Time extensions for inclement weather shall only be granted when the Work stopped during inclement weather is on the critical path of the Project schedule.
- C. **Extension of Time.** Contractor shall not be charged liquidated damages because of any delays in completion of the Work due to unforeseeable causes beyond the control and without the fault or negligence of Contractor (or its subcontractors or suppliers). Contractor shall within five (5) Days of identifying any such delay notify the City in writing of causes of delay. The City shall ascertain the facts and extent of delay and

grant extension of time for completing the Work when, in its judgment, the facts justify such an extension. Time extensions to the Project shall be requested by the Contractor as they occur and without delay. No delay claims shall be permitted unless the event or occurrence delays the completion of the Project beyond the Contract completion date.

- D. **No Damages for Reasonable Delay.** The City's liability to Contractor for delays for which the City is responsible shall be limited to only an extension of time unless such delays were unreasonable under the circumstances. In no case shall the City be liable for any costs which are borne by the Contractor in the regular course of business, including, but not limited to, home office overhead and other ongoing costs. Damages caused by unreasonable City delay, including delays caused by items that are the responsibility of the City pursuant to Government Code section 4215, shall be based on actual costs only, no proportions or formulas shall be used to calculate any delay damages.

ARTICLE 41. COST BREAKDOWN AND PERIODIC ESTIMATES

Contractor shall furnish on forms Approved by the City:

- A. Within ten (10) Days of Notice to Proceed with the Contract, a detailed estimate giving a complete breakdown of the Contract price, if the Contract amount is a lump sum.
- B. A monthly itemized estimate of Work done for the purpose of making progress payments. In order for the City to consider and evaluate each progress payment application, the Contractor shall submit a detailed measurement of Work performed and a progress estimate of the value thereof before the tenth (10th) Day of the following month.
- C. Contractor shall submit, with each of its payment requests, an adjusted list of actual quantities, verified by the Engineer, for unit price items listed, if any, in the Bid Form.
- D. Following the City's Acceptance of the Work, the Contractor shall submit to the City a written statement of the final quantities of unit price items for inclusion in the final payment request.
- E. The City shall have the right to adjust any estimate of quantity and to subsequently correct any error made in any estimate for payment.

Contractor shall certify under penalty of perjury, that all cost breakdowns and periodic estimates accurately reflect the Work on the Project.

ARTICLE 42. PROGRESS ESTIMATES AND PAYMENT

- A. By the tenth (10th) Day of the following calendar month, Contractor shall submit to Engineer a payment request which shall set forth in detail the value of the Work done for the period beginning with the date work was first commenced and ending on the end of the calendar month for which the payment request is prepared. Contractor shall include any amount earned for authorized extra work. From the total thus computed, a deduction shall be made in the amount of five percent (5%) for retention, except where the City has adopted a finding that the Work done under the Contract is

substantially complex, and then the amount withheld as retention shall be the percentage specified in the Notice Inviting Bids. From the remainder a further deduction may be made in accordance with Section B below. The amount computed, less the amount withheld for retention and any amounts withheld as set forth below, shall be the amount of the Contractor's payment request.

- B. The City may withhold a sufficient amount or amounts of any payment or payments otherwise due to Contractor, as in his judgment may be necessary to cover:
 - 1. Payments which may be past due and payable for just claims against Contractor or any subcontractors for labor or materials furnished in and about the performance of work on the Project under this Contract.
 - 2. Defective work not remedied.
 - 3. Failure of Contractor to make proper payments to his subcontractor or for material or labor.
 - 4. Completion of the Contract if there is a reasonable doubt that the Work can be completed for balance then unpaid.
 - 5. Damage to another contractor or a third party.
 - 6. Amounts which may be due the City for claims against Contractor.
 - 7. Failure of Contractor to keep the record ("as-built") drawings up to date.
 - 8. Failure to provide update on construction schedule as required herein.
 - 9. Site cleanup.
 - 10. Failure to comply with Contract Documents.
 - 11. Liquidated damages.
 - 12. Legally permitted penalties.
- C. The City may apply such withheld amount or amounts to payment of such claims or obligations at its discretion with the exception of subsections (B)(1), (3), and (5) of this Article, which must be retained or applied in accordance with applicable law. In so doing, the City shall be deemed the agent of Contractor and any payment so made by the City shall be considered as a payment made under contract by the City to Contractor and the City shall not be liable to Contractor for such payments made in good faith. Such payments may be made without prior judicial determination of claim or obligations. The City will render Contractor a proper accounting of such funds disbursed on behalf of Contractor.
- D. Upon receipt, the Engineer shall review the payment request to determine whether it is undisputed and suitable for payment. If the payment request is determined to be unsuitable for payment, it shall be returned to Contractor as soon as practicable but not later than seven (7) Days after receipt, accompanied by a document setting forth

in writing the reasons why the payment request is not proper. The City shall make the progress payment within 30 calendar days after the receipt of an undisputed and properly submitted payment request from Contractor, provided that a release of liens and claims has been received from the Contractor pursuant to Civil Code section 8132. The number of days available to the City to make a payment without incurring interest pursuant to this paragraph shall be reduced by the number of days by which the Engineer exceeds the seven (7) Day requirement.

- E. A payment request shall be considered properly executed if funds are available for payment of the payment request and payment is not delayed due to an audit inquiry by the financial officer of the City.

ARTICLE 43. SECURITIES FOR MONEY WITHHELD

Pursuant to section 22300 of the Public Contract Code of the State of California, Contractor may request the City to make retention payments directly to an escrow agent or may substitute securities for any money withheld by the City to ensure performance under the contract. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with the City or with a state or federally chartered bank as the escrow agent who shall return such securities to Contractor upon satisfactory completion of the contract. Deposit of securities with an escrow agent shall be subject to a written agreement substantially in the form provided in section 22300 of the Public Contract Code.

ARTICLE 44. CHANGES AND EXTRA WORK.

A. Contract Change Orders.

1. The City, without invalidating the Contract, may order changes in the Work consisting of additions, deletions or other revisions, and the Contract Price and Contract Time shall be adjusted accordingly. Except as otherwise provided herein, all such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents. A Change Order signed by the Contractor indicates the Contractor's agreement therewith, including any adjustment in the Contract Price or the Contract Time, and the full and final settlement of all costs (direct, indirect and overhead) related to the Work authorized by the Change Order.
2. Contractor shall promptly execute changes in the Work as directed in writing by the City even when the parties have not reached agreement on whether the change increases the scope of Work or affects the Contract Price or Contract Time. All claims for additional compensation to the Contractor shall be presented in writing. No claim will be considered after the Work in question has been done unless a written Change Order has been issued or a timely written notice of claim has been made by Contractor.
3. Whenever any change is made as provided for herein, such change shall be considered and treated as though originally included in the Contract, and shall be subject to all terms, conditions, and provisions of the original Contract.

4. Contractor shall not be entitled to claim or bring suit for damages, whether for loss of profits or otherwise, on account of any decrease or omission of any item or portion of Work to be done.
5. No dispute, disagreement, or failure of the parties to reach agreement on the terms of the Change Order shall relieve the Contractor from the obligation to proceed with performance of the work, including Additional Work, promptly and expeditiously.
6. Contractor shall make available to the City any of the Contractor's documents related to the Project immediately upon request of the City, as set forth in Article 52.
7. Any alterations, extensions of time, Additional Work, or any other changes may be made without securing consent of the Contractor's surety or sureties.

B. Contract Price Change.

1. Process for Determining Adjustments in Contract Price.

- a. Owner Initiated Change. The Contractor must submit a complete cost proposal, including any change in the Contract Price or Contract Time, within seven (7) Days after receipt of a scope of a proposed change order initiated by the City, unless the City requests that proposals be submitted in less than seven (7) Days.
- b. Contractor Initiated Change. The Contractor must give written notice of a proposed change order required for compliance with the Contract Documents within seven (7) Days of discovery of the facts giving rise to the proposed change order.
- c. Whenever possible, any changes to the Contract amount shall be in a lump sum mutually agreed to by the Contractor and the City.
- d. Price quotations from the Contractor shall be accompanied by sufficiently detailed supporting documentation to permit verification by the City, including but not limited to estimates and quotations from subcontractors or material suppliers, as the City may reasonably request. Contractor shall certify the accuracy of all Change Order Requests under penalty of perjury.
- e. If the Contractor fails to submit a complete cost proposal within the seven (7) Day period (or as requested), the City has the right to order the Contractor in writing to commence the Work immediately on a time and materials basis and/or issue a lump sum change to the Contract Price and/or Contract Time in accordance with the City's estimate. If the change is issued based on the City's estimate, the Contractor will waive its right to dispute the action unless within fifteen (15) Days following completion of the added/deleted work, the Contractor presents written proof that the City's estimate was in error.

2. Unit Price Change Orders.

- a. When the actual quantity of a Unit Price item varies from the Bid Form, compensation for the change in quantity will be calculated by multiplying the actual quantity by the Unit Price. This calculation may result in either an additive or deductive Final Change Order pursuant to the Contract Documents.
 - b. No Mark up for Overhead and Profit. Because the Contract Unit Prices provided in the Bid Form include Overhead and Profit as determined by Contractor at the time of Bid submission, no mark up or deduction for Overhead and Profit will be included in Unit Price Change Orders.
 - c. Bid items included on the Bid Form may be deducted from the Work in their entirety without any negotiated extra costs.
 - d. Contractor acknowledges that unit quantities are estimates and agrees that the estimated unit quantities listed on the Bid Form will be adjusted to reflect the actual unit quantities which may result in an adjustment to the Contract Unit Prices. Such an adjustment will be made by execution of a final additive or deductive Change Order following Contractor's completion of the Work. Upon notification, Contractor's failure to respond within seven (7) Days will result in City's issuance of a unit quantity adjustment to the Contract Unit Prices and/or Contract Time in accordance with the Contract Documents.
 - e. The City or Contractor may make a Claim for an adjustment in the Unit Price in accordance with the Contract Documents if:
 - i. the quantity of any item of Unit Price Work performed by Contractor differs by twenty-five percent (25%) or more from the estimated quantity of such item indicated in the Contract; and
 - ii. there is no corresponding adjustment with respect to any other item of Work; and
 - iii. Contractor believes that Contractor is entitled to an increase in Unit Price as a result of having incurred additional expense or the City believes that the City is entitled to a decrease in Unit Price and the parties are unable to agree as to the amount of any such increase or decrease.
3. Contractor shall incorporate the provisions of this Section into all agreements with Subcontractors. Compensation for Lump Sum Change Orders shall be limited to expenditures necessitated specifically by the Additional Work, and shall be according to the following:
- a. Overview. The Contractor will submit a properly itemized Lump Sum Change Order Proposal covering the Additional Work and/or the work to be deleted. This proposal will be itemized for the various components of the Additional Work and segregated by labor, material, and equipment in a detailed format satisfactory to the City. The City will require itemized change orders on all change order proposals from the Contractor, subcontractors, and sub-subcontractors regardless of tier. Details to be submitted will include detailed line item estimates showing detailed materials quantity take-offs, material

prices by item and related labor hour pricing information and extensions (by line item or by drawing as applicable).

- b. Labor. The costs of labor will be the actual cost for wages prevailing locally for each craft or type of worker at the time the Additional Work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State or local laws, as well as assessment or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the Additional Work cost will not be permitted unless the Contractor establishes the necessity for such new classifications. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

Estimated labor hours must only include hours for those workmen and working foremen directly involved in performing the change order work. Supervision above the level of working foremen (such as general foremen, superintendent, project manager, etc.) is considered to be included in the markup percentages as outlined below. Note that no separate allowances for warranty expense will be allowed as a direct cost of a change order. Costs attributed to warranty expenses will be considered to be covered by the markup.

- c. Labor Burden. Labor burden allowable in change orders shall be defined as employer's net actual cost of payroll taxes (FICA, Medicare, SUTA, FUTA), net actual cost for employer's cost of union benefits (or other usual and customary fringe benefits if the employees are not union employees), and net actual cost to employer for worker's compensation insurance taking into consideration adjustments for experience modifiers, premium discounts, dividends, rebates, expense constants, assigned risk pool costs, net cost reductions due to policies with deductibles for self-insured losses, assigned risk rebates, etc. Contractor shall reduce their standard payroll tax percentages to properly reflect the effective cost reduction due to the estimated impact of the annual maximum wages subject to payroll taxes. An estimated percentage for labor burden may be used for pricing change orders. However, the percentage used for labor burden to price change orders will be examined at the conclusion of the Project and an adjustment to the approved change orders will be processed if it is determined that the actual labor burden percentage should have been more or less than the estimated percentage used.
- d. Materials. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available in the quantities involved, plus sales tax, freight, and delivery. Materials costs shall be based upon supplier or manufacturer's invoice. If invoices or other satisfactory evidence of cost are not furnished within fifteen (15) Days of delivery, then the City shall determine the materials cost, at its sole discretion. Estimated material change order costs shall reflect the Contractor's reasonably anticipated net actual cost for the purchase of the material needed for the change order work. Estimated material costs shall reflect cost reductions available to the Contractor due to "non-cash" discounts, trade discounts, free material credits, and/or volume rebates. "Cash" discounts (i.e., prompt payment discounts of 2% or less) available on material purchased for change order work shall be credited to the

City if the Contractor is provided the City funds in time for Contractor to take advantage of any such "cash" discounts. The portion of any "cash" discounts greater than 2% will not be considered "non-cash" discount for purposes of this provision. Price quotations from material suppliers must be itemized with unit prices for each specific item to be purchased. "Lot pricing" quotations will not be considered sufficient substantiating detail.

- e. Tool and Equipment Use. Costs for the use of small tools, which are tools that have a replacement value of \$1,000 or less, shall be considered included in the Overhead and Profit mark-ups established below. Allowable change order estimated costs may include appropriate amounts for rental of major equipment specifically needed to perform the change order work (defined as tools and equipment with an individual purchase cost of more than \$750). For Contractor owned equipment, the "bare" equipment rental rates allowed to be used for pricing change order proposals shall be 75% of the monthly rate listed in the most current publication of The AED Green Book divided by 176 to arrive at a maximum hourly rate to be applied to the hours the equipment is used performing the change order work. Further, for Contractor owned equipment, the aggregate equipment rent charges for any single piece of equipment used in all change order work shall be limited to 50% of the fair market value of the piece of equipment when the first change order is priced involving usage of the piece of equipment. Fuel necessary to operate the equipment will be considered as a separate direct cost associated with the change order work.
- f. Maximum Markup Percentage Allowable on Self-Performed Work. With respect to pricing change orders, the maximum markup percentage to be paid to any Contractor or subcontractor (regardless of tier) on self-performed work shall be a single markup percentage not-to-exceed fifteen percent (15%) of the net direct cost of (1) direct labor and allowable labor burden costs applicable to the change in the Work; (2) the net cost of material and installed equipment incorporated into the change in the Work, and (3) net rental cost of major equipment and related fuel costs necessary to complete the change in the Work. The markup computed using the above formula shall be considered to be allocated 2/3 to cover applicable overhead costs directly attributable to the field overhead costs related to processing, supervising and performing, the change order work, and the remaining 1/3 to cover home office overhead costs and profit
- g. Maximum Markup Percentages Allowable on Work Performed by Lower Tier Subcontractors. With respect to pricing the portion of change order proposals involving Work performed by lower tier contractors, the maximum markup percentage allowable to the Contractor or subcontractor supervising the lower tier subcontractor's work shall not exceed five percent (5%) of the net of all approved change order work performed by all subcontractors combined for any particular change order proposal. The markup computed using the above formula shall be considered to be allocated 2/3 to cover applicable overhead costs directly attributable to the field overhead costs related to processing, supervising and performing the change order work, and the remaining 1/3 to cover home office overhead costs and profit.

- h. No Markup on Bonds and Liability Insurance Costs. Change order cost adjustments due to increases or decreases in bond or insurance costs (if applicable) shall not be subject to any markup.
 - i. Direct and Indirect Costs Covered by Markup Percentages. As a further clarification, the agreed upon markup percentage set forth above is intended to cover the Contractor's profit and all indirect costs associated with the change order work. Items intended to be covered by the markup percentage include, but are not limited to: home office expenses, branch office and field office overhead expense of any kind, project management, superintendents, general foremen, estimating, engineering, coordinating, expediting, purchasing, detailing, legal, accounting, data processing or other administrative expenses, shop drawings, permits, auto insurance and umbrella insurance, pick-up truck costs, and warranty expense costs. The cost for the use of small tools is also to be considered covered by the markup percentage established above. Small tools shall be defined as tools and equipment (power or non-power) with an individual purchase cost of less than \$750.
 - j. Deduct Change Orders and Net Deduct Changes. The application of the markup percentages referenced above will apply to both additive and deductive change orders. In the case of a deductive change order, the credit will be computed by applying the sliding scale percentages as outlined above so that a deductive change order would be computed in the same manner as an additive change order. In those instances where a change involves both additive and deductive work, the additions and deductions will be netted and the markup percentage adjustments will be applied to the net amount.
 - k. Contingency. In no event will any lump sum or percentage amounts for "contingency" be allowed to be added as a separate line item in change order estimates. Unknowns attributable to labor hours will be accounted for when estimating labor hours anticipated performing the work. Unknowns attributable to material scrap and waste will be estimated as part of material costs.
 - l. Insurance and Bonds. In the event the Contractor has been required to furnish insurance and/or bonds as part of the base contract price, a final contract change order will be processed to account for the Contractor's net increase or decrease in insurance costs and/or bond premium costs associated with change orders to Contractor's base Contract Price.
4. Time and Materials Change Orders.
- a. General. The term Time and Materials means the sum of all costs reasonably and necessarily incurred and paid by Contractor for labor, materials, and equipment in the proper performance of Additional Work. Except as otherwise may be agreed to in writing by the City, such costs shall be in amounts no higher than those prevailing in the locality of the Project, and shall include only the following items.
 - b. Timely and Final Documentation.

- i. T&M Daily Sheets. Contractor must submit timesheets, materials invoices, records of equipment hours, and records of rental equipment hours to the City's Representative for an approval signature **each day** Additional Work is performed. Failure to get the City's Representative's approval signature each Day shall result in a waiver of Contractor's right to claim these costs. The City's Representative's signature on time sheets only serves as verification that the Work was performed and is not indicative of City's agreement to Contractor's entitlement to the cost.
 - ii. T&M Daily Summary Sheets. All documentation of incurred costs ("T&M Daily Summary Sheets") shall be submitted by Contractor within **three (3) Days** of incurring the cost for labor, material, equipment, and special services as Additional Work is performed. Contractor's actual costs shall be presented in a summary table in an electronic spreadsheet file by labor, material, equipment, and special services. Each T&M Daily Summary Sheet shall include Contractor's actual costs incurred for the Additional Work performed that day and a cumulative total of Contractor's actual costs incurred for the Additional Work. Contractor's failure to provide a T&M Daily Summary Sheet showing a total cost summary within three (3) Days but within five (5) Days of performance of the Work will result in the Contractor's otherwise allowable overhead and profit being reduced by 50% for that portion of Additional Work which was not documented in a timely manner. Contractor's failure to submit the T&M Daily Summary Sheet within five (5) Days of performance of the Work will result in a total waiver of Contractor's right to claim these costs.
 - iii. T&M Total Cost Summary Sheet. Contractor shall submit a T&M Total Cost Summary Sheet, which shall include total actual costs, within **seven (7) Days** following completion of City approved Additional Work. Contractor's total actual cost shall be presented in a summary table in an electronic spreadsheet file by labor, material, equipment, and special services. Contractor's failure to submit the T&M Total Cost Summary Sheet within seven (7) Days of completion of the Additional Work will result in Contractor's waiver for any reimbursement of any costs associated with the T&M Summary Sheets or the performance of the Additional Work.
- c. Labor. The Contractor will be paid the cost of labor for the workers used in the actual and direct performance of the Work. The cost of labor will be the sum of the actual wages paid (which shall include any employer payments to or on behalf of the workers for health and welfare, pension, vacation, and similar purposes) substantiated by timesheets and certified payroll for wages prevailing for each craft or type of workers performing the Additional Work at the time the Additional Work is done, and the labor surcharge set forth in the Department of Transportation publication entitled *Labor Surcharge and Equipment Rental Rates*, which is in effect on the date upon which the Work is accomplished and which is a part of the Contract. The labor surcharge shall constitute full compensation for all payments imposed by Federal, State, or local laws and for all other payments made to, or on behalf of, the workers, other than actual wages.

- i. Equipment Operator Exception. Labor costs for equipment operators and helpers shall be paid only when such costs are not included in the invoice for equipment rental.
 - ii. Foreman Exception. The labor costs for foremen shall be proportioned to all of their assigned work and only that applicable to the Additional Work shall be paid. Indirect labor costs, including, without limitation, the superintendent, project manager, and other labor identified in the Contract Documents will be considered Overhead.
- d. Materials. The cost of materials reported shall be itemized at invoice or lowest current price at which materials are locally available and delivered to the Project site in the quantities involved, plus the cost of sales tax, freight, delivery, and storage.
- i. Trade discounts available to the purchaser shall be credited to the City notwithstanding the fact that such discounts may not have been taken by Contractor.
 - ii. For materials secured by other than a direct purchase and direct billing to the purchaser, the cost shall be deemed to be the price paid to the actual supplier as determined by the City's Representative.
 - iii. Payment for materials from sources owned wholly or in part by the purchaser shall not exceed the price paid by the purchaser for similar materials from said sources on Additional Work items or the current wholesale price for such materials delivered to the Project site, whichever price is lower.
 - iv. If, in the opinion of the City's Representative, the cost of materials is excessive, or Contractor does not furnish satisfactory evidence of the cost of such materials, then the cost shall be deemed to be the lowest current wholesale price for the total quantity concerned delivered to the Project site less trade discounts.
 - v. The City reserves the right to furnish materials for the Additional Work and no Claim shall be allowed by Contractor for costs of such materials or Indirect Costs or profit on City furnished materials.
- e. Equipment.
- i. Rental Time. The rental time to be paid for equipment on the Project site shall be the time the equipment is in productive operation on the Additional Work being performed and, in addition, shall include the time required to move the equipment to the location of the Additional Work and return it to the original location or to another location requiring no more time than that required to return it to its original location; except that moving time will not be paid if the equipment is used on other than the Additional Work, even though located at the site of the Additional Work.

- (a) Rental Time Not Allowed. Rental time will not be allowed while equipment is inoperative due to breakdowns.
 - (b) Computation Method. The following shall be used in computing the rental time of equipment on the Project site.
 - (i) When hourly rates are paid, any part of an hour less than 30 minutes of operation shall be considered to be 1/2-hour of operation, and any part of an hour in excess of 30 minutes will be considered one hour of operation.
 - (ii) When daily rates are paid, any part of a day less than 4 hours operation shall be considered to be 1/2-day of operation, and any part of an hour in excess of 4 hours will be considered one day of operation.
- ii. Rental Rates. Contractor will be paid for the use of equipment at the lesser of (i) the actual rental rate, or (ii) the rental rate listed for that equipment in the California Department of Transportation publication entitled *Labor Surcharge and Equipment Rental Rates*, which is in effect on the date upon which the Contract was executed. Such rental rates will be used to compute payments for equipment whether the equipment is under Contractor's control through direct ownership, leasing, renting, or another method of acquisition. The rental rate to be applied for use of each item of equipment shall be the rate (i.e., daily, monthly) resulting in the least total cost to the City for the total period of use. If it is deemed necessary by Contractor to use equipment not listed in the publication, an equitable rental rate for the equipment will be established by the City's Representative. Contractor may furnish cost data which might assist the City's Representative in the establishment of the rental rate.
- iii. Contractor-Owned Equipment.
 - (a) For Contractor-owned equipment, the allowed equipment rental rate will be limited to the monthly equipment rental rate using a utilization rate of 173 hours per month.
 - (b) For Contractor-owned equipment, the rental time to be paid for equipment on the Site shall be the time the equipment is in productive operation, unless, in the instance of standby time, the equipment could be actively used by Contractor on another project, then City shall pay for the entirety of the time the equipment is on Site. It shall be Contractor's burden to demonstrate to the City that the equipment could be actively used on another project.
- iv. All equipment shall, in the opinion of the City's Representative, be in good working condition and suitable for the purpose for which the equipment is to be used.
- v. Before construction equipment is used on the Additional Work, Contractor shall plainly stencil or stamp an identifying number thereon at a

conspicuous location, and shall furnish to the City's Representative, in duplicate, a description of the equipment and its identifying number and the scheduled Additional Work activities planned.

- vi. Unless otherwise specified, manufacturer's rating and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.
- f. Special Services. Special work or services are defined as that Additional Work characterized by extraordinary complexity, sophistication, or innovation or a combination of the foregoing attributes which are unique to the construction industry.
 - i. Invoices for Special Services. When the City's Representative and Contractor determine that a special service is required which cannot be performed by the forces of Contractor or those of any of its Subcontractors, the special service may be performed by an entity especially skilled in the Additional Work. Invoices for special services based upon the current fair market value thereof may be accepted without complete itemization of labor, material, and equipment rental costs, after validation of market values by the City's Representative.
 - ii. Discount and Allowance. All invoices for special services will be adjusted by deducting all trade discounts offered or available, whether the discounts were taken or not. In lieu of Overhead and Profit specified herein, a total allowance not to exceed fifteen percent (15%) for Overhead and Profit will be added to invoices for Special Services.
 - iii. When the City determines, in its sole discretion, that competitive bidding is necessary for certain special services, Contractor shall solicit competitive bids for those special services.
- g. Excluded Costs. The term Time and Material shall not include any of the following costs or any other home or field office overhead costs, all of which are to be considered administrative costs covered by Contractor's allowance for Overhead and Profit.
 - i. Overhead Cost. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, timekeepers, clerks, and other personnel employed by Contractor whether at the Site or in Contractor's principal office or any branch office, material yard, or shop for general administration of the Additional Work;
 - ii. Office Expenses. Expenses of Contractor's principal and branch offices;
 - iii. Capital Expenses. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Additional Work and charges against Contractor for delinquent payments;

- iv. Negligence. Costs due to the negligence of Contractor or any Subcontractor or Supplier, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including without limitation the correction of Defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property;
- v. Other. Other overhead or general expense costs of any kind and the cost of any item not specifically and expressly included in the Contract Documents;
- vi. Small Tools. Cost of small tools valued at less than \$1,000 and that remain the property of Contractor;
- vii. Administrative Costs. Costs associated with the preparation of Change Orders (whether or not ultimately authorized), cost estimates, or the preparation or filing of Claims;
- viii. Anticipated Lost Profits. Expenses of Contractor associated with anticipated lost profits or lost revenues, lost income or earnings, lost interest on earnings, or unpaid retention;
- ix. Home Office Overhead. Costs derived from the computation of a "home office overhead" rate by application of the *Eichleay, Allegheny*, burden fluctuation, or other similar methods;
- x. Special Consultants and Attorneys. Costs of special consultants or attorneys, whether or not in the direct employ of Contractor, employed for services specifically related to the resolution of a Claim, dispute, or other matter arising out of or relating to the performance of the Additional Work.
- h. Overhead, Profit and Other Charges. The mark-up for overhead (including supervision) and profit on work added to the Contract shall be according to the following:
 - i. "Net Cost" is defined as consisting of costs of labor, materials, and tools and equipment only excluding overhead and profit. The costs of applicable insurance and bond premium will be reimbursed to the Contractor and subcontractors at cost only, without mark-up. Contractor shall provide City with documentation of the costs, including, but not limited to, payroll records, invoices, and such other information as City may reasonably request.
 - ii. For Work performed by the Contractor's forces, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the Net Cost of the Work.
 - iii. For Work performed by a subcontractor, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the subcontractor's Net Cost of the Work to which the Contractor may add five percent (5%) of the subcontractor's Net Cost.

- iv. For Work performed by a sub-subcontractor, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the sub-subcontractor's Net Cost for Work to which the subcontractor and general contractor may each add an additional five percent (5%) of the Net Cost of the lower tier subcontractor.
 - v. No additional mark-up will be allowed for lower tier subcontractors, and in no case shall the added cost for overhead and profit payable by City exceed twenty-five percent (25%) of the Net Cost as defined herein, of the party that performs the Work.
- 5. All of the following costs are included in the markups for overhead and profit described above, and Contractor shall not receive any additional compensation for: Submittals, drawings, field drawings, Shop Drawings, including submissions of drawings; field inspection; General Superintendence; General administration and preparation of cost proposals, schedule analysis, Change Orders, and other supporting documentation; computer services; reproduction services; Salaries of project engineer, superintendent, timekeeper, storekeeper, and secretaries; Janitorial services; Small tools, incidentals and consumables; Temporary On-Site facilities (Offices, Telephones, High Speed Internet Access, Plumbing, Electrical Power, Lighting; Platforms, Fencing, Water), Jobsite and Home office overhead or other expenses; vehicles and fuel used for work otherwise included in the Contract Documents; Surveying; Estimating; Protection of Work; Handling and disposal fees; Final Cleanup; Other Incidental Work; Related Warranties; insurance and bond premiums.
 - 6. For added or deducted Work by subcontractors, the Contractor shall furnish to the City the subcontractor's signed detailed record of the cost of labor, material and equipment, including the subcontractor markup for overhead and profit. The same requirement shall apply to sub-subcontractors
 - 7. For added or deducted work furnished by a vendor or supplier, the Contractor shall furnish to the City a detailed record of the cost to the Contractor, signed by such vendor or supplier.
 - 8. Any change in the Work involving both additions and deletions shall indicate a net total cost, including subcontracts and materials. Allowance for overhead and profit, as specified herein, shall be applied if the net total cost is an increase in the Contract Price; overhead and profit allowances shall not be applied if the net total cost is a deduction to the Contract Price. The estimated cost of deductions shall be based on labor and material prices on the date the Contract was executed.
 - 9. Contractor shall not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is stated in the Change Order for Work. No claims shall be allowed for impact, extended overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity of changes and/or clarifications. The Contractor may not change or modify the City's change order form in an attempt to reserve additional rights.
 - 10. If the City disagrees with the proposal submitted by Contractor, it will notify the Contractor and the City will provide its opinion of the appropriate price and/or time

extension. If the Contractor agrees with the City, a Change Order will be issued by the City. If no agreement can be reached, the City shall have the right to issue a unilateral Change Order setting forth its determination of the reasonable additions or savings in costs and time attributable to the extra or deleted work. Such determination shall become final and binding if the Contractor fails to submit a claim in writing to the City within fifteen (15) Days of the issuance of the unilateral Change Order, disputing the terms of the unilateral Change Order, and providing such supporting documentation for its position as the City may require.

C. Change of Contract Times.

1. The Contract Times may only be changed by a Change Order.
2. All changes in the Contract Price and/or adjustments to the Contract Times related to each change shall be included in Contractor's COR pursuant to this Article. No cost or time will be allowed for cumulative effects of multiple changes. All Change Orders must state that the Contract Time is not changed or is either increased or decreased by a specific number of days. Failure to include a change to time shall waive any change to the time unless the parties mutually agree in writing to postpone a determination of the change to time resulting from the Change Order.
3. Notice of the amount of the request for adjustment in the Contract Times with supporting data shall be delivered within seven (7) Days after such start of occurrence. No extension of time or additional compensation shall be given for a delay if the Contractor failed to give notice in the manner and within the time prescribed.
4. City may elect, at City's sole discretion, to grant an extension in Contract Times, without Contractor's request, because of delays or other factors.
5. Use of Float and Critical Path.
 - a. Float is for the benefit of the Project. Float shall not be considered for the exclusive use or benefit of either the City or the Contractor.
 - b. Any difference in time between the Contractor's early completion and the Contract Time shall be considered a part of the Project float. Contractor shall not be entitled to compensation, and City will not compensate Contractor, for delays which impact early completion.
6. Contractor's entitlement to an extension of the Contract Times is limited to a City-caused extension of the critical path, reduced by the Contractor's concurrent delays, and established by a proper time impact analysis. No time extension shall be allowed unless, and then only to the extent that, the City-caused delay extends the critical path beyond the previously approved Contract Time.
 - a. Contractor shall not be entitled to an adjustment in the Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

- b. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions (as determined by the City), Acts of God, acts or failures to act of utility owners not under the control of City, or other causes not the fault of and beyond control of City and Contractor, then Contractor shall be entitled to a time extension when the Work stopped is on the critical path. Such a non-compensable adjustment shall be Contractor's sole and exclusive remedy for such delays. Contractor must submit a timely request in accordance with the requirements of this Article.
- c. Utility-Related Delays.
 - i. Contractor shall immediately notify in writing the utility owner and City's Representative of its construction schedule and any subsequent changes in the construction schedule which will affect the time available for protection, removal, or relocation of utilities. Requests for extensions of time arising out of utility relocation or repair delays shall be filed in accordance with this Article.
 - ii. Contractor shall not be entitled to damages or additional payment for delays attributable to utility relocations or alterations if correctly located, as noted in the Contract Documents or by the Underground Service Alert survey.
- 7. Content for Requests for Contract Extension. Contractor's justification for entitlement shall be clear and complete citing specific Contract Document references and reasons on which Contractor's entitlement is based. At a minimum, each request for a time extension must include:
 - a. Each request for an extension of Contract Time must identify the impacting event, in narrative form, providing a description of the delay event and sufficient justification as to why the Contractor is entitled to a time extension. Contractor must demonstrate that the delay arises from unforeseeable causes beyond the control and without the fault or negligence of both Contractor and any Subcontractors or Suppliers, or any other persons or organizations employed by any of them or for whose acts any of them may be liable, and that such causes in fact lead to performance or completion of the Work, or specified part in question, beyond the corresponding Contract Times, despite Contractor's reasonable and diligent actions to guard against those effects.
 - b. Each request for an extension of Contract Time must include a time impact analysis in CPM format, using the Contemporaneous Impacted As-Planned Schedule Analysis to calculate the impact of the delay event.
- 8. No Damages for Reasonable Delay.
 - a. City's liability to Contractor for delays for which City is responsible shall be limited to only an extension of time unless such delays were unreasonable under the circumstances. In no case shall City be liable for any costs which are borne by the Contractor in the regular course of business, including, but not limited to, home office overhead and other ongoing costs.

- b. Damages caused by unreasonable City delay that impact the critical path, including delays caused by items that are the responsibility of the City pursuant to Government Code section 4215, shall be compensated at the Daily Rate established in the Special Conditions. No other calculations, proportions or formulas shall be used to calculate any delay damages.
 - c. City and City's Representative, and the officers, members, partners, employees, agents, consultants, or subcontractors of each of them, shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.
9. Contractor's failure, neglect, or refusal to comply with the requirements of the Contract Documents, or any portion thereof, shall bar Contractor's request for extensions of the Contract Times. Such failure, neglect, or refusal prejudices City's and City's Representative's ability to recognize and mitigate delay, and such failure, neglect, or refusal prevent the timely analysis of requests for extensions of Contract Times, and whether such extensions may be warranted. Contractor hereby waives all rights to extensions of Contract Times due to delays or accelerations that result from or occur during periods of time for which Contractor fails, neglects, or refuses to fully comply with the requirements of this Article.

ARTICLE 45. FINAL ACCEPTANCE AND PAYMENT

- A. The acceptance of the Work on behalf of the City will be made by the Engineer. Such acceptance by the City shall not constitute a waiver of defects. When the Work has been accepted there shall be paid to Contractor a sum equal to the contract price less any amounts previously paid Contractor and less any amounts withheld by the City from Contractor under the terms of the contract. The final five percent (5%), or the percentage specified in the notice inviting bids where the City has adopted a finding of substantially complete, shall not become due and payable until five (5) calendar days shall have elapsed after the expiration of the period within which all claims may be filed under the provisions of Civil Code section 9356. If the Contractor has placed securities with the City as described herein, the Contractor shall be paid a sum equal to one hundred percent (100%) of the contract price less any amounts due the City under the terms of the Contract.
- B. Unless Contractor advises the City in writing prior to acceptance of the final five percent (5%) or the percentage specified in the notice inviting bids where the City has adopted a finding of substantially complete, or the return of securities held as described herein, said acceptance shall operate as a release to the City of all claims and all liability to Contractor for all things done or furnished in connection with this work and for every act of negligence of the City and for all other claims relating to or arising out of this work. If Contractor advises the City in writing prior to acceptance of final payment or return of the securities that there is a dispute regarding the amount due the Contractor, the City may pay the undisputed amount contingent upon the Contractor furnishing a release of all undisputed claims against the City with the disputed claims in stated amounts being specifically excluded by Contractor from the operation of the release. No payments, however, final or otherwise, shall operate to

release Contractor or its sureties from the Faithful Performance Bond, Labor and Material Payment Bond, or from any other obligation under this contract.

- C. In case of suspension of the contract any unpaid balance shall be and become the sole and absolute property of the City to the extent necessary to repay the City any excess in the cost of the Work above the contract price.
- D. Final payment shall be made no later than 60 days after the date of acceptance of the Work by the City or the date of occupation, beneficial use and enjoyment of the Work by the City including any operation only for testing, start-up or commissioning accompanied by cessation of labor on the Work, provided that a release of liens and claims has been received from the Contractor pursuant to Civil Code section 8136. In the event of a dispute between the City and the Contractor, the City may withhold from the final payment an amount not to exceed 150% of the disputed amount.
- E. Within ten (10) calendar days from the time that all or any portion of the retention proceeds are received by Contractor, Contractor shall pay each of its subcontractors from whom retention has been withheld each subcontractor's share of the retention received. However, if a retention payment received by Contractor is specifically designated for a particular subcontractor, payment of the retention shall be made to the designated subcontractor if the payment is consistent with the terms of the subcontract.

ARTICLE 46. OCCUPANCY

The City reserves the right to occupy or utilize any portion of the Work at any time before completion, and such occupancy or use shall not constitute acceptance of any part of Work covered by this Contract. This use shall not relieve the Contractor of its responsibilities under the Contract.

ARTICLE 47. INDEMNIFICATION

To the fullest extent permitted by law, Contractor shall immediately defend (with counsel of the City's choosing), indemnify and hold harmless the City, officials, officers, agents, employees, and representatives, and each of them from and against:

- A. Any and all claims, demands, causes of action, costs, expenses, injuries, losses or liabilities, in law or in equity, of every kind or nature whatsoever, but not limited to, injury to or death, including wrongful death, of any person, and damages to or destruction of property of any person, arising out of, related to, or in any manner directly or indirectly connected with the Work or this Contract, including claims made by subcontractors for nonpayment, including without limitation the payment of all consequential damages and attorney's fees and other related costs and expenses, however caused, regardless of whether the allegations are false, fraudulent, or groundless, and regardless of any negligence of the City or its officers, employees, or authorized volunteers (including passive negligence), except the sole negligence or willful misconduct or active negligence of the City or its officials, officers, employees, or authorized volunteers.
- B. Contractor's defense and indemnity obligation herein includes, but is not limited to damages, fines, penalties, attorney's fees and costs arising from claims under the

Americans with Disabilities Act (ADA) or other federal or state disability access or discrimination laws arising from Contractor's Work during the course of construction of the improvements or after the Work is complete, as the result of defects or negligence in Contractor's construction of the improvements.

- C. Any and all actions, proceedings, damages, costs, expenses, fines, penalties or liabilities, in law or equity, of every kind or nature whatsoever, arising out of, resulting from, or on account of the violation of any governmental law or regulation, compliance with which is the responsibility of Contractor;
- D. Any and all losses, expenses, damages (including damages to the Work itself), attorney's fees, and other costs, including all costs of defense which any of them may incur with respect to the failure, neglect, or refusal of Contractor to faithfully perform the Work and all of Contractor's obligations under the agreement. Such costs, expenses, and damages shall include all costs, including attorney's fees, incurred by the indemnified parties in any lawsuit to which they are a party.

Contractor shall immediately defend, at Contractor's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against the City, its officials, officers, agents, employees and representatives. Contractor shall pay and satisfy any judgment, award or decree that may be rendered against the City, its officials, officers, employees, agents, employees and representatives, in any such suit, action or other legal proceeding. Contractor shall reimburse the City, its officials, officers, agents, employees and representatives for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. The only limitations on this provision shall be those imposed by Civil Code section 2782.

ARTICLE 48. PROCEDURE FOR RESOLVING DISPUTES

Contractor shall timely comply with all notices and requests for changes to the Contract Time or Contract Price, including but not limited to all requirements of Article 44, Changes and Extra Work, as a prerequisite to filing any claim governed by this Article. The failure to timely submit a notice of delay or notice of change, or to timely request a change to the Contract Price or Contract Time, or to timely provide any other notice or request required herein shall constitute a waiver of the right to further pursue the claim under the Contract or at law.

- A. **Intent.** Effective January 1, 1991, Section 20104 et seq., of the California Public Contract Code prescribes a process utilizing informal conferences, non-binding judicial supervised mediation, and judicial arbitration to resolve disputes on construction claims of \$375,000 or less. Effective January 1, 2017, Section 9204 of the Public Contract Code prescribes a process for negotiation and mediation to resolve disputes on construction claims. The intent of this Article is to implement Sections 20104 et seq. and Section 9204 of the California Public Contract Code. This Article shall be construed to be consistent with said statutes.
- B. **Claims.** For purposes of this Article, "Claim" means a separate demand by the Contractor, after a change order duly requested in accordance with Article 44 "Changes and Extra Work" has been denied by the City, for (A) a time extension, (B) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract, or (C) an amount the payment of which is disputed by the City. A "Claim" does not include any demand for payment for which the

Contractor has failed to provide notice, request a change order, or otherwise failed to follow any procedures contained in the Contract Documents. Claims governed by this Article may not be filed unless and until the Contractor completes all procedures for giving notice of delay or change and for the requesting of a time extension or change order, including but not necessarily limited to the procedures contained in Article 44, Changes and Extra Work, and Contractor's request for a change has been denied in whole or in part. Claims governed by this Article must be filed no later than fourteen (14) days after a request for change has been denied in whole or in part or after any other event giving rise to the Claim. The Claim shall be submitted in writing to the City and shall include on its first page the following in 16 point capital font: "THIS IS A CLAIM." Furthermore, the claim shall include the documents necessary to substantiate the claim. Nothing herein is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims, including all requirements pertaining to compensation or payment for extra Work, disputed Work, and/or changed conditions. Failure to follow such contractual requirements shall bar any claims or subsequent lawsuits for compensation or payment thereon.

C. Supporting Documentation. The Contractor shall submit all claims in the following format:

1. Summary of claim merit and price, reference Contract Document provisions pursuant to which the claim is made
2. List of documents relating to claim:
 - a. Specifications
 - b. Drawings
 - c. Clarifications (Requests for Information)
 - d. Schedules
 - e. Other
3. Chronology of events and correspondence
4. Analysis of claim merit
5. Analysis of claim cost
6. Time impact analysis in CPM format
7. If Contractor's claim is based in whole or in part on an allegation of errors or omissions in the Drawings or Specifications for the Project, Contractor shall provide a summary of the percentage of the claim subject to design errors or omissions and shall obtain a certificate of merit in support of the claim of design errors and omissions.

8. Cover letter and certification of validity of the claim, including any claims from subcontractors of any tier, in accordance with Government Code section 12650 *et seq.*
- D. **City's Response.** Upon receipt of a claim pursuant to this Article, City shall conduct a reasonable review of the claim and, within a period not to exceed 45 Days, shall provide the Contractor a written statement identifying what portion of the claim is disputed and what portion is undisputed. Any payment due on an undisputed portion of the claim will be processed and made within 60 Days after the City issues its written statement.
1. If the City needs approval from its governing body to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the claim, and the City's governing body does not meet within the 45 Days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the City shall have up to three Days following the next duly publicly noticed meeting of the City's governing body after the 45-Day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.
 2. Within 30 Days of receipt of a claim, the City may request in writing additional documentation supporting the claim or relating to defenses or claims the City may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of City and the Contractor. The City's written response to the claim, as further documented, shall be submitted to the Contractor within 30 Days (if the claim is less than \$15,000, within 15 Days) after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.
- E. **Meet and Confer.** If the Contractor disputes the City's written response, or the City fails to respond within the time prescribed, the Contractor may so notify the City, in writing, either within 15 Days of receipt of the City's response or within 15 Days of the City's failure to respond within the time prescribed, respectively, and demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand, the City shall schedule a meet and confer conference within 30 Days for settlement of the dispute.
- F. **Mediation.** Within 10 business Days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the City shall provide the Contractor a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 Days after the City issues its written statement. Any disputed portion of the claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the City and the Contractor sharing the associated costs equally. The City and Contractor shall mutually agree to a mediator within 10 business Days after the disputed portion of the claim has been identified in writing, unless the parties agree to select a mediator at a later time.

1. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.
 2. For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.
 3. Unless otherwise agreed to by the City and the Contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Public Contract Code Section 20104.4 to mediate after litigation has been commenced.
 4. The mediation shall be held no earlier than the date the Contractor completes the Work or the date that the Contractor last performs Work, whichever is earlier. All unresolved claims shall be considered jointly in a single mediation, unless a new unrelated claim arises after mediation is completed.
- G. **Procedures After Mediation.** If following the mediation, the claim or any portion remains in dispute, the Contractor must file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code prior to initiating litigation. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits his or her written claim pursuant to subdivision (a) until the time the claim is denied, including any period of time utilized by the meet and confer conference.
- H. **Civil Actions.** The following procedures are established for all civil actions filed to resolve claims of \$375,000 or less:
1. Within 60 Days, but no earlier than 30 Days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties or unless mediation was held prior to commencement of the action in accordance with Public Contract Code section 9204 and the terms of this Contract. The mediation process shall provide for the selection within 15 Days by both parties of a disinterested third person as mediator, shall be commenced within 30 Days of the submittal, and shall be concluded within 15 Days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.
 2. If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1114.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration. In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be

experienced in construction law, and (B) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.

- I. **Government Code Claims.** In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra Work, disputed Work, construction claims and/or changed conditions, the Contractor must comply with the claim procedures set forth in Government Code Sections 900, et seq. prior to filing any lawsuit against the City. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra Work, disputed Work, construction claims, and/or changed conditions have been followed by Contractor. If no such Government Code claim is submitted, or if the prerequisite contractual requirements are not satisfied, no action against the City may be filed. **A Government Code claim must be filed no earlier than the date the Work is completed or the date the Contractor last performs Work on the Project, whichever occurs first. A Government Code claim shall be inclusive of all unresolved claims unless a new unrelated claim arises after the Government Code claim is submitted.**
- J. **Non-Waiver.** The City's failure to respond to a claim from the Contractor within the time periods described in this Article or to otherwise meet the time requirements of this Article shall result in the claim being deemed rejected in its entirety.

ARTICLE 49. CITY'S RIGHT TO TERMINATE CONTRACT

A. Termination for Cause by the City:

1. In the sole estimation of the City, if the Contractor refuses or fails to prosecute the Work or any separable part thereof with such diligence as will insure its completion within the time specified by the Contract Documents, or any extension thereof, or fails to complete such Work within such time, or if the Contractor should be adjudged a bankrupt, or if it should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, or the Contractor or any of its subcontractors should violate any of the provisions of this Contract, the City may serve written notice upon the Contractor and its Surety of the City's intention to terminate this Contract. This notice of intent to terminate shall contain the reasons for such intention to terminate this Contract, and a statement to the effect that the Contractor's right to perform this Contract shall cease and terminate upon the expiration of ten (10) calendar days unless such violations have ceased and arrangements satisfactory to the City have been made for correction of said violations.
2. In the event that the City serves such written notice of termination upon the Contractor and the Surety, the Surety shall have the right to take over and perform the Contract. If the Surety does not: (1) give the City written notice of Surety's intention to take over and commence performance of the Contract within 15 calendar days of the City's service of said notice of intent to terminate upon Surety; and (2) actually commence performance of the Contract within 30 calendar days of the City's service of said notice upon Surety; then the City may take over the

Work and prosecute the same to completion by separate contract or by any other method it may deem advisable for the account and at the expense of the Contractor.

3. In the event that the City elects to obtain an alternative performance of the Contract as specified above: (1) the City may, without liability for so doing, take possession of and utilize in completion of the Work such materials, appliances, plants and other property belonging to the Contractor that are on the site and reasonably necessary for such completion (A special lien to secure the claims of the City in the event of such suspension is hereby created against any property of Contractor taken into the possession of the City under the terms hereof and such lien may be enforced by sale of such property under the direction of the City without notice to Contractor. The proceeds of the sale after deducting all expenses thereof and connected therewith shall be credited to Contractor. If the net credits shall be in excess of the claims of the City against Contractor, the balance will be paid to Contractor or Contractor's legal representatives.); and (2) Surety shall be liable to the City for any cost or other damage to the City necessitated by the City securing an alternate performance pursuant to this Article.

B. Termination for Convenience by the City:

1. The City may terminate performance of the Work called for by the Contract Documents in whole or, from time to time, in part, if the City determines that a termination is in the City's interest.
2. The Contractor shall terminate all or any part of the Work upon delivery to the Contractor of a Notice of Termination specifying that the termination is for the convenience of the City, the extent of termination, and the Effective Date of such termination.
3. After receipt of Notice of Termination, and except as directed by the City's Representative, the Contractor shall, regardless of any delay in determining or adjusting any amounts due under this Termination for Convenience clause, immediately proceed with the following obligations:
 - a. Stop Work as specified in the Notice.
 - b. Complete any Work specified in the Notice of Termination in a least cost/shortest time manner while still maintaining the quality called for under the Contract Documents.
 - c. Leave the property upon which the Contractor was working and upon which the facility (or facilities) forming the basis of the Contract Document is situated in a safe and sanitary manner such that it does not pose any threat to the public health or safety.
 - d. Terminate all subcontracts to the extent that they relate to the portions of the Work terminated.
 - e. Place no further subcontracts or orders, except as necessary to complete the continued portion of the Contract.

- f. Submit to the City's Representative, within ten (10) calendar days from the Effective Date of the Notice of Termination, all of the usual documentation called for by the Contract Documents to substantiate all costs incurred by the Contractor for labor, materials and equipment through the Effective Date of the Notice of Termination. Any documentation substantiating costs incurred by the Contractor solely as a result of the City's exercise of its right to terminate this Contract pursuant to this clause, which costs the contractor is authorized under the Contract documents to incur, shall: (1) be submitted to and received by the Engineer no later than 30 calendar days after the Effective Date of the Notice of Termination; (2) describe the costs incurred with particularity; and (3) be conspicuously identified as "Termination Costs occasioned by the City's Termination for Convenience."
- 4. Termination of the Contract shall not relieve Surety of its obligation for any just claims arising out of or relating to the Work performed.
- 5. In the event that the City exercises its right to terminate this Contract pursuant to this clause, the City shall pay the Contractor, upon the Contractor's submission of the documentation required by this clause and other applicable provisions of the Contract Documents, the following amounts:
 - a. All actual reimbursable costs incurred according to the provisions of this Contract.
 - b. A reasonable allowance for profit on the cost of the Work performed, provided Contractor establishes to the satisfaction of the City's Representative that it is reasonably probable that Contractor would have made a profit had the Contract been completed and provided further, that the profit allowed shall in no event exceed fifteen (15%) percent of the costs.
 - c. A reasonable allowance for Contractor's administrative costs in determining the amount payable due to termination of the Contract under this Article.
- C. Notwithstanding any other provision of this Article, when immediate action is necessary to protect life and safety or to reduce significant exposure or liability, the City may immediately order Contractor to cease Work on the Project until such safety or liability issues are addressed to the satisfaction of the City or the Contract is terminated.

ARTICLE 50. WARRANTY AND GUARANTEE OF WORK

- A. Contractor hereby warrants that materials and Work shall be completed in conformance with the Contract Documents and that the materials and Work provided will fulfill the requirements of this Warranty. Contractor hereby agrees to repair or replace, at the discretion of the City, any or all Work that may prove to be defective in its workmanship, materials furnished, methods of installation or fail to conform to the Contract Document requirements together with any other Work which may be damaged or displaced by such defect(s) within a period of one (1) year from the date of the Notice of Completion of the Project without any expense whatever to the City, ordinary wear and tear and unusual abuse and neglect excepted. Contractor shall be required to promptly repair or replace defective equipment or materials, at Contractor's

option. All costs associated with such corrective actions and testing, including the removal, replacement, and reinstitution of equipment and materials necessary to gain access, shall be the sole responsibility of the Contractor.

- B. For any Work so corrected, Contractor's obligation hereunder to correct defective Work shall be reinstated for an additional one (1) year period, commencing with the date of acceptance of such corrected Work. The reinstatement of the one (1) year warranty shall apply only to that portion of work that was corrected. Contractor shall perform such tests as City may require to verify that any corrective actions, including, without limitation, redesign, repairs, and replacements comply with the requirements of the Contract. In the event of Contractor's failure to comply with the above-mentioned conditions within ten (10) calendar days after being notified in writing of required repairs, to the reasonable satisfaction of the City, the City shall have the right to correct and replace any defective or non-conforming Work and any work damaged by such work or the replacement or correction thereof at Contractor's sole expense. Contractor shall be obligated to fully reimburse the City for any expenses incurred hereunder immediately upon demand.
- C. In addition to the warranty set forth in this Article, Contractor shall obtain for City all warranties that would be given in normal commercial practice and assign to City any and all manufacturer's or installer's warranties for equipment or materials not manufactured by Contractor and provided as part of the Work, to the extent that such third-party warranties are assignable and extend beyond the warranty period set forth in this Article. Contractor shall furnish the City with all warranty and guarantee documents prior to final Acceptance of the Project by the City as required.
- D. When specifically indicated in the Contract Documents or when directed by the Engineer, the City may furnish materials or products to the Contractor for installation. In the event any act or failure to act by Contractor shall cause a warranty applicable to any materials or products purchased by the City for installation by the Contractor to be voided or reduced, Contractor shall indemnify City from and against any cost, expense, or other liability arising therefrom, and shall be responsible to the City for the cost of any repairs, replacement or other costs that would have been covered by the warranty but for such act or failure to act by Contractor.
- E. The Contractor shall remedy at its expense any damage to City-owned or controlled real or personal property.
- F. The City shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. The Contractor shall within ten (10) calendar days after being notified commence and perform with due diligence all necessary Work. If the Contractor fails to promptly remedy any defect, or damage; the City shall have the right to replace, repair or otherwise remedy the defect, or damage at the Contractor's expense.
- G. In the event of any emergency constituting an immediate hazard to health, safety, property, or licensees, when caused by Work of the Contractor not in accordance with the Contract requirements, the City may undertake at Contractor's expense, and without prior notice, all Work necessary to correct such condition.

H. Acceptance of Defective Work.

1. If, instead of requiring correction or removal and replacement of Defective Work, the City prefers to accept it, City may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to City's evaluation of and determination to accept such Defective Work and for the diminished value of the Work.
2. If any acceptance of defective work occurs prior to release of the Project Retention, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and City shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work and all costs incurred by City.
3. If the Project Retention is held in an escrow account as permitted by the Contract Documents, Contractor will promptly alert the escrow holder, in writing, of the amount of Retention to be paid to City.
4. If the acceptance of Defective Work occurs after release of the Project Retention, an appropriate amount will be paid by Contractor to City.

I. City May Correct Defective Work.

1. If Contractor fails within a reasonable time after written notice from City's Representative to correct Defective Work, or to remove and replace rejected Work as required by City, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, City may, after seven (7) Days' written notice to Contractor, correct, or remedy any such deficiency.
2. In connection with such corrective or remedial action, City may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which City has paid Contractor but which are stored elsewhere. Contractor shall allow City and City's Representative, and the agents, employees, other contractors, and consultants of each of them, access to the Site to enable City to exercise the rights and remedies to correct the Defective Work.
3. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by City correcting the Defective Work will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions into the Contract Documents with respect to the Work; and City shall be entitled to an appropriate decrease in the Contract Price.

4. Such claims, costs, losses and damages will include, but not be limited to, all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Defective Work.
5. If the Change Order is executed after all payments under the Contract have been paid by City and the Project Retention is held in an escrow account as permitted by the Contract Documents, Contractor will promptly alert the escrow holder, in writing, of the amount of Retention to be paid to City.
6. If the Change Order is executed after release of the Project Retention, an appropriate amount will be paid by Contractor to City.
7. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to City correcting Defective work.
- J. Nothing in the Warranty or in the Contract Documents shall be construed to limit the rights and remedies available to City at law or in equity, including, but not limited to, Code of Civil Procedure section 337.15.

ARTICLE 51. DOCUMENT RETENTION & EXAMINATION

- A. In accordance with Government Code section 8546.7, records of both the City and the Contractor shall be subject to examination and audit by the State Auditor General for a period of three (3) years after final payment.
- B. Contractor shall make available to the City any of the Contractor's other documents related to the Project immediately upon request of the City.
- C. In addition to the State Auditor rights above, the City shall have the right to examine and audit all books, estimates, records, contracts, documents, bid documents, subcontracts, and other data of the Contractor (including computations and projections) related to negotiating, pricing, or performing the modification in order to evaluate the accuracy and completeness of the cost or pricing data at no additional cost to the City, for a period of four (4) years after final payment.

ARTICLE 52. SEPARATE CONTRACTS

- A. The City reserves the right to let other contracts in connection with this Work or on the Project site. Contractor shall permit other contractors reasonable access and storage of their materials and execution of their work and shall properly connect and coordinate its Work with theirs.
- B. To ensure proper execution of its subsequent Work, Contractor shall immediately inspect work already in place and shall at once report to the Engineer any problems with the Work in place or discrepancies with the Contract Documents.
- C. Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by the City in prosecution of the Project to the end that Contractor may perform this Contract in the light of such other contracts, if any. Nothing herein contained shall be interpreted as granting to Contractor exclusive occupancy at site of the Project. Contractor shall not cause any

unnecessary hindrance or delay to any other contractor working on the Project. If simultaneous execution of any contract for the Project is likely to cause interference with performance of some other contract or contracts, the Engineer shall decide which Contractor shall cease Work temporarily and which contractor shall continue or whether work can be coordinated so that contractors may proceed simultaneously. The City shall not be responsible for any damages suffered or for extra costs incurred by Contractor resulting directly or indirectly from award, performance, or attempted performance of any other contract or contracts on the Project site.

ARTICLE 53. NOTICE AND SERVICE THEREOF

All notices shall be in writing and either served by personal delivery or mailed to the other party as designated in the Bid Forms. Written notice to the Contractor shall be addressed to Contractor's principal place of business unless Contractor designates another address in writing for service of notice. Notice to City shall be addressed to the City as designated in the Notice Inviting Bids unless City designates another address in writing for service of notice. Notice shall be effective upon receipt or five (5) calendar days after being sent by first class mail, whichever is earlier. Notice given by facsimile shall not be effective unless acknowledged in writing by the receiving party.

ARTICLE 54. NOTICE OF THIRD PARTY CLAIMS

Pursuant to Public Contract Code section 9201, the City shall provide the Contractor with timely notification of the receipt of any third-party claims relating to the Contract. The City is entitled to recover reasonable costs incurred in providing such notification.

ARTICLE 55. STATE LICENSE BOARD NOTICE

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

ARTICLE 56. INTEGRATION

- A. **Oral Modifications Ineffective.** No oral order, objection, direction, claim or notice by any party or person shall affect or modify any of the terms or obligations contained in the Contract Documents.
- B. **Contract Documents Represent Entire Contract.** The Contract Documents represent the entire agreement of the City and Contractor.

ARTICLE 57. ASSIGNMENT OF CONTRACT

Contractor shall not assign, transfer, convey, sublet or otherwise dispose of the rights or title of interest of any or all of this contract without the prior written consent of the City. Any assignment or change of Contractor's name or legal entity without the written consent of the City shall be void. Any assignment of money due or to become due under this Contract shall be subject to a prior

lien for services rendered or Material supplied for performance of Work called for under the Contract Documents in favor of all persons, firms, or corporations rendering such services or supplying such Materials to the extent that claims are filed pursuant to the Civil Code, the Code of Civil Procedure or the Government Code.

ARTICLE 58. CHANGE IN NAME AND NATURE OF CONTRACTOR'S LEGAL ENTITY

Should a change be contemplated in the name or nature of the Contractor's legal entity, the Contractor shall first notify the City in order that proper steps may be taken to have the change reflected on the Contract and all related documents. No change of Contractor's name or nature will affect City's rights under the Contract, including but not limited to the bonds.

ARTICLE 59. ASSIGNMENT OF ANTITRUST ACTIONS

Pursuant to Public Contract Code section 7103.5, in entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, Contractor or subcontractor offers and agrees to assign to the City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 USC, 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 the purchase of goods, services, or materials pursuant to this contract or any subcontract. This assignment shall be made and become effective at the time the City tenders final payment to the Contractor, without further acknowledgment by the parties.

ARTICLE 60. PROHIBITED INTERESTS

No City official or representative who is authorized in such capacity and on behalf of the City to negotiate, supervise, make, accept, or approve, or to take part in negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the project, shall be or become directly or indirectly interested financially in the Contract.

ARTICLE 61. CONTROLLING LAW

Notwithstanding any subcontract or other contract with any subcontractor, supplier, or other person or organization performing any part of the Work, this Contract shall be governed by the law of the State of California excluding any choice of law provisions.

ARTICLE 62. JURISDICTION; VENUE

Contractor and any subcontractor, supplier, or other person or organization performing any part of the Work agrees that any action or suits at law or in equity arising out of or related to the bidding, award, or performance of the Work shall be maintained in the Superior Court of San Joaquin County, California, and expressly consent to the jurisdiction of said court, regardless of residence or domicile, and agree that said court shall be a proper venue for any such action.

ARTICLE 63. LAWS AND REGULATIONS

- A. Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on conduct of work as indicated and specified. If Contractor observes that drawings and specifications are at variance therewith, it shall promptly

notify the Engineer in writing and any necessary changes shall be adjusted as provided for in this Contract for changes in work. If Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Engineer, it shall bear all costs arising therefrom.

- B. Contractor shall be responsible for familiarity with the Americans with Disabilities Act ("ADA") (42 U.S.C. § 12101 et seq.). The Work will be performed in compliance with ADA regulations.

ARTICLE 64. PATENTS

Contractor shall hold and save the City, officials, officers, employees, and authorized volunteers harmless from liability of any nature or kind of claim therefrom including costs and expenses for or on account of any patented or unpatented invention, article or appliance manufactured, furnished or used by Contractor in the performance of this contract.

ARTICLE 65. OWNERSHIP OF CONTRACT DOCUMENTS

All Contract Documents furnished by the City are City property. They are not to be used by Contractor or any subcontractor on other work nor shall Contractor claim any right to such documents. With exception of one complete set of Contract Documents, all documents shall be returned to the City on request at completion of the Work.

ARTICLE 66. NOTICE OF TAXABLE POSSESSORY INTEREST

In accordance with Revenue and Taxation Code section 107.6, the Contract Documents may create a possessory interest subject to personal property taxation for which Contractor will be responsible.

ARTICLE 67. SURVIVAL OF OBLIGATIONS

All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

END OF GENERAL CONDITIONS

00 73 13 – SPECIAL CONDITIONS

1.1 Engineer of Record.

- A. For purposes of this Project, the Engineer of Record or Engineer shall be: Nick Prichard.

1.2 Location of the Project.

- A. The Project is located in the City of Escalon, CA 95320.

1.3 Shared Cost Savings for Reductions in Contract Price; Value Engineering. Should the cost of construction be less than the agreed upon Contract Price, then the savings shall be shared between the Contractor and the City. The Contractor shall receive twenty-five percent (25%) of any reductions realized in the Contract Price, and the City shall receive the remaining seventy-five percent (75%) of the savings.

1.4 Status of the Project Area and Rights-of-Way.

- A. City, at its expense, will provide all rights-of-way or permits, or both, covering the crossing of private property and public and private rights-of-way necessary for the permanent Work; provided, however, Contractor shall, at its expense, obtain any bonds or insurance policies or pay any fees and enter into any agreements required by a controlling authority, e.g., Caltrans or Union Pacific Railroad Company, before Contractor enters upon any property or right-of-way under the jurisdiction of any such controlling authority for the purpose of performing Work.
- B. City has acquired or is negotiating to acquire any rights-of-way, or both, necessary for the permanent Work.
- C. If such permits are required, all operations of Contractor shall conform to the restrictions, regulations, and requirements set forth in said permits, copies of which will be included in the Contract Documents.
- D. Contractor may be required, as a condition for receiving final payment, to obtain, and provide City's Representative with copies of, executed damage releases from the owners of public and private property whose property has been damaged by the Work. The damage releases will be on a form provided by City.
- E. Contractor shall, also, as a condition for receiving final payment, obtain, and provide City's Representative with copies of, executed damage releases from the owners of certain public and private property or areas which have been crossed by the Work or otherwise affected by the Work. The damage releases will be on a form provided by City.

1.5 Site Data.

- A. The data provided herein is for the information of Contractor and is subject to all limitations and conditions set forth in the Contract Documents.

B. Subsurface Exploration Data. The following data are included in the Project Manual:

1. _____

C. Other Site Data. The following data are available for inspection at City's office:

1. _____

Copies of these reports, drawings and other materials may be examined at City's office during regular business hours.

1.6 Designation of City's Representative.

A. Unless otherwise modified by City, City's Representative shall be the City Engineer.

1.7 Modification of Hours of Work.

NOT USED

1.8 Project Retention

In accordance with Public Contract Code § 7201, City will withhold 5% of each progress payment as retention on the Project.

1.9 Liquidated Damages Due to Contractor Delay.

A. Time is of the essence. Should Contractor fail to complete all or any part of the Work within the time specified in the Contract Documents, City will suffer damage, the amount of which is difficult, if not impossible, to ascertain and, pursuant to the authority of Government Code section 53069.85, City shall therefore be entitled to \$500.00 per Day as liquidated damages for each Day or part thereof that actual completion extends beyond the time specified.

B. Liquidated damages may be deducted from progress payments due Contractor, Project retention or may be collected directly from Contractor, or from Contractor's surety. These provisions for liquidated damages shall not prevent City, in case of Contractor's default, from terminating the Contractor.

1.10 Utility Outages – Notices to Residents.

A. Should Contractor's operations require interruption of any utility service, Contractor shall notify City at least ten (10) Days prior to the scheduled outage. Contractor will notify all impacted residents on a form provided by City at least seven (7) Days prior to the scheduled outage.

B. Contractor shall be responsible for providing, at its cost, any temporary utility or facilities necessitated by the utility outage.

1.11 Schedule Constraints.

NOT USED.

1.12 Noise Restrictions

NOT USED.

1.13 Safety Programs.

NOT USED.

1.14 Coordination with Other Contractors.

NOT USED.

END OF SPECIAL CONDITIONS

01 00 00 – GENERAL REQUIREMENTS

PART 1 -- GENERAL

1.1 DESCRIPTION

The project consists of the abandonment of an existing 8" water line and the installation of a new PVC 8" water line within the Valdapena Way, Barbera Court, and Muscat Court roadways. The existing water services, meters, and boxes shall be removed and reinstalled throughout both sides of the roadways. The existing roadways shall have a 2" asphalt grind over the entire width of the roadways. Various sidewalk and curb improvements shall be done on all roadways to aid in ADA accessibility.

RELATED REQUIREMENTS SPECIFIED ELSEWHERE

PART 2 -- PRODUCTS (NOT USED)

PART 3 -- EXECUTION

3.1 LAYOUT OF WORK AND QUANTITY SURVEYS

- A. General. The Contractor shall utilize a properly licensed surveyor to perform all layout surveys required for the control and completion of the Work, and all necessary surveys to compute quantities of Work performed.

City and/or the Engineer of Record has established primary control to be used by the Contractor for establishing lines and grades required for the Work.

Primary control consists of benchmarks and horizontal control points in the vicinity of the Work. A listing and identification of the primary control is provided on the Drawings. Before beginning any layout work or construction activity, the Contractor shall check and verify primary control, and shall advise the City Representative of any discrepancies.

- B. Quantity surveys. The Contractor shall perform such surveys and computations as are necessary to determine quantities of Work performed or placed during each progress payment period, and shall perform all surveys necessary for the City Representative to determine final quantities of Work in place. The City Representative will determine final quantities based upon the survey data provided by the Contractor, and the design lines and grades. If requested by the City Representative, the Contractor shall provide an electronic copy of data used for quantity computations.

All surveys performed for measurement of final quantities of Work and material shall be subject to approval of City's Representative. Unless waived by City's Representative in each specific case, quantity surveys made by the Contractor shall be made in the presence of City's Representative.

C. Surveying

1. Accuracy. Degree of accuracy shall be an order high enough to satisfy tolerances specified for the Work and the following:

(a) Right-of-way and alignment of tangents and curves shall be within 0.1 foot.

(b) Structure points shall be set within 0.01 foot, except where operational function of the special features or installation of metalwork and equipment require closer tolerances. When formwork has been placed and is ready for concrete, the Contractor shall check the formwork for conformance with the drawings and to ensure that the forms are sufficiently within the tolerance limits for the completed work.

(c) Cross-section points shall be located within 0.1 foot, horizontally and vertically.

(d) Aerial Mapping shall meet National Mapping Standards for 2-foot contour intervals.

D. Records. Survey data shall be recorded in accordance with recognized professional surveying standards. Original field notes, computations, and other surveying data shall be recorded on electronic data collectors or in standard field books and must be of sufficient quality to enable the Contractor to prepare accurate record drawings as required by the Contract Documents.

E. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required for surveys for the layout of work and quantity surveys shall be included in the Schedule of Pay Items for items of work requiring the surveys. No additional compensation shall be made to the Contractor for this Work.

3.2 SCHEDULE

A. Estimated Schedule. Within 14 Days after the issuance of the Notice to Proceed, Contractor shall prepare a Project schedule and shall submit this to the Engineer for Approval. The receipt or Approval of any schedules by the Engineer or the City shall not in any way relieve the Contractor of its obligations under the Contract Documents. The Contractor is fully responsible to determine and provide for any and all staffing and resources at levels which allow for good quality and timely completion of the Project. Contractor's failure to incorporate all elements of Work required for the performance of the Contract or any inaccuracy in the schedule shall not excuse the Contractor from performing all Work required for a completed Project within the specified Contract time period. If the required schedule is not received by the time the first payment under the Contract is due, Contractor shall not be paid until the schedule is received, reviewed and accepted by the Engineer.

B. Schedule Contents. The schedule shall indicate the beginning and completion dates of all phases of construction; critical path for all critical, sequential time related activities; and "float time" for all "slack" or "gaps" in the non-critical activities. The schedule shall clearly identify all staffing and other resources which in the Contractor's judgment are needed to complete the Project within the time specified for completion. The overall Project Schedule duration shall be within the Contract time.

- C. Schedule Updates. Contractor shall continuously update its construction schedule. Contractor shall submit an updated and accurate construction schedule to the Engineer monthly when requested to do so by Engineer. Contractor shall also submit schedules showing a three week detailed look-ahead at bi-weekly meetings conducted with the City. The Engineer may withhold progress payments or other amounts due under the Contract Documents if Contractor fails to submit an updated and accurate construction schedule.

3.3 TEMPORARY FIELD OFFICE

NOT USED.

3.4 PROTECTION OF WORK AND PROPERTY

- A. All traffic detector loops, fences, walls, culverts, property line monuments, or other obstructions (except property line monuments within five (5) feet of the centerline of the mains) which are removed, damaged, or destroyed in the course of the Work, shall be replaced or repaired to the original condition. If Contractor provides the City with reasonable notice of the need for such repair or replacement, it shall be performed by the City. If the Contractor fails to provide the City with reasonable notice, the repair or replacement shall be performed by and at the expense of the Contractor to the satisfaction of the City, whether or not those obstructions have been shown on the Plans, unless otherwise stated herein. It is then the Contractor's responsibility to employ at its expense a Licensed Land Surveyor to restore all property line monuments located more than five (5) feet from the centerline of the mains, which are destroyed or obliterated. Property line monuments located within five (5) feet of the centerline of the mains will be replaced by the City at no expense to the Contractor, provided the City is notified at least 48 hours before the property line monuments are damaged.
- B. Contractor shall provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions.
- C. Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavements, utilities, and other adjoining property and structures, and to avoid damage thereto, and Contractor shall repair any damage thereto caused by the Work operations. Contractor shall:
 - 1. Enclose the working area with a substantial barricade, and arrange work to cause minimum amount of inconvenience and danger to the public.
 - 2. Provide substantial barricades around any shrubs or trees indicated to be preserved.
 - 3. Deliver materials to the Project site over a route designated by the Engineer.
 - 4. Provide any and all dust control required and follow the Applicable air quality regulations as appropriate. If the Contractor does not comply, the City shall have the immediate authority to provide dust control and deduct the cost from payments to the Contractor.

5. Confine Contractor's apparatus, the storage of materials, and the operations of its workers to limits required by law, ordinances, permits, or directions of the Engineer. Contractor shall not unreasonably encumber the Project site with its materials.
 6. Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by a civil engineer or land surveyor acceptable to the City, at no cost to the City.
 7. Ensure that existing facilities, fences and other structures are all adequately protected and that, upon completion of all Work, all facilities that may have been damaged are restored to a condition acceptable to the City.
 8. Preserve and protect from injury all buildings, pole lines and all direction, warning and mileage signs that have been placed within the right-of-way.
 9. At the completion of work each day, leave the Project site in a clean, safe condition.
 10. Comply with any stage construction and traffic control plans. Access to residences and businesses shall be maintained at all times, unless otherwise permitted in writing by the City.
- D. These precautionary measures will apply continuously and not be limited to normal working hours. Full compensation for the Work involved in the preservation of life, safety and property as above specified shall be considered as included in the prices paid for the various contract items of Work, and no additional allowance will be made therefore.
- E. Should damage to persons or property occur as a result of the Work, Contractor shall be responsible for proper investigation, documentation, including video or photography, to adequately memorialize and make a record of what transpired. The City shall be entitled to inspect and copy any such documentation, video, or photographs.

3.5 SITE CONDITIONS SURVEYS

A. Work Included.

Contractor shall conduct thorough pre-construction and post-construction site condition surveys of the entire project area. Site Conditions surveys shall include written documentation of the conditions found, as well as photographs and video recordings of the area within at least 80 feet of any construction area and staging area. The written notes, photographs, and video shall be suitable for forensic purposes to resolve any damage claims that may arise as a result of construction.

B. Submittals.

1. Written documentation of site condition survey at pre-construction and post-construction.

2. Photographs as described herein of pre-construction and post-construction conditions.
3. Video recordings as described herein of pre-construction and post-construction conditions.
4. Submittals shall be made within three days of the surveys. All post-construction data shall be submitted prior to the final project inspection.

C. Site Condition Written Documentation.

Written documentation shall include the time, date, and conditions under which the site survey was made. The documentation shall note the condition of structures, pavement, sidewalks, utilities, fences, and etc. within the work areas.

D. Photographs.

1. General – Contractor shall take enough photographs during each site survey to provide a record of conditions existing prior to construction and conditions after construction. Pre-construction photographs shall be taken prior to any construction or mobilization of equipment, but not more than one week prior to actual start of work. The pre-construction photographs may be staged at different times to match the progression of the Work.
2. The photographs shall document existing damage to public and private facilities, both prior to and after construction. Conditions to be documented include, but are not limited to: sidewalk cracks, broken curbs, separated property walls, improvements within public right-of-ways, access roads used, utility covers and markings, signs, pavement striping, pavement, unique or unusual conditions, adjacent driveways, landscaping, survey markers, and any feature directed by the Engineer. Private property that is adjacent to the public right-of-way shall be documented to the extent visible from the public right-of-way.
3. Photographs shall include items to indicate scale, as needed. In particular, scales or other items shall be laid next to close ups of structural cracks and other damaged areas being recorded. Scaling shall also be used to document elevation differences, as needed.
4. One set of color prints shall be submitted. Additional sets shall be available for reviewing in settling any construction disputes. A set of photos shall also be furnished in electronic format. The resolution shall be at least equal to 7 megapixels. All photos shall be documented as to time and date taken, photographer, project number, location, and orientation. Documentation shall include a brief description of objects photographed.

E. Video Recording.

1. Video recordings shall document the conditions of the entire area affected by construction, as well as nearby structures and facilities. The general

documentation requirements for videos are the same as for photographs. Video recorders shall accurately and continuously record the time and date.

2. Video recordings shall include an audio portion made simultaneously during the videoing. The audio recording shall describe the location, time, orientation, and objects being recorded. Special commentary shall be provided for unusual conditions or damage noted.
3. Video equipment shall be capable of producing high resolution images and shall have zoom capabilities.
4. Video recordings shall provide an overall picture of the sites and shall provide detailed images of damaged areas. Video shall extend to the maximum height of structures.
5. The Engineer shall have the right to reject any audio video recordings submitted with unintelligible audio, uncontrolled pan or zoom, or of poor quality. Video recordings shall be repeated when rejected.
6. Video recordings shall be submitted with labels indicating the project, date, recorder, and other pertinent information. Recordings shall be submitted on standard DVDs in a standard format.

F. Timing.

Contractor shall provide written notice of the time scheduled for the site conditions survey and the place it is to begin. Contractor shall obtain the Engineer's concurrence prior to beginning the condition survey. The Engineer reserves the right to cancel the survey due to weather conditions or other problems. Videoing shall be done during times of good visibility and no videoing or photography shall be done during periods of visible precipitation or when standing water obscures pavement. Contractor shall provide the Engineer with an opportunity to have a representative present when taking the photos and provide guidance during photographing.

G. Site Surveyor.

The site condition surveyor(s) shall be experienced in construction and potential damage concerns. The site condition surveyor(s) shall be familiar with the photography and video equipment being used.

H. Field Quality Control.

Prior to submitting videos and photographs, the Contractor shall spot check the photos and videos in the field to insure they accurately reflect the actual conditions and to insure they are correctly labeled.

I. Soils Compaction Testing.

1. All soils compaction testing will be done by a licensed geotechnical engineer furnished by the City. Soils compaction testing will be done for all footings and foundations prior to placement of rebar or concrete.

2. For pipeline construction, soil compaction testing will be done at 100-foot intervals at the bottom of the trench prior to placement of pipe bedding; at the top of the pipe bedding above the pipe; every two vertical feet of trench backfill; at the top of the trench backfill, which should be the bottom of the pavement section; and at the top of the aggregate base prior to pavement construction.

3.6 SUBMITTAL REQUIREMENTS FOR MANUALS AND RECORD DRAWINGS

- A. General. The Contractor shall furnish all materials and perform all Work required for furnishing submittals to City in accordance with Contract Documents.

- B. Technical Manuals.

1. The Contractor shall submit technical operation and maintenance information for each item of mechanical, electrical and instrumentation equipment in an organized manner in the Technical Manual. It shall be written so that it can be used and understood by City's operation and maintenance staff.
2. The Technical Manual shall be subdivided first by specification section number; second, by equipment item; and last, by "Category." "Categories" shall conform to the following (as applicable):

- (a) Category 1 - Equipment Summary:

- (1) Summary: A summary table shall indicate the equipment name, equipment number, and process area in which the equipment is installed.

- (b) Category 2 - Operational Procedures:

- (1) Procedures: Manufacturer-recommended procedures on the following shall be included in Part 2:

- a. Installation
 - b. Adjustment
 - c. Startup
 - d. Location of controls, special tools, equipment required, or related instrumentation needed for operation
 - e. Operation procedures
 - f. Load changes
 - g. Calibration
 - h. Shutdown
 - i. Troubleshooting
 - j. Disassembly

- k. Reassembly
- l. Realignment
- m. Testing to determine performance efficiency
- n. Tabulation of proper settings for all pressure relief valves, low and high pressure switches, and other protection devices
- o. List of all electrical relay settings including alarm and contact settings

(c) Category 3 - Preventive Maintenance Procedures:

- (1) Procedures: Preventive maintenance procedures shall include all manufacturer-recommended procedures to be performed on a periodic basis, both by removing and replacing the equipment or component, and by leaving the equipment in place.
- (2) Schedules: Recommended frequency of preventive maintenance procedures shall be included. Lubrication schedules, including lubricant SAE grade, type, and temperature ranges, shall be covered.

(d) Category 4 - Parts List:

- (1) Parts List: A complete parts list shall be furnished, including a generic description and manufacturer's identification number for each part. Addresses and telephone numbers of the nearest supplier and parts warehouse shall be included.
- (2) Drawings: Cross-sectional or exploded view drawings shall accompany the parts list.

(e) Category 5 - Wiring Diagrams:

- (1) Diagrams: Part 5 shall include complete internal and connection wiring diagrams for electrical equipment items.

(f) Category 6 - Shop Drawings:

- (1) Drawings: This part shall include approved shop or fabrication drawings, complete with dimensions.

(g) Category 7 - Safety:

- (1) Procedures: This part describes the safety precautions to be taken when operating and maintaining the equipment or working near it.

(h) Category 8 - Documentation:

- (1) All equipment warranties, affidavits, and certifications required by the Technical Specifications shall be placed in this part.

3. The Contractor shall furnish to City six (6) identical Technical Manuals. Each set shall consist of one or more volumes, each of which shall be bound in a standard binder.
- C. Spare Parts List - The Contractor shall furnish to City six (6) identical sets of spare parts information for all mechanical, electrical, and instrumentation equipment. The spare parts list shall include the current list price of each spare part. The spare parts list shall include those spare parts which each manufacturer recommends be maintained by City in inventory. Each manufacturer or supplier shall indicate the name, address, and telephone number of its nearest outlet of spare parts to assist City in ordering. The Contractor shall cross-reference all spare parts lists to the equipment numbers designated in the Contract Documents. The spare parts lists shall be bound in standard size, 3-ring binder.
- D. Record Drawings
1. The Contractor shall maintain one record set of Drawings at the Site. On these, it shall mark all Project conditions, locations, configurations, and any other changes or deviations which may vary from the information represented in the original Contract Documents, including buried or concealed construction and utility features which are revealed during the course of construction. Special attention shall be given to recording the horizontal and vertical location of all buried utilities that differ from the locations indicated, or which were not indicated on the Contract Drawings. Said record drawings shall be supplemented by any detailed sketches as necessary or directed to fully indicate the Work as actually constructed. These master record drawings of the as-built conditions, including all revisions made necessary by Addenda and Change Orders shall be maintained up-to-date during the progress of the Project. Red ink shall be used for alterations and notes. Notes shall identify relevant Change Orders by number and date.
 2. For all Projects involving the installation of any pipeline, Contractor shall survey and record the top of the pipe at a minimum of every 100 linear feet, and at each bend, recording both the horizontal and vertical locations.
 3. Record drawings shall be accessible to City's Representative at all times during the construction period. Failure on the Contractor's part to keep record drawings current could result in withholding partial payment.
 4. Upon Completion of the Project and as a condition of final acceptance, the Contractor shall finalize and deliver a complete set of Record Drawings to City's Representative. The information submitted by the Contractor will be assumed to be correct, and the Contractor shall be responsible for, and liable to City, for the accuracy of such information, and for any errors or omissions which may or may not appear on the Record Drawings.
- E. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete the Manuals and Record Drawings shall be included in Contractor's bid and distributed in the Schedule of Pay. No additional compensation shall be made to the Contractor for this Work.

3.7 MATERIALS

A. Materials to be Furnished by the Contractor

1. Inspection of Materials. Materials furnished by the Contractor which will become a part of the Project shall be subject to inspection at any one or more of the following locations, as determined by City's Representative: at the place of production or manufacture, at the shipping point, or at the site of the Work. To allow sufficient time to provide for inspection, the Contractor shall submit to City's Representative, at the time of issuance, copies of purchase orders or other written instrument confirming procurement of the materials, including drawings and other pertinent information, covering materials on which inspection will be made.
2. No later than fourteen (14) Days prior to manufacture of material, Contractor shall inform City's Representative, in writing, the date the material is to be manufactured.
3. Contractors Obligations. The inspection of materials at any of the locations specified above or the waiving of the inspection thereof shall not impact whether the materials and equipment conform to the Contract Documents. Contractor will not be relieved from furnishing materials meeting the requirements of the Contract Documents due to City's inspection or lack of inspection of the equipment or materials. Acceptance of any materials will be made only after materials are installed in the Project.
4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to accommodate City's testing efforts, including any travel required by Contractor's forces, shall be included in Contractor's bid and distributed in the Schedule of Pay Items related to the materials requiring testing. No additional compensation shall be made to the Contractor for this Work.

3.8 LOCAL CONDITIONS AND REQUIREMENTS

A. Access to Work and Haul Routes

1. General. All work on the rights-of-way necessary for access to the Site shall be performed by the Contractor.
2. Access, Damage, Restoration. The Contractor shall make his own investigation of the condition of available public or private roads and of clearances, restrictions, bridge-load limits, permit or bond requirements, and other limitations that affect or may affect transportation and ingress or egress at the Site. Claims for changes in Contract Price or Contract Times arising out of the unavailability of transportation facilities or limitations thereon shall not be considered by City.
3. The Contractor shall maintain and repair any damage arising out of Contractor's operations to all roads used during construction of the Project, and upon completion of all Work, but prior to final acceptance, the roads shall be restored to their original condition. Prior to using any road for access to the Site, the

Contractor shall conduct a photograph and/or video survey of the roadway with a copy submitted to City's Representative.

4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this Work, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.
- B. Power. Contractor shall provide at its own expense all necessary power required for operations under the contract. The Contractor shall provide and maintain in good order such modern equipment and installations as shall be adequate in the opinion of the Engineer to perform in a safe and satisfactory manner the Work required by the contract.
- C. Construction Water.
1. Construction water shall not be used for purposes other than those required to satisfactorily complete the contract.
 2. All connections to the City's water system used for the purposes of obtaining construction water shall utilize a temporary construction meter and backflow prevention device supplied by the City. The City-furnished backflow prevention device shall be tested immediately after installation and the construction meter and backflow prevention device shall not be placed into service until the backflow prevention device passes such tests. Backflow prevention device testing shall be performed in accordance with applicable standards, and test results shall be provided to the Engineer. If the temporary construction meter and backflow prevention device are moved to alternate location(s) during construction, the backflow prevention device shall again be tested as described above immediately after re-installation.
 3. For each temporary construction meter requested by the Contractor for the performance of work under this contract, an amount equivalent to the deposit requirement for temporary construction meters listed in the current approved version of the City's Policies and Procedures Manual shall be withheld from the final contract payment until the temporary construction meters are returned.
- D. Operation of Existing Water Facilities
1. The Contractor shall not operate any of the existing water systems, including pumps, motors, and hydrants, but shall contact the City two (2) working days in advance with a list and location of the water system facilities that will require operating, opening, stopping, or closure by the City.
 2. At the option of the Engineer, the Contractor may be permitted to operate valves for the purpose of making connections to existing mains. The City will perform all notification to existing customers regarding temporary loss of service.
 3. Contractor shall submit a request on City's standard form for any shut-down of existing water facilities.

E. Construction at Existing Utilities

1. General. Where the Work to be performed crosses or otherwise interferes with water, sewer, gas, or oil pipelines; buried cable; or other public or private utilities, the Contractor shall perform construction in such a manner so that no damage will result to either public or private utilities. It shall be the responsibility of the Contractor to determine the actual locations of, and make accommodations to maintain, all utilities.
2. Permission, Notice and Liability. Before any utility is taken out of service, permission shall be obtained by the Contractor from the owner. The owner, any impacted resident or business owner and the City Representative will be advised of the nature and duration of the utility outage as well as the Contractor's plan for providing temporary utilities if required by the owner. The Contractor shall be liable for all damage which may result from its failure to maintain utilities during the progress of the Work, and the Contractor shall indemnify City as required by the Contract Documents from all claims arising out of or connected with damage to utilities encountered during construction; damages resulting from disruption of service; and injury to persons or damage to property resulting from the negligent, accidental, or intentional breaching of utilities.
3. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this Work, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

F. Traffic Control

1. General. Contractor shall abide by traffic control plans approved by the appropriate jurisdiction.
2. Protections. Roads subject to interference by the Work shall be kept open or suitable temporary passages through the Work shall be provided and maintained by the Contractor. The Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient flasher lights, flag persons, danger signals, and signs, and shall take all necessary precautions for the protection of the Work and the safety of the public. No construction work along public or private roads may proceed until the Contractor has proper barricades, flasher lights, flag persons, signals, and signs in place at the construction site.
3. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this Work, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

G. Cleaning Up

1. Contractor at all times shall keep premises free from debris such as waste, rubbish, and excess materials and equipment. Contractor shall not store debris under, in, or about the premises. Contractor shall also clean all asphalt and concrete areas to the degree necessary to remove oil, grease, fuel, or other stains caused by

Contractor operations or equipment. The use of water, resulting in mud on streets, will not be permitted as substitute for sweeping or other methods. Dust control may require having a water truck onsite for the duration of the project, and/or use of temporary hoses and pipelines to convey water.

2. Contractor shall fully clean up the site at the completion of the Work. If the Contractor fails to immediately clean up at the completion of the Work, the City may do so and the cost of such clean up shall be charged back to the Contractor.

3.9 ENVIRONMENTAL QUALITY PROTECTION

A. Environmental Conditions

NOT USED.

B. Landscape and Vegetation Preservation

1. General. The Contractor shall exercise care to preserve the natural landscape and vegetation, and shall conduct operations so as to prevent unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the Work.
2. Damage and Restoration. Movement of crews and equipment within the rights-of-way and over routes provided for access to the Work shall be performed in a manner to prevent damage to property. When no longer required, construction roads shall be restored to original contours.
3. Upon completion of the Work, and following removal of construction facilities and required cleanup, land used for construction purposes and not required for the completed installation shall be scarified and regraded, as required, so that all surfaces are left in a condition that will facilitate natural revegetation, provide for proper drainage, and prevent erosion.
4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this Work, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

C. Protected Species

1. General. If, in the performance of the Work, evidence of the possible occurrence of any Federally listed threatened or endangered plant or animal is discovered, the Contractor shall notify the City Representative immediately, giving the location and nature of the findings. Written confirmation of the evidence, location and nature of the findings shall be forwarded to City within 2 Days.
2. Procedures. The Contractor shall immediately cease all construction activities in the immediate area of the discovery to the extent necessary to protect the endangered plant or animal.

If directed by the City Representative, Contractor will refrain from working in the immediate area, suspend the Work in its entirety, or alter its performance to ensure full compliance with all applicable permits, laws and regulations. Any City directed changes to the Work as a result of a siting will be pursuant to the Contract Documents.

3. False Siting. Any costs or delays incurred by City or the Contractor due to unreasonable or false notification of an endangered plant or animal will be borne by the Contractor.
4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to comply with this paragraph, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

D. Preservation of Historical and Archeological Resources

1. General. If, in the performance of the Work, Contractor should unearth cultural resources (for example, human remains, animal bones, stone tools, artifacts and/or midden deposits) through excavation, grading, watering or other means, the Contractor notify the Construction/Archeological Monitor and/or the City Representative immediately, giving the location and nature of the findings. Written confirmation of the evidence, location and nature of the findings shall be forwarded to the Construction/Archeological Monitor and/or City within 2 Days.
2. Procedures. The Contractor shall immediately cease all construction activities in the immediate area of the discovery to the extent necessary to protect the cultural resource.

If directed by the City Representative, Contractor will refrain from working in the immediate area, suspend the Work in its entirety, or re-sequence and/or alter its performance to ensure full compliance with all applicable permits, laws and regulations. Should the presence of cultural resources be confirmed, the Contractor will assist the City Representative and the Construction/Archeological Monitor in the preparation and implementation of a data recovery plan. The Contractor shall provide such cooperation and assistance as may be necessary to preserve the cultural resources for removal or other disposition. Any City directed changes to the Work as a result of the cultural resource will be pursuant to the Contract Documents.

3. Contractor's Liability. Should Contractor, without permission, injure, destroy, excavate, appropriate, or remove any cultural resource on or adjacent to the Site, it will be subject to disciplinary action, arrest and penalty under applicable law. The Contractor shall be principally responsible for all costs of mitigation and/or restoration of cultural resources related to the unauthorized actions identified above. Contractor shall be required to pay for unauthorized damage and mitigation costs to cultural resources (historical and archeological resources) as a result of unauthorized activities that damage cultural resources and shall indemnify City pursuant to the Contract Documents.

4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to comply with this paragraph, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

E. Dust and Pollution Control

1. Contractor shall provide all necessary material, equipment and labor to prevent and control the emission of dust and any other potential pollutant on site.
2. Contractor shall not discharge into the atmosphere from any source smoke, dust or other air contaminants in violation of the law, rules, and regulations of the governing agency.
3. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to comply with this paragraph, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

F. Fugitive Dust

1. In addition to all other environmental and air quality requirements of the Contract Documents, Contractor must also comply with the most recent version of any rules implemented by the Air Quality Management City (AQMD) with jurisdiction over the Project in order to reduce the amount of particulate matter entrained in the ambient air as a result of the Project. All equipment shall be AQMD compliant and permitted, as needed.
2. City has considered these other requirements when determining the Contract Times and no additional time or compensation will be added to the Contract due to these requirements.

G. Management of Storm, Surface and Other Waters

1. Storm water, surface water, groundwater, and nuisance, or other waters may be encountered at various times during construction of the Project. Federal and State laws require the City and its contractors to manage such waters pursuant to the requirements of California State Water Resources Control Board Order Number 2022-0057-DWQ, the Federal Clean Water Act, and the California Porter Cologne Water Quality Control Act. Contractor acknowledges that it has investigated the risk arising from such waters in conjunction with the Project, and assumes any and all risks and liabilities arising therefrom.
2. The Contractor shall perform all construction operations in such a manner as to comply, and ensure all subcontractors to comply, with all applicable Federal, State, and local laws, orders, and regulations concerning the control and abatement of water pollution; and all terms and conditions of any applicable permits issued for the Project. In the event there is a conflict between Federal, State, and local laws, regulations, and requirements, the most stringent shall apply.

3. Contractor violations. If noncompliance should occur, the Contractor shall report this to the City Representative immediately, with the specific information submitted in writing within 2 Days. Consistent violations of applicable Federal, State, or local laws, orders, regulations, or Water Quality Standards may result in City stopping all site activity until compliance is ensured. The Contractor shall not be entitled to any change in Contract Price or Contract Times, claim for damage, or additional compensation by reason of such a work stoppage. Corrective measures required to bring activities into compliance shall be at the Contractor's expense.
4. Compliance with Construction General Storm water Permit. Contractor shall be required to comply with all aspects of the State Water Resources Control Board (State Board) Water Quality Order No. 2022-0057-DWQ, National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity (Permit) for all projects that involve construction on or disturbance of one acre or more of land or which are part of a larger common area of development.
 - (a) Contractor shall implement the City provided Storm Water Pollution Prevention Plan (SWPPP) for the Project site based on the appropriate Risk Level requirements.
 - (b) The implantation of the SWPPP include industry standard requirements for water quality control including but not be limited to the following:
 - (1) Sediment and erosion control measures to manage sediment and erosion including vegetative practices, structural control, silt fences, straw dikes, sediment controls or operator controls as appropriate. Storm water management measures shall be instituted as required, including velocity dissipaters, and solid waste controls shall address controls for building materials and offsite tracking of sediment.
 - (2) Wastewater and storm water management controls to divert offsite surface flows around the Project site and to divert surface flows within the Project area away from areas of open earth or stockpiles of building and other materials. Wastewater from general construction activities, such as drain water collection, aggregate processing, concrete batching, drilling, grouting, or other construction operations, shall not enter flowing or dry watercourses without having met the authorized non-storm water discharge requirements listed in State Board Water Quality Order No. 2022-0057-DWQ, Section III.C., including proper notification to the Regional Water Board.
 - (3) Pollution prevention measures including methods of dewatering, unwatering, excavating, or stockpiling earth and rock materials which include prevention measures to control silting and erosion, and which will intercept and settle any runoff of sediment-laden waters.
 - (4) Turbidity prevention measures for prevention of excess turbidity including, but are not restricted to, intercepting ditches, settling ponds, gravel filter entrapment dikes, flocculating processes, recirculation, combinations thereof, or other approved methods that are not harmful to aquatic life. All such wastewaters discharged into surface waters, shall contain the least concentration of settleable material possible, and shall

meet all conditions of section 402, the National Pollutant Discharge Elimination System (NPDES) permit.

- (5) Overall construction site management measures to address changes at the Project site as the Project moves through different phases and changes that account for rainy and dry season management practices.
 - (6) Pollution control measures and construction activity methods that will prevent entrance, or accidental spillage, of solid matter, contaminants, debris, or other pollutants or wastes, into streams, flowing or dry watercourses, lakes, wetlands, reservoirs, or underground water sources. Such pollutants and wastes include, but are not restricted to: refuse, garbage, cement, sanitary waste, industrial waste, hazardous materials, radioactive substances, oil and other petroleum products, aggregate processing, tailings, mineral salts, and thermal pollution.
 - (7) Control measures for stockpiled or deposited materials prohibiting the stockpile or deposit of excavated materials, or other construction materials, near or on stream banks, lake shorelines, or other watercourse perimeters where they can be washed away by high water or storm runoff, or can, in any way, encroach upon the watercourse.
 - (8) Develop and implement a Rain Event Action Plan (REAP), if required, that must be designed and implemented to protect all exposed portions of the site 48 hours prior to any likely precipitation event.
 - (9) Monitoring, reporting and record keeping, as necessary to achieve compliance with applicable Permit requirements, including but not limited to annual reports and rain event reports.
- (c) Failure to implement the SWPPP or otherwise comply with the Permit is a violation of federal and state law. Contractor hereby agrees to indemnify City as required by the Contract Documents for any noncompliance or alleged noncompliance with the Permit arising out of or in connection with the Project, except for liability resulting from the sole established negligence, willful misconduct or active negligence of City. City may seek damages from Contractor for delay in completing the Contract in accordance with the Contract Documents, caused by Contractor's failure to comply with the Permit.
5. In addition to compliance with the Permit, Contractor shall comply with the lawful requirements of any applicable municipality, district, drainage district, flood control district, and other local agencies regarding discharges of storm water, surface water, groundwater or other nuisance waters off of the Project site.
6. Oil storage tanks management.
- (a) Storage tank placement. All oil or other petroleum product (hereinafter referred to collectively as oil) storage tanks shall be placed at least 20 feet from streams, flowing or dry watercourses, lakes, wetlands, reservoirs, and any other water source.
 - (b) Storage area dikes. Storage areas shall be diked at least 12 inches high or graded and sloped to permit safe containment of leaks and spills equal to the

capacity of all tanks and/or containers located within each area, plus a sufficient amount of freeboard to contain the 25-year rainstorm.

- (c) Diked area barriers. Diked areas shall have an impermeable barrier at least 10 mils thick. Areas used for refueling operations shall have an impermeable liner at least 10 mils thick buried under 2 to 4 inches of soil.
 - (d) Spill Prevention Control and Countermeasure Plan (SPCC). Where the location of a construction site is such that oil from an accidental spillage could reasonably be expected to enter into or upon the navigable waters of the United States or adjoining shorelines, and the aggregate storage of oil at the site is over 1,320 gallons or a single container has a capacity in excess of 660 gallons, the Contractor shall prepare an SPCC Plan. The Contractor shall submit the SPCC Plan to the Engineer at least 30 days prior to delivery or storage of oil at the site. The Plan must have been reviewed and certified by a registered professional engineer in accordance with 40 C.F.R., part 112
- 7. Underground tank prohibition. The Contractor shall not use underground storage tanks.
 - 8. Construction safety standards. The Contractor shall comply with the sanitation and potable water requirements of Section 7 of United States Bureau of Reclamation's publication "Reclamation Safety And Health Standards."
 - 9. Other Permits.
 - (a) Other permits applicable to the Project are listed in the Special Conditions. The Contractor shall obtain all other necessary licenses and permits.
 - (b) Monitoring. The Contractor is required to conduct monitoring in order to meet the requirements of the permits, which may include sampling, testing and inspections.
 - (c) Recordkeeping. The Contractor shall retain all records and data required by the permits for the time specified in the contract.
 - 10. Cost. Except as specified herein, the cost of complying with this section shall be included in the Schedule of Pay Items for work which necessitate the water pollution prevention measures required by this paragraph.

END OF GENERAL REQUIREMENTS

EXHIBIT "A"
CHANGE ORDER FORM

City of Escalon

*2060 McHenry Avenue
Escalon, California 95320*

Contract Change Order #

Project:

Change Order No.:

Orig. Contract Amt.: \$ Days

Contract No.:

Contractor:

Prev. Appvd. Changes: \$ Days

Owner: City of Escalon

This Change: \$ Days

Revised Contract Amt.: \$ Days

This Change Order covers changes to the subject contract as described herein. The Contractor shall construct, furnish equipment and materials, and perform all work as necessary or required to complete the Change Order items for a lump sum price agreed upon between the Contractor and City of Escalon, otherwise referred to as Owner.

Item No.	Description of Changes	Increase/ (Decrease) in Contract Amount	Contract Time Extension, Days
1			
2			
	Totals	\$	

This Contract Change Order consists of **2 pages** and any exhibits attached to this Contract Change Order shall not be part of the Contract Change Order unless specifically initialed by or on behalf of both the Contractor and the City of Escalon.

Contract Change Order # _____ Page 1 of 2

The amount of the contract will be increased by the sum of \$_____ and the contract time shall be extended by _____ working days. The undersigned Contractor approves the foregoing Change Order # _____ as to the changes, if any, in the contract price specified for each item including any and all supervision costs and other miscellaneous costs relating to the change in work, and as to the extension of time allowed, if any, for completion of the entire work on account of said Change Order # _____. The Contractor agrees to furnish all labor and materials and perform all other necessary work, inclusive of the directly or indirectly related to the approved time extension, required to complete the Change order items. This document will become a supplement of the contract and all provisions will apply hereto. It is understood that the Change Order shall be effective when approved by the Owner.

Contractor accepts the terms and conditions stated above as full and final settlement of any and all claims arising out of or related to the subject of this Change Order and acknowledges that the compensation (time and cost) set forth herein comprises the total compensation due for the work or change defined in the Change Order, including all impact on any unchanged work. By signing this Change Order, the Contractor acknowledges and agrees that the stipulated compensation includes payment for all Work contained in the Change Order, plus all payment for any acceleration or interruption of schedules, extended overhead costs, delay, and all impact or cumulative impact on all Work under this Contract. The signing of this Change Order acknowledges full mutual accord and satisfaction for the change and that the stated time and/or cost constitute the total equitable adjustment owed the Contractor as a result of the change. The Contractor hereby releases and agrees to waive all rights, without exception or reservation of any kind whatsoever, to file any further claim or request for equitable adjustment of any type, for any reasonably foreseeable cause that shall arise out of, or as a result of, this Change Order and/or its impact on the remainder of the Work under the Contract.

Accepted:

(Signature) Contractor's Authorized Representative

Date

Recommended:

(Signature) City Engineer

Date

Approved:

(Signature) City Manager

Date

Item No.	Justification for Change(s)
1	
2	

This Contract Change Order consists of **2 pages** and any exhibits attached to this Contract Change Order shall not be part of the Contract Change Order unless specifically initialed by or on behalf of both the Contractor and the City of Escalon.

Contract Change Order # _____

02 00 00 – TECHNICAL SPECIFICATIONS

2.01	DESCRIPTION OF WORK	134
2.02	ORDER OF WORK	134
2.03	QUANTITIES.....	134
2.04	PRE-CONSTRUCTION CONFERENCE	134
2.05	PRE-CONSTRUCTION INSPECTION.....	135
2.06	SURVEYING	135
2.07	CONSTRUCTION STAKING	135
2.08	MOBILIZATION	135
2.09	DUST CONTROL	135
2.10	EROSION CONTROL	135
2.11	CONSTRUCTION AREA SIGNS	136
2.12	TRAFFIC CONTROL.....	136
2.13	EARTHWORK.....	138
2.14	COMPACTION TESTING.....	138
2.15	REMOVAL OF PAVEMENT, CONCRETE, AND MISCELLANEOUS ITEMS	139
2.16	TREE TRIMMING & REMOVAL	143
2.17	CONCRETE WORK	144
2.18	AGGREGATE BASE ROCK & SUBGRADE	153
2.19	ASPHALT CONCRETE	154
2.20	TYPE II SLURRY SEAL	160
2.21	FURNISH/INSTALL STORM CATCH BASIN & DRYWELL STRUCTURE	164
2.22	ADJUST STRUCTURES TO GRADE.....	165
2.23	WATER VALVE BOX	165
2.24	ELECTRICAL	166
2.25	SOLAR LIGHTS	166
2.26	IRRIGATION	167
2.27	RESTROOM.....	167
2.28	SEPTIC SYSTEM.....	168
2.29	WATER	168
2.30	PARK FIXTURES.....	176
2.31	LANDSCAPE MATERIALS.....	178
2.32	HEADER BOARD EDGING.....	178
2.33	REMOVABLE BOLLARD.....	179

2.34	SIGNS	179
2.35	THERMOPLASTIC STRIPES AND PAVEMENT MARKINGS	180
2.36	PAINTED TRAFFIC STRIPES AND PAVEMENT MARKINGS	182
2.37	WHEEL STOPS	183
2.38	LAWN GAMES	183
2.39	CARE AND CLEANUP	184

2.01 DESCRIPTION OF WORK

The project consists of the installation of sidewalk and improved bike and pedestrian safety along Main Street including ADA curb ramps, improved striping, concrete bulb outs at the intersection with 4th Street and bike lane striping south of the intersection. An asphalt bike path, additional parking and a restroom will be installed in Main Street Park. The improvement of existing facilities of the electrical system and irrigation system.

2.02 ORDER OF WORK

The work shall progress and be completed in a manner to minimize disruptions to traffic access and home ingress and/or egress, and to minimize any conflict in trades or logistics between trades or services that would complicate scheduling, performance, or completion of work.

2.03 QUANTITIES

The Engineer's preliminary estimate of the quantities of work to be done and the materials to be furnished are indicated on the bid form of proposal and are approximate only, being given as a basis for comparison of bids. The Owner does not expressly or by implication agree that the actual amount of work will correspond therewith. The Owner reserves the right to increase or decrease the quantities of work or materials to be furnished in accordance with the provisions of the General Conditions.

- A.** All work to be paid for at a contract price per unit of measurement shall be measured in accordance with the methods stipulated in the specifications.
- B.** Material paid for by weight shall be weighed by and at the expense of the Contractor on sealed scales regularly inspected by the State Division of Measurement Standards or its designated representatives. The scales shall be operated by a weigh master licensed in accordance with the provisions of the California Business and Professional Code. The Contractor shall furnish a Public Weigh master's certificate for each load delivered and daily summary weigh sheets.
- C.** Weight measurements shall be in accordance with the U.S. Standard Measures. A pound is an avoirdupois pound. A ton is 2,000 avoirdupois pounds. The unit of liquid measure is the U.S. gallon.
- D.** Items for which quantities are indicated "Lump Sum" shall be paid for at the price indicated in the Bid. Such payment shall be full compensation for the items of work and all work appurtenant thereto.

2.04 PRE-CONSTRUCTION CONFERENCE

Prior to the issuance of the Notice to Proceed, a pre-construction conference, or other method, will be held at the office of the City Engineer for the purpose of discussing with the Contractor the scope of work, Contract Drawings & Specifications, existing conditions, materials to be ordered, equipment to be used, and all essential matters pertaining to the execution of and the satisfactory completion of the contract as required. The contractor's representative at this conference shall include all major superintendents for the work and may include major subcontractors.

2.05 PRE-CONSTRUCTION INSPECTION

Prior to the commencement of work, a joint inspection between the Engineer, or his representative, and the Contractor's superintendent will be conducted to review the pre-construction conditions of the existing facilities in the vicinity of the project site. This project is located in proximity to residences, and some work will be required on the properties of individual homeowners. Care should be taken to protect existing structures (including fences, landscaping, and mailboxes) during all phases of work. If such existing facilities are damaged by the Contractor's operations, the Contractor, at his expense, shall replace or restore them to the condition that existed prior to the commencement of work.

2.06 SURVEYING

Surveying, if required, will be the City of Escalon's responsibility.

2.07 CONSTRUCTION STAKING

Construction staking, if required, will be the City of Escalon's responsibility.

2.08 MOBILIZATION

Mobilization shall conform to the provisions in Section 9-1.16D, "Mobilization," of the State Standards.

Measurement and Payment

Full compensation for mobilization for furnishing all labor, materials, tools, and equipment, including, but not limited to, equipment shipping and delivery, temporary facilities, equipment setup, material setup and delivery for both Mobilization and Demobilization operations, as required by the Standard Specifications, these Technical Specifications, and the City Engineer shall be paid for via the bid item "**MOBILIZATION**," to be paid for on the basis of a lump sum and no additional or special compensation shall be made.

2.09 DUST CONTROL

The Contractor shall provide dust control in the area of the work in accordance with Section 10-1 of the Standard Specifications. Dust control may be required at times outside of normal working hours. No separate payment will be made for any work performed or material used to control dust resulting from the Contractor's performance of the work, either inside or outside the right of way.

2.10 EROSION CONTROL

The work of this section consists of implementing measures to prevent storm water pollution during construction activities, in accordance with Federal, State and local regulations and in accordance with the Storm Water Pollution Prevention Plan (SWPPP) as provided by the City. The SWPPP shall be amended by the contractor as required to comply with all provision and regulation required during the construction activities.

Erosion Control shall comply with the General Permit for Discharges of Storm Water Associated with Construction Activities – Order 2022-0057-DWQ as issued by the California State Water

Resources Control Board (Effective September 1, 2023). The contractor shall exercise every reasonable precaution to protect streams, lakes, reservoirs, bays, and coastal water from pollution with fuels, oils, bitumens, calcium chloride and other harmful materials and shall conduct and schedule operations so as to avoid or minimize muddying and silting of streams, lakes reservoirs, bays, and coastal waters.

Measurement and Payment

Full compensation for complying and implementing the required erosion control methods as outlined in the provided SWPPP, shall be paid for via the bid item "**EROSION CONTROL**," to be paid for on the basis of a lump sum and no additional or special compensation shall be made.

2.11 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 Standard Specifications and these special provisions. 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 constructed 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 details shown on the plans and the requirements in Section 82, "Markers and Delineators", of the Standard Specifications.

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.

Measurement and Payment

Full compensation for furnishing the traffic control plan, implantation of the traffic control plan, its maintenance within the project site shall be paid for via the bid item "**TRAFFIC CONTROL**," to be paid for on the basis of a lump sum and no additional or special compensation shall be made.

2.12 TRAFFIC CONTROL

Contractor shall maintain reasonable traffic and pedestrian access to the residences and shall coordinate with private property owners by written notice. A copy of said notice shall be submitted to the City for prior approval. To avoid conflicts, the Contractor shall submit a plan of how the work is to proceed, showing how access can be maintained (see Section 1.02 "Order of Work" of these Technical Specifications).

Contractor is responsible and shall comply with all applicable Federal, State, County and Local requirements as required for traffic control and public safety during project construction. Attention is directed to Sections 7-1.03, "Public Convenience", 7-1.04, "Public Safety", and Section 12, "Temporary Traffic Control", of the Standard Specifications. Nothing in these special provisions shall be construed as relieving the Contractor from the responsibilities specified in Section 7-1.04. Coordination with the public, private property owners, proper agencies and the placement and

maintenance of warning signs, lights and other traffic control devices, as may be required, shall be the responsibility of the Contractor.

The Contractor shall cooperate with local authorities relative to handling traffic through the area and shall make his own arrangements relative to keeping the working area clear of parked vehicles. Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulders, including any section closed to public traffic.

Whenever vehicles or equipment are parked on the shoulder within 6 feet 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-foot intervals to point not less than 25 feet 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 telescoping flag tree with flags. The flag tree shall be placed where directed by the City Engineer.

A minimum of one paved traffic lane, not less than 12 feet wide, shall be open for use by local traffic; and when construction operations are not actively in progress, not less than two such lanes shall be open to local traffic.

A traffic control system shall consist of closing traffic lanes in accordance with the provisions of Section 12, "Temporary Traffic Control", of the Standard Specifications and the provisions elsewhere in these special provisions.

The provisions in this section will not relieve the Contractor from his responsibility to provide such additional devices or take such measures as may be necessary to comply with the provisions in Section 7-1.04, "Public Safety", of the Standard Specifications.

The base material of construction area signs shall not be plywood.

If any component in the traffic control system is displaced, or ceases to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair said component to its original condition or replace said component and shall restore the component to its original location.

When lane closures are made for work periods only, at the end of each work period, all 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, said components may be stored at selected central locations, approved by the Engineer, within the limits of the highway right of way.

Contractor shall develop a Traffic Control Plan (TCP) complying with the current edition of the Manual of Uniform Traffic Control Devices and submit the plan to the City for approval prior to beginning and any work which may affect traffic.

One-way traffic shall be controlled through the project in accordance with the plans entitled "Traffic Control System for Lane Closure on Two Lane Conventional Highways", located in the State of California Department of Transportation Encroachment Permits Manual, and these special provisions.

Additional advanced flaggers may be required.

The complete closure of a street is allowed only when authorized in writing by the City Engineer or Director of Public Works. Such closure shall be accomplished only through the use of Type III barricades.

The Contractor may, at his option, utilize a pilot car.

If the Contractor elect's to use a pilot care, cones along the centerline need not be placed. The pilot car shall have radio contact with personnel in the work area and the maximum speed of the pilot car through the traffic control zone shall be 25 miles per hour.

Minor deviations from the requirements of this section concerning hours of work which do not significantly change the cost of the work may be permitted upon the written request of the Contractor if in the opinion of the City Engineer public traffic will be better served and the work expedited. Such deviations shall not be adopted until the Engineer has indicated his written approval. All other modifications will be made by contract change orders.

Measurement and Payment

Full compensation for furnishing the traffic control plan, implantation of the traffic control plan, its maintenance within the project site shall be paid for via the bid item **"TRAFFIC CONTROL,"** to be paid for on the basis of a lump sum and no additional or special compensation shall be made.

2.13 EARTHWORK

Earthwork shall conform to the provisions of Section 19, "Earthwork", of the Standard Specifications (State of California) and these special provisions. Earthwork provisions contained in this section shall apply to roadway excavation, and subgrade preparation.

Surplus excavated material shall become the property of the Contractor and shall be removed from the roadway Right of Way.

Measurement and Payment

Full compensation for re-grading the landscaping by the sidewalk within the project site shall be paid for via the bid item **"RE-GRADE LANDSCAPE BACKING AT SIDEWALK,"** to be paid for on the basis of a lump sum and no additional or special compensation shall be made.

Full compensation for re-grading the landscaping by the park improvements including, bike path, parking lot and restroom, within the project site shall be paid for via the bid item **"CUT TO FILL FOR PARK IMPROVEMENTS AND TRANSITION GRADING,"** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

2.14 COMPACTION TESTING

Arrangements for all required compaction tests will be made by the Engineer. Compaction tests will be performed as specified in Section 19-5 "Compaction", of the Standard Specifications under the direction of the Engineer. Compaction tests will be made in accordance with ASTM 1557. The Owner shall pay for all laboratory inspection services direct for the first test. The actual cost of re-testing shall be deducted from future payments due the contractor. The contractor shall cooperate with the Engineer and shall furnish required labor and excavating equipment, as determined by the Engineer, to aid in making compaction tests.

Testing services shall be provided by an independent third party sampling and testing service qualified by Caltrans and certified by a Caltrans Independent Assurance Program, in accordance with the City's adopted Quality Assurance Program (QAP). No separate payment will be made for any work performed or material used to perform compacting testing resulting from the Contractor's performance of the work, either inside or outside the right of way. Full compensation for Compaction shall be included as a component of the bid items to which Compaction is applicable, and no further or special compensation shall be made.

2.15 REMOVAL OF PAVEMENT, CONCRETE, AND MISCELLANEOUS ITEMS

Landscape and Shoulder Removal

Removal of existing landscaping and shoulder material shall be done so in a clean and orderly manner. Removal of such existing material shall include off-haul and disposal. Depths and locations are shown on the improvement plans.

Concrete Hardscape, Sidewalk, Curb, Gutter, and Misc. Flatwork

Removal of existing concrete hardscape, sidewalk, curb, gutter, and/or other flatwork shall be done so in a clean and orderly manner. Sawcutting at edge of areas to be removed is mandatory. Removal of concrete sidewalk, curb, and gutter at existing expansion joints is preferred. Removal of such existing material shall include off-haul and disposal.

Roadway Asphalt Pavement Removal

Removal of existing pavement shall be done so in a clean and orderly manner. Sawcutting at edge of areas to be removed is mandatory. Removal of such existing material shall include off-haul and disposal. Depths and locations are shown on the improvement plans.

Base Rock & Subgrade Removal

Removal of existing roadway base rock and subgrade shall be done so in a clean and orderly manner. The existing base rock and subgrade may be used for fill on-site.

Removal of Miscellaneous Signs

Removal of signs and signposts shall be done so in a clean and orderly manner. Removal of such existing material shall include off-haul and disposal.

Drinking Fountain Removal

Drinking fountain shall be removed and waterline to be abandoned per City of Escalon Standards. Shade Structure and concrete pad to be removed. Removal of all existing materials shall include off-haul and disposal.

Irrigation Removal

Irrigation system including lines, boxes and controllers within work limits shall be removed and capped. All irrigation lines shall be tested to test for leaks and/or missed caps prior to completion of demolition phase.

Removal of Electrical lines and Power Poles

Power poles are to be removed to a minimum depth of 12 inches below finished grade. All attached connections are to be removed and traced back to a remaining structure.

All overhead lines shall be removed. Underground electrical are to be removed from improvement area. Removal of all existing materials shall include off-haul and disposal.

City will disconnect power to all overhead and underground electrical lines prior to Contractor removal.

Remove Horse Shoe Pits

Horse shoe pits shall be removed to 3 inches below grade leaving the stake protected in place. Removal of all existing materials shall include off-haul and disposal.

Measurement and Payment

Full compensation for removal of existing landscaping for concrete sidewalk shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING LANDSCAPE FOR SIDEWALK,”** to be paid for on the basis of square feet of area removed and regraded, and no additional or special compensation shall be made.

Full compensation for removal of existing shoulder material for concrete sidewalk shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING SHOULDER FOR SIDEWALK,”** to be paid for on the basis of square feet of area removed and regraded, and no additional or special compensation shall be made.

Full compensation for removal of existing landscaping for new sod shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING LANDSCAPE FOR SOD,”** to be paid for on the basis of square feet of area removed and regraded, and no additional or special compensation shall be made.

Full compensation for removal of existing base landscaping for bike path area, asphalt parking lot, and other park improvements shall be paid for via the bid item, **“REMOVE & OFF-HAUL LANDSCAPE FOR PARK IMPROVEMENTS,”** to be paid for on the basis of square feet of area removed and regraded, and no additional or special compensation shall be made.

Full compensation for removal of existing landscaping for railroad concrete foot pads shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING LANDSCAPE FOR RR CONCRETE FOOT PADS,”** to be paid for on the basis of each area removed and regraded, and no additional or special compensation shall be made.

Full compensation for removal of existing drinking fountain and abandonment of waterline shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING DRINKING FOUNTAIN,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for removal of existing drinking fountain concrete pad shall be paid for via the bid item, **“REMOVE & OFF-HAUL FOUNTAIN CONCRETE PAD,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for removal of existing shade structure over drinking fountain and all appurtenances shall be paid for via the bid item, **“REMOVE & OFF-HAUL FOUNTAIN SHADE STRUCTURE,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for removal of existing concrete depressed curb and gutter shall be paid for via the bid item, **“REMOVE & OFF-HAUL DEPRESSED CURB & GUTTER,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for removal of existing concrete sidewalk shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING CONCRETE SIDEWALK,”** to be paid for on the basis of square feet of area removed and regraded, and no additional or special compensation shall be made.

Full compensation for removal of existing concrete sidewalk shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING CONCRETE HARDSCAPE,”** to be paid for on the basis of square feet of area removed and regraded, and no additional or special compensation shall be made.

Full compensation for removal of existing valley gutter shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING VALLEY GUTTER,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for removal of existing flag mount pipes shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING FLAG MOUNT PIPES (±22),”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for removal of existing commercial driveway including curb and gutter shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING COMMERCIAL DRIVEWAY,”** to be paid for on the basis of each item removed and regraded and no additional or special compensation shall be made.

Full compensation for removal of existing rollover curb and gutter shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING ROLLOVER CURB & GUTTER,”** to be paid for on the basis of linear foot removed and regraded and no additional or special compensation shall be made.

Full compensation for removal of existing vertical curb and gutter shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING VERTICAL CURB & GUTTER,”** to be paid for on the basis of linear foot removed and regraded and no additional or special compensation shall be made.

Full compensation for removal of existing vertical curb shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING VERTICAL CURB,”** to be paid for on the basis of linear foot removed and regraded and no additional or special compensation shall be made.

Full compensation for removal of existing concrete tree island and all appurtenances shall be paid for via the bid item, **“REMOVE & OFF-HAUL CONCRETE TREE ISLAND,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal of existing ADA curb returns including ramps, sidewalk, curb and gutter shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING ADA CURB RETURNS, CURB & GUTTER,”** to be paid for on the basis of each item removed and regraded and no additional or special compensation shall be made.

Full compensation for removal of existing traffic lines and stencils shall be paid for via the bid item, **“GRIND & REMOVE EXISTING TRAFFIC LINES & STENCILS (THERMOPLASTIC),”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for removal of existing asphalt pavement and subgrade shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING ASPHALT & SUBGRADE,”** to be paid for on

the basis of square feet of area removed and regraded, and no additional or special compensation shall be made.

Full compensation for removal of existing water valve boxes shall be paid for via the bid item, **“REMOVE EXISTING WATER VALVE BOX,”** to be paid for on the basis of each item removed and regraded and no additional or special compensation shall be made.

Full compensation for removal, protection and storage of existing commercial property sign shall be paid for via the bid item, **“REMOVE & RETAIN COMMERCIAL SIGNS,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal, protection and storage of existing private property sign shall be paid for via the bid item, **“REMOVE & RETAIN PRIVATE PROPERTY SIGNS,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal, protection and storage of existing rail road sign shall be paid for via the bid item, **“REMOVE & RETAIN RR SIGNS,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal and disposal of existing trash and recycle structure and appurtenances shall be paid for via the bid item, **“REMOVE & OFF-HAUL TRASH/RECYCLE CAN,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal, protection and storage of existing trash can and appurtenances shall be paid for via the bid item, **“REMOVE & OFF-HAUL TRASH CAN,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal, protection and storage of existing metal benches and appurtenances shall be paid for via the bid item, **“REMOVE & RETAIN METAL BENCH,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal, protection and storage of existing brass plaque and appurtenances shall be paid for via the bid item, **“REMOVE & RETAIN BRASS PLAQUE,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal, protection and storage of existing wheel stops and appurtenances shall be paid for via the bid item, **“REMOVE & RETAIN WHEEL STOPS,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal of existing street signs and posts shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING SIGNS & POSTS,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal of existing curve arrow signs and posts shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING CURVE ARROW SIGNS,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal and of existing bike rack and appurtenances shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING BIKE RACK,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal of existing railroad concrete structures shall be paid for via the bid item, **“REMOVE & OFF-HAUL RR CONCRETE STRUCTURES,”** to be paid for on the basis of each item removed and regraded and no additional or special compensation shall be made.

Full compensation for removal of existing railroad concrete pad shall be paid for via the bid item, **“REMOVE & OFF-HAUL RR CONCRETE PAD,”** to be paid for on the basis of each item removed and regraded and no additional or special compensation shall be made.

Full compensation for removal of existing irrigation lines shall be paid for via the bid item, **“REMOVE EXISTING IRRIGATION LINES,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for removal of overhead lines shall be paid for via the bid item, **“REMOVE OVERHEAD LINES,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for removal of power poles including any connections shall be paid for via the bid item, **“REMOVE & OFF-HAUL EXISTING POWER POLE,”** to be paid for on the basis of each item removed and no additional or special compensation shall be made.

Full compensation for removal of underground electrical lines shall be paid for via the bid item, **“REMOVE & OFF-HAUL UNDERGROUND ELECTRICAL LINES,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for removal of existing horse shoe pits leaving the stake in place shall be paid for via the bid item, **“REMOVE & OFF-HAUL HORSE SHOE PITS,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

2.16 TREE TRIMMING & REMOVAL

The work shall consist of the removal and disposal of trees, including stumps. Selected trees, including stumps, shall be cleared from the surface of the alignment or work area.

Unless specifically indicated on the Plans or set forth in the Special Provisions no trees may be removed without direct authority of the City. For the purposes of this section, trees shall be considered as those having a trunk diameter of three inches (3") and greater measured at a height of three feet (3') above the ground.

Removal of existing trees and shrubs shall include removing their stumps and roots 2 inches or larger in diameter to a minimum depth of 12 inches below finished grade. Holes resulting from stump removal shall be backfilled to finished grade with material obtained from adjacent areas. At his option, the contractor may grind existing stumps to the minimum depth specified above. The Contractor shall be required to hand-cut trees or hedges if removal by machines may cause damage to fences, telephone, power lines or other such facilities or if the area is not accessible by heavy equipment.

Contractor shall complete a safety trim on all remaining trees in the park and clear all dead limbs. Any dead palm fronds shall be removed from remaining palm trees.

Measurement and Payment

Full compensation for removal and disposal of existing trees and root balls shall be paid for via the bid item **"REMOVE TREE & ROOT BALL,"** to be paid for on the basis of each item removed and regraded and no additional or special compensation shall be made.

Full compensation for trimming trees and removing dead limbs shall be paid for via the bid item, **"TREE TRIMMING,"** to be paid for on the basis of a lump sum and no additional or special compensation shall be made.

2.17 CONCRETE WORK

A. DESCRIPTION

The work to be performed under this section shall consist of furnishing all labor, materials, tools, transportation, supplies, equipment, appurtenances, fuel, and power, unless specifically excepted in writing by the City Engineer, necessary or required for the installation of Portland Cement Concrete curbs, gutters, sidewalks, curb cuts, ramps, driveways, and appurtenant facilities as shown on the plans and as described in these specifications.

B. REFERENCED STANDARDS

1. Published specifications, standards, tests, or recommended methods of trade, industry, or governmental organizations apply to work of this Section where cited from the following references:
 - a. American Concrete Institute (ACI)
 - b. The American Society for Testing and Materials (ASTM)
 - c. State of California, Department of Transportation (CalTrans)
 - d. Federal Specifications (Fed. Spec.)
 - e. Occupational Safety and Health Administration (OSHA)

C. SUBMITTALS

1. Manufacturer's Specifications: Where manufacturer's specifications and/or directions are referred to in the Specifications.
2. Product Data: Furnish manufacturer's descriptive and technical data sheets where required to indicate use of materials or equipment in conformance with the Specifications.
3. Materials: Furnish signed certificates from the suppliers of materials and manufactured items showing conformance with the standards specified in this Section.
4. Mix Designs: Furnish copies of the mix design data for each type of concrete to be used on the work.

D. QUALITY ASSURANCE

1. Materials and equipment specified by reference to standard specifications, trade association publications, and manufacturer's catalogs and installation recommendations shall refer to the latest issue in effect at the date of the contract, except where building codes refer on specific items to an earlier issue. All referenced standard specifications shall be considered an integral part of this specification, as if repeated in full herein.

2. Work shall comply with the requirements of governing codes, ordinances, laws, regulations, safety orders, and directives relating to the work.

E. MATERIALS

1. Portland Cement: ASTM C150, Type II, unless otherwise specified.
2. Concrete Aggregates:
 - a. General: ASTM C33
 - b. Fine Aggregate: Clean, hard, strong, durable, natural sand
 - c. Coarse Aggregate: Hard, durable, non-coated crushed stone or gravel. Maximum size of aggregate shall be $\frac{1}{5}$ of narrowest dimension between forms of the concrete member or $\frac{3}{4}$ of minimum clear spacing between reinforcing bars.
 - d. Store fine and coarse aggregates separately.
3. Mixing Water: Potable
4. Steel Reinforcement:
 - a. Reinforcing Bars: ASTM A615, Grade 40, deformed billet steel bars, plain finish
 - b. Welded Wire Mesh: ASTM A185, electrically welded, plain finish
 - c. Metal Accessories: Provide spacers, chairs, ties, and other devices necessary for proper placing, spacing, supporting, and fastening reinforcement in place.
5. Dowels: Dowels shall be smooth steel rods, #5 or 5/8" in diameter, 24 inches in length, and shall be greased and wrapped one side through every expansion joint, as shown on the plans. Tight fitting PVC inserts may be used in lieu of wrapping one side.
6. Form Work:
 - a. Plywood: 5-ply, 5/8-inch thick minimum, moisture resistant Plyform ~X
 - b. Lumber for Form Work: Construction grade Douglas Fir
7. Admixtures:
 - a. Air Entraining Admixtures: ASTM C260, air content not to exceed 4 percent
 - b. Water Reducing, retarding, and Accelerating Admixtures: ASTM C494
8. Form Release Agent: Form release agent shall be provided where necessary to keep concrete from binding to forms.
9. Curing Materials: Membrane Forming Curing Compounds, ASTM C309, Type I.
10. Joint Materials: Self-expanding cork board, ASTM D1752, or preformed bituminous, ASTM D1751. Extend joint fillers to the full depth of slab or joint; thickness and length indicated.
11. Cement Mortar: Cement mortar shall conform to the requirements of Section 51-1.135 of the Standard Specifications.

F. PROPORTIONING OF CONCRETE MIXES

1. Strength: Except as otherwise indicated, concrete shall have the minimum 28 day compressive strength as follows:
 - a. Curb, gutter, and sidewalks: 2,800 psi
 - b. Traffic pavement and driveways: 4,000 psi
2. Mix Design:
 - a. Concrete mixtures except for lean concrete shall be signed by a testing laboratory approved by the City Engineer. Mixes shall be verified by actual tests on cylinders prior to placing concrete, and compression tests shall show values at least 25 percent greater than the minimum strength indicated or specified. Mixes shall conform to the governing building code requirements and to current ACI Standards, and shall be approved by the City Engineer. Contractor shall pay the testing laboratory for cost incurred for the mix design.
 - b. The amount of fine and coarse aggregates shall be proportioned with respect to each other and with respect to the water content, so that the concrete may be placed

without segregation; but in no case shall the volume of the fine aggregates be less than 35 percent of the sum of volumes of fine and coarse aggregates when measured in loose, dry volumes before being combined. The amount of aggregates before combining shall not exceed 6-1/2 cubic feet per each sack of cement.

- c. Water, including moisture contained in the aggregate, shall not exceed the amounts specified in Table 502(a) of the ACI Building Code 318.
- d. The minimum cement content for concrete shall be 5 sacks per cubic yard, or more, as determined by the testing laboratory.
- 3. Admixtures:
 - a. Use air entraining admixtures for all concrete. Amount of entrained air shall be 3 to 6 percent by volume when tested by air meter in accordance with ASTM C173. Use admixtures for air entraining in accordance with manufacturer's printed recommendations, at the batch plant by the manufacturer's representative, for correct entrainment.
 - b. In order to reduce total water content, a water reducing agent may be used in accordance with the manufacturer's recommendations. The reduced water content shall be taken into consideration when proportioning materials, except that the minimum requirements specified shall be maintained.
 - c. Do not use retarding and accelerating admixtures, unless approved by the City Engineer.
 - d. Include admixtures in the design test cylinders.
 - e. Admixtures shall be compatible and retain full efficiency, with no deleterious effect on the concrete or on the properties of each other.
 - f. Do not use calcium chloride.

G. BATCHING AND MIXING

- 1. General: Except as otherwise specified, concrete shall be ready-mixed or job-mixed in accordance with requirements of the governing building code and ACI 318.
- 2. Ready-Mixed Concrete:
 - a. Ready-mixed concrete shall be mixed and delivered to the point designated, as specified in ASTM C94.
 - b. Do not add water on the job, unless authorized by the Construction Manager. The amount of water, if added, shall be recorded on the delivery ticket. If water is permitted to be added to mixed concrete upon arrival at the job, an additional mixing of 20 revolutions of the drum shall be required.
 - c. Furnish duplicate delivery tickets with each load of concrete delivered to the job, one for the Contractor and one for the City Engineer. Delivery tickets shall provide the following information:
 - 1. Date
 - 2. Name of ready-mix concrete plant
 - 3. Job location
 - 4. Contractor
 - 5. Type and brand of cement
 - 6. Class and specified cement contents in bags per cubic yard of concrete
 - 7. Truck number
 - 8. Time dispatched and time unloaded
 - 9. Amount of concrete in load, in cubic yards
 - 10. Admixtures in concrete, if any
 - 11. Maximum size of aggregate and amount of aggregate of each size per cubic yard
 - 12. Water added at job, if any

H. PREPARATION AND LAYOUT

1. Preserve reference points, such as survey monuments, benchmarks, and survey stakes. If disturbed or destroyed by the contractor, replace as directed by the City Engineer, at no extra cost to the City.
2. Establish extent of excavation by area and elevation; designate and identify datum elevation.
3. Set required lines and levels.
4. Install signs, lights, and barricades where necessary to guard against accident. Comply with County, CalTrans, OSHA, and any other applicable safety standards.
5. Protect existing structures and facilities to remain from damage.
6. Perform work within the confines of the project limits. DO not trespass other property without specific permission from adjacent owners.
7. Existing sidewalks: Where existing sidewalks are to be removed and reconstructed, the existing sections shall be cut to their full depth with an abrasive saw and then removed. Dowels shall be installed as indicated on the plans.
8. Subgrade Preparation: The subgrade shall be constructed to a true grade and cross section and shall be wetted and thoroughly compacted to a minimum relative compaction of 90% or greater, as indicated on the plans. Subgrade cross section shall then be checked by measure template supported from the forms. Compaction testing shall be paid for by the Contractor.
9. Weather Conditions:
 - a. Comply with ACI Standards for hot and cold weather concreting.
 - b. Do not mix salt, chemicals, or other foreign materials with the concrete.
 - c. Do not use admixtures to accelerate the hardening of the concrete or to produce high early strength concrete, unless specified or approved by the City Engineer.
 - d. Maintain records showing date of placements, the mix used, and the air temperature at the time of concreting of the various portions of work.

I. FORMWORK

1. Forms shall be designed, constructed, and erected in accordance with "Recommended Practice for Concrete Flatwork," ACI 346.
2. Construction tolerances shall not exceed those specified in ACI 347.
3. Re-use of form materials shall be contingent upon the condition of such materials after stripping, and their ability to produce concrete finishes as required.
4. Forms: Forms shall be carefully set to the alignment and grade indicated on the plans, and held firmly in place with stakes, clamps, spreaders, or braces. Clamps, etc. shall be installed so as not to interfere with finishing operations.
5. Coat the contact surfaces of forms with an approved release agent.

J. REINFORCING STEEL

1. Bending and Placing:
 - a. Bars shall be bent cold. Do not use bars with bends not indicated.
 - b. The minimum clear distance between parallel bars shall be not less than the nominal diameter of the bars nor less than 1-1/3 times the maximum size of the coarse aggregate, or one inch minimum, except where otherwise indicated.
 - c. Splices for reinforcement shall be made in accordance with ACI 318, except where otherwise indicated.

K. WELDED WIRE FABRIC REINFORCEMENT

1. Lap fabric 6" or one full mesh plus 2", whichever is greater. At joints, securely tie wire together and to other reinforcement at approximately 12" centers. Extend wires to within 1" of expansion and contraction joints. Provide dobies on a three (3) foot grid to support the welded wire mesh.

L. INSTALLATION OF ANCHORAGE ITEMS

1. Set anchor bolts for steel column bases in the forms and cast into the concrete. Bolts shall be furnished in accordance with other Sections of these Specifications.
2. Grouting of Bases: Grout bases with approved premixed shrinking grout. The amount of water added shall be in accordance with the manufacturer's recommendations. The grout shall be worked under the bases, completely filling the space between the base and the concrete.
3. Provide for the installation of inserts, conduit, pipe sleeves, drains, hangers, metal ties, shelf angle supports, anchors, bolts, nailing strips, blocking, grounds, and other fastening devices required for the attachment of other work. Properly locate and secure in position before concrete is poured. Where openings are left in concrete for the passage of conduits or pipes, the openings shall be made slightly larger than the conduit or pipe.

M. CONVEYING AND PLACING CONCRETE

1. Preparation: Before placing concrete, remove debris and water from the places to be occupied by the concrete. Clean and wet wood forms, clean reinforcement, and apply special coatings.
2. Placing: In accordance with the requirements of ACI 318.
3. Weather Conditions: Concrete shall have a minimum temperature of 50 degrees F., and a maximum temperature of 85 degrees F., when deposited.
4. Construction Joints:
 - a. Form as indicated on the plans, approved or directed by the City Engineer.
 - b. The rate and method of placing concrete and the arrangement of construction joint bulkheads shall be such that the concrete between the construction joints shall be placed in a continuous operation.
 - c. Joints shall be perpendicular to the axis or surface of the member jointed.
 - d. Immediately before concreting is resumed, the surfaces of previously placed concrete shall be roughened, cleaned by vigorous wire brushing or sandblasting, wetted, and slushed with grout. Grout shall be 1 part Portland Cement and 2 parts sand.

N. INTEGRAL CURB AND GUTTER AND CROSS GUTTER

1. Forms for Curb and Gutter:
 - a. Rear forms shall be of a height equal to the depth of the curb. Front forms shall be equal to the curb face, and shall be rigidly supported. Supporting members passing through the gutters shall be withdrawn when the front forms are removed and the holes left in the gutter shall be filled with concrete and the flowline finished smooth. Forms for gutter and gutter shall be equal to the full depth of the section indicated. Timber forms shall be surfaced on the side which is placed next to the concrete and not be less than 1-5/8 inches thick. Do not use warped forms and/or forms not having a smooth, straight upper edge.
 - b. Provide rigid forms for curb returns. However, benders or thin plank forms, rigidly placed, may be used for curbs or curb returns of more than 20 foot radius.

- c. Hold forms rigidly in place by using pairs of iron stakes, placed at intervals not to exceed 4 feet. Do not remove front forms sooner than 2 hours, nor later than 4 hours after the concrete has been placed. Do not remove back forms until front face of curb has been finished.
2. Finishing Curb and Gutter:
 - a. Prior to removal of forms, the surfaces shall be finished to a true, uniform surface, true to grade by means of a straight edge float. Immediately after stripping the forms, the face of the curb shall be troweled smooth to the flowline of the integral curb and then finished with a steel trowel. The top shall be finished and the edges rounded, as shown on the plans. Mark curbs at intervals of 24 inches, using suitable scoring tool, in line with markings on adjoining sidewalk, and to suitable depth for contraction joints, as indicated.
 - b. After the curb has been troweled smooth, it shall be given a final finish with a fine broom with brush strokes parallel to the flowline. Sidewalk shall have brush finish strokes perpendicular to the gutter flowline.
 - c. Curing compound shall be applied immediately after finishing operations are complete.
 - d. The face and top of the finished curb and gutter shall be true and straight, and the top surface of curbs shall be a uniform width, free of humps and sags.
 - e. When a straight edge 10 feet long is placed on the top or face of the curb or gutter, the surface shall not vary more than 0.01 foot from the edge of the straight edge, except at grade changes on curves. Repairs shall be made by removing and replacing the entire section between scoring lines or expansion joints.
 3. Expansion Joints: Construct expansion joints $\frac{1}{4}$ inch thick in curbs at intervals indicated. Expansion joint filler shall be in one unit, cut to conform to the cross section of the curb and gutter, and set at right angles to the top and face of curb. Dowels shall be placed 12 inches on center and shall be greased and wrapped one side through every expansion joint as shown on the plans.

O. SIDEWALKS

1. Forms: Timber forms for sidewalks shall be at least 1-1/2 inches thick (finished) and a width equal to the full depth of the finished sidewalk. Set with the upper edge true to line and grade, and held rigidly in place by stakes placed on the outside of the forms. Do not remove the side forms sooner than 12 hours after the finishing of concrete.
2. The finished surface of sidewalks shall lie in a plane, sloping upward from the established top of curb grade at the rate of $\frac{1}{4}$ inch per foot, in a direction at a right angle to the curb.
3. Placing and Finishing: After concrete has been placed, bring the surface to the proper section, after which it shall be grid-tamped until all waves or irregularities in the surface mortar have been eliminated.
4. Finish surface to a grade with a wooden float, and trowel smooth with a steel trowel. Finish with a fine hair push broom drawn over the surface, transverse to the line of traffic, and score as indicated. Scoring shall be done with a tool which will leave the corners rounded and to a depth that will insure a satisfactory contraction joint, as indicated.
5. Expansion Joints: Construct $\frac{1}{4}$ inch thick transverse expansion joints at sidewalk or curb returns, and opposite expansion joints in adjacent curbs. Expansion joint filler shall be in one unit, cut to conform to the cross section of the curb and gutter, and set at right angles to the top and face of curb. Dowels shall be placed 12 inches on center and shall be greased and wrapped one side through every expansion joint, as shown on plans.

6. Place score joints consisting of 1/8 inch wide and 1/4 inch deep tooled joints at sidewalk areas 5 feet on center or as indicated on the drawings.

P. CONCRETE FINISHES

1. Broom Finish: Surfaces shall be given a light broom finish, unless otherwise indicated.

Q. PROTECTION AND ACCESS

1. The Contractor shall take all precautions to avoid damage to the buildings, landscaping, and other facilities of the adjoining businesses. The Contractor shall provide temporary access to the businesses.
2. The Contractor shall be responsible to protect finished work against damage and/or vandalism during the progress of work and until final acceptance.
3. Any vandalism damage to fresh concrete shall be repaired immediately, if not severe enough that a durable and aesthetically pleasing repair cannot be made, in which case the damaged area shall be neatly sawcut to the nearest score line or expansion joint, removed, and replaced at no additional cost to the City.

R. CURING

1. Cure concrete by coating with an approved sealing and curing compound. Apply compound in two separate coats in accordance with manufacturer's directions. Apply curing compound as soon as surface water has disappeared from concrete surfaces.

S. TESTING

1. General Requirements
 - a. Testing of all work shall be in accordance with the requirements of Division 1. Testing will be performed so as to least encumber the performance of work.
 - b. When work of this section or portions of work are completed, notify the City Engineer, to schedule the testing laboratory to perform the appropriate tests. All testing shall be done in the presence of the City Engineer and the Contractor shall not proceed with additional portions of work, until test results have been verified.
 - c. If, during progress of work, tests indicate that the work or materials do not meet specified requirements, the defective work shall be remedied, removed, replaced, and re-tested at no cost to the City.
2. Compaction testing
 - a. Relative compaction of the soils and aggregate base shall be tested by the City's Soils Engineer in accordance with California test method No. 231, Nuclear Gage.
 - b. Degree of Compaction: The degree of compaction shall be expressed as a % ratio of the in-place dry density of the compacted fill material to the maximum dry density of the same material as determined by ASTM D1557.
 - c. Compacted fills shall be tested prior to proceeding with placement of surface materials.
 - d. If, during progress of work, tests indicate that compacted materials do not meet specified requirements, the defective work shall be removed and replaced, re-compacted, and re-tested at no cost to the City.
 - e. Upon completion of this portion of the work, deliver to the City Engineer a written report from the City's Soils Engineer, stating that the work performed hereunder complies with the requirements of the plans and specifications. The report shall be prepared in accordance with the requirements of Division 1.

3. Concrete testing

- a. Slump tests shall be made daily and each 40 yards of concrete delivered to the site in accordance with ASTM C143 procedures. Concrete shall have a maximum slump, as follows:
 - i. Slabs on grade: 3-1/2" max.
 - ii. Curb, Gutter, and Sidewalk: 4" max.
 - iii. Traffic pavement: 3" max.
 - iv. Drainage structures and appurtenances: 3-1/2" max.
- b. Furnish samples of concrete in accordance with ASTM C172. Transport to a place on site where tests can be made and cylinders stored without being disturbed for the first 24 hours.
- c. Cylinder for strength tests shall be made in accordance with ASTM C31 and tested in accordance with ASTM C39.
- d. The average of all of the strength tests representing each class of concrete shall be equal to or greater than the specified strength, and not more than one test in ten shall have a value of less than 90 percent of specified strength.
- e. Furnish a record of the delivery ticket number for the particular load of concrete tested and the exact location in the work at which each load represented by a strength test is deposited to the testing laboratory.
- f. Enforcement of Strength Requirements: When the ultimate compressive strength of any cylinder falls below the specified strength for the specified class of concrete, adjust the design mix and water content to produce specified strength for concrete that is subsequently placed. In addition, the City Engineer may order additional curing for that portion of the structure where the questionable concrete has been placed. In the event that such additional curing does not give the strength required, as determined by load tests made in accordance with ACI 318, or cored cylinder tests, and if such tests indicate the necessity, the defective parts shall be removed and replaced, or shall be reinforced as directed by the City Engineer, at no additional cost to the City.

4. Reinforcement Testing

- a. If material is properly identified, certified mill report will be accepted. Otherwise, test shall be made.
- b. When the name of the manufacturer, or the heat identification number, or the manufacturer's chemical analysis is not known, the testing agency's lot number may include any amount of reinforcement, but at least one tensile and one bending test shall be made of each 5 tons or fraction thereof of each size of reinforcement in each lot.

5. Flow Testing

- a. All concrete gutters and drainage items shall be water tested for drainage flow before acceptance. The maximum deviation from a true grade shall not result in ponding water deeper than a depth of 0.02 foot (1/4"). Any sections which fail to meet the requirements of this section shall be removed and replaced at no cost to the City. All flow testing shall be conducted in the presence of the City Engineer.

T. CLEANING AND PROTECTION

1. Do not store soil, landscape amendments, or other material which will stain on finished concrete surfaces.
2. Protect all concrete surfaces from damage until acceptance by the City. All concrete work damaged during the course of construction shall be removed and replaced at no cost to the City.

Measurement and Payment

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete sidewalks, shall be paid for via the bid item, **“SIDEWALK 5’ WIDTH, 4” DEPTH,”** to be paid for on the basis of linear feet of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete sidewalks at the bike path, shall be paid for via the bid item, **“SIDEWALK 5’ WIDTH, 6” DEPTH – BIKE PATH,”** to be paid for on the basis of linear feet of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete vertical curb & gutter, shall be paid for via the bid item, **“6” VERTICAL CURB & GUTTER,”** to be paid for on the basis of linear feet of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete curb transition shall be paid for via the bid item, **“4.5” ROLL OVER TO 6” VERTICAL CURB TRANSITIONS,”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete rollover curb & gutter, shall be paid for via the bid item, **“4.5” ROLL OVER CURB & GUTTER,”** to be paid for on the basis of linear feet constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete vertical curb, shall be paid for via the bid item, **“CONCRETE TREE ,”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete driveway, ramps, and curb & gutter, shall be paid for via the bid item, **“TYPE 2 COMMERCIAL ENTERANCE – 20’ W/ ADA RAMPS & CURB/GUTTER”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete driveway, ramps, and curb & gutter, shall be paid for via the bid item, **“TYPE 2 COMMERCIAL ENTERANCE – 24’ W/ SIDEWALK, ADA RAMPS & CURB/GUTTER”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete driveway, ramps, and curb & gutter, shall be paid for via the bid item, **“TYPE 2 COMMERCIAL ENTERANCE – 30’ W/ ADA RAMPS & CURB/GUTTER”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete sidewalks, ramps, and curb & gutter, shall be paid for via the bid item, **“4TH STREET CURB RETURNS, SIDEWALK, CURB, & GUTTER, W/ DUAL ADA RAMPS”** to be

paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete island, shall be paid for via the bid item, **“ROADWAY ISLAND W/ ADA PATH & CONCRETE INFILL”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete valley gutter, shall be paid for via the bid item, **“4’ WIDE VALLEY GUTTER”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete pad, shall be paid for via the bid item, **“RESTROOM FRONTAGE CONCRETE PAD, 4” DEPTH (80 SF),”** to be paid for on the basis of lump sum, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete pad, shall be paid for via the bid item, **“RESTROOM ACCESS CONCRETE PAD, 4” DEPTH (25SF),”** to be paid for on the basis of lump sum, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete pad, shall be paid for via the bid item, **“BENCH CONCRETE PAD, 4” DEPTH (88 SF),”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete pad, shall be paid for via the bid item, **“BIKE RACK CONCRETE PAD, 4” DEPTH (22 SF),”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete pad, shall be paid for via the bid item, **“RR CONCRETE PAD, 4” DEPTH (24 SF),”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for doweling, grading, preparing, compacting, subgrade, forming, pouring and finishing concrete pad, shall be paid for via the bid item, **“LAWN GAMES CONCRETE PAD, 4” DEPTH (123 SF),”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

2.18 AGGREGATE BASE ROCK & SUBGRADE

Aggregate base shall be Class II and shall conform to the provisions in Section 26, "Aggregate Base", of the Standard Specifications (State of California) and these Special Provisions. Aggregate Base may consist of non-virgin aggregates provided that the grading and quality requirements contained in Section 26 "Aggregate Base", of the Standard Specifications (State of California) are met.

The completed aggregate base thickness shall be as shown on the plans.

Subgrade around wet wells and dry well precast structures shall be backfilled and compacted up to the elevation of the proposed roadway aggregate base rock.

Aggregate Base Rock compaction: 95%

Subgrade compaction: 95%

Measurement and Payment

The contract price paid per ton for “**SHOULDER BACKING CLASS II (2,012 SF), 3” DEPTH - SIDEWALK,**” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing Aggregate Base as shoulder backing for sidewalk complete in place, as shown on the plans, and as specified in the Standard Specifications and these special provisions and as directed by the Engineer.

The contract price paid per ton for “**BASE ROCK CLASS II (17,309 SF), 8” DEPTH – ROADWAY & PARKING LOT,**” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing Aggregate Base under roadway and parking lot complete in place, as shown on the plans, and as specified in the Standard Specifications and these special provisions and as directed by the Engineer.

The contract price paid per ton for “**BASE ROCK CLASS II (7,214 SF), 4” DEPTH – BIKE PATH,**” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing Aggregate Base under bike path complete in place, as shown on the plans, and as specified in the Standard Specifications and these special provisions and as directed by the Engineer.

The contract price paid per ton for “**BASE ROCK CLASS II (1,862 SF), 6” DEPTH – BIKE PATH,**” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing Aggregate Base under bike path complete in place, as shown on the plans, and as specified in the Standard Specifications and these special provisions and as directed by the Engineer.

The contract price paid per ton for “**SHOULDER BACKING CLASS II (721 SF), 3” DEPTH – BIKE PATH,**” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing Aggregate Base as shoulder backing for bike path complete in place, as shown on the plans, and as specified in the Standard Specifications and these special provisions and as directed by the Engineer.

2.19 ASPHALT CONCRETE

A. GENERAL

Work to be performed under this Section covers all labor, materials, tools, equipment, transportation, and incidentals necessary to construct asphalt concrete pavements. This shall include asphalt concrete surfacing over compacted native material or aggregate base, and/or pavement patching over trench lines or adjacent to new concrete curb and gutter, sidewalk, or driveway.

All such work shall conform to the applicable provisions of the State of California, Department of Transportation, Standard Specifications (Caltrans); these Special Provisions; and the plans and

typical sections.

B. MATERIALS

All asphalt concrete materials shall be as specified in Section 39, "Asphalt Concrete", of the Standard Specifications; these Special Provisions; and the plans and typical sections.

Mix Types

Generally, the asphalt concrete to be used will be as follows unless modified by the Engineer:

Base Courses:	3/4 inch Maximum, Type A, Medium asphalt concrete for base courses greater than 2-1/2 inches (0.20 feet or 65 mm).
	1/2 inch Maximum, Type A, Medium asphalt concrete for base courses of 2-1/2 inches (0.20 feet or 65 mm) or less.
Leveling Courses:	3/8 inch Maximum, Type A asphalt concrete for leveling courses of 3/4 of an inch (0.06 feet or 19 mm) or less.
	1/2 inch Maximum, Type A, Medium asphalt concrete for leveling courses greater than 3/4 of an inch (0.06 feet or 19 mm).
Surface Courses:	1/2 inch Maximum, Type A, Medium asphalt concrete for surface courses of 2-1/2 inches (0.20 feet or 65 mm) or less on residential minor collectors; surface courses less than 2 inches (0.17 feet or 50 mm) on collectors and arterials; and on all alleyways and parking lots.
	3/4 inch Maximum, Type A, Medium asphalt concrete for surface courses greater than 2 inches (0.17 feet or 50 mm) on collectors and arterials.

Main Street, 4th Street, the Parking Lot and Bike Path are classified as residential roadways and shall have 1/2" maximum aggregate installed throughout the project site.

Binder Types

The asphalt grade shall be PG64-10 conforming to Section 92, "Asphalts", of the Standard Specifications. For pavements to be used by heavy industrial vehicles or forklifts, PG70-10 shall be used.

Tack Coat

Tack coat shall be utilized and will be emulsified asphalt Grade RS-1, RS-1h, SS-1, or SS-1h and shall conform to Section 94, "Asphaltic Emulsions", of the Standard Specifications.

Contractor Supplied Mix Designs

The Contractor will be required to furnish the Engineer with a mix design for each type of asphalt concrete to be used on the project. The mix design shall include a list of material sources and a Certificate of Compliance signed by the material supplier or his representative indicating that the materials to be incorporated in the work fulfill the requirements of these specifications. This submission will be provided fifteen calendar days or ten working days prior to the start of work. If requested, the Contractor will also provide aggregate and binder samples or a plant produced mix sample for mix design verification.

The mix designs shall be prepared by AASHTO or by laboratories and personnel with current Caltrans certification.

The asphalt concrete mixtures shall conform to all of the provisions of Section 39 of the Standard Specifications and to the following requirements:

For arterial and collector streets the asphalt concrete air void content shall be between 4% minimum and 5% maximum and the S-value shall be 40 or greater.

For parking lots and residential streets and collectors the asphalt concrete air void content shall be between 3% minimum and 4.5% maximum and the S-value shall be 35 or greater.

Up to 15% recycled asphalt pavement may be incorporated into the mix.

In no event shall there be less than two percent passing the No. 200 sieve.

As a minimum, the mix design shall indicate the percentage passing for each specified sieve, the percent of asphalt, the laboratory compacted unit weight, the theoretical unit weight (Rice Gravity), and the stability of the mix to be used for each asphalt concrete mixture to be incorporated on the project. The mix design, with allowable tolerance for a single test, shall be used for job control.

Delivery Tickets

Each delivery ticket shall include information on the material type, binder type, oil content, and the mix design number. Material delivered to the project without such annotations shall be subject to rejection.

C. CONSTRUCTION

Surface Preparation

The work shall consist of preparing the existing street surfaces prior to the commencement of paving. Such work shall include removing raised pavement markers, removing thermoplastic traffic markings and legends, controlling nuisance water, sweeping, watering, and removing loose and broken asphalt concrete pavement and foreign material as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

Prime Coat

No prime coat is required.

Tack Coat

Tack coat shall be applied to all existing asphalt concrete or Portland cement concrete surface to be paved over. The tack coat shall conform to the requirements in Section 39 of the Standard Specifications.

All vertical edges to be paved against shall be tack coated. These include, but are not limited to, curb faces, gutter lips, swale edges, cross gutter edges, and asphalt concrete edges.

Cold Joints

All cold joints, both longitudinal and transverse, shall be heated with a torch immediately prior to paving. Cold joints include previous passes placed more than three hours prior. All cold joints shall be tack coated.

Leveling, Transitions, and Asphalt Concrete Fills

A leveling course of variable thickness shall be placed and compacted prior to placing the surface course at locations where directed by the Engineer. The leveling course will be used to correct pavement irregularities such as rutting, variable cross slope, or variable longitudinal slope. Where two overlays of different thickness abut at a longitudinal joint, the Contractor shall add to the thinner section to match the thicker lift and provide a smooth transition and uniform cross-fall. Cold planing ridges or other rises in the pavement surface may be required by the Engineer. The Engineer will determine the exact limits and thickness of the leveling courses, asphalt concrete fills, and transitions.

Layout

The Contractor shall layout and mark the location of the edges of the paving passes of the surface course to match the new layout of the lane lines. The layout shall be made at least 24 hours prior to paving. The layout shall be approved by the Engineer prior to paving.

If the striping is to remain unchanged, the edges of the paving passes shall conform to existing lane edges.

In all cases where practical, each lane shall be paved in a single pass. In tapered transition areas, the shoulder areas shall be paved first, then the through lane shall be hotapped immediately after the shoulder paving.

For paving which incorporates new quarterpoints or gradebreaks due to keycuts or other conditions, the Contractor shall provide equipment capable of adjusting to the new surface profile at the appropriate locations. The profile adjustments shall be within twelve inches of the actual quarterpoint or gradebreak.

The Contractor shall take sufficient measurements during laydown to assure that the full design asphalt concrete layer depth is provided at each quarterpoint, gradebreak, or transition. Failure to provide the design depth at these areas will result in rejection of the work. Correction of this rejected work will include milling out the new asphalt concrete from the road edge to the centerline or nearest inside lane line and repaving. The minimum length of the milled and corrected area shall be fifty feet.

Tolerances

The finished asphalt concrete surface shall be flush with, to 1/4 inch (0.02 feet or 6 mm) above, the gutter lips. The finished pavement surface shall not be lower than the gutter lips.

The average pavement thickness shall be equal to the specified thickness for the project.

For total pavement thicknesses of less than four inches, the minimum allowable thickness will be 1/4 inch less than that specified.

For total pavement thicknesses of four inches or more, the minimum allowable thickness will be 1/2 inch less than that specified.

Automatic Screed Controls

For all main line street or roadway paving with single lane length exceeding 300 feet, automatic screed controls shall be required. Automatic screed controls shall not be required for the paving of parking lots, intersections, cul-de-sacs, alleyways or other irregular areas.

In addition to the requirements in Subsection 39-5.01 of the Standard Specifications, asphalt concrete shall be placed with spreading equipment equipped with fully automatic screed and grade sensing controls which shall control the longitudinal grade of the screed. Automatic controls shall conform to and be operated in accordance with the provisions herein.

Unless approved otherwise, ski-type devices with a minimum length of 30 feet shall be used to provide a reference for the grade sensor. Skis shall be constructed and installed in such a manner that a reference to the average elevation of the existing pavement, along the length of the ski, is maintained at the sensor point. When placing surfacing adjacent to surfacing previously placed in conformance with these provisions, a joint matching shoe of adequate size and type to properly sense the grade of the previously placed mat may be used in lieu of the 30-foot ski.

The ski shall be mounted at a location which will provide an accurate reference for the surfacing being placed. This may require the ski to be mounted ahead of and inside the outer limits of the screed. Automatic cross slope control may be accomplished by use of a ski and grade sensor on each side of the paving machine.

Automatic screed controls shall be installed in such a manner that the occasional manual adjustments necessary to maintain the attitude of the screed parallel to the underlying pavement are readily accomplished. Automatic screed controls shall be installed so that with little or no delay, use of the automatic controls can be discontinued and the screed controlled by manual methods.

Should the automatic screed controls fail to operate properly during any day's work, the Contractor may manually control the spreading equipment for the remainder of that day provided the quality of the work conforms to the requirements of Section 39-6 of the Standard Specifications. Should the methods and equipment used for automatic control fail to result in the quality of work required by said Section 39-6, the paving operations will be temporarily discontinued and the Contractor shall make the necessary changes to the equipment, or furnish other equipment conforming to the requirements herein, before paving is resumed.

If it is determined by the Engineer that the existing grade and cross slope are too irregular for the

automatic controls to provide the quality of work required, the use of the automatic controls shall be discontinued and the spreading equipment adjusted by manual methods. Use of automatic controls shall resume when the Engineer has determined that it is again practical and so orders.

Rolling and Compaction

In addition to the requirements of Subsection 39-5.02 of the Standard Specifications, the number of rollers required for each paving operation shall be such that all rolling for density can be completed before the temperature of the asphalt concrete mixture drops below 240 degrees Fahrenheit.

Breakdown rolling shall commence when the asphalt concrete is placed. Rolling shall be accomplished with the drive wheel forward and with the advance and return passes in the same line.

For leveling courses under 3/4 of an inch (0.06 feet or 19 mm), using 3/8 inch maximum Type A asphalt concrete, breakdown rolling shall consist of three coverages with a pneumatic roller followed by a finishing coverage with a steel wheel roller.

The Contractor shall compact the asphalt concrete to a minimum density of 96.5 percent relative compaction. The compaction shall be computed for each lot, with a maximum lot size of 500 tons. Each street segment of less than 500 tons shall be its own unique lot.

Core density/nuclear gauge shall be done per CTM 375, "Determining the In-Place Density and Relative Compaction of Asphalt Concrete Pavement".

Core densities shall be taken at a rate of no fewer than one core per 50 tons of mix.

If compaction fails by nuclear methods, then core density/nuclear gauge correlation and/or core densities shall be used to establish compaction.

When core density is used to determine compaction, cores that meet or exceed the minimum specified density of 96.5 percent shall be paid for by the owner. Failing cores shall be paid for by the Contractor. If the core density testing produces both passing and failing cores, the cost will be prorated between the owner and Contractor.

The Contractor shall have hand-compaction equipment immediately available for compacting all areas inaccessible to rollers. Hand-compaction shall be performed concurrently with breakdown rolling. If for any reason hand-compaction falls behind breakdown rolling, further placement of asphalt concrete shall be suspended until hand-compaction is caught up. Hand-compaction includes vibraplates and hand tampers. Hand torches shall be available for rework of areas which have cooled.

After compaction, the surface texture of all hand work areas shall match the surface texture of the machine placed mat. Any course or segregated areas shall be corrected immediately upon discovery. Failure to immediately address these areas shall cause suspension of asphalt concrete placement until the areas are satisfactorily addressed, unless otherwise allowed by the Engineer.

Sampling

The Engineer may sample the asphalt concrete from truck beds at the plant, from the hopper of the spreading machine, or from the completed mat at the discretion of the Engineer. The Contractor shall facilitate the sampling process.

Measurement and Payment

The measurement and payment for asphalt concrete, complete in place, compacted and finished, will be made at the contract unit price indicated in the Bid Schedule. The Contractor shall furnish to the Engineer one copy of the official weight tag from the asphalt plant with each load of asphalt concrete when material is delivered to the job site.

The bid price per ton for **“ASPHALT CONCRETE PAVING (17,309 SF), 4” DEPTH – ROADWAY & PARKING LOT”** shall include full compensation for all labor, materials, tools, transportation, supplies, equipment, appurtenances, fuel, and power, unless specifically excepted, necessary or required for the installation, compaction, and finishing of hot mix asphalt pavement, as shown on the included exhibits and described in the Standard Specifications, these Technical Specifications, and as directed by the City Engineer, and no additional, separate, or special compensation shall be made therefore, and shall be paid for on the basis of ton of asphalt installed, compacted, and finished.

The bid price per ton for **“ASPHALT CONCRETE PAVING (7,214 SF), 2” DEPTH – BIKE PATH”** shall include full compensation for all labor, materials, tools, transportation, supplies, equipment, appurtenances, fuel, and power, unless specifically excepted, necessary or required for the installation, compaction, and finishing of hot mix asphalt pavement, as shown on the included exhibits and described in the Standard Specifications, these Technical Specifications, and as directed by the City Engineer, and no additional, separate, or special compensation shall be made therefore, and shall be paid for on the basis of ton of asphalt installed, compacted, and finished.

The bid price per ton for **“ASPHALT CONCRETE PAVING (1,862 SF), 3” DEPTH – BIKE PATH”** shall include full compensation for all labor, materials, tools, transportation, supplies, equipment, appurtenances, fuel, and power, unless specifically excepted, necessary or required for the installation, compaction, and finishing of hot mix asphalt pavement, as shown on the included exhibits and described in the Standard Specifications, these Technical Specifications, and as directed by the City Engineer, and no additional, separate, or special compensation shall be made therefore, and shall be paid for on the basis of ton of asphalt installed, compacted, and finished.

2.20 TYPE II SLURRY SEAL

Slurry seal shall conform to the provisions in Section 37-3, "Slurry Seals and Micro-Surfacing", of the Standard Specifications and these Special Provisions.

A Type II Polymer Modified Asphaltic Emulsion Slurry Seal material shall be used for this project with a spread rate of 15 lbs of dry aggregate per square yard.

The Contractor shall furnish all labor, equipment, material, supplies, signage, traffic control, and other incidentals necessary to provide a Slurry Seal. Slurry Seal shall consist of a mixture of an approved emulsified asphalt, mineral aggregate, water, and specified additives, proportioned, mixed and uniformly spread over a properly prepared asphalt surface. The completed Slurry Seal shall leave a homogeneous mat, adhere firmly to the prepared surface, and have a skid-resistant surface texture throughout its service life.

MATERIALS

Polymer Modified Asphaltic Emulsified Material

A polymer modified asphaltic emulsion must:

1. Consist of an elastomeric polymer mixed with an asphaltic material uniformly emulsified with water and an emulsifying or stabilization agent.
2. Use either neoprene polymer or butadiene and styrene copolymer. The polymer must be homogeneous and milled into the asphaltic emulsion at the colloid mill.
3. Be Grade PMCQS1h and must comply with the requirements shown in the following table:

Polymer Modified Asphaltic Emulsion Requirements

Quality characteristic	Test method	Requirement
Tests on emulsion:		
Saybolt Furol Viscosity at 25 °C (Saybolt Furol seconds)	AASHTO T 59	15–90
Sieve test (%)	AASHTO T 59	0–0.3
Storage stability after 1 day (%)	AASHTO T 59	0–1
Residue by evaporation (min, %)	California Test 331	60
Particle charge	AASHTO T 59	Positive
Tests on residue by evaporation:		
Penetration at 25 °C	AASHTO T 49	40–90
Ductility at 25 °C (min, mm)	AASHTO T 51	400
Torsional recovery (min, %)	California Test 332	18
Or Polymer content based on residual asphalt (min, %)	California Test 401	2.5

Aggregate must comply with the quality characteristic requirements shown in the following table:

Aggregate Requirements

Quality characteristic	Test method	Requirement
Los Angeles Rattler loss (max, %) At 500 revolutions	California Test 211a	35
Percent of crushed particles (min, %)	California Test 205	95
Durability (min)	California Test 229	55
Sand equivalent (min) Type I Type II Type III	California Test 217	45 55 60

a California Test 211 must be performed on the source aggregate before crushing. The aggregate supplier must certify that the crushed aggregate being used on the project is manufactured from the source aggregate complying with the LA rattler requirements.

Aggregate must be rock dust. Aggregate must be free from vegetable matter, deleterious substances, caked or clay lumps, and oversized particles.

Aggregate for a slurry seal and micro-surfacing must comply with the gradations shown in the following table:

Aggregate Gradation				
Quality characteristic	Test method	Requirements		
Gradation (% passing by weight) Sieve size:	California Test 202	Type I	Type II	Type III
3/8"		--	100	100
No. 4		100	94–100	70–90
No. 8		90–100	65–90	45–70
No. 16		60–90	40–70	28–50
No. 30		40–65	25–50	19–34
No. 200		10–20	5–15	5–15

The water shall be potable and free of harmful soluble salts or reactive chemicals and other contaminants. If necessary, for workability, a set-control agent may be used and must be included as part of the mix design and be compatible with the other components of the mix.

The slurry seal mix design, using project source aggregate, an asphaltic emulsion, and set-control agents if any, must comply with the requirements shown in the following table:

Slurry Seal Mix Design Requirements		
Quality characteristic	Test method a	Requirement
Consistency (max, mm)	Technical Bulletin 106	30
Wet stripping	Technical Bulletin 114	Pass
Compatibility	Technical Bulletin 115	Pass b
Cohesion test, within 1 hour (min, kg-mm)	Technical Bulletin 139	200
Wet track abrasion (max, g/m ²)	Technical Bulletin 100	810

a Test methods are by the International Slurry Surfacing Association.

b Mixing test must pass at the maximum expected air temperature at the job site during placement.

The mix design must have the percent of asphaltic residue, based on percentage by weight of the dry aggregate, within the ranges shown in the following table:

Slurry seal type	Residue range
Type I	10–16
Type II	7.5–13.5
Type III	6.5–12.0

Determine the exact percentage based on the design asphalt binder content and the asphalt residual content of the asphaltic emulsion furnished.

Application Rates:

The slurry seal spread rates must be within the ranges shown in the following table:

Slurry Seal Spread Rates

Slurry seal type	Application range (lb of dry aggregate/sq yd)
Type I	8–12
Type II	10–18
Type III	20–25

The City of Escalon shall require the slurry seal spread rate shall be a rate of 15 lbs of dry aggregate per square yard

The material shall be mixed by either a truck mounted or self propelled micro- surfacing mixing machine. The machine shall employ continuous flow mixing and be able to accurately deliver and proportion the aggregate, emulsified asphalt, mineral filler and water to a revolving multi-blade mixer and discharge the mixed product on a continuous flow basis. The machine shall have sufficient storage capacity for aggregate, emulsified asphalt, mineral filler and water to maintain an adequate supply to the proportioning controls.

Individual volume or weight controls for proportioning each material to be added to the mix shall be provided. Each material control device shall be calibrated and properly marked. The aggregate feed to the mixer shall be equipped with a revolution counter or similar device so the amount of aggregate used may be determined at any time. The emulsion pump shall be a heated positive displacement type and shall be equipped with a revolution counter or similar device so that the amount of emulsion used may be determined at any time.

The mixing machine shall be equipped with a water pressure system and nozzle type spray bar to provide a water spray immediately ahead of and outside the spreader box. The mixing machine shall be equipped with an approved fines feeder that shall provide a uniform, positive, accurately metered, predetermined amount of the specified mineral filler.

The paving mixture shall be spread uniformly by means of a mechanical type squeegee box attached to the mixer, equipped with paddles and/or augers to agitate and spread the materials throughout the box. A front seal shall be provided to insure no loss of the mixture at the road contact surface. The rear seal shall act as final strike off and shall be adjustable. The mixture shall be spread to fill cracks and minor surface irregularities and leave a uniform skid resistant application of aggregate and asphalt on the surface. The spreader box and rear strike-off shall be so designed and operated that a uniform consistency is achieved to produce a free flow of material to the rear strike-off. No "burlap" will be permitted to be drug behind the squeegee box except along the seams where a 2' to 3' wide burlap "blanket" will be permitted to be drug to the extent necessary to achieve an acceptable finish at the seams as determined by the owner. Rut filling equipment will require adjustable steel strike-off plates. The seam where two spreads join shall be neat appearing and uniform. All excess material shall be removed from ends of each job site immediately.

Each mixing unit to be used during performance of the work shall be calibrated in the presence of the Project Manager prior to construction. Previous calibration documentation covering the exact materials to be used may be acceptable, provided they were made during the same calendar year. The documentation shall include an individual calibration of each material at

various settings, which can be related to each machine's metering devices. No machine will be allowed to work on the project until all calibrations have been completed and/or accepted by the Project Manager.

Care shall be taken to insure straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections shall be kept straight to provide a good appearance. Approved hand squeegees, with burlap drags, shall be used to spread Slurry in areas not accessible to the Slurry spreader box. Care shall be exercised in leaving no unsightly appearance from handwork.

Areas receiving Slurry Seal will be allowed to cure from three to five hours or until the treated pavement will not be damaged by traffic. The Contractor will protect the area with suitable barricades or markers for the full curing period. Areas damaged within 24 hours of application of Slurry, or prior to moving to new work locations, shall be repaired by the Contractor at their expense.

Immediately prior to applying the Slurry Seal, the surface shall be cleared of all loose material, oil spots, vegetation and other objectionable material. Any standard cleaning method will be acceptable. If water is used, cracks shall be allowed to dry thoroughly before Slurry surfacing. Manholes, valve boxes, drop inlets and other service entrances shall be protected from the Slurry Seal by a suitable method. The Project Manager shall approve the surface preparation prior to surfacing.

The Slurry Seal shall not be applied if either the pavement or air temperature is below 50°F (10°C) and falling, but may be applied when both pavement and air temperatures are above 45°F (7°C) and rising. No Slurry Seal shall be applied when air temperatures will be below freezing within 24 hours. The mixture shall not be applied when weather conditions prolong opening to traffic beyond a reasonable time.

All areas, such as man-ways, gutters and intersections, shall have the Slurry Seal removed as specified by the Project Manager. The Contractor shall remove any debris associated with the performance of the work on a daily basis.

Measurement and Payment

Full compensation for furnishing all labor, materials, tool, equipment, and incidentals for doing all work involved with conforming to the requirements of this section, shall be paid for via the bid item "**TYPE II SLURRY SEAL**," to be paid for on the basis of a square yards and no additional or special compensation shall be made.

2.21 FURNISH/INSTALL STORM CATCH BASIN & DRYWELL STRUCTURE

The work to be performed under this section shall consist of furnishing all labor, materials, tools, transportation, supplies, equipment, appurtenances, fuel, and power, unless specifically excepted in writing by the City Engineer, necessary or required for the installation of a dry well and catch basin as shown on the plans and as described in these specifications.

Drainage facilities shall conform to the provisions set forth in Section 70 "Miscellaneous Drainage Facilities" and Section 7 "Storm Drains", of the Caltrans Standard Specifications and these special provisions.

Installation of storm catch basin, grate, and concrete curb shall be per project plans.

Rock wells, shall be constructed as shown on plans. The rock wells shall be located at least 150 feet from domestic water wells. Individual rock wells shall have a 20-foot minimum horizontal separation from all other vertical rock wells. Rock well floors shall be 10 feet minimum above existing ground water elevation. Rock wells shall be connected to proposed catch basin per the plans and these Special Provisions.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with the installation and testing of the dry well shall be paid for as a component of the bid item, **“STORMWATER DRYWELL & CATCH BASIN”** to be paid for on the basis of each unit installed and no additional or special compensation shall be made.

2.22 ADJUST STRUCTURES TO GRADE

All vaults, manholes, boxes, sewer cleanouts, grates, covers, fire hydrants, and other structures shall be set to finished grade by the Contractor after surfacing the project area, in accordance with the provisions in Section 71-5.013B "Frames, Covers, Grates, and Manholes", of the State Specifications, the plans and these special provisions.

Structures located in the asphalt and concrete shall be level and flush with the surrounding surface and conform to City of Escalon Standard Drawings.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with adjusting the storm drain manhole to grade, shall be paid for via the bid item, **“ADJUST STORM MH TO GRADE”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with adjusting utility box to grade, shall be paid for via the bid item, **“ADJUST SEWER LAMPHOLE TO GRADE”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with adjusting utility box to grade, shall be paid for via the bid item, **“ADJUST UTILITY BOX TO GRADE”** to be paid for on the basis of each item constructed, and no additional or special compensation shall be made.

2.23 WATER VALVE BOX

Water Valve Boxes shall conform to City of Escalon Standard Drawings and Standard Specification.

The box and lid shall be HS-20-44 traffic rated. The valve box shall have a cast iron lid with cast in lettering indicating “Water”. Lids with welded markings will not be accepted.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with the installation of water valve boxes shall be paid for via the bid item,

“INSTALL WATER VALVE BOX,” to be paid for on the basis of each item installed and no additional or special compensation shall be made.

2.24 ELECTRICAL

Project plans depict an electrical system plan to be modified by the Contractor to meet current electrical standards and show what products are to be installed. Contractor to submit an electrical system plan to be reviewed and approved by the City. The plan shall be divided into two parts, one for the bulk of the electrical work needed for the park improvements and one for the restroom improvements.

All electrical conduit shall be PVC Schedule 80 electrical conduit pipe. The contractor shall use the existing conduit penetrations for access to the existing control cabinet if possible. If using the existing penetrations is not feasible, contractor shall run conduit to exterior of cabinet and penetrate through the sheet metal side.

All electrical conduit lines shall be sealed with both Appleton ERS21 and T&B Fittings (sized to seal electrical cord) to seal the end of the conduit and limit the amount of moisture and gas transfer.

Measurement and Payment

Full compensation for furnishing all labor and incidentals for preparing the electrical plan shall be paid for via the bid item, **“ELECTRICAL PLAN,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with the electrical plan for the park improvements shall be paid for via the bid item, **“INSTALLATION OF ELECTRICAL SYSTEM – FRONTAGE/PARK IMPROVEMENTS,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with the electrical plan for the Restroom improvements shall be paid for via the bid item, **“INSTALLATION OF ELECTRICAL SYSTEM – RESTROOM,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

2.25 SOLAR LIGHTS

All lighting shall be installed per the manufacturer's recommendations and in locations marked out on the civil plan set. Solar light shall be both single and double lights. Light power shall be 40 watts (5,288 lumen) with factory program for 5 hours of full brightness at dusk and then dimming to 40% brightness for the remainder of the night. Pole shall be 26' in height. The foundation shall be extended 3' above ground to provide traffic protection to the metal pole, with a diameter of 2.5'. All reinforcement shall be per manufacturer's recommendations and be the same in the 3' above ground section.

The civil plan calls for the installation of Greenshine Supera, or approved equivalent:

- Two (2) Supera40W single fixture system with 26' Pole. Locations to be on the perimeter of the parking lot.

Part # SU-1-290D-T2-40W-4K-525MA-A6-1-1B-1-200-H-1-180W-P26-GY-5/40DIM

See attached Greenshine Supera cut sheet for additional material, structural, and electrical specifications.

Measurement and Payment

Full compensation for procuring, assembling, installing all mechanical, structural, and electrical items associated with the solar lighting, shall be paid for via the bid item, **“SOLAR LIGHTING W/ 3’ STAND,”** all in accordance with the plans, and specifications shall be considered in the contract price paid for on the basis of each item installed and no additional or special compensation shall be made.

2.26 IRRIGATION

The Park irrigation will be damaged as part of the demolition of the project. Contractor to submit an irrigation plan to be reviewed and approved by the City. Plan shall include, but is not limited too, relocation of controllers, valves, sprinklers and lines and installation of new lines near the rail road caboose and lines to each new tree to be installed.

Measurement and Payment

Full compensation for furnishing all labor and incidentals for preparing an irrigation plan shall be paid for via the bid item, **“IRRIGATION PLAN,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with the irrigation plan for the park improvements shall be paid for via the bid item, **“IRRIGATION MODIFICATION,”** to be paid for on the basis of lump sum and no additional or special compensation shall be made.

2.27 RESTROOM

The work to be performed under this section shall consist of furnishing all labor, materials, tools, transportation, supplies, equipment, appurtenances, fuel, and power, unless specifically excepted in writing by the City Engineer, necessary or required for the installation of the restroom facility including, but not limited too, construction of the building pad, purchase and coordination of the restroom facility, and final connection to utilities.

Restroom shall be Public Restroom Company model BaseMOD-022-DF-BF or approved equal. Restroom shall be in compliance with Attachment A – Restroom Performance Specifications. Restroom shall have Automatic Door Locks.

Measurement and Payment

Full compensation furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with the purchase of premanufactured restroom, installation of restroom, construction of building pad, and connection to utilities, shall be paid for via the bid item, **“INSTALLATION OF RESTROOM,”** to be paid for on the basis of a lump sum and no additional or special compensation shall be made.

2.28 SEPTIC SYSTEM

Restroom septic system shall be per San Joaquin County Standards, these special provisions and the project plans.

Restroom septic system includes a 1,500 gallon septic tank and approximately 80 linear feet of leach lines. Leach lines include a four inch perforated pipe with two by three feet of drain rock. Septic tank and leach lines are connected with four inch non perforated pipe.

Measurement and Payment

Full compensation for furnishing all labor, equipment and incidentals for installing the restroom sewer system shall be paid for via the bid item, "**RESTROOM SEPTIC SYSTEM**," to be paid for on the basis of lump sum and no additional or special compensation shall be made.

2.29 WATER

POLYVINYL CHLORIDE PIPE (PVCP)

- A. Polyvinyl Chloride pipe shall meet the requirements of AWWA C900 "Polyvinyl Chloride (PVC) Pressure Pipes. Pipe sizes 4" through 12" shall be AWWA Class 150 and Class 200 where required. All Class 150 pipe shall meet the requirements of DR 18 and Class 200 pipe shall meet the requirements of DR 14 with cast iron O.D.
- B. Polyvinyl Chloride Pipe 14" and larger shall be 235 psi rated conforming to AWWA C 9095 and Uni-Bell-B-11 requirements. PVC pipe shall meet the requirements of DR 18 with cast iron O.D.
- C. All pipes shall be suitable for use as a pressure conduit. Provisions shall be made for expansion and contraction at each joint with an "O" ring elastomeric gasket seal meeting the requirements of ASTM D1869 and F477. Solvent welded joints will not be permitted. The bell section shall be designed to be at least as strong as the pipe wall.

AIR-VACUUM RELIEF VALVE AND SERVICE CONNECTION

- A. Air-vacuum relief valve and service connection shall be done per San Joaquin County Public Works Standard Detail W-13.

CAST IRON FITTINGS

- A. Fittings for polyvinyl chloride pipe shall be domestically manufactured, cement lined cast iron fittings conforming to AWWA requirements. Where possible, mechanical joint fittings shall be used.
 - 1. Flanged fittings shall be Class 250, Ductile Iron, short body conforming to AWWA C110/ANSI A21.10.
 - 2. Mechanical Joint fittings shall be Class 350, Ductile Iron, compact body conforming to AWWA C153/ANSI 21.53.
 - 3. Cement lining of cast fittings shall conform to AWWA C104/ANSI 21.

GASKETS, RINGS & BOLTS

- A. Gaskets for flanged fittings shall be full circle one-sixteenth (1/8) inch composition gaskets conforming to AWA C115/ANSI 21.15
- B. Rubber rings for mechanical joints shall be natural or synthetic rubber or neoprene and shall conform to AWWA C111/ANSI A21.11.
- C. Bolts for flanged fittings shall conform to AWWA C110/ANSI 21.10.

PIPE COUPLINGS

- A. Pipe coupling sleeves and end rings shall be ductile iron conforming to ASTM A536, Grade 65-45-12. Pipe coupling shall be epoxy coated. Rubber rings shall conform to the requirements of ASTM D2000. Bolts shall be corrosion resistant high strength conforming to AWWA CIII.

TAPPING SLEEVES

- A. Tapping sleeves shall be mechanical joint and mechanical joint by flanged unless deviation is permitted by the City Engineer. Tapping joint sleeves shall conform to the requirements for cast iron fittings.

GATE VALVES

- A. Gate Valves 4" through 12" shall be resilient seat gate valves conforming to AWWA standards C500, C509 and C550.
- B. The valve body and bonnet shall be high strength Ductile Iron conforming to ASTM A536. Valve body and bonnet shall be coated inside and out with a fusion bonded epoxy conforming to AWWA C550.
- C. The valve gate shall be Ductile Iron, fully encapsulated with BUNA-S elastomeric rubber forming dual sealing surfaces conforming to AWWA C509. Thermoplastic guides shall be permanently installed into the guide slots of the gate.
- D. The valve stem shall be non-rising design of high strength ASTM B584 bronze. The stem shall have a Delrin sealing cartridge that consists of dual "O" rings in a Delrin housing. The stem shall be supplied with a Delrin bonnet thrust washer.
- E. Valve ends shall be mechanical joint or flanged in accordance with AWWA C500 unless otherwise specified.
- F. Wrench nuts shall be made of top grade cast iron, fitting the top of the valve stem and secured by nut or key. Wrench nuts shall be one and fifteen sixteenths (1-15/16) inch square at the top and two (2) inches square at the bottom.
- G. Valves requiring operating wrenches exceeding six (6) feet in length shall have extensions and guides installed in valve boxes.
- H. The open direction shall be left (counter-clockwise) and the closed direction right (clockwise).
- I. The valve shall be designed for underground use and shall be rated Class 200. Gate Valve shall be U.S. Metroseal 250; or equal.

TAPPING GATE VALVES

- A. Tapping gate valves shall conform to the requirements of Paragraph 2.06 "Gate Valves" and shall be provided with Class 125 flange for attaching to tapping sleeve. The flange shall have a machined projection compatible with a machined recess in the tapping sleeve. The outlet of the valve shall be provided with a flange for tapping machine mounting and bell for installing Class 150 P.V.C. pipe.

SMALL GATE VALVES

- A. This specification includes valves three (3) inches in size and smaller for buried service in a domestic water system.
- B. Gate valves shall be double disc with non-rising stem meeting or exceeding the latest revisions of AWWA C500 with a design working pressure of one-hundred-seventy-five (175) psi. Valve disc seats shall be Grade 1 bronze, double disc type with parallel seats.

BUTTERFLY VALVES

- A. Valves 14" and larger shall be rubber seated, bubble tight closing butterfly valves conforming to AWWA standard C504.
- B. The valve body shall be high strength ASTM A126 cast iron, with 18-8 Type 304 stainless steel body seat. The valve vane shall be high strength ASTM A48 cast iron with a 360-degree rubber seat secured to the vane with a stainless steel clamp ring and stainless steel lock screws.
- C. The valve drive shaft shall extend through the entire valve and operator with no neck downs, keys or holes to weaken it. Valve shaft shall have Type 304 stainless steel journals rotating in reinforced Teflon 2 way thrust bearings.
- D. Packing shall be of triple seal type rubber designed for permanent duty underground service.
- E. Valve operator shall be a permanently lubricated, sealed traveling nut type operator designed for underground service and shall be equipped with a 2" AWWA square operating nut. The valve and operator shall be capable of withstanding an overload input torque of 450 ft. lb. at full open or closed without sustaining any damage. The operator shall be designed so that a minimum of 45 turns is required to open or close the valve.
- F. The interior and exterior of the valve and the valve vane shall be thermal epoxy coated, free of any holidays, etc.
- G. The valve shall be rated Class 150 and shall be Dresser 450; U.S.; or equal.

BACKFLOW PREVENTERS

- A. Backflow preventers shall conform to the requirements of AWWA 506 and the Foundation for Cross Connection Control and shall be on the "Approved" list. Backflow Preventers shall be Cla-Valve; Febco; Watts; or equal.
- B. Reduced Pressure (RP) backflow preventers shall consist of 2 non-slam check valves with a reduced pressure venting device and two non-rising stem valves.
- C. Double Check Valve (DC) backflow preventers shall consist of 2 non-slam check valves and two non-rising stem valves.

FIRE HYDRANTS

- A. Fire hydrants shall conform to the requirements of the local Fire Department and Water Supplier, and conform to the requirements of these specifications.
- B. Fire Hydrants shall be cast iron body, bronze filled, 1-1/4" pentagon bronze operating nut, counter clockwise opening, with "O" ring seals. Outlets shall be independently valved with replaceable bronze National Standard Hose Threads and Cast Iron Caps.
- C. The hydrant shall be of the "wet barrel" design with a 6" flanged inlet conforming to AWWA C503. Hydrants shall be as follows:
 - 1. Type "R": 1 ea. 2-1/2" NST hose outlet and 1 ea. 4 1/2" / ST
 - 2. streamer outlet; CLOW 950.
 - 3. Type "C": 2 ea. 2-1/2" NST hose outlets and 1 ea. 4 1/2" NST
 - 4. streamer outlet; CLOW 960.
- D. Hydrants shall be furnished for traffic conditions and shall include "Break Off" fittings. Break off spools shall be a 6" by 6" flanged spool with weakened break off point and break off bolts shall be of the hollow design.
- E. The hydrant bury shall have a 6" mechanical joint inlet and a 6" flanged outlet. The minimum length of the bury shall be 36" and additional lengths at 6" increments shall be available to accommodate various mainline depths.

WATER SERVICE PIPE

- A. Service Pipe 1" through 2" shall be polyethylene flexible plastic pipe conforming to NSF standard No. 14, ASTM D-2239; and AWWA C906. Pipe shall carry a pressure rating classification of 160 psi and have a SDR of 7. Pipe shall have standard IPS I.D. sizing for 1.5" and smaller, and CTS sizing for pipe larger than 1.5".

It is the contractor's responsibility ensure the property owner's existing meter connection is sound and leak free within a 2' span behind the new meter connection. The contractor shall modify and/or improve on the property owners existing meter connection if it is found by the contractor, City of Escalon Inspector/Engineer, or City of Escalon Public Works Staff to be un-sound or leaking due to the installation of the new meter box or connection of the new water meter.

It is the contractor's responsibility to ensure that the new water service, the existing property owner's water pipeline, and new meter box are properly aligned to allow for the City of Escalon Public Works Staff to install the new water meter without any mis-alignment resulting in un-needed stress or bending of installed pipe. If the City of Escalon Inspector/Engineer, or City of Escalon Public Works Staff find that any water service meter is too difficult to install and/or leaks due to water service mis-alignment, it will be the contractor's responsibility to modify the water service, box, and/or property owner's water pipeline to remedy this issue.

SERVICE SADDLE

- A. Service saddles shall be ASTM A536 Ductile Iron body, coated with 12 mils of fusion epoxy, with integral BUNA N Rubber gaskets. A double wide flat 18-8 stainless steel band to which 4 bolts NC bolts have been MIG welded and 18-8 stainless nuts and washers shall also be supplied. The service saddle shall be C.C. outlet as required; 300 psi working pressure. Saddle shall be Ford FC202 for all service sizes.

CORPORATION STOP

- A. Corporation Stops shall be 85-5-5-5 Bronze corporation stop conforming to AWWA C800, Corporation Stop (C.C.) threaded inlet with a pack joint for polyethylene IPS pipe outlet. Stainless steel insert stiffener shall be used with all pack joint fittings. Corporation Stops shall be as follows:

Service Size	Ford	Jones
1"	F1001	J3402
1-1/2"	FB1001	
2"	FB1001	

ANGLE STOP

- A. Angle Stops shall be 85-5-5-5 bronze (ASTM B62) body angle stop with lock wings. Stop shall have a pack joint for PE IPS pipe and shall be provided with stainless steel stiffeners. The outlet shall be a meter coupling nut or flange as indicated below:

Service Size	Meter Coupling Size	Ford	Jones
1"	3/4" coupling nut	KV63-342W	J42022
1"	1" coupling nut	KV63-444W	
1-1/2"	1-1/2" Flange	FV63-666W	
2"	2" Flange	FV63-777W	

- B. A meter bushing (Ford-A-34) 1" to 3/4" reducer shall be installed to allow for the 3/4" water meter installation and future upgrade to 1" water meter installation.

METER IDLER

- A. Meter Idlers shall consist of a SCH 80 PVC spool with meter coupling threaded or flanged ends.

WATER METERS

Existing Water Meters shall be protected and reinstalled and shall be 3/4" in size. See note B in angle stop section regarding the installation of a meter bushing between the 1" service line and 3/4" meter.

- A. Water meters 3/4" size, 1" size, 1-1/2" size, and 2" size shall be sealed register magnetic drive displacement type meters conforming to AWWA C700. Meters shall consist of three basic components: main case, measuring chamber and sealed register.
 - 1. Main case shall be cast bronze with externally threaded spuds. Bottom plate shall be bronze. Case shall contain a cylindrical strainer to prevent foreign material from entering the measuring chamber. Trim and bolts shall be stainless steel.
 - 2. Measuring chamber shall be corrosion resistant thermoplastic material formulated for long life in aggressive water. The drive shall contain a hard rubber oscillation piston and roller coupled to an Alinco magnet.
 - 3. Register shall be tamper proof magnetic drive register, which records the oscillations of the piston in the measuring chamber. Register shall be hermetically sealed with heat-treated reading glass. The register shall be guaranteed for ten years.
 - a. Gears shall be of long life molded plastic. The gear train shall be permanently sealed against moisture, dirt and tampering.
 - 4. Registers shall be furnished with registration in gallons with six odometric wheels and a sweep hand.
 - 5. Meters 3/4" and 1" in size shall be furnished with threaded outlet ends; 1-1/2" and 2" meters shall be furnished with flanged ends and flange adapters.

VALVE BOXES

- A. Valve boxes shall be manufactured of a high-density reinforced concrete with a minimum compressive strength of 4000 psi. Boxes shall have a belled top or flared shoulders to prevent settling. Box shall have a 10" min. inside diameter and shall be 12Zw tall. Box shall have an integral cast iron seat with a 9" diameter throat of the rattle proof design and a cast iron lid. The box and lid shall be HS-20-44 traffic rated.
- B. Extensions shall be as a single length of 10" O.D. Class 100 PVC pipe. Grade rings for adjusting the box shall be as manufactured for the box.
- C. The valve box shall have an 11" diameter cast iron lid with cast in lettering indicating "Water", "Fire", or Irrigation as applicable. Lids with welded markings will not be acceptable. Valve box shall be Christy; Brooks; or equal.

METER BOXES

- A. Meter Boxes shall be manufactured of reinforced concrete with minimum compression strength of 4000 psi. Boxes shall have flared shoulders to prevent settling and integral lid seats. The lid shall be reinforced concrete with a self-closing cast iron meter reading lid marked "water". Meter boxes shall be furnished in sizes as follows:

Service Size	Meter Box	Lid
1"	CHRISTY B12	FL12D
1-1/2"	CHRISTY B16	B16P
2"	CHRISTY B30	B30P
3" & 4"	CHRISTY B36	B36P
6" OR LARGER	PER CITY ENGINEER'S DIRECTIONS	

Fiberglass lid for 1" services shall be Fibrelite.

SPECIAL MATERIAL

- A. Materials not specified herein such as specialty valves, air release valves, conductor casing, etc., shall be of the highest trade quality available. The Contractor shall provide submittals of such material he intends to use.

PIPE BEDDING MATERIAL

- A. Bedding material shall be sand, gravel, crushed aggregate, or native free-draining granular material, having sand equivalent of between 18 and 21, a minimum R-value of 50 and conforming to the following grading:

% Sieve Size	% Passing
3/8"	100
#4	35-95
#200	0-25

LOCATOR WIRE

- A. Locator Wire shall be #12 UF conforming to NEMA standards and NEC Article 339 for direct burial. Splicing of wire shall be made with a waterproof epoxy splice kit.

THRUST BLOCKS

- A. Concrete for thrust blocks shall be Class B in accordance with CalTrans Section 90. Thrust blocks shall be of the size indicated on the Plans.

CONCRETE

- A. Concrete for thrust blocks and miscellaneous work shall have a minimum 28-day compressive strength of 2,800 psi, and shall conform to the requirements of CalTrans Section 90 for Class B concrete; 3/4' maximum combined aggregate grading.

MORTAR

- A. Mortar shall conform to CalTrans Section 65-1.06A.

REINFORCING STEEL

- A. Reinforcing bars shall be Grade 40, deformed billet steel bars, plain finish, conforming to ASTM A615.

TESTING

- A. General Requirements
 1. Testing of all work shall be in accordance with the requirements of Division I. Testing will be performed so as to least encumber the performance of work.
 2. When work of this section or portions of work are completed, schedule the testing laboratory to perform the appropriate tests. All testing shall be done in the

presence of the City Engineer and the Contractor shall not proceed with additional portions of work until test results have been verified.

3. If, during progress of work, tests indicate that the work or materials do not meet specified requirements, the defective work shall be remedied, removed, replaced and re-tested at no cost to City.

B. Hydraulic Testing

1. The test for hydrostatic pressure shall commence no sooner than seven (7) days after the last concrete thrust block has been cast with standard cement or at least after thirty-six (36) hours with high early strength cement, and after backfilling and compacting the trench to the plane upon which the asphalt concrete surfacing is to be placed. The Contractor shall take the necessary precautions to insure that the pipe fittings, couplings, valves, and other appurtenances are not displaced during the test.
2. Testing shall be, insofar as practical, carried out as the work progresses in order that any problems or unsatisfactory conditions of installation may be detected and corrected as the work proceeds. The Engineer shall be given a minimum of 24 hours notice prior to any testing.
3. The Contractor shall furnish and install, at his own expense, all corporation stops, temporary pipe, fittings, connections, equipment, bulkheads and bracing required for the tests, and he shall be responsible for any and all damages resulting from failure under test of material furnished and installed by him or from faulty workmanship, negligence, or improper test methods. The Contractor shall provide suitable bracing to withstand thrusts developed during testing and shall take all necessary precautions to prevent any joints from drawing while the pipeline or their appurtenances are being tested.
4. The Contractor shall furnish all materials and equipment necessary or required to perform the testing specified herein.
 - a. The Contractor shall provide a suitable pressure testing device consisting of 1) a pressure pump, 2) storage reservoir, 3) flow meter reading in tenths of gallons, 4) pressure gage, 3 1/2" minimum diameter, 0-200 PSI, 28 accuracy or better, and 5) piping and valves to connect to the pipeline. The testing device shall be sufficiently sized to test the sections of piping and shall be of leak-free construction.
5. The pipe shall be filled with water at least twenty-four (24) hours prior to testing to allow for absorption by the pipe. Care shall be taken to allow all air to escape from the pipelines. The test shall be performed on all sections of the water main so that all pipe, valves, fittings, fire hydrants, connections, and water services are subject to the test.
6. Each section of the completed pipe under test shall be subjected to a hydrostatic test by maintaining a pressure of one hundred fifty (150) pounds per square inch for two (2) hours. During this period of the test, all pipes shall be inspected for visible leaks, and any leaks, failures, or imperfect construction revealed during the period of tests shall be corrected by the Contractor.
7. If there is any sign of failure at any point on the line during the pressure test, the test shall be discontinued until the same has been repaired, after which the test shall be repeated until the section tested shall have met the above requirements.

C. Leakage Testing

1. After a satisfactory hydrostatic pressure test, the line shall be tested for leakage. At the end of the first hour, the pressure shall meet the requirements stated above. Pumping shall then be discontinued for one hour and the drop in pressure read on the dial of the gauge at the end of the hour and recorded. The initial test pressure

shall then be restored by pumping and the quantity of water pumped into the line to accomplish this shall be measured accurately.

This quantity shall not exceed the amount shown in the following table:

PIPE DIAMETER	ALLOWABLE LEAKAGE AT 150 PSI
6"	0.50 Gallons (l)
8"	0.66 Gallons (l)
10"	0.83 Gallons (l)
12"	0.99 Gallons (1)
14"	1.16 Gallons (2)

*Gallons per 1,000 feet (50 Couplings) Per Hour for:

(1) AWWA C900 PVC pipe.

(2) (2) Uni-Bell UNI-B-11-85 PVC pipe.

2. If there is any sign of failure at any point on the line during the test, the test shall be discontinued until the same has been repaired, after which the test shall be repeated until the section tested shall have met the above requirements.

DISINFECTING, FLUSHING AND BACTERIOLOGICAL TESTING

- A. The interior of all pipe, fittings, and other accessories shall be kept as free as possible from dirt, foreign material and bacteria at all times. During pipe laying operations, when bacterial contamination of interior pipe surfaces is obvious or suspected by the City Engineer he may order said surfaces to be swabbed with an approved bactericidal solution.
- B. All new water work shall be disinfected in accordance with AWWA C651.
- C. Flush the mains thoroughly at the end of the disinfection contact period. All flushing shall be done in the presence of the City Engineer. The Contractor shall provide all temporary provisions and take all necessary precautions to facilitate flushing of the water system. The Contractor shall repair all damage caused by flushing operations.
- D. The water system shall be flushed until a chlorine residual test shall show no more chlorine in the water leaving the main than in the water entering the main.
- E. The Contractor shall collect a sample for bacteriological examination in a sterile bottle provided by the City's Testing Laboratory. On the label, give date, address, and the name or number for the project. Where possible the sample should be taken from a service located near the end of the chlorination section, otherwise, it may be taken through the same blow-off used for flushing the heavily chlorinated water out of the main so that the blow-off is sterilized.
- F. If the bacteriological tests are unsatisfactory, the main shall be re-sterilized using AWWA methods and re-tested until satisfactory results are obtained.

Water meters and boxes are shown being re-installed in the same locations as existing meters and boxes, except where it is shown to be relocated. The contractor can request that the meter and box locations be moved on a per site basis if City Staff approves. It shall be the contractors responsibility to furnish all materials and labor for any field modifications to the meter and box relocation, i.e. hardscape and property owner connections.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with the installation and testing (Hydraulic, Leaking, and Bacteriological) of the

residential water services shall be paid for as a component of the bid item, **“INSTALL 2” WATER SERVICE,”** to be paid on the basis of linear feet installed and no additional or special compensation shall be made

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with the connection of the new water main line into the existing water line shall be paid for as a component of the bid item, **“WATER SERVICE CONNECTION,”** to be paid on the basis of lump sum and no additional or special compensation shall be made.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with the installation of the water meter and valve shall be paid for as a component of the bid item, **“WATER METER W/ VALVE & BACKFLOW,”** to be paid on the basis of each item installed and no additional or special compensation shall be made.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with the installation of the residential meter box shall be paid for as a component of the bid item, **“WATER METER BOX,”** to be paid on the basis of each item installed and no additional or special compensation shall be made.

2.30 PARK FIXTURES

Flag Mount

Flag mount shall be a galvanized schedule 40 pipe, 1.5 inch diameter, 10 inches long, placed at the back of sidewalk as shown on plans. Detail for installation shown on plans.

Brass Plaque

Reinstall existing Brass Plaque at new location as shown on plans.

Benches

Existing benches shall be surface mounted as shown on the plans.

New Park Benches shall be :

- UltraSite 6' Contour Bench w/out back, Surface Mount, Diamond, PC Frame, P966SM-V6 or approved equal
- Seat Color: Black
- Frame Color: Royal Purple

As shown below:



Bike Rack

“Bike Rack shall be The Park and Facilities Catalog” Model No. 136-2654 6 Bike Single Sided BR-6/SS or approved equal

Trash Receptacles

Existing Trash/Recycle Structure shall be protected and surface mounted as shown on plans.

New Trash Cans shall be:

- Ultrasite 36 Gln Receptacle w/ Rain Bonnet Lid, and Liner, PC, PJK-36RB or approved equal.
- Color/Lid Color: Yellow

Six trash cans will be given to the City as inventory for future use and installation by the City.

All new fixtures shall be installed per manufacturers requirements.

Measurement and Payment

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing flag mount and concrete behind sidewalk be paid for via the bid item, **"FLAG MOUNT PIPE & CONCRETE,"** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing bike rack be paid for via the bid item, **"INSTALL BIKE RACK – NEW,"** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with reinstalling existing brass plaque be paid for via the bid item, **"RE-INSTALL BRASS PLAQUE,"** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with reinstalling park bench be paid for via the bid item, **"RE-INSTALL PARK BENCH,"** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing park bench be paid for via the bid item, **"INSTALL PARK BENCH – NEW,"** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with reinstalling trash and recycle structure be paid for via the bid item, **"RE-INSTALL TRASH/RECYCLE CAN,"** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing trash can be paid for via the bid item, **"INSTALL TRASH CAN – NEW,"** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

2.31 LANDSCAPE MATERIALS

Grass Sod/Seed

Newly installed sod shall be perennial ryegrass. Sod shall be watered as needed during construction until irrigation system is installed and running appropriately.

The contractor shall rake in and water grass seed in any area disturbed by construction. The contractor shall furnish the seed for the project. The seed shall be perennial ryegrass.

Bark Mulch

Bark mulch shall be Red Bark from P & L Concrete Products, Inc And Garden Center at 1900 Roosevelt Ave, Escalon, CA 95320 or approved equal.

Trees

Trees shall be 5 gallon Male Ginkgo Biloba or Red Maple as shown on the plans. Trees shall be installed per San Joaquin County Standard Detail R-31 as modified on the project plans.

Measurement and Payment

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with restoring landscape at the sidewalk and bike path to be paid for via the bid item, "**SEED, RAKE, & WATER LANDSCAPE AT SIDEWALK & BIKE PATH,**" to be paid for on the basis of lump sum, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing sod to be paid for via the bid item, "**INSTALL SOD,**" to be paid for on the basis of square foot installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing back mulch to be paid for via the bid item, "**INSTALL BARK MULCH,**" to be paid for on the basis of square foot installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing tree to be paid for via the bid item, "**INSTALL TREE,**" to be paid for on the basis of each item installed, and no additional or special compensation shall be made.

2.32 HEADER BOARD EDGING

This work consists of installing redwood header board edging flush with the asphalt concrete finish grade in conformance with these special provisions, as shown on the plans and as directed by the Engineer.

Install 2 in. x 6 in. Redwood headers with 2 in. x 3 in. x 12 in. redwood or pressure treated douglas fir stakes at 4 feet on centers, on each side of the path as shown on the plans.

Measurement and Payment

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing header board edging to be paid for via the bid item, "**HEADER BOARD EDGING,**" to be paid for on the basis of linear feet installed, and no additional or special compensation shall be made.

2.33 REMOVABLE BOLLARD

Removable steel bollard shall be installed at locations listed on the plans and conform with project plans.

Type of locking mechanism shall be per City of Escalon Public Works.

Measurement and Payment

Full compensation for furnishing all labor materials, tools, equipment and incidentals for doing all work involved with “**REMOVABLE BOLLARD**” to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

2.34 SIGNS

Roadside Signs

Road signs shall conform to the requirements of the latest State of California Traffic Manual (Manual of Uniform Traffic Control Devices).

Radar Signs

Radar speed sign shall be Traffic Logix SafePace Evolution 11 or approved equal. Sign shall be installed per manufacturers requirements.

Metal Posts

Posts shall be 2"x2" square perforated steel tubing with penetrator anchors. Ground level to the bottom of sign shall be 84 inches. Contractor's attention is directed to San Joaquin County drawing R-26.

Reinstall Signs

Contractor shall reinstall railroad, private property and commercial sign on their existing poles. If poles are damaged during removal of the signs then contractor shall replace in kind. Signs shall be installed per details in project plans.

Measurement and Payment

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing roadside sign shall be paid for via the bid item, “**ADA PARKING, R99C SIGN,**” to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing roadside sign shall be paid for via the bid item, “**BIKE LANE AHEAD, R3-16 SIGN,**” to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing roadside sign shall be paid for via the bid item, “**END OF BIKE LANE, R3-16A SIGN,**” to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing roadside sign shall be paid for via the bid item, “**STOP, R1-1**”

SIGN,” to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing roadside sign shall be paid for via the bid item, **““STOP AHEAD”, W3-1 SIGN,”** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing roadside sign shall be paid for via the bid item, **““NO PARKING BIKE LANE”, R7-9 SIGN,”** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing roadside sign shall be paid for via the bid item, **““25 MPH”, R2-1 SIGN,”** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing roadside sign shall be paid for via the bid item, **“RADAR SPEED SIGN EV11 W/ SOLAR PANEL,”** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with installing sign post shall be paid for via the bid item, **“METAL POST,”** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with re-installing roadside sign shall be paid for via the bid item, **“RE-INSTALL RR SIGN,”** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with re-installing roadside sign shall be paid for via the bid item, **“RE-INSTALL PRIVATE PROPERTY SIGN & POST,”** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with re-installing roadside sign shall be paid for via the bid item, **“RE-INSTALL COMMERCIAL SIGN & POST,”** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

2.35 THERMOPLASTIC STRIPES AND PAVEMENT MARKINGS

Thermoplastic traffic stripes (traffic lines) and pavement markings shall be applied in conformance with the provisions in Section 84, "Traffic Stripes and Pavement Markings", of the Standard Specifications (State of California) and these special provisions. Thermoplastic material shall be free of lead and chromium, and shall conform to the requirements in State Specification PTH-02ALKYD.

Retro reflectivity of the thermoplastic traffic stripes and pavement markings shall conform to the requirements in ASTM Designation: D 6359-99. White thermoplastic traffic stripes and pavement markings shall have a minimum initial retro reflectivity of $250 \text{ mcd}\cdot\text{m}^{-2}\cdot\text{lx}^{-1}$. Yellow thermoplastic traffic stripes and pavement markings shall have a minimum initial retro reflectivity of $150 \text{ mcd}\cdot\text{m}^{-2}\cdot\text{lx}^{-1}$.

Where striping joins existing striping, as shown on the plans, the contractor shall begin and end the transition from the existing striping pattern into or from the new striping pattern a sufficient distance to ensure continuity of the striping pattern.

Thermoplastic traffic stripes shall be applied at the minimum thickness and application rate as specified below. The minimum application rate is based on a solid stripe of 100 mm (4 inches) in width.

Minimum Stripe Thickness (mm) {inch}	Minimum Application Rate (kg/m) {inch}
2.0 {0.079-inch}	0.4 {0.27-lb/ft}
2.5 {0.098-inch}	0.5 {0.34-lb/ft}

Thermoplastic traffic stripes and pavement markings shall be free of runs, bubbles, craters, drag marks, stretch marks and debris.

The contractor is to replace all hydrant markers removed by the construction process and as shown on the plans. The hydrant markers shall be set in accordance with current MUTCD standards.

Measurement and Payment

Full compensation furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with roadway traffic striping, shall be paid for via the bid item, **“BIKE LANE AND ARROW STENCIL,”** to be paid for on the basis of each item installed, and no additional or special compensation shall be made.

Full compensation furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with roadway traffic striping, shall be paid for via the bid item, **““STOP” STENCIL – WHITE,”** to be paid for on the basis of each item installed, and no additional or special compensation shall be made.

Full compensation furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with roadway traffic striping, shall be paid for via the bid item, **“CROSS WALK, TRIPLE FOUR – WHITE,”** to be paid for on the basis of each item installed, and no additional or special compensation shall be made.

Full compensation furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with roadway traffic striping, shall be paid for via the bid item, **“DETAIL 21, DOUBLE SOLID LINE – YELLOW,”** to be paid for on the basis of linear feet of each item installed, and no additional or special compensation shall be made.

Full compensation furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with roadway traffic striping, shall be paid for via the bid item, **“DETAIL 24, SINGLE SOLID LINE – YELLOW,”** to be paid for on the basis of linear feet of each item installed, and no additional or special compensation shall be made.

Full compensation furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with roadway traffic striping, shall be paid for via the bid item, “**DETAIL 39 STRIPE BIKE LANE SOLID LINE – WHITE,**” to be paid for on the basis of linear feet of each item installed, and no additional or special compensation shall be made.

Full compensation furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with roadway traffic striping, shall be paid for via the bid item, “**1’ WIDE STOP BAR – WHITE,**” to be paid for on the basis of each item installed, and no additional or special compensation shall be made.

Full compensation furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with curb painting, shall be paid for via the bid item, “**YELLOW CURB PAINT,**” to be paid for on the basis of linear feet installed, and no additional or special compensation shall be made.

Full compensation furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with green conflict zone painting shall be paid for via the bid item, “**GREEN CONFLICT ZONE (5’x5’ BOX),**” to be paid for on the basis of square feet installed, and no additional or special compensation shall be made.

2.36 PAINTED TRAFFIC STRIPES AND PAVEMENT MARKINGS

All traffic stripes and pavement markings shall also conform to the requirements of the latest State of California Traffic Manual (Manual of Uniform Traffic Control Devices).

This work shall consist of applying painted traffic stripes (traffic lines) and pavement markings, including glass spheres, at locations shown on the plans in conformance with Section 84-1 “General” and 84-2 “Traffic Stripes and Pavement Markings” of the California Standard Specifications and these Special Provisions.

Striping material shall be as follows:

Parking Line	Surfaces should be clean and dry. Top Coat Sherwin Williams – Pro Mar Traffic Marking Paint White
ADA Parking Area	Surfaces should be clean and dry. Top Coat Sherwin Williams – Pro Mar Traffic Marking Paint “H.C.” Blue

Where striping joins existing striping, as shown on the plans, the contractor shall begin and end the transition from the existing striping pattern into or from the new striping pattern a sufficient distance to ensure continuity of the striping pattern.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with “**PAINT STRIPING, HAZARD PATH**”, to be paid for on the basis of square feet installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with **“PAINT STRIPING, PARKING LINE 4” WIDTH – WHITE**”, to be paid for on the basis of linear feet installed, and no additional or special compensation shall be made.

2.37 WHEEL STOPS

Wheel stops shall be installed per manufacturer’s recommendations and shall be 4’ in length.

Measurement and Payment

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with wheel stops shall be paid for via the bid item, **“INSTALL WHEEL STOP,”** to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

2.38 LAWN GAMES

Pickleball Court

Work involved with the pickleball court includes the pickleball concrete pad, sports coating and striping, and pickle ball net.

Pickleball concrete pad shall be per Section 2.17, Concrete, of these special provisions and shall have a slope of no grater than 0.833% in one direction as shown on project plans.

Sports coating and striping shall be The PickleMaster System, by SportMaster or approved equal.

Pickleball net shall be a Bison Inc, Recreational Pickleball System with removable option or approved equal and shall be installed per manufacturer recommendations.

Bocce Ball Court

Work involved in installing bocce ball court includes, installing edge posts, weed barrier, 1” clean crushed rock, class II aggregate base, and ¼” decomposed granite.

Bocce ball court shall be constructed per details on the project plans.

Posts shall be pressure treated wood.

Cornhole Court

Work involved in installing the cornhole court includes header board edging, weed barrier, and decomposed granite surface. Court shall be graded flat.

Header board edging shall be per section 2.32 of these special provisions, and shall be flush with surrounding surface.

Horse Shoe Pit

Horse shoe pits shall match footprint of removed pits. New railroad ties shall be installed with decomposed granite within the pit. Existing stake shall be protected in place.

Measurement and Payment

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with the pickleball court shall be paid for via the bid item, **“PICKLEBALL COURT,”** to be paid for on the basis of lump sum, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with bocce ball court shall be paid for via the bid item, "**BOCCE BALL COURT**," to be paid for on the basis of lump sum, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with cornhole court shall be paid for via the bid item, "**CORNHOLE COURT**," to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals for doing all work involved with each horse shoe pit shall be paid for via the bid item, "**HORSE SHOE PIT**," to be paid for on the basis of each unit installed, and no additional or special compensation shall be made.

2.39 CARE AND CLEANUP

The contractor shall repair or replace all broken, damaged or defective parts of his work. Prior to filing the notice of completion, the contractor shall carefully clean and adjust all equipment, fixtures, etc., installed as part of his work. All unsuitable surplus materials and/or debris of any type and quantity resulting from the contractor's work, shall be removed off-site. The work site shall be left neat and clean.

ATTACHMENT A **RESTROOM TECHNICAL SPECIFICATIONS**

SECTION 13000
PREFABRICATED RESTROOM OR RESTROOM/CONCESSION BUILDING

A. General, Specifications and Clarification of Prefabricated Building and Site Installation

1. This portion of the bid specifications does not follow the CSI standard format as the prefabricated structure in this bid is an **offsite constructed “product”** and not “typical” general construction.
2. The **installation of the product on site is general construction**, which must be coordinated between the general contractor and the subcontractor. Specifications for the building foundation/pad shall be provided herein by the specified design/build subcontractor. Due to the responsibility of the specified building subcontractor for architecture, engineering and a five-year warranty, the site pad/foundation must meet the subcontractor’s design so the pad and building can be considered from a single source for warranty purposes. The subcontractor must accept the pad and compactions tests before they take responsibility for the entire system under their warranty.

B. Architectural Design/Engineering and Insurance Responsibility

1. While the City of Escalon has provided bid specifications and a design for the building, the building design/build subcontractor remains legally responsible for architecture, engineering, and all applicable building, safety, health, fire, and accessibility code compliance. Since they hold professional design responsibility to the owner, the building subcontractor must furnish certification that they provide product liability insurance in the amounts required by the general specifications **to cover property damage and personal injury**. Final drawings shall be stamped by a California engineer and California Department of Housing and Community Development, suitable for local permitting.

C. Errors and Omissions Insurance

1. The building design/build subcontractor must also provide an additional Professional Architectural and Engineering Errors and Omissions insurance, in the minimum amount of \$2,000,000, **to cover claims against the owner or the general contractor for State and Federal ADA handicapped accessibility and other design/engineering code issues**. This Errors and Omission Policy must remain in effect for 5 years from the completion and owner acceptance of the project. Product liability insurance (since it does not cover professional design responsibility only) will be insufficient for this bid and will be cause for rejection of the bidder.

D. Insurance for the Building offsite, while in transit, and/or on site until turn over and final owner acceptance

1. The subcontractor may request invoicing for a percentage of building completion in-plant, monthly. Under UCC law, this means that the subcontractor is turning over

responsibility for the portion invoiced to the owner, yet the building will not be on the owner's property and may not be covered by the owner's insurance. Therefore, the building subcontractor must provide a separate insurance policy insuring the owner and general contractor as additionally insured for liability, damage and/or vandalism to the building while in the manufacturing facility, while in transit, and/or while in storage at a certified bonded storage facility or at the final project site for up to \$200,000 for each prefabricated building module, until the building is final accepted by owner.

E. General Contractor Coordination with Design/Build Subcontractor

1. The specified prefabricated public restroom building requires coordination between the General Contractor (who prepares the site subgrade and delivery access for the prefabricated building) and the prefabricated restroom building subcontractor (who completes the architectural design, engineering, off-site building construction, delivery and installation on site.) The specified prefabricated restroom building specifications include unique components/systems which are custom to the restroom building subcontractor. Since the restroom subcontractor is responsible for design, additional insurance requirements for errors and omissions are required.

F. General Contractor, General Scope of Work

1. The general contractor for this project is responsible for the site survey and staking the building locations, finished slab survey elevations and marking on site, construction and compaction of the required building pads; access to the site for a large crane and tractor trailers delivering the prefabricated building; providing water, sewer, and power at a point of connection (POC) within 6 feet of the building and at the depth required by the building subcontractor and local code; and the installation of any sidewalks outside the building footprint.
2. The general contractor is responsible for verification to the building subcontractor design/build firm that there are no unanticipated site delivery issues such as overhead wires, trees, tree roots, or existing grade changes and that prevent a clear path of travel between a roadway and the final site exists for a tractor trailer and crane to expedite delivery. The design/build subcontractor requires that the general contractor certify that the required delivery crane must be able to set the building modules within 35' distance from the center of the building to the center of the crane hoist.

G. Prefabricated Restroom Building, General Scope of Work:

1. The prefabricated restroom building specialist will provide to the general contractor final building design architectural drawings and engineering calculations under the responsibility of a licensed structural engineer, in compliance with all local, state and federal codes. The design/build subcontractor shall construct the building offsite as a permanently relocatable building, transport it to the final required destination, and install the building turnkey, on a general contractor prepared pad per the drawings included in this bid.

H. Licensing:

The subcontractor must comply with all the State of California; Department of Housing and Community Development, prefabricated “Commercial Modular Requirements” as follows:

1. The building *manufacturer* must be licensed by the State of California, Department of Housing and Community Development as a manufacturer.
2. The selling dealer (if applicable) must be a California licensed dealer and present their license for verification with the bid.
3. The licensed dealer must also possess a State of California Contractors License Board Class B License and present their license for verification with the bid.

I. Bid Standard for the Prefabricated Restroom Building

1. The City of Escalon understands that there are several firms who design and build various types of public restroom building in varying quality and architectural styles, using similar or different construction methods and materials. For the purpose of this bid, the owner has selected:

Public Restroom Company, 2587 Business Parkway, Minden, NV 89423 and specifies herein that this firm is the standard for architectural design (safety, green design, code compliance, and site-specific compatibility.) PRC is also the standard of building performance and quality for the 50-year building design-life with low-maintenance based upon the longevity of the materials selected. Other firms quoting “or equal” whose criteria and standards do not comply will be rejected.

Contact: Steven Myler, Regional Sales Manager
Phone: 888-888-2060 ext. 103
Fax: 888-888-1448
Email: steve@publicrestroomcompany.com
Web: www.publicrestroomcompany.com

2. Pre-cast structures are not acceptable

J. “Or Equal Restroom Design/Build Subcontractors”

The City of Escalon may also allow other firms to become qualified to bid, but any firms so authorized to bid must fully comply with these bid specifications and plans or be subject to post bid rejection.

- a) Or Equal applicant shall provide scaled floor plans and elevations, to show general architectural design criteria is met.
- b) Or Equal applicant shall provide a written list of each deviation from the published bid specifications/plans. Lack of specificity to each deviation from the bid specifications will be cause for rejection.
- c) Or Equal applicant shall provide a manufacturer’s certification of concrete test

-
- compliance from a national independent testing laboratory. The written report must state the concrete compressive strength and absorption resistance per ASTM standard #C39 and #C642, respectively.
- d) Or Equal applicant must provide a list of every building they designed and built over the last 3 years utilizing the same building materials/systems design criteria as published in this bid. Provide date of building bid, date of completion, and most knowledgeable owner contact.
 - e) Or equal applicant shall provide certification of the special insurance required in this bid.
 - f) Or Equal applicant shall be responsible for and bear all cost for architecture, plan checks, design and structural engineering and all fees in obtaining approvals and permits from applicable agencies.
3. The City of Escalon or their consultant will be solely responsible for the decision to accept or reject the “or equal” submission.

J. Certificate of Off-site Inspection and Construction Compliance, Provision for Maintenance Manuals, and Warranty

- 1. The off-site restroom construction requires that a licensed third-party inspection firm provide the owner and the local building official with certification and compliance for the building with the approved plans and specifications. A certificate of compliance shall be issued by this inspector to the local building official to provide certification that the building meet and or exceed the approved plans and applicable codes.
- 2. At the project conclusion, the building subcontractor shall furnish two sets of complete maintenance manuals including a trouble shooting guide, location of manufacturers of key components for replacement parts together with final as-built plans, and a **5-year component/20-year structural warranty** to the owner or general contractor.

K. Site Scope of Work by General Contractor

The general contractor shall prepare the restroom building subgrade to receive the prefabricated building in accordance with the bid subgrade preparation drawings or foundation plan.

- 1. The building subgrade/footings shall be constructed per the bid drawings
- 2. The General Contractor shall provide water point of service at 30” below finished building slabs; sewer at 24” below the finished building slabs; and electrical at 36” below the finished building slabs or other per bid plans.
- 3. General Contractor shall coordinate with restroom subcontractor to provide full site delivery access for a 70’ tractor-trailer and hydro crane to the final building sites.
- 4. If the final site access is over existing sidewalks, utilities, or landscaping, the General Contractor shall be responsible for plating and or tree trimming, utility line removal, or other to protect any existing conditions.
- 5. The hydro crane must be able to locate no greater than 35’ from the center point of the building to the center point of the crane.

-
6. The utilities shall be furnished per bid site plans at specified points of connection (POC) nominally 6' from the building lines.
 7. General contractor shall furnish and install final grading, landscaping and sidewalks.

M. Connection to Utilities

1. The restroom subcontractor will stub-out: Electrical, Water, and Sewer at the proper POINT OF CONNECTION AND AT THE PROPER ELEVATION BELOW GRADE, for this project. Restroom subcontractor shall provide final hook up of the water from building to POC; sewer hookup to POC; and electrical sleeve from building panel to POC only. Final utility connections shall be by General Contractor or others. General contractor shall flush the water lines thoroughly before making final water connection to the building. **Thoroughly flushing the water lines for AT LEAST 30 MINUTES is critical to ensure that the new code required low-flow fixtures and flush valves that are extremely sensitive to particulate matter in the water will not malfunction.**

N. Concrete Slab, Required Independent Testing Laboratory Certification:

1. The prefabricated building slabs special concrete technology claims to be water and urine resistant for life due to special additive technology. The building subcontractor must furnish a test certification of compliance from a national independent testing laboratory to support the claim for absorption resistance. The written report must state the concrete compressive strength (minimum of 7,000 PSI) and absorption resistance (not greater than 3%) per ASTM standard #C642 and #C39 respectively. Since this non-absorbency capability is so significant, the design/build subcontractor must provide a general certification of compliance.

O. Prefabricated Restroom Building:

1. The City of Escalon has evaluated several prefabricated restroom building suppliers. This bid requires such building be used in lieu of site-built traditional construction because of the unique built-in advantages guaranteed by the design/build firm. This technology includes many new innovations such as non-absorbent concrete; anti-microbial components to reduce health risks; built in vandal resistance design; lowered maintenance and long-term warranties that reduce owner risk for failure. The specifications below are written around this new technology.

P. Mat Engineered Concrete Building Slab/Foundation:

1. The mat engineered 8" thick slab/foundation shall be engineered and constructed to withstand the transportation weight of the building without cracking and to resist absorption from any liquids deposited on the surface. The concrete slab shall be constructed inside a steel angle curb, reinforced with dual mats (tension and compression,) and poured with a custom concrete formula with special admixtures to create a finished slab that is waterproof for life.
2. The building slab/foundation will include the area under the covered entry.
3. Perimeter Steel Curb: 5/16" 50,000 kip steel 6" X 6" welded continuous angle.

-
4. Rebar Steel Mat: Two layers of 40,000 tensile steel rebar in varying sizes per engineers' requirements, including a perimeter structural continuous grade beam design inside the exterior steel angle and at any other location deemed by the engineer of record as required for the use intended. In coastal locations or when required for corrosion resistance rebar shall be epoxy coated or fiberglass to resist permanent corrosion. Rebar mats shall be wire tied to code with a minimum of three turns of the wire and overlaps shall be minimum of 15 diameters for any connection.
 5. All slab openings shall be surrounded with two layers of steel collars as required by the engineer of record to stop corner cracking and to reinforce the openings for lifting.
 6. 1" thick by 3" minimum length threaded nuts shall be welded to the steel perimeter frame with continuous $\frac{1}{4}$ " fillet welds. Nuts shall be welded to common steel plates per the engineer of records design and attached to the interior steel rebar structural mats.
 7. The engineer of record shall provide lifting locations with sufficient reinforcement to allow the safe lifting of the entire designed weight of the structure with dual 1" steel bolts and washers at each lifting location. The number of lifting locations with each location fitted with removable $\frac{3}{4}$ " 8" X 8" 50,000 tensile strength steel angles shall be determined by the engineer of record.
 8. The slab shall be poured over a 1" thick steel plate table. The concrete mix design shall not exceed a 3" slump and shall be stinger vibrated for maximum consolidation. All floors shall slope to any floor drains within each room and if no floor drain is present the floor should not slope. The surface shall be a very light broom that should meet a coefficient of friction on the surface of .06. Birdbaths shall be cause for rejection.
 9. The steel perimeter angle will remain below the concrete surface by nominal two inches to prevent corrosion. After the site concrete sidewalks are poured, the joint shall be full flow sealed with self-leveling grey urethane caulk to prevent penetration of water into the joint.
 10. The building shall be designed for future relocation and shall provide protection for the lifting openings in the mat slab so that the threaded openings will be available for future use if needed.
 11. The building system shall be designed for placement on a general contractor site prepared class 2 building subgrade/and or footings as required by code, per the bid drawings, suitable for 1500 pounds soil bearing capacity minimum. Any soils survey (if necessary) shall be by owner or engineer of record.

Q. Exterior & Interior Masonry Block Walls

1. The block walls shall be nominal 8" x 16" CMU. The building corners shall have special corner return block for structural integrity. All CMU shall be custom fabricated with an enlarged interior hole for placement of the grout and vertical rebar. The block walls shall be nominal 8" x 16" CMU. The building corners shall have special corner return block that matches the exterior finish and creates a uniform appearance. All CMU shall be custom fabricated with an enlarged interior hole for placement of the grout and vertical rebar. The exterior walls shall be 4"

thickness per State of California codes or engineering for wind and seismic. The interior walls shall be 4" block to nominally 7'-4" above finished floor and wood-framed with applicable required finishes above for pony and gable walls. A structural steel tubular .188 wall cap beam shall be welded to 5/16" 40,000 kip steel plate embeds, at intervals per the engineer of record, within the masonry wall. Cap beam shall be ZRC primed and painted, color to be selected by owner.

2. The 8" mat engineered concrete slab shall be cured a minimum of 7 days. Holes for vertical dowels shall be drilled into the mat engineered slab avoiding any grade beams or other structural reinforcement. Once the holes are drilled, blow out the remaining material and using two-part structural epoxy, wet set the #3 or #4 vertical rebar (as specified on the engineering calculations into holes drilled to the depth per the engineer of record requirements. Each rebar shall be held vertical to allow equal epoxy support to each dowel during the drying period. Engineering calculations require that rebar shall be installed in each concrete block center void or every block hole. The engineered uplift on each rebar shall be sufficient to restrain any load imposed on the masonry block wall for vertical rebar pull out from the concrete mat engineered slab.

R. Roof System

1. The roof structure shall be 2" x 6" wood rafters at 24" on center with 5/8" OSB sheathing and ice and water shield membrane with **26 gauge** standing seam metal roof, color to be selected by owner from manufacturer's brochure. Building roof rake and fascia shall be wrapped with 16 gauge formed metal, primed and painted. Color to be selected by owner.
2. The roof design shall exceed compliance with local code at 20 PSF live load and wind load "C".
3. The restroom ventilation screens (described in a following section) shall be attached to the gable truss frames and vandal resistant. Roof color shall be determined by owner and selected from the color chart by restroom supplier.

S. Interior Wall Finish:

1. Interior precision CMU block masonry walls (Restroom Only) shall be smoothed to a pebble grain finish with 2-4 mil layers of 7-day curing block fillers and painted with two additional 4 mil layers of industrial high solids (white) industrial grade enamel. Walls shall be painted white with industrial high solids enamel. Utility chase and storage area shall be natural block finish.

T. Exterior Wall Finish, Masonry and Gable

1. The building exterior finish shall be **gray split face** 8" x 16" CMU to wall height per the exterior elevations in the bid plans. The block shall be covered with 2-4 mil layers of 7-day curing block fillers and painted with two additional 4 mil layers of industrial high solids industrial grade enamel, color selected by Owner. The gable area finish shall be **fiber-reinforced cement board** painted in a color selected by owner.

U. Passive Ventilation System (Restrooms)

-
1. Shall be woven ¼" X 1" X 1", 316T, stainless steel wire mesh set in welded stainless steel angles attached to the masonry wall with vandal resistant stainless steel screws, per plans. There shall also be a 8" x 16" aluminum louvered vent in each restroom located on the chase at 9' AFF, nominal.

V. Doors and Gates

1. The restroom entry doors shall be 7' 0" high, 14-gauge steel; reinforced with 14 gauge steel ribs welded at 6" intervals on each face, concealed; reinforced with a welded plate for door closer mounting
2. Doors shall be hung on a single continuous, 1 million cycle, aluminum gear hinge with stainless steel vandal resistant screws at nominal 4" on center. The doors shall weigh nominally 176 lbs each for a 36" X 84" door. Custom fabricated 14-gauge steel door jambs with 4" steel heads shall be welded to the steel cap beam and be solid filled with 3000 psi masonry grout mix. Doors shall be primed and painted with two coats of industrial enamel; color selected by owner.
3. All exterior entry doors shall have a ¼" thick stainless steel "Z-shaped" anti-microbial pull handles with integral latch guard and **SCHLAGE B600 series temporary large format core locks**. The interior push-plate shall be anti-microbial for public safety and hygiene.
4. The door closer (restroom and concession entry doors only) shall be "LCN" heavy duty #4210 Series, fastened to a structural reinforced door plate per door manufacturer design. Stainless steel vandal resistant fasteners shall be used on all hardware.
5. Stainless steel vandal resistant fasteners shall be used on all hardware.

W. Specialties

1. All specialty washroom equipment shall be commercial grade stainless steel fastened securely to walls with vandal resistant stainless-steel screws to avoid removal by vandals as follows:
2. Toilet paper holders shall be **Royce Rolls TP-3, three-roll** stainless steel. Toilet paper holders shall be attached to block walls with 4 epoxy-bedded vandal resistant stainless steel fasteners.
3. Stainless steel grab bars to code shall be 1 ¼" minimum exposed fastener vandal resistant design and installed at each accessible water closet.
4. Cast Aluminum California compliant signage shall be recessed into block surface flush with masonry/stucco exterior and door sign shall be blind fastened with epoxy adhesive and stainless-steel fasteners. Wall signs shall have raised pointed Braille tips. Signage shall comply with AB1732, identifying the restrooms as "All Gender Restrooms."
5. Stainless steel baby-changing stations (**Foundations Model 200-EH-1**) shall be mounted in each accessible restroom with identifying signage on the exterior adjacent to the restroom signage.

X. Plumbing:

1. Building shall be fully compliant with current with the following codes:
 - a) All applicable State of California Building Codes. Latest edition applicable.

-
- b) California Plumbing Code. Latest edition applicable.
2. GENERAL: All components and fabrications shall be designed to reduce life cycle maintenance, be compatible with current maintenance spare parts, and shall be listed in a spare parts/maintenance manual (two copies) delivered in utility chase of building.
 3. WATER PIPING: Shall be type L copper soldered per code above grade and type K with silver solder below grade. All water piping shall be designed and constructed with high and low point drain fittings. All piping shall be mounted on Uni-strut wall brackets with neoprene isolators, to code.
 4. WATER PRESSURE GAUGE/VALVE COMBO: install three commercial grade industrial water pressure gauges (one on incoming line, one at pressure regulator valve and one after water filter), isolation ball valves, 150 PSI pressure regulator with wye strainer, 10-micron water filter with clear canister, and check valve. System will also incorporate a **ProFlo PFXT5 Bladder Tank** for additional plumbing protection.
 5. PLUMBING FAUCETS, ISOLATION VALVES AND ACTUATORS: All fixtures except those with flush valves shall be isolated with ball valves for each fixture, concealed hydraulic push-button flush valves, and metered push-button lavatory faucets.
 6. DWV PIPING: DWV piping shall be concealed behind the wall. DWV piping shall be PVC DWV, solvent welded, for all concealed piping. A cast iron no hub DWV vent pipe with a cast iron roof mounted vandal cap vent shall be required, through the roof.
 7. REMOVABLE PIPE TRAPS: all floor drain, sink drain, and waste traps shall be removable for maintenance. Floor drains shall be trapped behind the wall in the utility chase using a combination waste and vent system. Floor drains shall be increased two pipe sizes over standard to allow code use. Trap primers for restroom floor drains shall be in the utility chase. All surface mounted utility chase piping shall be mounted on Uni-strut with plastic isolators to code. Sink drain traps shall be concealed behind the utility chase walls where maintenance staff can access all plumbing.
 8. PLUMBING FIXTURES: Plumbing fixtures shall be 14-gauge, 316 stainless steel manufactured by Acorn. Toilets shall be wall hung, rear discharge, with concealed, ADA-compliant, hydraulic push-button type, flush valves. Toilet seats shall be black solid core plastic, non-flammable construction with continuous stainless steel concealed self-checking hinges. Exterior Lavatories shall have concealed remote traps behind the mechanical wall. Schedule of fixtures:
 - a. **Water Closets: Acorn Penal-Ware, 1675-W-1-HET-FVBO-ADA-PFS-316SS**
 - b. **Water Closet Flush Valve: Zurn ZH6152AV-HET-7L-BG**
 - c. **Lavatories: Acorn Penal-ware 1652LRB-1-DMS-03-M-316SS**
 - d. **Lavatory Faucet: Chicago MVP 333-E2805-665PSHABCP-TEMPERED**
 - e. **Soap Dispensers: PRC Through Wall SS Tank W/Lav Dispensers**
 9. FLOOR GRATES: Removable 350 lbs. per square foot pultruded fiberglass non-

skid floor grates shall be installed over every opening in the utility chase for OSHA compliance.

10. HOSE BIB: There shall be **one** Acorn 8121-LF hose bib provided in the utility chase.
11. HOSE REEL: **N/A**
12. HI-LO DRINKING FOUNTAIN: **HAWS 1109.14**
13. BOTTLE FILLER: **HAWS #1920 & #6469**

Y. Electrical:

1. GENERAL: Electrical system and components shall be commercial grade or better and piping conduits shall be installed on commercial Uni-strut wall hangers. Interior lighting fixtures in public areas shall provide lifetime manufacturer's warranty.
 2. PANEL/WIRING: **One 100 amp** (restroom) or 225 amp (restroom/concession), 120/240v, single-phase, industrial grade Panel Board, Square "D" QO series with 100 or 225 amp main circuit breaker, shall be mounted in the utility chase in the restroom building. All breakers shall be **Plug-on** type, minimum 10,000 A.I.C. RMS (Sym). Wiring shall be copper wire #12 min in EMT piping with compression fittings.
 3. PIPING: All piping shall be surface mounted to the masonry block walls with minimum of 2" fastener penetration. EMT conduit shall be compression type. Main panel shall maintain a 30" X 36" safety code required clear space, floor to 6' above finished floor.
 4. HAND DRYER: Shall be **Fastaire HD03S**, low energy, remote located vandal resistant design. Dryer shall be mounted in the utility chase with only protruding cast metal air nozzles and start switch accessible to the public at exterior lavatory. Dryers shall be 840 watts, low energy consumption. One mounted adjacent to each exterior lavatory.
 5. WATER HEATERS (exterior lavatories): Shall be **Steibel DHC E8** shall be in the utility chase, shared for each lavatory (**Qty. 1**). The water to the lavatories shall be tempered.
 6. EXTERIOR LIGHTING: **Luminaire AEL-12 (Dark Sky Compliant), 10 watt**, LED, vandal resistant, high-impact polycarbonate lens fixtures shall be installed per plans,
 7. INTERIOR LIGHTING: **Luminaire SWP1212-OP-BRZ-OCC 15 watt**, LED, vandal resistant high-impact polycarbonate lens fixtures shall be installed in the restrooms per plans (one in each restroom) and shall have **integral occupancy sensors**. The chase shall have a 4' single-tube, 15-watt LED fixture suitable for wet locations, with a single switch at door entry.
 8. LIGHTING CONTROL: All interior restroom lighting shall be controlled by built-in fixture **occupancy sensors** and 2 bypass switches (one for interior lighting and one for exterior lighting), so maintenance staff can check operation during daylight hours. A single photocell, roof mounted, and shall control all exterior lighting.
- ELECTRICAL OUTLETS: **One (1)** commercial spec grade duplex outlet shall be in the utility chase adjacent to the panel. There shall be one additional outlet located in the storage area.

Z. Shipping Protection

The building, while traveling over roads to the destination may encounter inclement weather or road grime that could require substantial cleaning when it arrives on site. The building shall be shrink-wrapped before transportation and sufficiently strong to arrive at the owner site intact for exterior finish protection. Materials removed on site shall be disposed of and recycled by restroom building install staff.

AA. Certifications

Building shall be certified in compliance with the plan approval by the State of California, Department of Housing and Community Development. The building shall be delivered with an applied insignia, in compliance with all State regulations. The local building authority shall provide site inspections for the underground mechanical piping and final connections, footings, and access issues outside the restroom footprint. Restroom building subcontractor shall also furnish 5-year component/20-year structural warranty and maintenance manuals for the building and components.

END OF SECTION

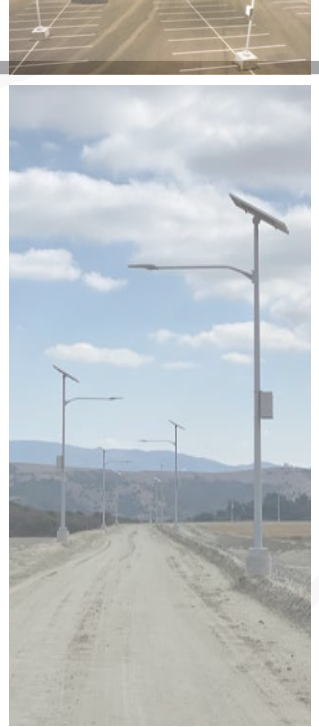
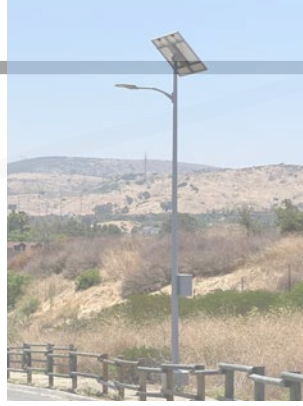
ATTACHMENT B GREENSHINE SUPERA CUT SHEET



Represented by:
SCL-North
(805)548-0200
info@sclnorth.com



OUTDOOR SOLAR LIGHTING SOLUTIONS



SUPERA

SUPERA | GENERAL SPECIFICATIONS



Greenshine

Light Fixture (GS-LED-290D)

Luminaire Input Voltage	DC 12V 24V
Power Consumption	30W 40W 60W 80W
Lumen	3929 5288 7051 9488 lumens
Color Temperature	3000-4000 K
IES Lighting Type	Type II III
Material	Die-cast aluminum



Solar Panel (1 or 2 Units)

180W

Rating Power	180 W
Maximum Power Voltage	18.95 V
Maximum Power Current	9.50 A
Open Circuit Current	22.74 V
Short Circuit Current	9.98 A
Size	58.5" x 27"
Weight	23.4 lb

Battery (1 or 2 Units)

Battery Type	GEL Deep Cycle Lead-Acid
Operating Voltage	12 V
Capacity	150 or 200 Ah at 20 hr-rate to 1.75 V per cell at 77°F
Dimensions	20.5" x 9.44" x 8.7" (in)
Expected Life	5 ~ 7 years

Solar Charger

Operating Voltage	12 V/24 V auto recognition
Max. Charge / Load Current	5 A/ 10 A/ 20 A (different models)
Night / Day Detection	2.5 V – 10 V
IP Class	IP68

Pole

Height	26 ft
Diameter	6 3/4" at the bottom, 4" at the top
Thickness	5/32"
Material	Galvanized Steel
Finishing	Powder Coating



SUPERA | GENERAL SPECIFICATIONS



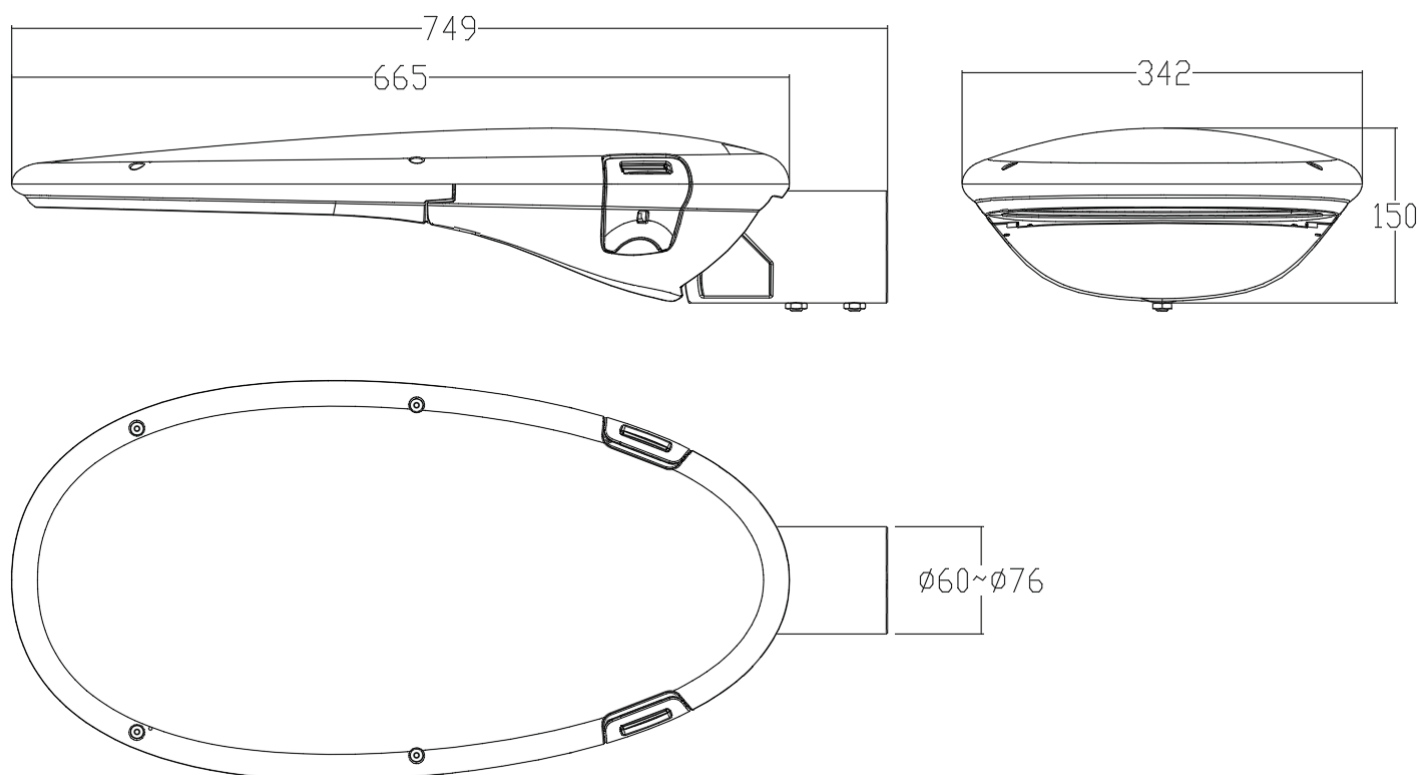
Greenshine

SPECIFICATIONS

Luminaire Input Voltage	DC 12V 24V
Power Consumption	30W 40W 60W 80W
Lumen Output	3929 5288 7051 9488 lumens
Color Temperature	3000-4000 K
IES Lighting Type	Type II III
Material	High pressure die-cast aluminum
Lens	5mm toughened glass, optical grade PMMA
IP Class	IP 65
Insulation	Class I
Operating Temperature	-30°C ~+50°C / -22°F ~+122°F
CRI	≥70

Weight: 8.3 kg | 18.3 lb

DIMENSIONS



SUPERA SERIES

Solar Powered LED Lighting System



OVERVIEW

The Supera Series features customizable outdoor solar light solutions depending on your specific application and an adjustable mounting bracket. Each system is completely customized according to your location, project and lighting requirements; also systems can be configured to run throughout the night or have them dim to save energy when full light is not required and with the option for a motion detection.

PART NUMBER

SYSTEM	LUM. QTY.	LUMINAIRE	OPTICS	LOAD	COLOR TEMP.	DRIVER	ARM	BOX QTY.
SU Supera	1 Single 2 Dual	290D NSBP	T2 Type 2 T3 Type 3 T5 Type 5	30W 40W 60W 80W ##	3K 3000 Kelvin 4K 4000 Kelvin 5K 5000 Kelvin	350MA 525MA 700MA 950MA	A4 4' Arm A6 6' Arm A0 No Arm A# Custom	1 1 Box 2 2 Boxes
BATTERY QTY.	BATT. MNT.	BATTERY	PV QTY.	PV WATT	POLE HEIGHT	COLOR	OPERATING PROFILE	
1B 1 Battery 2B 2 Batteries 3B 3 Batteries 4B 4 Batteries	H High L Low	120 120 amp 150 150 amp 200 200 amp	1 Single 2 Dual 4 Quad	110W 180W AC 345W	P20 20ft P26 26ft P30 30ft P# Custom	GR Grey BK Black BZ Bronze C# Custom	5/40 DIM 6/40 DIM 7/40 DIM 8/40 DIM D2D	

FIXTURES

SPECIFICATIONS



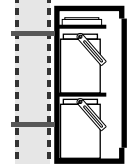
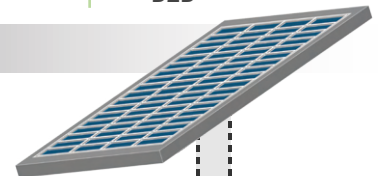
NSB PRO
30W-40W-60W-80W
TYPE 2, 3 & 5



290D
30W-40W-60W-80W
TYPE 2, 3 & 5

Decorative Luminaire Series available. See Decorative Data-sheets for more info.

- **Luminaire**
 - 60,000 hours.
 - 3000K - 5000K available with standard 4000K.
 - Turtle Friendly compliant fixtures available.
- **Panel Mount**
 - Rated to 145mph. 185mph available.
- **Solar Panel**
 - Mono-crystalline Photovoltaic solar panels.
- **Battery Enclosure**
 - Vented, corrosion resistant stainless steel battery box.
 - Holds battery and controller.
 - Includes lock.
- **GEL-Type Battery**
 - Greenshine Battery - Maintenance-free 99% recyclable.
 - 120Ah - 200Ah seal GEL Cell batteries.
- **Smart Controller**
 - Controller - Solar Charge controller that monitors and regulates charging and discharging of batteries. Also, programable to specific operating profile for project.
- **5 Year Limited Warranty**
 - Includes 20 year warranty on solar panel. 5 and 10 Year Full Warranty available.



GREENSHINE SOLAR PANEL

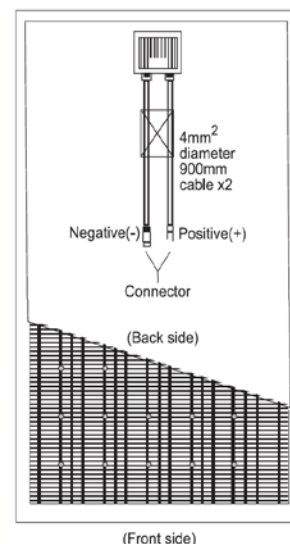
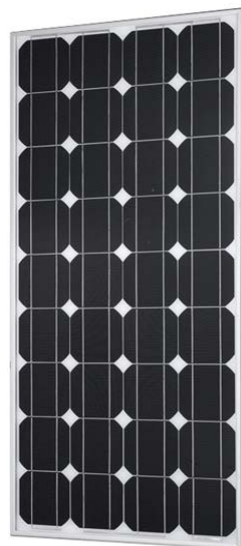
Solar Powered LED Lighting System



Greenshine

OVERVIEW

- Mono-Crystalline solar cells
- Aluminum frame with a unique design to withstand strong winds
- Highly resistant tempered glass
- Multilayer EVA encapsulation with triple layer back sheet
- 25-year power output warranty: 5 years/95%, 12 years/90%, 25 years/80%.



Rating Power	110W	180W
Product Tolerance	± 3%	± 3%
Maximum Power Voltage	17.60V	18.95V
Maximum Power Current	6.25A	9.50A
Open Circuit Voltage	21.7 V	22.74 V
Short Circuit Current	6.71 A	9.98 A
Frame	Anodized aluminum, 4mm thickness	
Dimensions	1208mm x 682mm 47.5" x 27" 10.6kg 23.4lb	1486mm x 682mm 58.5" x 27" 13kg 29.5lb
Test Temperature	25°C 77°F, 1000w/m², Air Mass 1.5	
Junction Box / Wiring	IP65 Junction box with 900mm cable with MC4 connectors	



SUPERA SERIES

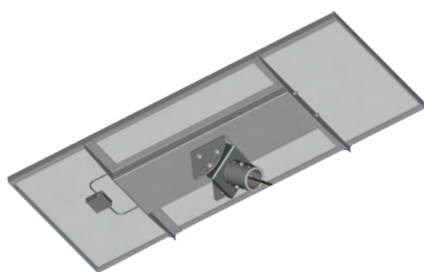
Solar Powered LED Lighting System



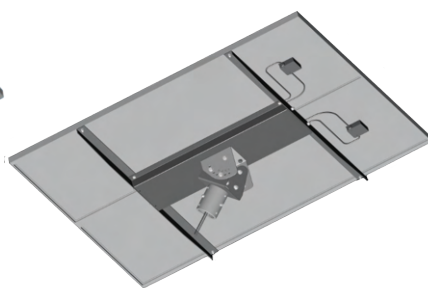
TECHNICAL

Description	Mount Dimensions (L x W)	Solar Panel	PV Dimensions (L x W)	EPA @ 45° Power Unit	System Weight	Pole Tenon
SINGLE	1208mm x 682mm 47.5" x 27"	110W	1208mm x 682mm 47.5" x 27"	0.8 sq meter	25kg 55lb	3" O.D 76mm O.D
	1486mm x 682mm 58.5" x 27"	180W	1486mm x 682mm 58.5" x 27"	1 sq meter	38kg 83lb	3" O.D 76mm O.D
DUAL	1208mm x 1400mm 47.5" x 55"	110W	1208mm x 682mm 47.5" x 27"	1.6 sq meter	27kg 60lb	3" O.D 76mm O.D
	1486mm x 1400mm 58.5" x 55"	180W	1486mm x 682mm 58.5" x 27"	2 sq meter	43kg 94lb	3" O.D 76mm O.D
QUAD	1208mm x 3000mm 47.5" x 118"	110W	1208mm x 682mm 47.5" x 27"	3.2 sq meter	54kg 120lb	3" O.D 76mm O.D
	1486mm x 3000mm 58.5" x 118"	180W	1486mm x 682mm 58.5" x 27"	4 sq meter	86kg 188lb	3" O.D 76mm O.D

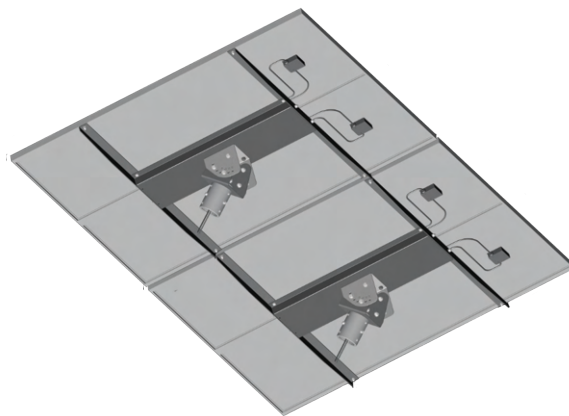
MOUNTS



SINGLE MOUNT



DUAL MOUNT

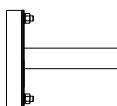


QUAD MOUNT

ARMS



Universal - 4', 6', 8'



Straight - 6", 1', 2'

GREENSHINE GEL-TYPE BATTERY

Solar Powered LED Lighting System



Greenshine

OVERVIEW

GEL deep cycle battery with a 12 years floating design life is especially designed for frequent cyclic discharge under extreme temperature.

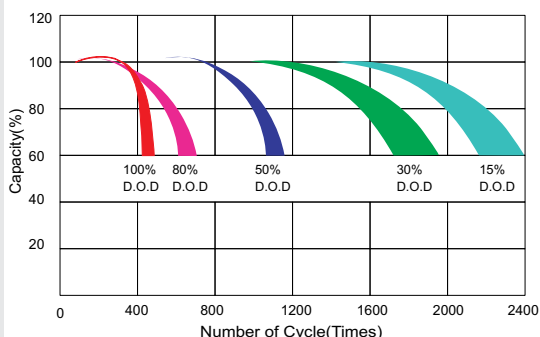


	GS-GEL-H120	GS-GEL-H150	GS-GEL-H200
Cells per unit	6	6	6
Voltage per unit	12V	12V	12V
Capacity	120Ah @ 20hr-rate to 1.75V per cell @ 25°C / 77°F	150Ah @ 20hr-rate to 1.75V per cell @ 25°C / 77°F	200Ah @ 20hr-rate to 1.75V per cell @ 25°C / 77°F
Weight	38kg / 84lb	46kg / 100lb	59.2kg / 131.5lb
Dimensions L x W x H	406 x 173 x 233(mm) 16" x 7" x 9.2"	483 x 170 x 240(mm) 19" x 6.7" x 9.5"	522 x 240 x 218(mm) 20.5" x 9.44" x 8.7"
Max Discharge Current	1200A (5 Sec)	1500A (5 Sec)	2000A (5 Sec) ²
Operating Temp. range	-40°C~60°C -40°F~140°F		
Flot Charging Voltage	13.6 to 13.8 VDC / unit average at 25°C / 77°F		
Recommended max. charging current	24A	30A	40A
Self-discharge	Valve Regulated Lead Acid can be stored for more than 6 months at 25°C/77°F. Self-discharge ratio less than 3% per month at 25°C/77°F. Please charge batteries before using.		
Equalization and cycle service	14.6 to 14.8 VDC / unit average at 25°C / 77°F		
Terminal type	5ft cooper wire leads from the battery case		

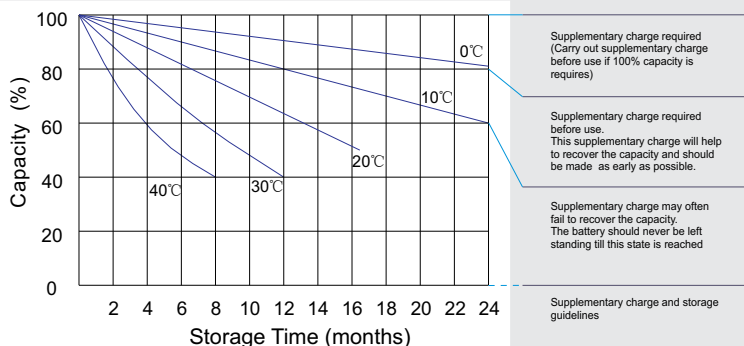
GREENSHINE GEL-TYPE BATTERY



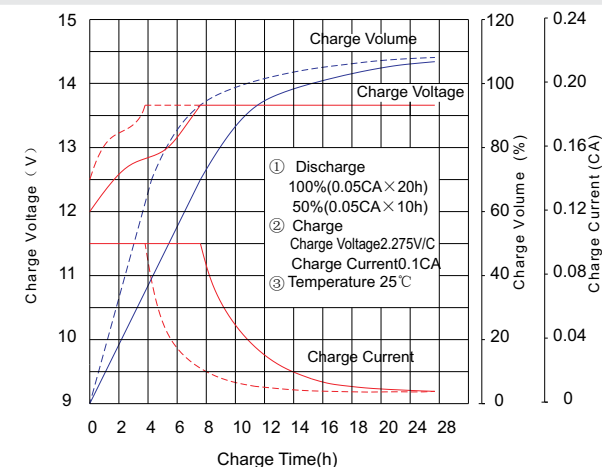
Life characteristics of cyclic use



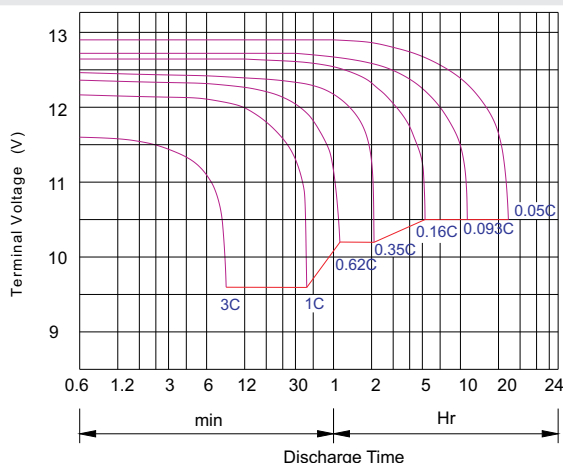
Storage characteristic



Charge characteristic curve for cyclic use



Discharge characteristic curve



Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V /cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	-0.2Cx2h+14.4-14.7Vx24h, Max. Current 0.2C
Constant Current	-0.2Cx2h+0.1Cx12h
Fast	-0.2Cx2h+0.2Cx6h

Bolt	M5	M6	M8
Terminal	F3 F4 F13 F18 T25 T26	F8 F11 F12-1 F15	F5 F9 F10 F12 F14 F16
Torque	6-7N-m	8-10N-m	10-12N-m

Maintenance & Cautions

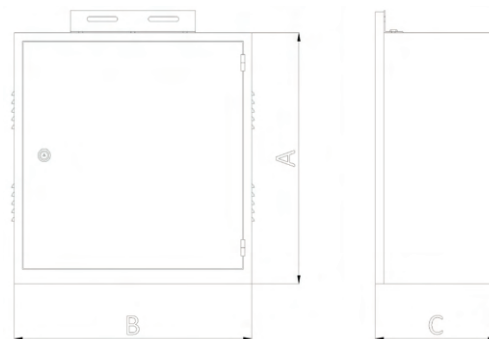
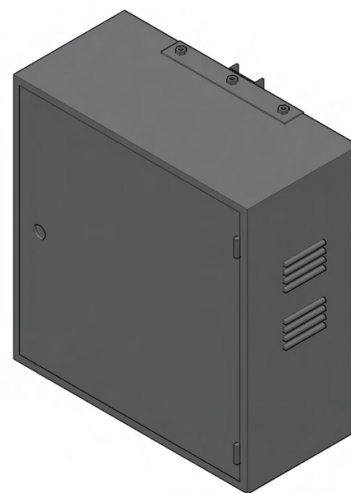
Cycle service

- ※ Avoid battery over discharge, especially battery series connection use.
- ※ Charged with recommend voltage, ensure battery can be full recharged.
- In general, recharge capacity should be 1.1-1.15 times discharge capacity.
- ※ Effect of temperature on cycle charge voltage: -4mV/°C/Cell.
- ※ There are a number of factors that will affect the length of cyclic service.
- The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged.
- Generally speaking, the most important factors is depth of discharge.

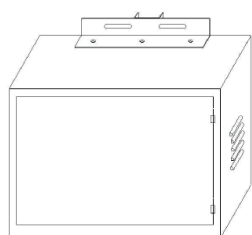
BATTERY ENCLOSURE

OVERVIEW

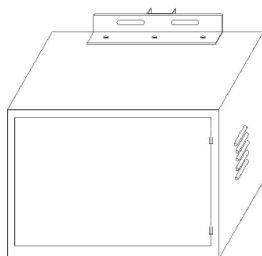
- Housing - Made of 201 stainless steel with powder coating finish unit that holds battery and smart controller. Vented to allow air circulation around batteries. Easy access through hinged/removable front cover to allow quick servicing or battery replacement. Maintenance-free 99% recyclable.
- Mounting - Mounted to Pole at low, mid or high placements.
- Battery - Our battery enclosures are designed to fit our 80Ah, 120Ah, 150Ah and 200Ah GEL TYPE batteries.
- Five Year System Warranty - Includes five year limited warranty on batteries.
- Controller - Mounted inside of hinged battery enclosure for ease of maintenance.
- The Battery Box is a stainless steel enclosure that has a lock for additional security.



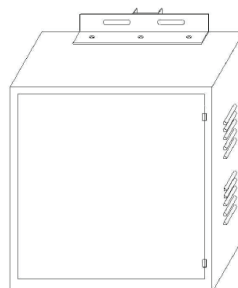
TYPE	# OF BATTERIES	DIMENSIONS: L x W x D (A x B x C)	WEIGHT	EFFECTIVE PROJECTED AREA (EPA)
1150	1 X 150AH	15.75"x22.4"x10.6" (inch) 40x57x27 (cm)	30 lb 13.6 kg	3.43 sq ft 0.319 m2
1200	1 X 200AH	15.75"x23.6"x12.2" (inch) 40x60x31 (cm)	35 lb 15.8 kg	3.61 sq ft 0.336 m2
2150	2 X 150AH	23.5"x22.4"x10.6" (inch) 60x57x27 (cm)	40 lb 18.1 kg	5.11 sq ft 0.476 m2
2200	2 X 200AH	24.4"x23.6"x12.6" (inch) 62x60x32 (cm)	45 lb 20.4 kg	5.58 sq ft 0.518 m2



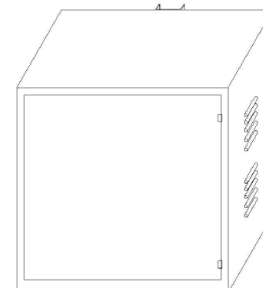
1 X 150AH



1 X 200AH



2 X 150AH



2 X 200AH

GREENSHINE CONTROLLER

Solar Powered LED Lighting System



FEATURES

- Corrosion-proof epoxy-encapsulated PCB (IP68)
- Four-stage battery charging (main, float, boost, equalization)
- Temperature compensated
- Automatic system voltage recognition (12V/24V)
- Customized by Greenshine to fit specific needs of clients
- Easy to install

SPECIFICATIONS

System Voltage

Max. charge / load current

Deep discharge protection:

Cut-off Voltage

Reconnect Level

Overvoltage Protection

Undervoltage Protection

Max. Panel Voltage

Temperature compensation

(Charge Voltage)

Ambient Temperature

Max. Altitude

Battery Type

Adjustment Range:

Evening / Morning Hours

Night / Day Detection

Wire Cross Section

Type of Protection

12V | 24 Auto Recognition

5A | 10A | 20A (Different Models)

11V - 12V | 22V - 24V

12.8V | 25.6V

15.5V | 31.0V

10.5V | 21V

$U_{BATmin} + 30V$ (if module and battery are connected with correct polarity)

-25mV | K at 12V

-50mV | K at 24V

-40°C to +60°C, -40°F to +140°F

4,000m above sea level

Lead acid (GEL, AGM, flooded)

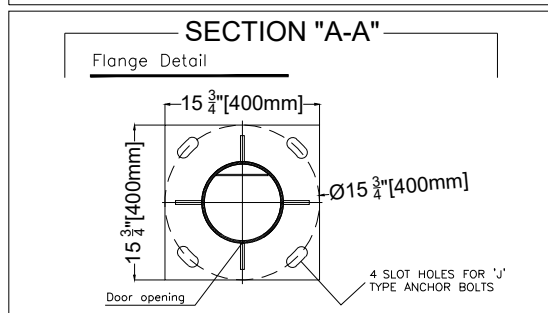
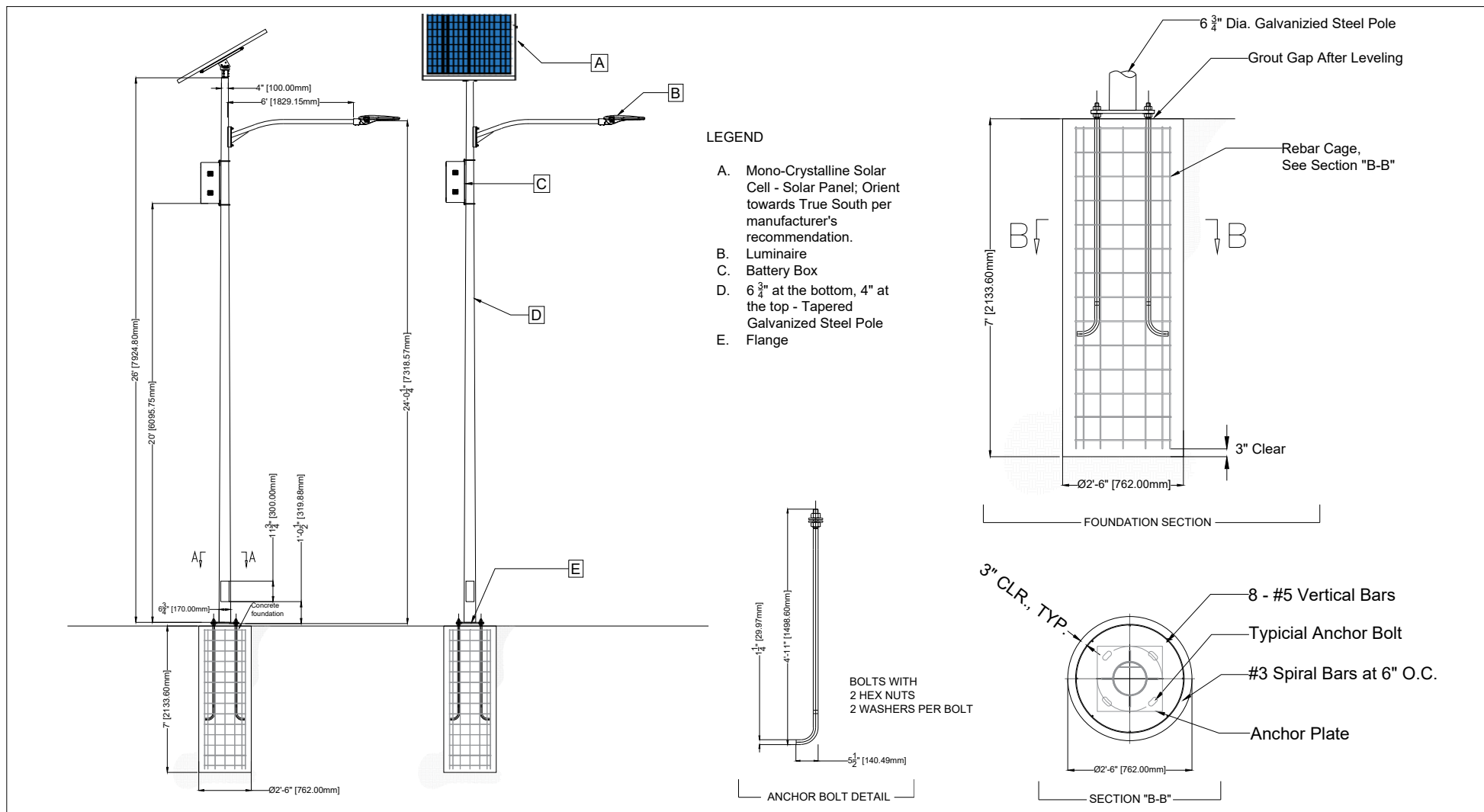
0 – 15h | 0 – 14h

2.5V – 10V

1.5mm²/ 1.5mm²/ 2.5mm², 15 (AWG)

IP68 (1.5 m, 72 h)





- Foundation dimensions shall be confirmed by a local engineering company, Greenshine New energy will not be held liable for any defect of the concrete foundation due to improper sizing.
 - Drawings are based using hot-dipped galvanized steel, powder coating with a thickness of 5/32"
 - *EPA of the system exclude the EPA of the pole, includes the solar panels, brackets, arm and LED fixture and battery box.
 - **Wind resistance of the poles are indicative and further customization can be provided.

Tilt angle of the solar panels	15	30	45	60
EPA (ft²)*	7.88	15.16	21.52	26.26
Wind resistance** (mph)	150	150	150	150

System	Supera 290D - 26' - 1P
By	
Date	5/25/2023
Website	



GREENSHINE NEW ENERGY



Greenshine

5 YEAR LIMITED WARRANTY

Greenshine New Energy provides a 5 year limited warranty on its solar lighting system. Greenshine will, at its option, repair or replace any Greenshine system that is defective. Additionally, certain components within Greenshine's system have extended warranty protection against failure as defined below:

COMPONENT	WARRANTY
*Solar Panel	20 Years
Pole and Mounting Brackets	5 Years
LED Light Fixture	5 Years
Electronics (Controller, driver)	5 Years
**Battery	5 Years

* Greenshine New Energy warrants that the power output of the PV Modules will be at least 80% of the minimum Peak Power rating for 20 years, and warrants that for 20 years beginning on the Warranty Start Date, its photovoltaic modules, shall be free from defects in materials and workmanship under normal application, installation, use and service conditions.

Specific restrictions may apply due to site-specific conditions, please check quote's details for more information.

This warranty does not cover damage or malfunction, as determined by Greenshine service technicians or engineers, due to abuse, misuse, incorrect installation, or accident such as, but not limited to:

- Failure to follow storage, installation, operation, and maintenance instructions provided by Greenshine
- Vandalism, theft, lightning, flood, "Acts of God", and other problems beyond the control of Greenshine
- Unauthorized or improper repairs or adjustments including use of any replacement parts not provided by Greenshine.
- Deployed in an abnormal or inconsistent manner from Greenshine New Energy written and verbal instructions
- Greenshine New Energy liability and Purchaser's remedy under Greenshine New Energy warranty is limited to the replacement of any defective item, but under no circumstance shall exceed the purchase price of the goods. Other warranties may be available for an additional cost with additional coverage and/or labor allowance included.
- Any repair cost not approved by Greenshine New Energy will not be reimbursed.
- Purchaser is responsible for any and all costs involved to service and/or replace defective good including labor, shipping, and rental of equipment.

**Greenshine New Energy provides a limited warranty for battery replacement with the following prorated coverage:

- 0 to 2 years: 100% credit (user pays 0% of the replacement battery price)
- 2 to 3 years: 60% credit (user pays 40% of the replacement battery price)
- 3 to 4 years: 40% credit (user pays 60% of the replacement battery price)
- 4 to 5 years: 20% credit (user pays 80% of the replacement battery price)

**CONTRACT DOCUMENTS AND
SPECIFICATIONS FOR
MAIN STREET BIKE PATH, SIDEWALK & CURB
INFILL PROJECT**



**CITY OF ESCALON
DEVELOPMENT SERVICES
2060 MCHENRY AVENUE
ESCALON, CA 95320**

NOVEMBER 2023